



REVIEW OF RESEARCH Second Step[®] Elementary Digital Program

Introduction

The Second Step Elementary digital program helps students acquire the skills, knowledge, and mindsets needed to persevere through challenges, set and achieve goals, handle strong emotions, better understand and connect with others, and resolve interpersonal conflicts. In addition, the program helps develop students' executive-function skills and promotes a growth mindset (the belief that intelligence and abilities can be developed). Together these skills and mindsets contribute to positive classroom and school climates that serve as the foundation for academic and social success (Snyder et al., 2012).

Brain Builders: Executive Function

Elementary students' executive-function skills are vital for both academic achievement and the development of socialemotional competencies (Eisenberg et al., 2000; Shaw et al., 2003). Executive-function skills encompass various interrelated cognitive processes that enable students to ignore distractions (Klenberg et al., 2001), inhibit impulses (Ciairano et al., 2007), shift between various tasks (Zelazo et al., 2003), remember information (Ponitz et al., 2009), and solve complex problems (Zelazo et al., 2003). These cognitive processes also underlie a child's ability to engage in flexible, goal-directed behaviors (Garon et al., 2008). Executive-function skills are associated with improved academic achievement and school readiness (Blair & Razza, 2007; Duncan et al., 2007; García-Madruga et al., 2016; Trentacosta & Izard, 2007). Children with strong executivefunction skills are less likely to engage in impulsive behavior

(Riggs et al., 2006) and more likely to demonstrate social-emotional skills like empathy (Decety & Svetlova, 2012; Riggs et al., 2006), emotion regulation (Riggs et al., 2006), and cooperative behaviors among peers (Ciairano et al., 2007).

Students' executive-function skills can be improved through experiences and practice opportunities in the classroom (Ponitz et al., 2009). Students can develop executive-function skills through games with explicit rules that directly challenge and provide practice for these skills, such as "Simon Says" (Bodrova & Leong, 2018; Burchinal et al., 2000). With short activities called Brain Builders, the Second Step Elementary digital program supports the development of students' executive-function skills-specifically, students' attention, working memory, and inhibitory skills. These fun, interactive activities were designed to provide the direct and appropriately challenging practice that helps students develop their executivefunction skills in Kindergarten through Grade 5. Embedded at the beginning of most lessons, the Brain Builder games provide students with a fun opportunity to strengthen their executive-function skills by playing along with an on-screen facilitator. Additionally, the Second Step Elementary digital program includes resources and embedded tips that help educators create conditions-such as orderly, predictable environments and scaffolded learning-that have been associated with development of executive-function skills (Center on the Developing Child at Harvard University, 2011).

Unit 1: Growth Mindset & Goal-Setting

Growth mindset, the belief that our abilities are malleable rather than fixed (Dweck et al., 2014), is the first topic in the Second Step[®] Elementary digital program because it supports learning across content areas.

A growth mindset is important to social-emotional development and success in school because our beliefs about changing our abilities influence the actions we take toward perseverance and resilience (Yeager & Dweck, 2012). Children who are taught and believe that their intelligence and social skills are flexible have stronger coursecompletion rates, have more success navigating school transitions, and are less aggressive when faced with peer victimization or exclusion (Yeager & Dweck, 2012; Yeager & Miu, 2011). Interventions to promote a growth mindset about intelligence and academic achievement have been shown to improve grades overall and increase the percentage of atrisk students who pass their classes (Dweck et al, 2014).

The Second Step Elementary digital program supports students in examining evidence and strategies that support a growth mindset by exploring the connection between improvement and practice and/or effort, normalizing mistakes as a part of learning, and using neuroscience to explain how and why our brains grow as we practice and improve our abilities. Understanding and endorsing these beliefs can improve students' academic goals (they believe they can learn instead of thinking they're unintelligent), attitudes toward effort in school (they believe trying hard creates success instead of believing they're incapable), and responses to setbacks and difficulties (they don't get derailed by mistakes, but try new strategies and work harder instead of giving up) (Yeager & Dweck, 2012). Additionally, some evidence suggests that providing children with growth mindset interventions before they engage in activities designed to develop executive-function skills supports the development of those skills (Autin & Croizet, 2012), which is why the Second Step Elementary digital program begins with instruction in growth mindset to support the effectiveness of the Brain Builder games throughout.

In the older elementary grades, the Second Step Elementary digital program builds on the foundation of growth mindset to teach students effective goal-setting. Mindset is closely related to how individuals' approach and set goals (Dweck, 2009). Individuals with a growth mindset tend to set "mastery goals," which are focused on improvement, as opposed to goals focused on performance compared to others (Poortvliet & Darnon, 2010). The use of mastery goals, in turn, is associated with increases in self-efficacy (Bong, 2009; Hulleman et al., 2010), positive personal relationships (Poortvliet & Darnon, 2010; Rodkin et al., 2013), increased empathy (Poortvliet & Darnon, 2010), and prosocial behavior, or behavior intended to help others (Hulleman et al., 2010; Ohtani & Okada, 2018; Yang & Frye, 2018). The Second Step Elementary digital program supports children in setting achievable mastery goals that are both collective and individual, making effective plans, and identifying strategies and resources to help them follow through on goals, including how to deal with roadblocks and how to modify plans when necessary.

Unit 2: Emotion Management

Emotions play a large and complex role in children's success inside and outside the classroom. Children's ability to process and manage emotions is related to how children effectively use executive-function skills like attention and working memory, influences how children approach and solve problems (C. Blair, 2002; Kwon et al., 2017), and can catalyze and support motivation and engagement (Trentacosta & Izard, 2007; Valiente et al., 2012, 2014). Greater emotion knowledge improves social competence and decreases both internalizing problems (for example, experiencing depression and anxiety) and externalizing problems (for example, exhibiting aggression) (Trentacosta & Fine, 2010). Children's emotion knowledge and emotion-management skills predict their social skills, quality of friendships, peer acceptance (B. L. Blair et al., 2015), and teachers' perceptions of children's social competence among their peers (Contreras et al., 2000). Students with poor emotion-management skills are prone to acting impulsively based on their emotions rather than using problem-solving skills, such as analyzing situations, anticipating consequences, and planning (Donohew et al., 2000; Simons et al., 2004). Taken together, having better emotion-management skills helps students cope in more effective ways (Zalewski et al., 2011) and enables students to employ many of the other skills taught in the program, such as perspective-taking and problem-solving.

In the Second Step Elementary digital program, students learn to use behavioral and contextual clues to identify and label emotions in themselves and others. The program helps students process their emotions by teaching them to identify the causes, signs, and consequences of their emotions as well as how their emotions relate to their thoughts, actions, and past experiences. It also teaches students a variety of evidence-based strategies to handle strong feelings. These strategies include behavioral techniques to help them feel calm (such as slow breathing), distract themselves (such as taking a break), and relax (such as talking to a friend or adult), as well as cognitive techniques like deliberately altering their thoughts (rethinking a situation) and practicing positive self-talk (helpful thoughts) in an emotional situation. The Second Step® Elementary digital program also teaches students about the purpose of emotions, how emotions impact our bodies and cognition, and how our emotional responses may differ from others' responses because of our own unique past experiences and personal preferences. In addition, the program provides ample opportunities to practice and revisit these skills throughout the units, as research finds that conscious practice of emotionmanagement techniques, like slow breathing and counting, can result in more automatic use of those strategies and techniques (Bargh & Chartrand, 1999).

Unit 3: Empathy & Kindness

Being able to identify and understand how someone is feeling, and then respond in a caring way, provides the foundation for helpful and socially responsible behavior, friendships, and conflict resolution (Batanova & Loukas, 2014). Developing empathy (the ability to understand or feel how others feel) and showing kindness are foundational for building and maintaining positive relationships. Children who have well-developed empathy tend to display more prosocial tendencies, such as assisting or helping others, comforting others, or being responsive to someone else's needs (Findlay et al., 2006). An important part of empathy is the ability to take others' perspectives. Perspective-taking skills have been associated with children's ability to manage emotions (Bengtsson & Arvidsson, 2011) as well as with a broad set of prosocial behaviors, including helping, cooperating, and comforting (Imuta et al., 2016). Students who develop these empathy and perspective-taking skills are also less likely to be physically, verbally, and indirectly aggressive to their peers, highlighting the importance of empathy for cooperation and conflict resolution (Kaukiainen et al., 1999; McDonald & Messinger, 2011; Roberts et al., 2014; Salmivalli, 2010).

The Second Step Elementary digital program helps younger elementary students learn to recognize acts of kindness, explore the effects of kindness on themselves and others, and perform kind acts for others in diverse social situations. As children progress through elementary school, they develop greater abilities to understand and respond to what other people are feeling and an improved ability to see things from others' perspectives. The program uses role-play, authentic scenarios, personal reflection, and discussions to help students develop and apply perspective-taking strategies for empathizing with others (especially when it's difficult to do so) and considering others' unique experiences and personal preferences when acting on empathy.

Unit 4: Problem-Solving

An awareness of effective problem-solving strategies is seen as a defining feature of social competence (Rubin et al., 1991). This is in part because children who lack or do not use the skills required to understand others' intentions and to generate and select appropriate social responses are more likely to exhibit aggression (Crick & Dodge, 1994; Dodge et al., 2002; Dodge & Somberg, 1987). Being able to engage effectively in social problem-solving helps children choose prosocial solutions to their problems (Riggs et al., 2006). Teaching students social problem-solving skills can reduce impulsive behavior, improve social adjustment, and prevent violence and other problems that affect children's success (Denham & Almeida, 1987; Hawkins et al., 1998; Shure & Spivack, 1980, 1982; Tolan & Guerra, 1994).

The problem-solving skills taught in the Second Step Elementary digital program, adapted from cognitivebehavioral research based on a social informationprocessing model (Crick & Dodge, 1994; Van Loan et al., 2019), are designed to scaffold students' ability to effectively handle interpersonal conflicts.

Unit 4 of the Second Step Elementary digital program teaches students a step-by-step framework that builds on the emotion-management and perspective-taking skills developed in prior units and focuses on authentic skill practice (Merrill et al., 2017). Students are taught to help themselves feel calm before following the STEP problemsolving process: Say the problem, Think of solutions, Explore the outcomes, and Pick the best solution. Students learn developmentally appropriate ways to engage with



the framework, from repeating clearly stated problems in kindergarten to using the entire process to solve real-life problems in older grades. The Second Step® Elementary digital program continues to provide opportunities to practice and reinforce empathy and kindness skills from Unit 3 by instructing students in the problem-solving process to both state the problem and evaluate potential solutions from each person's or community's point of view. These steps lead children through constructive, prosocial thought processes to help them manage problems, weigh outcomes, and consider all parties' wants and needs while handling interpersonal conflicts.

References

Autin, F., & Croizet, J.-C. (2012). Improving working memory efficiency by reframing metacognitive interpretation of task difficulty. *Journal of Experimental Psychology: General*, 141(4), 610–618. https://doi.org/10.1037/a0027478

Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. American Psychologist, 54(7), 462–479. https://doi.org/10.1037/0003-066X.54.7.462

Batanova, M., & Loukas, A. (2014). Unique and interactive effects of empathy, family, and school factors on early adolescents' aggression. *Journal of Youth and Adolescence*, 43(11), 1890–1902. https://doi.org/10.1007/s10964-013-0051-1

Bengtsson, H., & Arvidsson, Å. (2011). The impact of developing social perspective-taking skills on emotionality in middle and late childhood. *Social Development*, 20(2), 353–375. https://doi.org/10.1111/j.1467-9507.2010.00587.x

Blair, B. L., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2015). Identifying developmental cascades among differentiated dimensions of social competence and emotion regulation. *Developmental Psychology*, 51(8), 1062–1073. https://doi.org/10.1037/a0039472

Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, 57(2), 111–127. https://doi.org/10.1037/0003-066X.57.2.111

Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. *Child Development*, *78*(2), 647–663. https://doi.org/10.1111/j.1467-8624.2007.01019.x

Bodrova, E., & Leong, D. J. (2018). Tools of the Mind: A Vygotskian early childhood curriculum. In M. Fleer & B. van Oers (Eds.), *International handbook of early childhood education* (pp. 1095–1111). Springer Netherlands. https://doi.org/10.1007/978-94-024-0927-7_56

Bong, M. (2009). Age-related differences in achievement goal differentiation. *Journal of Educational Psychology*, 101(4), 879–896. https://doi.org/10.1037/a0015945 Burchinal, M. R., Peisner-Feinberg, E., Bryant, D. M., & Clifford, R. (2000). Children's social and cognitive development and child-care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science*, 4(3), 149–165. https://doi.org/10.1207/S1532480XADS0403_4

Center on the Developing Child at Harvard University. (2011). Building the brain's "air traffic control" system: How early experiences shape the development of executive function (Working Paper No. 11), 20. Harvard. https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/ wp-content/uploads/2011/05/How-Early-Experiences-Shape-the-Development-of-Executive-Function.pdf

Ciairano, S., Visu-Petra, L., & Settanni, M. (2007). Executive inhibitory control and cooperative behavior during early school years: A follow-up study. *Journal of Abnormal Child Psychology*, *35*(3), 335–345. https://doi.org/10.1007/s10802-006-9094-z

Contreras, J. M., Kerns, K. A., Weimer, B. L., Gentzler, A. L., & Tomich, P. L. (2000). Emotion regulation as a mediator of associations between motherchild attachment and peer relationships in middle childhood. *Journal of Family Psychology*, 14(1), 111–124. https://doi.org/10.1037//0893-3200.14.1.111

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115(1), 74–101. https://doi.org/10.1037/0033-2909.115.1.74

Decety, J., & Svetlova, M. (2012). Putting together phylogenetic and ontogenetic perspectives on empathy. *Developmental Cognitive Neuroscience*, 2(1), 1–24. https://doi.org/10.1016/j.dcn.2011.05.003

Denham, S. A., & Almeida, M. C. (1987). Children's social problem-solving skills, behavioral adjustment, and interventions: A meta-analysis evaluating theory and practice. *Journal of Applied Developmental Psychology*, *8*(4), 391–409. https://doi.org/10.1016/0193-3973(87)90029-3

Dodge, K. A., Laird, R., Lochman, J. E., Zelli, A., & Conduct Problems Prevention Research Group. (2002). Multidimensional latent-construct analysis of children's social information processing patterns: Correlations with aggressive behavior problems. *Psychological Assessment*, 14(1), 60–73. https://doi.org/10.1037//1040-3590.14.1.60



Dodge, K. A., & Somberg, D. R. (1987). Hostile attributional biases among aggressive boys are exacerbated under conditions of threats to the self. *Child Development*, 58(1), 213–224. https://doi.org/10.2307/1130303

Donohew, L., Zimmerman, R., Cupp, P. S., Novak, S., Colon, S., & Abell, R. (2000). Sensation seeking, impulsive decision-making, and risky sex: Implications for risk-taking and design of interventions. *Personality and Individual Differences*, 28(6), 1079–1091. https://doi.org/10.1016/S0191-8869(99)00158-0

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, *43*(6), 1428–1446. https://doi.org/10.1037/0012-1649.43.6.1428

Dweck, C. S. (2009). Mindsets: Developing talent through a growth mindset. *Olympic Coach*, *21*(1). https://www.teamusa.org/~/media/USA_ Volleyball/Documents/Resources/OlympCoachMag_Win%2009_Vol%20 21_Mindset_Carol%20Dweck.pdf

Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). Academic tenacity: Mindsets and skills that promote long-term learning. Bill & Melinda Gates Foundation. https://eric.ed.gov/?id=ED576649

Eisenberg, N., Fabes, R. A., Guthrie, I. K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology*, 78(1), 136–157. https://doi.org/10.1037/0022-3514.78.1.136

Findlay, L. C., Girardi, A., & Coplan, R. J. (2006). Links between empathy, social behavior, and social understanding in early childhood. *Early Childhood Research Quarterly*, 21(3), 347–359. https://doi.org/10.1016/j.ecresq.2006.07.009

García-Madruga, J. A., Gómez-Veiga, I., & Vila, J. Ó. (2016). Executive functions and the improvement of thinking abilities: The intervention in reading comprehension. *Frontiers in Psychology*, *7*, 58. https://doi.org/10.3389/fpsyg.2016.00058

Garon, N., Bryson, S. E., & Smith, I. M. (2008). Executive function in preschoolers: A review using an integrative framework. *Psychological Bulletin*, 134(1), 31–60. https://doi.org/10.1037/0033-2909.134.1.31

Hawkins, J. D., Farrington, D. P., & Catalano, R. F. (1998). Reducing violence through the schools. In D. Elliott, B. Hamburg, & K. Williams (Eds.), *Violence in American schools: A new perspective* (pp. 188–216). Cambridge University Press. https://doi.org/10.1017/9780511840913.007

Hulleman, C. S., Schrager, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136(3), 422–449. https://doi.org/10.1037/a0018947

Imuta, K., Henry, J. D., Slaughter, V., Selcuk, B., & Ruffman, T. (2016). Theory of mind and prosocial behavior in childhood: A meta-analytic review. *Developmental Psychology*, 52(8), 1192–1205. https://doi.org/10.1037/dev0000140

Kaukiainen, A., Björkqvist, K., Lagerspetz, K., Österman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, *25*(2), 81–89. https://doi.org/10.1002/(SICI)1098-2337(1999)25:2<81::AID-AB1>3.0.CO;2-M

Klenberg, L., Korkman, M., & Lahti-Nuuttila, P. (2001). Differential development of attention and executive functions in 3- to 12-year-old Finnish children. *Developmental Neuropsychology*, *20*(1), 407–428. https://doi.org/10.1207/S15326942DN2001_6

Kwon, K., Hanrahan, A. R., & Kupzyk, K. A. (2017). Emotional expressivity and emotion regulation: Relation to academic functioning among elementary school children. *School Psychology Quarterly, 32*(1), 75–88. https://doi.org/10.1037/spq0000166 McDonald, N. M., & Messinger, D. S. (2011). The development of empathy: How, when, and why. In A. Acerbi, J. A. Lombo, & J. J. Sanguineti (Eds.), Free will, emotions, and moral actions: Philosophy and neuroscience in dialogue (p. 36). IF-Press.

Merrill, K. L., Smith, S. W., Cumming, M. M., & Daunic, A. P. (2017). A review of social problem-solving interventions: Past findings, current status, and future directions. *Review of Educational Research*, *87*(1), 71–102. https://doi.org/10.3102/0034654316652943

Ohtani, K., & Okada, R. (2018). Relationship between classroom social goal structures, gender, and social outcomes in Japanese elementary school children. *School Psychology International*, *39*(5), 435–453. https://doi.org/10.1177/0143034318788120

Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology*, 45(3), 605–619. https://doi.org/10.1037/a0015365

Poortvliet, P. M., & Darnon, C. (2010). Toward a more social understanding of achievement goals: The interpersonal effects of mastery and performance goals. *Current Directions in Psychological Science*, 19(5), 324–328. https://doi.org/10.1177/0963721410383246

Riggs, N. R., Jahromi, L. B., Razza, R. P., Dillworth-Bart, J. E., & Mueller, U. (2006). Executive function and the promotion of social-emotional competence. *Journal of Applied Developmental Psychology*, *27*(4), 300–309. https://doi.org/10.1016/j.appdev.2006.04.002

Roberts, W., Strayer, J., & Denham, S. (2014). Empathy, anger, guilt: Emotions and prosocial behaviour. *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement*, 46(4), 465–474. https://doi.org/10.1037/a0035057

Rodkin, P. C., Ryan, A. M., Jamison, R., & Wilson, T. (2013). Social goals, social behavior, and social status in middle childhood. *Developmental Psychology*, 49(6), 1139–1150. https://doi.org/10.1037/a0029389

Rubin, K. H., Bream, L. A., & Rose-Krasnor, L. (1991). Social problem solving and aggression in childhood. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 219–248). Lawrence Erlbaum Associates, Inc.

Salmivalli, C. (2010). Bullying and the peer group: A review. Aggression and Violent Behavior: Special Issue on Group Processes and Aggression, 15(2), 112–120. https://doi.org/10.1016/j.avb.2009.08.007

Shaw, D. S., Gilliom, M., Ingoldsby, E. M., & Nagin, D. S. (2003). Trajectories leading to school-age conduct problems. *Developmental Psychology*, 39(2), 189–200. https://doi.org/10.1037/0012-1649.39.2.189

Shure, M. B., & Spivack, G. (1980). Interpersonal problem solving as a mediator of behavioral adjustment in preschool and kindergarten children. *Journal of Applied Developmental Psychology*, 1(1), 29–44. https://doi.org/10.1016/0193-3973(80)90060-X

Shure, M. B., & Spivack, G. (1982). Interpersonal problem-solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology*, *10*(3), 341–356. https://doi.org/10.1007/BF00896500

Simons, J. S., Carey, K. B., & Gaher, R. M. (2004). Lability and impulsivity synergistically increase risk for alcohol-related problems. *The American Journal of Drug and Alcohol Abuse*, *30*(3), 685–694. https://doi.org/10.1081/ada-200032338

Snyder, F. J., Vuchinich, S., Acock, A., Washburn, I. J., & Flay, B. R. (2012). Improving elementary school quality through the use of a social-emotional and character development program: A matched-pair, cluster-randomized, controlled trial in Hawai'i. *The Journal of School Health*, *82*(1), 11–20. https://doi.org/10.1111/j.1746-1561.2011.00662.x



Tolan, P. H., & Guerra, N. G. (1994). Prevention of delinquency: Current status and issues. *Applied and Preventive Psychology*, *3*(4), 251–273. https://doi.org/10.1016/S0962-1849(05)80098-8

Trentacosta, C. J., & Fine, S. E. (2010). Emotion knowledge, social competence, and behavior problems in childhood and adolescence: A meta-analytic review. *Social Development*, *19*(1), 1–29. https://doi.org/10.1111/j.1467-9507.2009.00543.x

Trentacosta, C. J., & Izard, C. E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion*, 7(1), 77–88. https://doi.org/10.1037/1528-3542.71.77

Valiente, C., Swanson, J., & Lemery-Chalfant, K. (2012). Kindergartners' temperament, classroom engagement, and student-teacher relationship: Moderation by effortful control. *Social Development*, *21*(3), 558–576. https://doi.org/10.1111/j.1467-9507.2011.00640.x

Valiente, C., Swanson, J., Lemery-Chalfant, K., & Berger, R. H. (2014). Children's effortful control and academic achievement: Do relational peer victimization and classroom participation operate as mediators? *Journal of School Psychology*, 52(4), 433–445. https://doi.org/10.1016/j.jsp.2014.05.005

Van Loan, C. L., Garwood, J. D., Smith, S. W., & Daunic, A. P. (2019). Take CHARGE! A randomized controlled trial of a social problem-solving curriculum to support students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 27(3), 143–153. https://doi.org/10.1177/1063426617754083

Yang, F., & Frye, D. (2018). When preferences are in the way: Children's predictions of goal-directed behaviors. *Developmental Psychology*, 54(6), 1051–1062. https://doi.org/10.1037/dev0000490

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47(4), 302–314. https://doi.org/10.1080/00461520.2012.722805

Yeager, D. S., & Miu, A. S. (2011). Implicit theories of personality predict motivation to use prosocial coping strategies after bullying in high school. In E. Frydenberg & G. M. Reevy (Eds.), *Personality, stress, and coping: Implications for education*. Information Age Publishing, Inc.

Zalewski, M., Lengua, L. J., Wilson, A. C., Trancik, A., & Bazinet, A. (2011). Associations of coping and appraisal styles with emotion regulation during preadolescence. *Journal of Experimental Child Psychology*, 110(2), 141–158. https://doi.org/10.1016/j.jecp.2011.03.001

Zelazo, P. D., & Carlson, S. M. (2012). Hot and cool executive function in childhood and adolescence: Development and plasticity. *Child Development Perspectives*, 6(4), 354–360.