Steinke, Camela. "Resilience through Supportive Relationships: Scientific Support for Lasallian Education." AXIS: Journal of Lasallian Higher Education 9, no. 3 (Institute for Lasallian Studies at Saint Mary's University of Minnesota: 2018).

© Camela Steinke, PhD. Readers of this article have the copyright owner's permission to reproduce it for educational, not-for-profit purposes, if the author and publisher are acknowledged in the copy.

Resilience through Supportive Relationships: Scientific Support for Lasallian Education

Camela Steinke²

Introduction

The term "resilience" has a number of definitions, but in essence, it is a "positive, adaptive response in the face of significant adversity." As discussed in previous work, Adverse Childhood Experiences (ACEs) of abuse, neglect, and household dysfunction have been linked to emotional, behavioral, and physical health problems later in life, in part due to structural and functional differences in the brain, particularly the part of the brain responsible for emotional regulation and self-control. Interrupting the negative impacts of ACEs' excessive activation of the stress response system is important for reducing the harm associated with these events. As a result, much research has focused on determining what increases resilience and the mechanisms through which resilience has impact. While this research has identified a handful of factors that improve resilience, this essay focuses on the role of stable supportive relationships on resilience.

The Neurobiology of Stress and Resilience

The body's response to stress is a very complex process. While an in-depth discussion of the neurobiological factors associated with the stress response and resilience to stressful events is beyond the scope of this paper, this section aims to provide a basic understanding of stress response and resilience. The body responds to stress by the activation of the sympathetic nervous system, which triggers the release of noradrenaline, resulting in a host of biological responses such as cardiovascular changes of increased heart rate and blood pressure. The Hypothalamus-pituitary-adrenal (HPA) axis plays a role in stress response through the release of hormones during an immediate threatening or stressful event.

Resilience is how the body mitigates the impacts of stress. Scientists have identified a complicated interplay between genes and brain circuitry that contribute to resilience. Genetic factors contribute to an individual's response to stress, as genetic factors can influence how the nervous system reacts to stress. Genes impact the transportation of serotonin, which impacts the risk for depression when presented with stressful life events. Genes also impact the levels of enzymes, neuropeptides, and brain development growth factors, which can impact anxiety, reactivity, and the ability to learn.

Genes also impact the HPA axis.¹² Resilience is associated with the brain's ability to moderate and recover from these stress hormones, which allows the body to return to homeostasis.¹³ Differences in genetic make-up moderate the negative influences of stressful events through how the HPA axis reacts under stress.¹⁴ This management of stress is an example of resilience.

The Impact of Relationships on Resilience

According to the National Scientific Council on the Developing Child, a major source of resilience is "the availability of at least one *stable, caring, and supportive relationship* between a child and the important adults in his or her life." Those who lack social support demonstrate heightened stress responses, including changes to the cardiovascular and neuroendocrine systems. High levels of strong relationships have been shown to have positive impacts on mental and physical health in many different samples of people of varying ages. There appears to be an interaction between social support and biology. For example, social support mitigates the impact of genetic variations that result in reactivity to stress. This means youth who have experienced stress may have fewer negative impacts from that stress as a result of their relationships with at least one supportive adult.

In listing the common factors that lead to resilience, the National Scientific Council on the Developing Child identifies "The availability of at least one *stable*, *caring*, *and supportive relationship* between a child and the important adults in his or her life" as the first factor.²⁰ The report goes on to suggest that resilience is the result of relationships, noting that individual grit or some in-born characteristic is not responsible for resilience, but that relationships is what matters. This sentiment is echoed in the *60 Minutes* report by Oprah Winfrey aired in March 2018, which talked about supportive relationships as being the difference between those that overcame trauma and those that did not.²¹

The Need for "Guardian Angels"

Since 1680, the followers of the Lasallian model of education and care for youth, now practiced in 80 countries worldwide, have believed it is through fostering caring relationships and communities that a child is best educated in the school or social service environments. The Lasallian model is based upon the writings and teachings of Saint John Baptist de La Salle, a French priest and educational reformer in seventeenth-century France. As evidenced in his writings, Saint John Baptist de La Salle recognized the need for supportive relationships. The fifth and sixth Meditations in the *Meditations for the Time of Retreat*²² center on this very concept which instruct readers "That those chosen by Providence for the education of children must fulfill the functions of Guardian Angels for them and How the function of Guardian Angels is fulfilled in the education of youth." De La Salle's concept of education is inclusive of academic learning, social skills, and care for others.

The first point of the fifth Meditation discusses that children need to be formed and that this does not happen on its own but instead occurs over time through exposure to learning opportunities. The writings of Saint John Baptist de La Salle states children need "good guides and visible angels" to become contributing adults and that "God has provided teachers who will instruct them." The second point expands on the education children need, indicating that it is not enough to teach them theoretical concepts, but practical applications and practice are needed. According to De La Salle, "for this they need visible angels, who by their instructions and good example will encourage them," indicating that it is the role of the teacher to form relationships with students through providing a good, reliable example. The third point describes teachers as

"watchful guides" who help prevent youth from the dangers of the world and lead youth on a path "through all the dangers they meet in the world."

The sixth Meditation begins with a discussion of how teachers should learn from God what and how to instruct students, making this goal a "main concern." The second point continues to discuss the need for providing students with a practical example of how to live "a life worthy of God," noting that it is not enough to just teach them about salvation, but instead how one lives is also important for achieving salvation. In the final point, De La Salle instructs teachers to inspire students to not "sadden the Holy Spirit," to leave negative ways of life, and to "be gentle and have tenderness for one another."

These are not the only times De La Salle discusses relationships with young people. The Meditation for the second Sunday after Easter, with its discussion of the shepherd, also extolls the virtue of a relationship between teacher and student and the teacher's mission to know each child individually and meet them where they are at, to provide them with the education they need.²³ *The Conduct of the Christian Schools*,²⁴ while strict about over familiarity with students, also identified the teacher-student relationship as key to learning, and put particular focus on the need to embrace what he called the poor. De La Salle recognized there were those among us who were in particular need of guidance and additional support due to what they have experienced outside the classroom.

Conclusion

Research has indicated that relationships are an important part of resilience in young people. This resilience is key to being able to persevere in the face of difficulty. While Saint John Baptist de La Salle did not have the benefit of modern technology to examine the reasons why relationships are so important, he recognized the critical role teachers can play in the lives of youth. His writings demonstrate he wanted teachers to not just be educators, but instead act as guardian angels to youth to help them along their paths.

Trauma informed, relational care that builds resilience as well as academic, vocational, and social skills has been at the heart of Lasallian teaching and social service provision for over 300 years. Recent research has provided scientific support for the practical wisdom of generations of Lasallian educators, strengthening and legitimizing the Lasallian model of education and service provision.

Endnotes

- 1. The author would like to thank Brother James Martino, FSC, for his advice and assistance in the writing of this piece, his knowledge of the works of De La Salle were instrumental. The author would also like to thank Anne Moscinski, AFSC, for her comments and excellent eye for typos.
- 2. Camela Steinke, PhD, is the program assessment and effectiveness research specialist at LaSalle School in Albany, NY, and an adjunct professor in the University at Albany's School of

Criminal Justice, the College of Saint Rose in Albany, the SUNY Plattsburgh, and Excelsior College. She earned a PhD in Criminal Justice from the University at Albany and a bachelor's degree in Criminal Justice and Spanish from the University of Nevada, Reno.

- 3. Shonkoff, J., P. Levitt, S. Bunge, J. Cameron, G. Duncan, P. Fisher, and N. Fox. "Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience. pdf." *National Scientific Council on the Developing Child* (2015), page 1.
- 4. "Trauma Informed Schools and the Lasallian Tradition Rooted in the Same Values" by Camela Steinke, PhD, in *AXIS: Journal of Lasallian Higher Education* 7, no. 3 (2016), pages 21-29.
- 5. Felitti, Vincent J., Robert F. Anda, Dale Nordenberg, David F. Williamson, Alison M. Spitz, Valerie Edwards, Mary P. Koss, and James S. Marks. "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study." *American journal of preventive medicine* 14, no. 4 (1998), pages 245-258.
- 6. Teicher, Martin H., Susan L. Andersen, Ann Polcari, Carl M. Anderson, Carryl P. Navalta, and Dennis M. Kim. "The neurobiological consequences of early stress and childhood maltreatment." *Neuroscience & Biobehavioral Reviews* 27, no. 1 (2003): 33-44, Wilson, Kathryn R., David J. Hansen, and Ming Li. "The traumatic stress response in child maltreatment and resultant neuropsychological effects." *Aggression and Violent Behavior* 16, no. 2 (2011), pages 87-97.
- 7. De Kloet, E. Ron, Marian Joëls, and Florian Holsboer. "Stress and the brain: from adaptation to disease." Nature Reviews Neuroscience 6, no. 6 (2005): 463.Ozbay, Fatih, Douglas C. Johnson, Eleni Dimoulas, C. A. Morgan III, Dennis Charney, and Steven Southwick. "Social support and resilience to stress: from neurobiology to clinical practice." Psychiatry (Edgmont) 4, no. 5 (2007): 35.
- 8. Charney, Dennis S. "Psychobiological mechanisms of resilience and vulnerability." *Focus* (2004). Herman, James P., and William E. Cullinan. "Neurocircuitry of stress: central control of the hypothalamo–pituitary–adrenocortical axis." *Trends in neurosciences* 20, no. 2 (1997): 78-84. Tsigos, Constantine, and George P. Chrousos. "Hypothalamic–pituitary–adrenal axis, neuroendocrine factors and stress." *Journal of psychosomatic research* 53, no. 4 (2002), pages 865-871.
- 9. Feder, Adriana, Eric J. Nestler, and Dennis S. Charney. "Psychobiology and molecular genetics of resilience." *Nature Reviews Neuroscience* 10, no. 6 (2009): 446. Wu, Gang, Adriana Feder, Hagit Cohen, Joanna J. Kim, Solara Calderon, Dennis S. Charney, and Aleksander A. Mathé. "Understanding resilience." *Frontiers in behavioral neuroscience* 7 (2013), page 10.
- 10. Caspi, Avshalom, Karen Sugden, Terrie E. Moffitt, Alan Taylor, Ian W. Craig, HonaLee Harrington, Joseph McClay et al. "Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene." *Science* 301, no. 5631 (2003): 386-389. Gillespie, Nathan A.,

- John B. Whitfield, B. E. N. Williams, Andrew C. Heath, and Nicholas G. Martin. "The relationship between stressful life events, the serotonin transporter (5-HTTLPR) genotype and major depression." *Psychological Medicine* 35, no. 1 (2005): 101-111. Kendler, Kenneth S., Jonathan W. Kuhn, Jen Vittum, Carol A. Prescott, and Brien Riley. "The interaction of stressful life events and a serotonin transporter polymorphism in the prediction of episodes of major depression: a replication." *Archives of general psychiatry* 62, no. 5 (2005), pages 529-535.
- 11. Chen, Zhe-Yu, Deqiang Jing, Kevin G. Bath, Alessandro Ieraci, Tanvir Khan, Chia-Jen Siao, Daniel G. Herrera et al. "Genetic variant BDNF (Val66Met) polymorphism alters anxiety-related behavior." *Science* 314, no. 5796 (2006): 140-143. Schmack, Katharina, Florian Schlagenhauf, Philipp Sterzer, Jana Wrase, Anne Beck, Theresa Dembler, Peter Kalus et al. "Catechol-O-methyltransferase val158met genotype influences neural processing of reward anticipation." *Neuroimage* 42, no. 4 (2008): 1631-1638. Zhou, Zhifeng, Guanshan Zhu, Ahmad R. Hariri, Mary-Anne Enoch, David Scott, Rajita Sinha, Matti Virkkunen et al. "Genetic variation in human NPY expression affects stress response and emotion." *Nature* 452, no. 7190 (2008), page 997.
- 12. Feder, Adriana, Eric J. Nestler, and Dennis S. Charney. "Psychobiology and molecular genetics of resilience." *Nature Reviews Neuroscience* 10, no. 6 (2009): 446. Gillespie, Charles F., Justine Phifer, Bekh Bradley, and Kerry J. Ressler. "Risk and resilience: genetic and environmental influences on development of the stress response." *Depression and anxiety* 26, no. 11 (2009): 984-992. Southwick, Steven M., and Dennis S. Charney. "The science of resilience: implications for the prevention and treatment of depression." *Science* 338, no. 6103 (2012), pages 79-82.
- 13. De Kloet, E. Ron, Marian Joëls, and Florian Holsboer. "Stress and the brain: from adaptation to disease." *Nature Reviews Neuroscience* 6, no. 6 (2005): 463. Osório, Carlos, Thomas Probert, Edgar Jones, Allan H. Young, and Ian Robbins. "Adapting to stress: understanding the neurobiology of resilience." *Behavioral Medicine* 43, no. 4 (2017), pages 307-322.
- 14. Bradley, Rebekah G., Elisabeth B. Binder, Michael P. Epstein, Yilang Tang, Hemu P. Nair, Wei Liu, Charles F. Gillespie et al. "Influence of child abuse on adult depression: moderation by the corticotropin-releasing hormone receptor gene." *Archives of general psychiatry* 65, no. 2 (2008), pages 190-200.
- 15. Shonkoff, J., P. Levitt, S. Bunge, J. Cameron, G. Duncan, P. Fisher, and N. Fox. "Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience. pdf." *National Scientific Council on the Developing Child* (2015), page 1.
- 16. Kamarck, Thomas W., Barbara Annunziato, and Leigh Meriwether Amateau. "Affiliation moderates the effects of social threat on stress-related cardiovascular responses: Boundary conditions for a laboratory model of social support." *Psychosomatic medicine* 57, no. 2 (1995), pages 183-194. Kirschbaum, Clemens, Thomas Klauer, Sigrun-Heide Filipp, and Dirk Helmut Hellhammer. "Sex-specific effects of social support on cortisol and subjective responses to acute psychological stress." *Psychosomatic medicine* 57, no. 1 (1995), pages 23-31. Lepore,

- Stephen J., Karen M. Allen, and Gary W. Evans. "Social support lowers cardiovascular reactivity to an acute stressor." *Psychosomatic Medicine* (1993). Stansfeld, Stephen A., Rebecca Fuhrer, Jenny Head, Jane Ferrie, and Martin Shipley. "Work and psychiatric disorder in the Whitehall II Study." Journal of psychosomatic research 43, no. 1 (1997), pages 73-81. Steptoe, Andrew, Natalie Owen, Sabine R. Kunz-Ebrecht, and Lena Brydon. "Loneliness and neuroendocrine, cardiovascular, and inflammatory stress responses in middle-aged men and women." *Psychoneuroendocrinology* 29, no. 5 (2004), pages 593-611. Uchino, Bert N., John T. Cacioppo, and Janice K. Kiecolt-Glaser. "The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health." *Psychological bulletin* 119, no. 3 (1996), page 488.
 - 17. Resick, Patricia A. Stress and trauma. Psychology Press, 2014.
- 18. Cicchetti, Dante. "Resilience under conditions of extreme stress: a multilevel perspective." *World Psychiatry* 9, no. 3 (2010), pages 145-154. Masten, Ann S. "Risk and resilience in development." (2013). Russo, Scott J., James W. Murrough, Ming-Hu Han, Dennis S. Charney, and Eric J. Nestler. "Neurobiology of resilience." *Nature neuroscience* 15, no. 11 (2012), page 1475.
- 19. Kaufman, Joan, Bao-Zhu Yang, Heather Douglas-Palumberi, Shadi Houshyar, Deborah Lipschitz, John H. Krystal, and Joel Gelernter. "Social supports and serotonin transporter gene moderate depression in maltreated children." *Proceedings of the National Academy of Sciences of the United States of America* 101, no. 49 (2004), pages 17316-17321.
- 20. Shonkoff, J., P. Levitt, S. Bunge, J. Cameron, G. Duncan, P. Fisher, and N. Fox. "Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience. pdf." *National Scientific Council on the Developing Child* (2015), page 5.
- 21. Oprah Winfrey, "Treating Childhood Trauma," CBS News March 11, 2018 https://www.cbsnews.com/news/oprah-winfrey-treating-childhood-trauma/.
 - 22. De La Salle, J. B. Meditations by John Baptist de La Salle. (1994). 197.1-198.3.
 - 23. De La Salle, J. B. Meditations by John Baptist de La Salle. (1994). 33.1-33.3.
- 24. De La Salle, J. B. *The Conduct of the Christian Schools* (F. de La Fontainerie and R. Arnandez, Trans.). Landover, MD: Lasallian Publications (1996).