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Fostering Resilience through Early Childhood Education

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Abstract

Resilience is the capacity to thrive in, rather than just survive stress and adversity (Ernst et al., 2019). Supporting children to develop resilience is an essential part of holistic developmentally appropriate practice within the field of Early Childhood Education because an improved capacity for resilience benefits other domains of education and wellness (Center on the Developing Child at Harvard University, 2011). Studies on resilience in early childhood education were examined to identify and explore protective factors, classroom strategies, and home relationships that contribute to an increased capacity for resilience in young children. In addition, position statements and articles from early childhood professional bodies were used to offer relevant context within the field. The research offered many practical ideas and strategies for educators to nurture resilience within their classrooms and extend opportunities for academic and personal growth of each individual child. Through a holistic vision of early childhood education, a deep comprehension of resilience theory, and developmentally appropriate action to strengthen resilience protective factors, educators can foster resilience in the rising generation. Future research on long-term effects of these tools will offer a more comprehensive perspective of what strategies are most effective and sustainable.

Keywords: resilience, early childhood education (ECE), holistic education, child development, mental health

Chapter One: Introduction

Children are facing increasing societal threats to mental health, well-being, and development (Ernst et al., 2019). Amongst increased incidents of stress, anxiety, and depression, happiness, well-being, and life satisfaction are on the decline (Graber et al., 2019). As societal pressures evolve, so must the way educators approach their practice to ensure children are developing the capacity to thrive in the modern world. One key strategy outlined in the literature that combats society's increasing threats to well-being is supporting young children to develop resilience (Ernst et al., 2019; Olive et al., 2019). It has been shown that good mental health during early childhood carries over to future stages of life, laying the foundation for lifelong mental health, well-being, academic success, and physical health (Olive et al., 2019).

Educator Role in Supporting Mental Health

To understand the function and importance of early childhood educators' roles in fostering resilience to support mental health, it is beneficial to review recent evidence regarding these themes and practical applications found within the literature. Over the last several years, early childhood researchers have been actively refining what resilience is, how it can be influenced, and strategies educators can incorporate into practice (Ernst et al., 2019). An emerging trend has been for researchers to investigate how early childhood educators can support mental health by fostering resilience and mental skills (Ernst et al., 2019). The literature points to improved understanding of how mental health is affected by resilience, the importance of self-efficacy, the positive effects of nature experiences, the impact of teaching methods that incorporate mental health as a learning outcome, ways educators can promote coping skills through developmentally appropriate practice, and how educators can work with families to extend or complement home experiences. Further exploration and experimentation on specific

strategies and principles will continue to shed light on ways resilience can be improved during the early years. These current and future findings are of importance to educators, administrators, policymakers, and, most importantly, to families as they consider the whole spectrum of human development to promote well-being and happiness (Olive et al., 2019). Given the research demonstrating the importance of developing resilience during early childhood, stakeholders must ask, how can early childhood educators facilitate resilience?

Learning how to support mental health by fostering resilience in young children is part of a developmentally appropriate and holistic approach to education (Hughes, 2016). Developing an increased capacity for resilience at a young age is especially impactful throughout the lifespan (Center on the Developing Child at Harvard University, 2011). Early childhood has long been understood as a critical phase of development during which connections made have far-reaching effects throughout the entire lifespan. The study of neuroplasticity has demonstrated that educators are in a unique position to promote resilience during the early years when connections in the social-emotional regions of the brain are developing (Taket et al., 2014). While resilience can be developed and demonstrated at any age, resilience is best developed during these early stages of brain development (Ernst et al., 2019). Competent, caring, and positive adult relationships influence how children perceive and react to adversity, making educators and parents strong influences on children's resilience (Ernst et al., 2019; Hughes, 2016). Developed resilience then leads to positive improvements in current and future mental health, well-being, and physical health which are universally regarded as positive outcomes (Olive et al., 2019). The research suggests that as chronic stress continues to become more manifest in the form of depression, anxiety, mistaken behaviour, and mental health disorders, modest investments during early childhood could pay off in social and economic dividends throughout the lifespan (Bagdi & Vacca, 2005; Gartrell & Cairone, 2014).

Resilience in Children

According to Hughes (2016), it is important for children to develop resilience because it is interconnected to their lifelong well-being, success, and happiness. In busy classrooms, educators begin to treat the symptoms rather than treat the disease, the underlying roots of mistaken behaviors (behaviors that are negative but not intentional) do not have a chance to heal (Gartrell & Cairone, 2014). Treating chronically underdeveloped resilience is one effective way to treat mistaken behaviors that result from chronic stress or trauma (Gartrell & Cairone, 2014). It is therefore critical for early childhood educators to adopt a focus within their classroom to develop the resilience of their students. This holistic approach is often marginalized in favour a single-minded approach to improving strictly academic performance, but refocusing on high-quality, holistic, and developmentally appropriate practice demands educators to understand and develop resilience as a learning outcome that enhances, rather than negates academic performance (Center on the Developing Child at Harvard University, 2011).

A resilient child can practice and gain skills and strategies in the safety of the classroom and their homes, which will follow them and help them throughout their lives. Simple things like being praised for effort rather than ability, sharing responsibilities, experimenting with problem solving, and receiving encouragement through frustration will help develop resilience (Collet, 2017). Seeing problems as opportunities creates an environment where children learn to handle rather than avoid problems. For example, a child allowed to use invented spelling will take measured risks. Through their academic journey, a child that takes risks will look for creative solutions to learn new concepts, more readily overcome frustration at a difficult math problem or

grammar concept, and be buffered against the inevitable changes experienced at home and school so better engagement in learning is possible. Later in life when a child is faced with a teenage or adult sized problem, they will have a greater capacity to problem solve, overcome frustration in a safe appropriate manner, recover from bad news or choices, and have an increased sense of well-being that will carry them through all types of difficult scenarios (Collet, 2017). By learning what resilience is, why it is important, and how to harness it within their classrooms, educators can support resilience at both home and school, and in the future. An increased capacity for resilience has the power to positively change academic outcomes, individual well-being, communities, and economies (Naidoo & Muthukrishna, 2016).

Definitions

Mental health is important at all stages of life from infancy to adulthood. It is frequently associated with resilience and happiness. Mental health influences the way individuals develop and maintain relationships as well as the way they survive or even thrive in the face of adversity (Olive et al. 2019). The terms mental health and well-being are often used interchangeably in the literature and relate to an individual's emotional, cognitive, spiritual, and social health (Olive et al., 2019; Hughes, 2016). Upon interviewing educators and parents, Hughes (2016) found that people's perceptions of happiness are often related to well-being and mental health. Hughes (2016) also found that most often happiness was associated with positive experiences outweighing negative ones, attention to spiritual contemplation, engagement and delight in activities, and development of positive relationships (Hughes, 2016). Both mental health and happiness are described as universally positive and valued traits (Ernst et al., 2019). Furthermore, mental health and happiness can be influenced by resilience, protective factors, and coping skills (Ernst et al., 2019).

Mental health and happiness are affected by an individual's response and resilience to stressors (Olive et al., 2019). This resilience is observed in children when they thrive and continue to develop despite their adverse circumstances and can be conceptualized as a human capacity that can be developed and strengthened in all people (Taket et al., 2014). Resilience is not a binary trait; instead it is developed in every individual (Ernst et al., 2019). There are, however, internal, external, and contextual protective factors such as: an internal sense of self-efficacy, the external environment, or a strong positive relationship (Ernst et al., 2019). As resilience is an ability that is restored or gained through practice and strengthening of protective factors and coping skills, it can be supported through a full spectrum of different strategies including: allowing children adequate sleep and space to recover from draining experiences, time to adjust to a new situation, providing problem solving techniques, labeling feelings, and helping children find meaning in life (Taket et al., 2014; Ernst et al., 2019).

Conclusion

Early childhood educators can support mental health by fostering resilience. Through examining the evidence in the literature, educators can better understand what resilience is, why it is an essential component of developmentally appropriate practice, and how educators can use this knowledge in practical ways inside and outside their classroom to improve the mental health and lifelong well-being of each individual student. While educators and parents both try to protect children from stress and trauma, children around the world still experience stress and trauma daily (Pizzolongo & Hunter, 2011). The negative effects of stress and trauma can, however, be mitigated by fostering resilience through protective factors. "Resilience helps children (and adults) overcome adversity with courage, skills, and faith" (Grothberg as cited by Pizzolongo & Hunter, 2011, p.68). Helping children develop an increased capacity for resilience

is consistent with holistic, developmentally appropriate practice, early childhood theories and philosophies, and supports a vision for a positive future in early childhood education where children can blossom and learn without the crushing weight that comes with the inability to overcome stress (Bodrova & Leong, 2007). Through an improved capacity for resilience seeded and nurtured during early childhood, children can look forward to a brighter future where they do not just survive stress, but thrive despite it (Ernst, et al. 2019). In the next chapter, literature pertaining to resilience will be reviewed in the context of how early childhood educators can foster resilience in young children.

Chapter Two: Literature Review

Children around the world are exposed to stress and trauma from large-scale natural disasters, violence, separation and death and less discernible stressors such as sibling harassment, peer rejection, developmentally inappropriate practices, or inconsistency of caregivers (Pizzolongo & Hunter, 2011). The National Association for the Education of Young Children (2011) establishes best practices for the field of Early Childhood educators and concludes it is the ethical responsibility of educators to proactively support the holistic development of all children. This extends to ensuring children develop the capacity to overcome feelings of vulnerability, worry, fear, sadness, frustration, and loneliness rather than reactively and inexorably trying to address the symptoms of a chronic lack of resilience (Pizzolongo & Hunter, 2011). Fostering resilience in young children is one way educators can effectively support young children through adverse conditions. Studies that increase educators' understanding of resilience, how it can be implemented practically in the classroom, and how it can benefit their students and families have been reviewed to create a concise picture of how educators can effectively support resilience. The literature explores what resilience is, why it is important, how it can be holistically and integrated into curriculum in a developmentally appropriate way, and how to support resilience beyond the classroom walls-sustainably improving life for children, families, school ecosystems, and communities.

What is Resilience?

Over the last several years, early childhood researchers have been actively refining the definition of resilience, how it can be influenced, and strategies educators can incorporate into practice to foster its development in children (Ernst et al., 2019). There has been an increase in research into how early childhood educators can foster resilience and coping skills in support of

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mental health (Bagdi & Vacca, 2005). The literature points to improved understanding of how mental health is affected by resilience, the importance of self-efficacy, the positive effects of nature experiences, the impact of teaching methods that incorporate mental health as a learning outcome, ways educators can promote coping skills through their practice, and how educators can work with families to extend or complement home experiences. Further exploration and experimentation on specific strategies and principles will continue to shed light on ways resilience and coping skills can be improved during the early years. These current and future findings are of importance to educators, administrators, policymakers, and, most importantly, families as they consider the whole spectrum of human development to promote well-being and happiness (Olive et al., 2019). Ernst et al. (2019) define resilience as the capacity to cope with stress and adversity. The concept of resilience as a capacity to develop, rather than a virtue that someone either possesses or does not, is an important one. As resilience can be improved through protective factors like self-regulation and attachment, it is a positive and learned skill that educators can and are ethically bound to nurture (National Association for the Education of Young Children, 2020).

A better understanding of resilience in young children can help educators focus on whole child development. Resilient young children are autonomous and can ask for help (Pizzolongo & Hunter, 2011). Traits of resilience can also be identified within infants and toddlers. Infants and toddlers that are active, affectionate, cuddly, good-natured, easily soothed, and that successfully elicit support from a nurturing family member have a more strongly developed capacity for resilience. Children not demonstrating these traits are fully capable of developing resilience if supported in their development (Ernst et al., 2019).

Once an educator understands and can identify what resilience looks like, they can then view all aspects of home and school life through this lens. With this holistic approach, educators can correctly observe, identify, and respond to mistaken behaviors stemming from underdeveloped or decreased resilience (Gartrell & Cairone, 2014). Understanding resilience can be a tool educators use in their holistic and developmentally appropriate, responsive practice. In the case of mistaken behavior, educators are much more likely to respond appropriately if they identify a child that may benefit from learning a new coping skill to increase autonomy to be self-reliant, or are attentive to the fact that a recent separation, lack of sleep, or other event has temporarily lowered the child's ability to focus on new stimuli—this might not be the day to learn a complicated new skill for one child, or for another a distraction may be just what they need. Understanding what resilience is helps educators better comprehend the complexity of classroom behavior.

Resilience and Happiness

As resilience is the human capacity to overcome, be strengthened, and transformed by adversity, it is universally valued as a positive human development goal that fosters happiness and learning (Pizzolongo & Hunter, 2011; Ernst et al., 2019). Hughes (2016) performed a qualitative study that explores the perspectives of teachers on a holistic pedagogical approach to supporting happiness as part of the aim of education. Twelve kindergarten-to-Grade 2 teachers in Ontario, Canada, from five different pedagogical contexts (public, independent, Waldorf, Froebel, and Montessori) were purposefully selected for the study. Teachers completed an interview to explore, recognize, and describe aspects of happiness to determine what makes a happy classroom. Each classroom was observed for 12 hours over two weeks and descriptive data was collected. Hughes (2016) highlights that supporting well-being and happiness is not in

opposition to other curricular objectives of educators—instead, it acknowledges that learning is holistic by attending to the full spectrum of human development. There are also specific positive experiences identified that attend to the whole child and give educators clear guidelines on ways to support resilience. These guidelines include positive relationships, learning outdoors, active play, arts-rich experiences, practical approaches to teaching happiness, and mindfulness practices. Supporting happiness and mental health through early childhood education—such as fostering resilience at home and school—will determine the well-being of the future generation and society. These needs can be most effectively met by laying down strong early childhood connections that form a capacity for well-being and happiness through resilience in the face of adversity (Hughes, 2016).

Why is Resilience Necessary?

The Centre of the Developing Child at Harvard University (2011) asserts that young children that learn and engage in executive functions—such as self-control—benefit from improved development throughout their lifespan. Learning skills like filtering distractions, switching activities, and impulse control are critical to later development, social impact, and academic success. Children that master executive functions early on are more likely to become engaged and competent learners and citizens. Early childhood educators can support children in gaining these skills through Vygotskian-based approaches that are responsive to the students and scaffold developmentally appropriate experiences that develop executive function. This article persuades readers that it is worth investing time and resources early during the lifespan to preemptively overcome challenges faced later in life. Humans have the potential to express genes early in life that affect long-term development and acquiring these skills early is essential to development (Centre of the Developing Child at Harvard University, 2011). Learning resilience

young does not just extend the duration of a higher quality life for children, it also the most efficient and effective time of development to rapidly gain this capacity. It is, therefore, critical that educators scaffold children's neuroplastic brains with positive coping strategies and experiences that improve resilience before their neural pathways are less malleable (Centre of the Developing Child at Harvard University, 2011). It is also noted in this paper that investments in education are economically a better investment in comparison to reparative costs of negating this area of development. Naidoo and Muthukrishna (2016) come to a similar conclusion in their study as they note the positive feedback loop associated to lack of intervention after community wide trauma and the far reaching socioeconomic impacts of a generation that was not supported with adequate resources to gain resilience adequate enough to see children through a traumatic generation of events.

Through the lens of social sustainability, Naidoo and Muthukrishna (2016) conducted a large-scale case study that mapped educational barriers caused by social inequality in South Africa. In a post-apartheid culture, scars from stress and trauma were deep and issues such as violence, unemployment, and social fragmentation were prevalent. They studied one early childhood facility, four primary schools (children, caregivers, and teachers), and their communities through a series of interviews. The community chosen was selected because of the traumatic history and ongoing socioeconomic issues where many children had lost one or more parents to violence or AIDS. The sample was not random as the community and participants were selected for the study based on a traumatic history. Furthermore, interviews were translated from isiZulu to English creating potential issues in interpretation. A broader study of several traumatized communities may be more apt to reveal if this case study is a trend or an anomaly.

The concept of social sustainability as an outcome of caring for the health and well-being of young children is raised, and social sustainability is defined as recognizing every individual, present and future, has a right to be a valued participant in their community. Naidoo and Muthukrishna (2016) take the concept of resilience in early childhood and project it through the lens of long-term societal obligations and consequences. This study clearly concludes that intervention and support of resilience protective factors are required to break the traumatic feedback loop troubling future generations (Naidoo & Muthukrishna, 2016).

Risk Factors of Resilience

Bagdi and Vacca (2005) found that in a qualitative investigation of 67 young mothers and three-year-old children that maternal well-being was linked to children's mental well-being and temperament. The study was limited in size and the participants were not randomly selected. A larger sample size and more diverse demographic in the future could demonstrate if the findings are consistent across more demographics. The study was conducted through questionnaires and observations, controlling for prenatal, postpartum and concurrent maternal hormones that influence emotions amid a plethora of identified risk factors (Bagdi & Vacca, 2005). The findings support a multisystems approach to the role of maternal biological and psychological processes influencing child temperament and resilience. A multisystems approach sheds light on the importance of supporting families to foster well-being and resilience in young children. Bagdi and Vacca (2005) identified several categories and potential risk factors to resilience and emotional wellness, many of which are within the circle of influence of educators. Risk factors for children include low birth weights, prematurity, challenging temperaments, fluctuating physiological states, developmental delays, and disabilities. Additional risk factors include poor

health, presence of illness, insecure attachments, deficient social skills, underdeveloped language and cognition, poor executive function, and minimal stress management and coping skills.

Parents and families share similar risk factors through temperament, disabilities, health and illness, stress management and coping skills. In addition, they introduce risk factors through internal working models, awareness of child health, development and well-being, training and education, and legislative priorities. The environment consisting of the natural environment, communities and neighbourhoods, and social/cultural/political landscapes echo risk factors relating to health, illness, disabilities, training and education, and legislative priorities and extend one step further to public health awareness. All risk factor categories are susceptible to socioeconomic status, family culture, race and ethnicity, abuse, neglect and maltreatment (Bagdi & Vacca, 2005). Risk factors from elements of children, families, and the environment all contribute to emotional wellness and developing resilience to these risk factors through protective factors is one way to mitigate known risk factors (Gartrell & Cairone, 2014).

Protective Factors of Resilience

Both risk and protective factors can be found within individual children, family, and environmental systems (Gartrell & Cairone, 2014). Naidoo and Muthukrishna (2016) found that protective factors such as feeling connected, warmth, and support helped improve resilience and began to repair the well-being of the community. The researchers also found that educators were in a good position to facilitate this effort, but that they were not adequately trained to do so effectively. Intentionally preparing educators through preservice training and ongoing professional development is necessary to support educators and reap the benefits of fortifying this capacity in young children (Bagdi & Vacca, 2005).

In a case study conducted through observations and interviews of a three-and-a-half-yearold boy struggling with stress-induced behaviour issues in a preschool classroom, Gartrell and Cairone (2014) model a successful strengths-based approach to supporting the child's internal (psychological) and external (environmental) protective factors. The study was limited to one child, but sheds light on how focusing on resilience supported a child to develop the necessary socioemotional skills associated with resilience. The study was limited to a single child and does not demonstrate any trends, but it does demonstrate one way that the educators successfully used internal and external protective factors to their advantage. The educators promoted internal protective factors through focusing on socioemotional skills relating to attachment/relationships, initiative, self-regulation, and external protective factors through supporting the mother of the child in an educator-parent partnership. Supporting the mother to feel like a worthy parent and positively involved in the child's development, supported the child's development (Gartrell & Cairone, 2014). Educators nurtured the educator-parent partnership by empowering the mother with tools to be more consistent at home and by helping improve the mother's self-esteem regarding parenting. By supporting the mother, the educators were able to lower stress in the home and the instances of stress-induced incidents at both school and home. Internally, the educators supported protective factors through partnering up the child with peers for various tasks, giving the child a chart of different jobs to complete to help out, identifying feelings, setting limits, asking open-ended questions about how to solve problems, and prompting appropriate responses. This scaffolded positive relationships, initiative, and self-regulation (Gartrell & Cairone, 2014).

Supporting Resilience at School

Within the classroom, educators have many strategies at their disposal to foster internal and external protective factors of resilience. Responsively observing and authentically assessing each child helps educators determine and develop strategies for happiness and internal development opportunities (Hughes, 2016). Encouraging frequent nature contact that facilitates both relaxing and restorative experiences as well as energetic physical activity promote stress reduction as well as health that contribute to physical and environmental protective factors for each child (Taket et al., 2014). In support of the National Association for the Education of Young Children (2020), educators demonstrate developmentally appropriate practice when they holistically support all domains of development as part of their practice and curriculum. Wellbeing and resilience should therefore be integrated into developmentally appropriate practice as a learning outcome (Olive et al., 2019). Finally, educators support resilience through forming strong relationships with families to establish consistency between home and school and extending coping skills that will strengthen resilience into the home environment (Taket et al., 2014).

Focus on Happiness and Developing Internal Qualities

Internal skills and perceptions are often linked to the feeling of happiness and outcome of resilience and mental health within the body of literature. Ernst et al. (2019) conducted a quantitative and exploratory study investigating how nature preschool attendance could influence three specific internal protective factors associated with resilience: initiative, self-regulation, and attachment behaviours. The researchers studied 92 preschoolers (ages three to five) at four different nature schools (78 participants) and one non-nature school (14 participants) in Minnesota (Ernst et al., 2019). Both the nature schools and baseline school were quality

programs focused on holistic child development and play-based curriculum. The study was completed with a pretest-posttest design that was conducted at the beginning and end of each school year using the Devereaux Early Childhood Assessment for Preschools as a standardized behavior rating scale (Ernst et al., 2019). Ernst et al. (2019) found that protective mechanisms that give rise to successful adaptation to diversity are personal qualities such as problem-solving abilities, initiative, self-efficacy, a sense of purpose in life, self-regulation skills, persistence, and belief that life has a meaning. Effective teachers and schools are able to improve mental health by supporting these qualities.

Authentically experiencing positive emotions like happiness *and* negative emotions like sadness are precursors for the essential executive functions that children must develop for their learning, health, and well-being (Ferrier et al., 2014). The dominant discourse of resilience theory concludes that executive function is the factor primarily associated with emotional regulation (Ferrier et al., 2014). Ferrier et al. (2014) suggest that authentically experiencing emotions is an essential precursor to the development of executive function. Researchers used partial least squares modeling to track the relationship between emotionality and executive function across time in a qualitative study. Data was collected using questionnaires from 175 children aged 35-60 months from Head Start and private childcare facilities. Each child was assessed twice by a research assistant in six-month intervals, assigning subjective ratings of executive function (Ferrier et al., 2014). It was found that emotionality—the ability to appropriately express and experience positive and negative emotions—predicts future executive function (Ferrier et al., 2014). Data was not collected from parents and only reflects results from a controlled preschool environment at two points in time. A third data point would better reveal a trend linking emotionality to executive function development. Despite the limitations of the

study, the research reveals the importance of allowing children to fully experience emotions in a safe classroom environment so that emotionality can develop into higher executive functions over time (Ferrier et al., 2014).

Support Persistence

Gaining protective mechanisms like persistence can be easily woven into classroom practices and curriculum through strategies as simple as language choices and emphasis of educators (Zentall & Morris, 2010). Zentall and Morris (2010) conducted a quantitative study where generic versus non-generic praise was investigated. Three female research assistants, blind to the hypothesis, collected data from a group of 135 predominantly Caucasian kindergarteners ages five to six, from two public schools in the midwestern United States (Zentall & Morris, 2010). Each child received either generic or non-generic praise from the teacher after drawing four successive pictures (Zentall & Morris, 2010). Generic praise is rooted in factors that are beyond the control of the individual such as "you draw well;" whereas non-generic praise stems from factors that the individual has control over, such as persistence, as seen in the praise, "you kept searching and found the perfect shade of green" (Zentall & Morris, 2010).

Some children received consistent praise, while others received inconsistent praise. This study found that consistent and non-generic praise increased the motivation of children to be persistent in the face of failure. It did not explore whether inconsistent praise focuses children's attention to other aspects of a task, feelings about failure, or fear of future failure (Zentall & Morris, 2010). This could be investigated further to understand the mechanisms of why consistent praise encourages persistence. Future research is also needed in more diverse socioeconomic communities and cultures could reveal the depth of influence of the findings (Zentall & Morris, 2010).

Zentall and Morris (2010) reproduced previous findings concluding that non-generic praise that focuses on effort such as, "you worked hard on that" promotes mastery of behaviors, whereas generic praise like, "good job" that focuses on results promotes helpless behaviors such as giving up and becoming frustrated or feelings of failure. Children can discriminate between generic and non-generic statements from as young as two-years-old (Zentall & Morris, 2010). Efforts to improve resilience by fortifying children's persistence can be achieved through educators intentionally choosing to give non-generic praise. This simple shift to language that focuses on effort over results can lead to a significant improvement of intrinsic motivation and resilience (Zentall & Morris, 2010).

Provide Ample Outdoor Experiences

Ernst et al. (2019) specifically researched the effects of nature programs in contrast to traditional high-quality programs. They wanted to find ways educators could help children reduce stress through nature contact. They found that the benefits of exposure to nature on mental well-being were well documented but that beyond these benefits, nature play in preschool further includes positive peer experiences, positive relationships with adults, and opportunities to feel competent. Hughes (2016) and Taket et al. (2014) similarly recognized that outdoor play and positive adult relationships contribute to improved resilience, increased happiness, and improved mental health. Nature play is a significant contributor to the protective factors that support resilience and educators can support development by maximizing opportunities to play in nature.

Although it has been found that nature play is a protective factor for resilience, resilience theory has not adequately considered nature as a protective factor in the same way it has examined more researched protective factors like neighborhood safety, community organizations, and food security (Beery, 2020). Beery (2020) conducted a mixed-method case

study using spatial analysis, survey outreach, and focus group methodology to understand how preschools can benefit from access to nature play in city parklands and what barriers existed for educators to access the protective factors associated with nature play. Spatial analysis was used to locate licensed child care facilities within the city of Duluth, Minnesota (Beery, 2020). Twenty-eight facilities were contacted, and 15 facilities completed surveys representing programs serving 330 children in the city (Beery, 2020). The study found that access to parklands was the largest barrier to nature play for licensed preschools in Duluth (Beery, 2020). The results are difficult to generalize as Duluth is a city rich with city parkland and the community is actively engaged in sustainability efforts with a focus on nature play (Beery, 2020). While the study looked to see if nature play was a precursor for the development of resilience, resilience was not measured and the interconnectedness of nature play and the development of resilience requires further research (Beery, 2020). Further research considering nature as a protective factor of resilience theory will be required in this area to better understand the concept of nature play as a protective factor of resilience (Beery, 2020). Beery (2020) suggests that children's nature experiences are becoming increasingly rare and that children are becoming disconnected with the emotional, cognitive, and physical development benefits associated with it. Beery (2020) proposes that to reverse this trajectory, efforts must be invested into early childhood education at the beginning of the life-span. Through enriching children's daily life, Beery (2020) argues that both individual resilience will develop, as well as community sustainability.

Both nature play and large motor physical activity are important for development (Olive et al., 2019). Unfortunately, the two concepts are sometimes incorrectly used interchangeably. While physical activity is a benefit of nature play, it is only one of many ways to experience and

benefit from nature. Nature play nurtures curiosity, creative thinking, reflection, and a connectedness to a complex natural ecosystem (Ernst et al., 2019). Both experiences for nature play and physical activity are elements of a program that fosters resilience (Beery, 2020).

Create Curriculum with Mental Health as a Learning Outcome

A study by Olive et al. (2019) measured and showed statistically significant responses to how specifically designed and delivered curriculum can improve mental health outcomes. In this quantitative study, a cluster-randomized controlled trial of 821 healthy seven-to-eight-year-old children from 29 schools participated in a one year and four year experiment. During this time, data was collected for indicators of depression, body fat, physical activity, puberty, and socioeconomic status at the beginning of the trial. Of the 29 schools, 13 received an intervention program where specialized physical education teachers focused on engaging with each child, emphasized the enjoyment of movement, and discouraged individual competition. The remaining participants all continued to receive physical education classes from generalized teachers. It was found that instruction can help or hinder mental health and that intervention results can vary depending on gender (Olive et al., 2019). Specifically, it was noted how specialist teaching increased body satisfaction for girls in the first year of the study, but by the fourth year those same students receiving specialist teaching had significantly decreased body satisfaction compared to the group not receiving specialized training (Olive et al., 2019). This finding indicates that to positively affect current and future mental health and well-being, it is important for teaching strategies and curriculum to adapt with the needs of the students and to be assessed regularly for effectiveness. Hughes (2016) further asserts the importance of dynamic and engaging curriculum to enhance happiness, mental health, and academic outcomes.

Build Partnerships with Families to Teach and Model Coping Skills

Educators are in a unique position to be able to support families fostering resilience at home (Ernst et al., 2019). Extending coping skills that will strengthen resilience into the home environment is important as research has identified that individual characteristics, caregiver relationships, and socio-cultural environments are significant factors in early childhood development and the development of resilience (Taket et al., 2014). Parental warmth is a key factor in promoting resilience, and parental involvement in cognitively stimulating activities during the preschool years predict resilience to stress events later in life (Taket et al., 2014). Schools can bolster protective elements by providing further opportunities for self-regulation, socioemotional learning, forming positive peer and adult relationships outside the home, and connection to community resources (Taket et al., 2014). Taket et al. (2014) conducted a qualitative study to investigate how families' perceptions of resilience and strategies could support their children's resilience. Participants were selected from a broader Australian study and children specifically facing extreme adversity while still demonstrating high levels of resilience were recruited. Data came from interviews with the mother of each child and was analyzed with deductive thematic analysis. These disadvantaged and resilient children thematically came from homes where parents were receptive to cues such as upset behavior or negative reactions, where parents encouraged self-regulation through reassuring and soothing words, empathetic understanding, and positive modeling, where parents helped children recognize emotions by naming them—thus building more connections in their developing brains, and where parents encouraged self-reliance and avoided over involvement (Taket et al., 2014). These strategies were found to be effective in helping children develop resilience and thrive despite adverse circumstances and can be reinforced by educators and parents working together

(Taket et al., 2019).

Supporting Resilience at Home

Family perceptions of resilience and the potential strategies they used supported their child's resilience (Taket et al., 2014). Resilience theory and action research can be used effectively to support positive changes within families that support and reflect resilience efforts within the classroom as well as promoting lifelong improvements to well-being (Hendrick & Young, 2013). Developmental systems theory builds on resilience theory by demonstrating how families and even communities have far reaching and lifelong effects on the resilience and well-being of young children (Branch et al., 2013). Through understanding family systems both families and educators can better understand and use strategies to improve children's well-being at both home and school (Branch et al., 2013).

Resilience Theory and Action Research

Hendrick and Young (2013) found that resilience theory as a premise provides protective and promotive factors to children, families, educators, and policymakers and guards against risk in early childhood. Hendrick and Young (2013) examined three case studies of how resilience theory and action research can be used to make positive changes to the well-being of children. The data was limited by the focus on environmental factors compared to individual factors as well and is representative of an Australian community. Young children were examined in an indigenous community, a community park with families of diverse backgrounds, and a group of indigenous teenage mothers. Researchers engaged with these groups to identify needs and meet needs on a local level. They found these outreach programs were successful and were able to receive further funding due to positive outcomes of community health and well-being.

Research on resilience has an indeterminate beginning, but research on risk factors has been ongoing since at least the 1950s (Hendrick & Young, 2013). These risk factors include but are not limited to, poverty, family unemployment, and parent-child conflict affecting child development (Hendrick & Young, 2013). Over time resilience has been treated less like an outcome and more like a process (Hendrick & Young, 2013). That is to say that a child does not *become* resilient; rather they *learn how* to act resiliently by making daily decisions and using tools to overcome challenges. There are several debated and unresolved approaches to resilience theory that are beginning to emerge as a unified approach to resilience (Hendrick & Young, 2013).

The literature is heavy with research that explores variable specific protective factors such as health services, education services, drug awareness programs, and anti-bullying strategies that address variables leading to a need for resilience (Hendrick & Young, 2013). Other research focuses on promotive factors that occur naturally such as high intelligence, socioeconomic advantage, or supportive family environments (Hendrick & Young, 2013). Both of these types of research rely heavily on external environmental variables. Hendrick and Young (2013) advocate for the implementation of process identification for both protective and promotive factors rather than variable identification to better predict outcomes with available or self-developed scales. Hendrick and Young (2013) further argue that process identification-driven resilience theory is strengthened through local participation and reviewing provided by action research which focuses on prevention of stressors rather than investigatory intervention during or after a stressful event or situation.

Using Developmental Systems Theory to Support Resilience

Developmental systems theory builds on Bronfenbrenner's bioecological model as well as other theoretical work in psychological and evolutionary biology (Branch et al., 2013). Branch et al. (2013) explored how developmental systems theory could be practically applied within a community for positive outcomes on resilience through a qualitative study. The researchers conducted 22 half hour, semi-structured interviews and 20 surveys which included principals, teachers, and parents at two different sites (Branch et al., 2013). Time restraints limited further interviews with more parents and a larger sample size and the nature of the interview process left data susceptible to misrepresentation (Branch et al., 2013). Branch et al. (2013) found that defining characteristics of this theory are that change over time is fundamental and the rejection of the notion of nature versus nurture as distinct processes. Instead, human development is a holistic developmental system in which individuals develop and evolve over time (Branch et al., 2013). Children, families, educators, and policymakers face the challenge of effectively partnering to meet the well-being needs of the whole child (Branch et al., 2013). Where educators are responsible for educational outcomes and counsellors are responsible for emotional well-being and resilience, nobody within the community is tasked with responsively unifying these needs and meeting needs holistically (Branch et al., 2013). Families are in a position to try but have limited success without access to appropriate resources (Branch et al., 2013).

While socioeconomic status is often a factor that is predictive of resilience and that increases access to resources that promote holistic development, the economic status of a country does not always translate into positive social, health, and educational outcomes for young children (Branch et al., 2013). Even prosperous countries such as Australia face chaotic childrearing environments and poverty (Branch et al., 2013). The Pathways to Prevention project

founded on developmental systems theory uses a program called Circles to support relationship building and achieve positive child outcomes (Branch et al., 2013). The Circle program strengthens connections between schools, families, and community services by setting goals, mobilizing resources, and monitoring progress with the child, parent(s), teachers, and agency (Branch et al., 2013). Hendrick and Young (2013) outline that this type of process-driven approach to intervention is the future of resilience theory where children are given the processes and tools to incorporate resilience skills into their lives.

Strategies for Families

The first layer of developmental systems theory that surrounds the child is the child's family, followed by their school, and then community, culture, and society (Branch et al., 2013). The development of a child is influenced by the characteristics of their culture even before birth (Branch et al., 2013). When children are born they have unique traits, capabilities, and temperaments, that from there begin to interact with their family, then school, then community, society and culture, as well as their environment with all these factors being subject to time (Branch et al., 2013). As the first layer of developmental support to their child, parent's use of specific promotive variables such as positive parenting practices is strongly correlated with positive social, emotional, and behavioral developmental outcomes (Cprek et al., 2015). In a qualitative analysis of the National Survey of Children's Health, Cprek, et al. (2015) examined the relationship of positive parenting practices on health and development. The survey was crosssectional, nationally representative, and designed to indicate levels of physical, emotional, and behavior health in children zero to 18 years old. The study was limited by recall and social desirability biases of parents socially pressured to misrepresent how often their children read, or performed other positively associated tasks (Cprek et al., 2015). Using multiple logistic

regression, Cprek et al. (2015) analysed how positive parenting practices related to outcomes of health and well-being.

Positive parenting practices include parental behaviours such as reading to children, engaging in storytelling or singing, and eating meals together as a family (Cprek et al., 2015). Cprek et al. (2015) found that not only did these positive parenting practices have good outcomes but that their effect was additive when all three practices were performed more frequently. While these practices are not directly financially dependent, socioeconomic factors relating to time, energy, and educational background, continue to affect the parent's ability to engage in these behaviours daily (Cprek et al., 2015). Parents and families are supported in engaging in meaningful interactions such as these specific positive parenting practices through school as the next level of interaction within the developmental systems model (Branch et al., 2013).

Research demonstrated that many young children are exposed to stressful and traumatic experiences such as violence, abuse, neglect, and unstable parental mental health. Educators can support families by facilitating understanding and identification of toxic stress and by directly teaching parenting practices that offset stress and bolster resilience for both children and families (Graber et al., 2019). In a qualitative study, Graber et al. (2019) conducted three focus groups with 17 parents that either participated in Group Well-Child Care (GWCC) or Trauma-Informed GWCC (TI-GWCC). Trauma-Informed practice is a framework of care that acknowledges the effects of trauma that have a toxic effect on health and well-being (Graber et al., 2019). The focus groups were designed to help parents identify toxic stress, empower parents to identify ways to role model for children, and activities that reflected on attachment, anger management, and intentional parenting practices (Graber et al., 2019). Graber et al. (2019) found that TI-GWCC better supported parental engagement in understanding toxic stress and adapting

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reflective and intentional parenting practices. The sample size was limited and was drawn from a demographic already participating in a parental support group (Graber et al., 2019). How this approach relates to the general public was not considered in this study. TI-GWCC is also just one example of an approach to support parental resilience. Supporting resilience requires a responsive, multi-faceted approach; however, TI-GWCC has been demonstrated to support parental resilience, knowledge, and peer-based support to help break the cycle of families embroiled in turmoil (Graber et al., 2019).

Strategies for Educators

Educators are found within the developmental systems model between parents and the community, society, and cultural level (Branch et al., 2013). Within this facilitatory level, educators are able to encourage families to engage in meaningful interactions, form strong homeschool relationships, as well as facilitate interactions with further layers of the model including community services and parental networks (Branch et al., 2013). Parents and educators are on the frontline to provide protective and promotive factors of resilience to the children in their care (Hendrick & Young, 2013). In addition, process-driven action research is a tool for parents and educators that can promote and enact change rather than the typical approach of conducting social inquiry based on variables (Hendrick & Young, 2013). The developmental system model is a powerful tool for educators to use in evaluating and engaging inwardly with families and externally with the community (Branch et al., 2013). This model is specifically useful to improve responsiveness between the child's support system of parents, teachers, and agencies, with the ultimate goal of improved well-being outcomes for each child (Branch et al., 2013). Educators using this model respond to the needs of the whole child and effectively bring together family and community to strengthen and harmonize relationships and resources (Branch et al., 2013).

Putting Knowledge into Practice

Rojas et al. (2013) examined how curriculum enhancements could be made on a national level to improve current and future mental health outcomes for students. Educators, administrators, and policymakers wishing to embrace holistic pedagogy and make changes to improve teacher consistency within the classroom, across a region, or even by remodeling a nationally delivered program, must be able to navigate the implications of this process in order to ensure intended improvements are not being lost through the cracks that implementation can bring. Rojas et al. (2013) conducted a qualitative study on the national level for the United States federal Head Start program to determine ways to implement social-emotional enhancements within programs. They were interested in how social-emotional enhancement programs such as "Incredible Years", "Preschool PATHS", and "Tools of the Mind" that facilitated improvements to resilience, coping skills, and well-being could best be consistently administered (Rojas et al., 2013). The Vygotskian approach to scaffolding development through skilled peers and providing a safe and predictable environment for exploration also emerges in both the work of Gartrell and Cairone (2014) and Bagdi and Vacca (2005) as a successful strategy to support the development of resilience.

In the qualitative study by Rojas et al. (2013), 17 programs were selected across the United States with varying settings, locations, urbanity, size and racial/ethnic compositions. A total of 307 classrooms and more than 3,600 children participated in the study. Half of the centers received Classroom-based Approaches and Resources for Emotion and Social skill promotion (CARES) interventions through specific professional development training, and the other half remained the control group (Rojas et al., 2013). Rojas et al. (2013) found that programs could be implemented on a wide-scale through substantial efforts and training, with a

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focus on user-friendly training, coaching, organizational context and administration by local coordinators, and technical assistance for quality and provision of resource kits.

Conclusion

Resilience is the capacity to cope with stress and adversity (Ernst et al, 2019). An increased capacity for resilience is necessary for individuals to succeed across lifespans and respond adaptively to increased threats of stress and trauma to health and well-being that influence upcoming generations (Naidoo & Muthukrishna, 2016; Pizzolongo & Hunter, 2011). Research findings have reinforced that resilience is a developed skill rather than a fixed trait that is best learned at a young age when brains are most malleable in a state of neuroplasticity as well as at a time in development that will most positively impact the entire lifespan of the individual and surrounding community (Centre of the Developing Child at Harvard University, 2011; Ernst et al., 2019). The resilience and well-being of children is of keen interest to educators as an essential part of holistic developmentally appropriate practice (NAEYC, 2020). Fostering resilience through early childhood education is part of best-practice and should be intentionally incorporated into learning outcomes for young children (Olive et al., 2019). Resilience should be supported both within the classroom and extend to the homes and communities of the children. At school, strategies such as outdoor play, physical activities, positive role modeling, experiencing and acknowledging emotionality, and strengths-based approaches to mistaken behaviors can support children to develop an increased capacity for resilience. At home, families are a critical component to the resilience of children and must be supported through encouragement and education to extend engaging opportunities for the development of resilience beyond the classroom walls (Taket et al., 2014). Parental warmth, positive parental feelings of self-worth and self-esteem, and positive parenting activities such as reading and sharing meals,

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all contribute to protective factors within the home (Cprek et al., 2015; Gartrell & Cairone, 2014).

Resilience is hard to quantify because it is complex and therefore under-studied (Ferrier et al., 2014). The effects of resilience are, however, easily quantifiable through longitudinal studies of variables such as academic scores, delinquency, wellness, happiness, and health (Centre of the Developing Child at Harvard University, 2011; Hughes, 2016). The literature offers educators many practical strategies based in resilience and developmental systems theory. Through understanding what resilience is, why it is a critical component to a holistic education, and how to incorporate it into practice using familiar Vygotskian strategies such as modeling and scaffolding—educators play a meaningful role in preparing children for life's challenges and the capacity to thrive and recover from stress rather than succumb to it (Bagdi & Vacca, 2005; Bodrova & Leong, 2007; Gartrell & Cairone, 2014). In chapter three, the findings are discussed and applied.

Chapter Three: Discussion and Application

Developing resilience at a young age is of immense importance as it will impact how an individual faces every future challenge (Center on the Developing Child at Harvard University, 2011). Without resilience, the capacity to regularly recover from stress and adversity, meaningful education cannot take place (Ernst et al., 2019). To successfully engage in learning, children must have their physical, social, emotional, and spiritual needs met (Hughes, 2016). Developmentally appropriate practice requires that educators must support the needs of the whole child (National Association for the Education of Young Children, 2020). Education is therefore not just a cognitive endeavour, it is a holistic endeavor of mind, body, and spirit working together. Supporting holistic development in all domains is an important function of early childhood educators and can be supported by insights from previous research and further advanced through future research. Theory, practical strategies, and tools can strengthen an educator's ability to foster resilience in young children through holistic and developmentally appropriate practices.

Insights Gained

The research demonstrates that instructional practices that promote the development of resilience as a program learning outcome will improve learning, health, and well-being in children (Olive et al., 2019). Resilience is a capacity that can be developed and not a static characteristic that children do or do not possess. Every child is capable of developing resilience, which is universally regarded as a positive area of development (Ernst et al., 2019). As resilience is a capacity that can be developed, it falls within the realm of holistic education where all aspects of development are nurtured. Meaningful and engaging learning experiences that support the whole child across the domains of social, emotional, physical, and cognitive development are

often denied to children when educational practices ignore or are unresponsive to the developmental needs of children—which include the development of resilience (National Association for the Education of Young Children, 2020). A holistic approach to education enhances cognitive learning through supporting all domains of development that allow children to access their full developmental potential across many domains (Branch et al., 2013). Early childhood is the best time in an individual's lifespan to increase their capacity for resilience—while their brains are developing in a state of neuroplasticity, and when the duration of positive development will be effective the longest (Taket et al., 2014).

A keenly developed capacity for resilience influences lifelong academic success, wellbeing, and happiness (Hughes, 2016). This is both beneficial to the individual harnessing this developmental power, but also to the community around them that may benefit economically from decreased attrition, delinquency, and health costs (Centre of the Developing Child at Harvard University, 2011). While there are positive socioeconomic benefits for communities and society throughout the lifespan, the less measurable factors that benefit individuals are of the most immediate concern for educators (Bagdi & Vacca, 2005; Gartrell & Cairone, 2014). While economic improvements can be used in advocating for resilience to large stakeholders, fostering the mental health and well-being of young children is a defining point of developmentally appropriate practice and therefore paramount to educators (National Association for the Education of Young Children, 2020). There is a difference between merely surviving and enduring through adversity versus perceiving the positives and developmental opportunities that come from it and harnessing adversity in a way that allows individuals to thrive. Children that are resilient see growth as incremental and attainable, are persistent, take risks, recognize and solve problems, value their own thinking, value revision and ongoing improvement, have self-

worth, take on responsibility and challenges, understand that choices have consequences that inform future decisions, and feel empowered (Collet, 2017). Children that thrive, learn to value the adversity that lead to these outcomes and both educators and families play a significant role in supporting practices that lead to positive outcomes (Taket et al., 2014).

Practical Strategies for Educators

There are both risk factors and protective factors for resilience (Hendrick & Young, 2013). Some are controllable and others are not. The factors that can be influenced are of most interest to educators. Risk factors such as physiological state, developmental delays and disabilities, health, illness, attachment, social skills, language and cognition, executive function, stress management and coping skills, abuse/neglect/maltreatment, and family culture can all be influenced to varying degrees by educators (Bagdi & Vacca, 2005). Protective factors that help mitigate these risks may include advocating for more community resources such as health services, education services, drug awareness programs, and anti-bullying campaigns (Hendrick & Young, 2013). To promote protective factors at home, educators can provide resources for families, nurture parental feelings of self-efficacy and self-worth by providing education and strategies, encourage family meals, and positive parenting activities such as reading together (Cprek et al., 2015; Gartrell & Cairone, 2014). Within the classroom, educators can exude warmth and positive modeling, provide experiences for social play, read to children, offering children strategies when stressed, encourage emotionality, and provide experiences that develop initiative and executive function (Ferrier et al., 2014; Gartrell & Cairone, 2014; Taket et al., 2014).

Classrooms that foster resilience provide resources such as process charts, word walls, and engender problem-solving attitudes (Collet, 2017). Educators help children set short-term

goals, value and praise effort such as invented writing which demonstrates to children that it is good to take academic risks and that growth is incremental and attainable (Collet, 2017). Offering children strategies that build resilience (like asking them to try a different way to resolve a problem, applying context clues, or considering previous experiences) teaches that learning takes effort, but is satisfying (Collet, 2017). An emphasis on process over product by praising efforts rather than results will encourage children to take on challenges and be persistent in the face of failure (Zentall & Morris, 2010). Providing ongoing feedback throughout a process rather than evaluating a final product teaches children to value revision and continual improvement (Collet, 2017). The common theme to experiences within a resilient classroom is observant and responsive teaching practices. Through careful observation, holistic, and developmentally appropriate practice, educators can responsively provide experiences that focus on mental health and resilience as a learning outcome (Pizzolongo & Hunter, 2011).

Limitations and Future Studies

The body of research on the topic of resilience is growing, and there is evidence that resilience is a capacity that educators can expand (Ernst et al., 2019). There is, however, a need for further research to fill in gaps, better understand mechanisms of resilience, and study trends across more diverse populations. The body of research clearly defines what resilience is, why it is important, and the long term benefits of developing children's capacity for it (Ernst et al., 2019). There are studies on risk factors and protective factors, but not all protective factors have been studied, and the ones that have, have not been studied proportionately. The potential protective factors that nature offers has largely gone unstudied and requires further exploration (Beery, 2020). There is also a significant amount of research on resilience within family units, and it would be beneficial to educators for future research to concentrate on classroom strategies

to the same degree. Quantitative authentic assessment strategies are also needed to better measure resilience. In line with the idea that society measures what it values, more quantifiable data will be more effective in demonstrating to educators, parents, administrators, and policymakers that focusing on the development of resilience elicits predictable and quantifiable benefits to individuals and society (Center on the Developing Child at Harvard University, 2011).

Quantifiable research to investigate the underlying mechanisms and overarching principles of how internal, external, and environmental protective factors work, will better inform educators' practice. Studies that avoid self-reporting where possible will also limit biases (Cprek eet al., 2015). Large-scale, quantitative, longitudinal studies on diverse populations across many cultures and continents will better demonstrate trends and add confidence to the research already completed. Conversely, individual case studies demonstrating how educators have adapted the principles of resilience theory within their responsive and holistic curriculum will model effective ways to observe, facilitate and assess the development of resilience. By understanding the mechanisms and principles of resilience, outward large-scale trends, and inward practical examples, educators will learn which risk and protective factors have the greatest impact within their environments and where to effectively focus their efforts to foster an increased capacity for resilience.

Conclusion

Children across the world experience stress and trauma on a daily basis—it is unavoidable despite the best efforts of educators, parents, and communities (Pizzolongo & Hunter, 2011). To prepare children to learn and to fortify their lifelong health and wellness, educators, parents, and communities must work together to develop the capacity for resilience in

children during the critical developmental phase of early childhood (Taket et al., 2019). Armed for life with an actualized potential of resilience, children will be equipped to thrive in the face of life's inevitable challenges rather than merely surviving stress, trauma, and adversity (Ernst et al., 2019). Resilience to overcome these challenges can be effectively accomplished through mitigating risk factors and fostering protective factors that support children to "overcome adversity with courage, skills, and faith" in the classroom, home, and community (Grothberg as cited by Pizzolongo & Hunter, 2011, p.68). An increased capacity for resilience has the power to positively change academic outcomes, individual well-being, communities, and economies (Naidoo & Muthukrishna, 2016).

References

- Bagdi, A., & Vacca, J. (2005). Supporting early childhood social-emotional well being: The building blocks for early learning and school success. *Early Childhood Education Journal*, 33(3), 145–150.
- Beery, T. (2020). Exploring access to nature play in urban parks: Resilience, sustainability, and early childhood. *Sustainability (Basel, Switzerland)*, *12*(12), 4894-4911. <u>https://doi.org/10.3390/su12124894</u>
- Bodrova, E., & Leong, D. J. (2007). *Tools of the mind: The Vygotskian approach to early childhood education*. Pearson.
- Branch, S., Homel, R., & Freiberg, K. (2013). Making the developmental system work better for children: Lessons learned implementing an innovative programme. *Child & Family Social Work*, 18(3), 294–304. <u>https://doi-org.ezproxy.csp.edu/10.1111/j.1365-</u> <u>2206.2012.00845.x</u>
- 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*. <u>https://developingchild.harvard.edu/</u>
- Collet, V. S. (2017). "I can do that!" Creating classrooms that foster resilience. *Young Children*, 72(1), 23-31.
- Cprek, S., Williams, C., Asaolu, I., Alexander, L., & Vanderpool, R. (2015). Three positive parenting practices and their correlation with risk of childhood developmental, social, or behavioral delays: An analysis of the national survey of children's health. *Maternal & Child Health Journal*, *19*(11), 2403–2411. <u>https://doiorg.ezproxy.csp.edu/10.1007/s10995-015-1759-1</u>

- Ernst, J., Johnson, M., & Burcak, F. (2019). The nature and nurture of resilience: Exploring the impact of nature preschools on young children's protective factors. *International Journal* of Early Childhood Environmental Education, 6(2), 7–18.
- Ferrier, D., Bassett, H., & Denham, S. (2014). Relations between executive function and emotionality in preschoolers: Exploring a transitive cognition-emotion linkage. *Frontiers in Psychology*, 5, 487–487. <u>https://doi.org/10.3389/fpsyg.2014.00487</u>
- Gartrell, D. & Cairone, K. (2014). Fostering resilience: Teaching social-emotional skills. *Young Children*, *63*(3), 92-93.

Graber, L., Roder-Dewan, S., Brockington, M., Tabb, T., & Boynton-Jarrett, R. (2019). Parent perspectives on the use of group well-child care to address toxic stress in early childhood. *Journal of Aggression, Maltreatment & Trauma*, 28(5), 581–600. https://doi.org/10.1080/10926771.2018.1539423

- Hendrick, A. S., & Young, S. (2013). Working the "spaces" between policy and practice: The contributions offered by resilience theory and action research. *Child & Family Social Work*, *18*(2), 179–188. <u>https://doi-org.ezproxy.csp.edu/10.1111/j.1365-2206.2011.00819</u>.
- Hughes, S. F. (2016). Landmarks of happiness: Conversations with teachers about happiness as an aim of education. *AERA Online Paper Repository*. <u>https://eric.ed.gov/?id=ED592275</u>
- Naidoo, J. T., & Muthukrishna, N. (2016). Child well-being in a rural context: Shifting to a social sustainability lens. *South African Journal of Childhood Education*, 6(2).
- National Association for the Education of Young Children. (2011). *Code of ethical conduct and statement of commitment: Position statement.*

https://www.naeyc.org/sites/default/files/globally-

shared/downloads/PDFs/resources/position-statements/Supplement%20PS2011.pdf

- National Association for the Education of Young Children. (2020). *Developmentally appropriate practice: Position statement*. <u>https://www.naeyc.org/sites/default/files/globally-</u> shared/downloads/PDFs/resources/position-statements/dap-statement_0.pdf
- Olive, L. S., Byrne, D., Cunningham, R. B., Telford, R. M., & Telford, R. D. (2019). Can physical education improve the mental health of children? The look study clusterrandomized controlled trial. *Journal of Educational Psychology*, 111(7), 1331–1340.
- Pizzolongo, P. J. & Hunter, A. (2011). I am safe and secure: Promoting resilience in young children. *Young Children*, 66(2), 67-69.
- Rojas, N., Lloyd, C. M., Mattera, S., & Society for Research on Educational Effectiveness (SREE). (2013). Fidelity and scaling-up in the context of a social-emotional intervention for early childhood education. Society for Research on Educational Effectiveness.
- Taket, A. R., Nolan, A., & Stagnitti, K. (2014). Family strategies to support and develop resilience in early childhood. *Early Years: An International Journal of Research and Development*, 34(3), 289–300.
- Zentall, S., & Morris, B. (2010). "Good job, you're so smart": The effects of inconsistency of praise type on young children's motivation. *Journal of Experimental Child Psychology*, 107(2), 155–163. <u>https://doi.org/10.1016/j.jecp.2010.04.015</u>