

12-20-2019

The Role of Quality ECE in Facilitating Mental Health and Well-Being in Children

Sharon C. Penney
Memorial University, scpenney@mun.ca

Gabrielle D. Young
Memorial University of Newfoundland, gabrielle.young@mun.ca

Emily Butler
Memorial University, u23esh@mun.ca

Kimberly Maich
Memorial Univerity, kmaich@mun.ca

David Philpott
Memorial University of Newfoundland, philpott@mun.ca

Abstract

This article explores trends and statistics specific to the mental health status of children from both the Canadian and the global contexts to inform a conversation on the environmental conditions and experiences that impact the mental health of young children. The research described here focused on the intersection between mental health and early child education (ECE), along with the educational and professional development experiences of early childhood educators, in an attempt to identify mitigating factors that can ensure social-emotional development in children. The article argues that while ECE can help the social-emotional development of young children, there needs to be a focus on ensuring quality of experience with explicit social-emotional learning outcomes, delivered by highly educated professionals. It concludes with a call to focus on the mental health of young children, early child educators, and the critical importance of healthy relationships in the lives of these children.

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Support from the Margaret and Wallace McCain Foundation was provided to complete this work.

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Recommended Citation

Penney, S. C., Young, G. D., Butler, E., Maich, K., & Philpott, D. (2019) The Role of Quality ECE in Facilitating Mental Health and Well-Being in Children. *Exceptionality Education International*, 29, 57-76. Retrieved from <https://ir.lib.uwo.ca/eei/vol29/iss3/5>

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Cover Page Footnote

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**Sharon C. Penney, Gabrielle D. Young, Emily Butler,
Kimberly Maich, and David Philpott**
Memorial University of Newfoundland

Abstract

This article explores trends and statistics specific to the mental health status of children from both the Canadian and the global contexts to inform a conversation on the environmental conditions and experiences that impact the mental health of young children. The research described here focused on the intersection between mental health and early child education (ECE), along with the educational and professional development experiences of early childhood educators, in an attempt to identify mitigating factors that can ensure social-emotional development in children. The article argues that while ECE can help the social-emotional development of young children, there needs to be a focus on ensuring quality of experience with explicit social-emotional learning outcomes, delivered by highly educated professionals. It concludes with a call to focus on the mental health of young children, early child educators, and the critical importance of healthy relationships in the lives of these children.

Mental health issues in young children can be associated with poor developmental outcomes such as discrimination, social exclusion, physical health problems, and unhealthy lifestyles (Moffitt et al., 2011; Poulou, 2015; World Health Organization, 2016). The purpose of this article is to explore how mental health issues can be mitigated and remediated when young children are given the opportunity to attend early childhood education (ECE) programs. As researchers, we were particularly interested in investigating the impact of ECE on reducing mental health issues and improving developmental outcomes, as the preschool period is considered an optimal time to

identify and reduce problem behaviours (Hall et al., 2009; Poulou, 2015; Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2009; Taggart, Sylva, Melhuish, Sammons, & Siraj, 2015). To set the stage, we reviewed mental health statistics in both Canadian and international contexts. We examined the risk factors and barriers to identification and treatment, along with influential longitudinal studies that investigated ECE programs and their impact on adversity, behaviour, and children's self-regulation skills, all of which are vital to positive child mental health (Hall et al., 2009; McCain, Mustard, & McCuaig, 2011; National Scientific Council on the Developing Child, 2008/2012; Ravers, 2003; Rimm-Kaufman, Pianta, & Cox, 2000; Schonkoff & Garner, 2012). Throughout this paper, the age range for ECE includes children aged 0–5 years. ECE is defined in this paper as regulated early learning, delivered by professional educators within a specific curriculum framework. This article provides further exploration of the concepts, definitions, and problems discussed by Young et al. (2019), published within this special issue.

Methodology

This article identifies research studies that intersect ECE and special education outcomes specific to mental health issues (emotional and behavioural problems) for young children and is not meant to serve as a systematic review. The literature collected included national and international peer-reviewed articles, longitudinal studies and reports, and provincial reports.

The initial search criteria included peer review articles published in the past 15 years (2003–2019). The articles were written in English and published in peer reviewed journals. The search terms included *preschool children, young children, at-risk, mental health, behaviour/behavior problems, social emotional development/learning, child care, early childhood education, preschool programs, teacher stress, and kindergarten*. The initial electronic search used Google Scholar, Education Resources Information Centre (ERIC), Psych-Med, PubMed, and PsyINFO, where the above key words and stated dates resulted in thousands of articles.

Some of the articles offered us alternative terms and that we subsequently used in the search (Sandieson, Kirkpatrick, Sandieson, & Zimmerman, 2009). Such terms included *disruptive behaviour/behavior, internalizing behaviour/behavior, externalizing behaviour/behavior, anxiety, and depression*, specific to preschool-aged children. The article abstracts were read by the first author (Penney) or the research assistant (Butler), and only relevant articles were kept. As a second search strategy, the reference lists of the articles kept from the initial searches were examined. Using this strategy, several articles were found that might otherwise have been missed. In addition, any articles that were cited multiple times were also gathered (regardless of the date) and reviewed. While the focus of this article is on ECE- or preschool-aged children, some of the literature presented here also includes school-aged children as it relates to childhood outcomes. This is an important component of the current article, as the benefits of early childhood experiences have been observed throughout the K–12 school years.

International and Canadian Statistics

The reported estimate of mental health issues globally range from 14% to 20% of the population, carrying an associated disease burden that ranges from 7% to as much as 14% in some countries, consuming a significant amount of health care budgets (Center on the Developing Child at Harvard University, 2016; National Research Council and Institute of Medicine, 2009; Ritchie & Roser, 2018; Waddell, Hua, Garland, Peters, & McEwan, 2007; World Health Organization, 2017). In Canada, mental health issues account for, “13% of the burden” of disease (Canadian Institute for Health Information, 2015, p. 5). Between 10% and 20% of Canadians will develop a mental health issue in their lifetime. The onset for more than half of the disorders in adulthood began in early childhood or adolescence (Collishaw, 2015; Lavigne et al., 2001; Moffitt et al., 2011; Waddell, McEwan, Peters, Hua, & Garland, 2007; Whitley, Smith, & Vaillancourt, 2012).

Bricker, Schoen Davis, and Squires (2004) suggested that the number of young children exhibiting mental health problems is on the rise; however, other studies have found no change in mental health problems among children. In a recent study using the Ontario Child Health Study data (from 1983 and 2014), researchers compared the prevalence rates as well as the perceived need for professional help and suggested that “overall prevalence of mental disorders among 4- to-16-year-olds has not changed between 1983 and 2014” (Comeau, Georgiades, Duncan, Wang, & Boyle, 2019, p. 262). However, there were some variations in the types of disorders diagnosed. Comeau et al.’s study suggested an increase in the prevalence of hyperactivity in male children between the ages of 4 and 11 years old, an increase in the prevalence of emotional-behaviour disorders in 12- to 16-year-old youth, and a decrease in the prevalence of conduct disorder, especially in males. McMartin, Kingsbury, Dykxhoorn, and Coleman (2014) compared findings from the National Longitudinal Survey of Children and Youth (1994/1995 and 2008/2009) and found results similar to those of Comeau et al. (2019). However, data for children under the age of 4 years are glaringly absent from these studies.

Prevalence rates and/or statistics specific to mental health issues in children under 5 years of age were challenging to find. In the early years it is estimated between 10% and 25% of young children have mental health issues that interfere with their daily social and environmental interactions (Bricker et al., 2004; Jones, 2013; Malla et al., 2019; Waddell, Hua, et al., 2007). In the United States between 13% and 20% of children under the age of 5 years qualify for a serious mental health disorder (Brauner & Stephens, 2006; Center for Disease Control, 2013; Egger & Angold, 2006). However, the prevalence rates of mental health disorders for children from 0 to 5 years of age in the Canadian context are difficult to determine (Clinton et al., 2014).

Some researchers indicated that there was an increased prevalence in individuals seeking treatment or the perceived need for professional help (Collishaw, 2015; Comeau et al., 2019; McMartin et al., 2014). These research studies are consistent with information presented by the Canadian Institute for Health Information (2015): The institute reported increases in the use of emergency room visits and hospitalization for mental health disorders. In 2012–2013, 5% of emergency room visits and 18% of

inpatient hospitalizations for individuals between 5 and 24 years were related to mental health issues. When compared with the 2006–2007 rates, the data suggested an increase of 45% for emergency room visits and 37% increase for hospitalizations (Canadian Institute for Health Information, 2015). However, it is estimated only a quarter of Canadian children who required mental health care were actually able to access specialized treatment and services for mental health disorders (Butler & Pang, 2014; Waddell, Hua, et al., 2007). This paper aims to explore how mental health concerns can be mitigated before children reach school age (4–5 years of age) by introducing social-emotional learning (SEL) to young children between the ages of 0 and 5 years.

Risk Factors

The research on risk and protection regarding mental health among children suggests that protective factors can be within the child; within parent, family, or caregiver; and within relationships including those with educators (Kulkarni et al., 2019). Literature reviewed for this article suggested that there are many child-related factors that may increase the risk for potential mental health disorders. While not meant to be an exhaustive list, risk factors include poverty, developmental vulnerabilities (such as preterm birth, low birth weight, genetic disorders), poor coping skills, low self-esteem, poor self-control, and externalizing and internalizing behaviours (Anders et al., 2010; Bayer et al., 2011; Bergen & Pronin-Fromberg, 2009; Bhutta, Cleves, Casey, Cradock, & Anand, 2002; Blair & Raver, 2012; Isaacs, 2012; Kulkarni et al., 2019; Masi & Gignac, 2015; Moffitt et al., 2011; National Scientific Council on the Developing Child, 2008/2012; Peisner-Feinberg et al., 2001; Sylva et al., 2009).

The ongoing development of children is a complex interplay between genetics and ecology (National Scientific Council on the Developing Child, 2008/2012). Researchers have looked beyond genetics to examine how, and to what degree, genes are activated by the child's environment and experiences (National Scientific Council on the Developing Child, 2008/2012; Sylva et al., 2009). Poverty-related adversity can affect children's development and cause increased stress hormones (Blair & Raver, 2012). An increase in stress hormones can impact a child's brain and physical development and can also have a long-term impact on a child's development of social, emotional, attentional, and executive functioning skills, as well as on physical and mental well-being (Schonkoff & Garner, 2012).

The research literature reviewed also suggested that there are several parent, caregiver, or family characteristics that may increase the risk of developing mental health disorders. Some risk factors include the age and education level of the mother, maternal mental health problems (including depression), parental experiences of trauma and violence, marital conflict, poverty, substance abuse, and criminal activity. Harsh and/or inconsistent parenting, a lack of knowledge about child development, and poor home environments (lack of resources), can also increase the risks of mental health problems in children (Anders et al., 2010; Bayer et al., 2011; Bergen & Pronin-Fromberg, 2009; Blair & Raver, 2012; Cohen, Oser, & Quigley, 2012; Isaacs, 2012; Kulkarni et al., 2019; Masi

& Gignac, 2015; National Scientific Council on the Developing Child, 2008/2012; Peisner-Feinberg et al., 2001; Sylva et al., 2009).

The research literature suggests that relationships can also be a risk factor for the development of mental health issues in young children. Children exposed to trauma, family conflict, inconsistent interpersonal approaches, adult insensitivity (or adults not being attuned to the child needs), and hostility may be at higher risk of developing a mental health issue. However, relationships are interpersonal and/or interactional and child behaviour, child characteristics, child temperament, and conflict between the parent or caregiver and child may also play a part in developing mental health problems in young children (Bayer et al., 2011; Bhutta et al., 2002; Kulkarni et al., 2019; Rimm-Kaufman et al., 2000; Schonkoff & Garner, 2012).

Stability of ECE placement is also a protective factor, as it can have an impact on relationships with other children and with educators, and on children's access to quality programming. Ironically, the mere manifestation of early behavioural difficulties exacerbates the risk for young children, as it places their ECE placement in jeopardy (Carlson et al., 2012; Gilliam & Shahar, 2006; Hoover, Kubicek, Rosenberg, Zundel, & Rosenberg, 2012). Preschool and ECE programs are not governed by the same level of accountability as the K–12 system and have great diversity in quality and structure. Research has shown that ECE programs are more likely to expel children with significant mental health issues, especially those with externalized or disruptive behaviours (Gilliam & Shahar, 2006; Perry, Dunne, McFadden, & Campbell, 2008). One study (Gilliam & Shahar, 2006) looked at expulsions and suspensions from ECE programs and found that, as compared to the K–12 rate, ECE programs were 34 times (27.42 children for every 1,000) more likely to expel children with behavioural difficulties. Expulsions were related to a variety of factors including child characteristics (disruptive behaviour), characteristics of the class (group size, racial composition), and teacher-reported stress and depressive symptoms. A Colorado study also reported high rates of suspension (10 out of every 1,000) for children with challenging behaviours. These behaviours had a negative impact on the well-being of staff, and this was found to be the most robust correlate for expulsions and suspensions within preschool settings (Gilliam & Shahar, 2006; Hoover et al., 2012).

Mental Health Issues Within the Early Years

Research has found that children entering kindergarten often do not have the necessary social and emotional skills to be successful at school (Whitted, 2011). Mental health problems in young children often go unrecognized and are not remediated (Gleason, Goldson, Yogman, & AAP Council on Early Childhood, 2016; National Scientific Council on the Developing Child, 2004; Poulou, 2015). While firm diagnoses of mental health disorders in the early years is complex, early warning signs need to be identified. Emotional dysregulation, peer rejection, disturbed sleeping or eating, aggression, irritability, being headstrong, being hurtful toward others, and defiance are some visible early signs and can differentiate typical behaviour from more significant issues in the preschool years (Lavigne et al., 2001; National Scientific Council on the Developing Child, 2008/2012; Wakschlag et al., 2014; Wakschlag,

Tolan, & Levental, 2010). Wakschlag et al. (2014) stated that disruptive behaviour in early childhood is a common precursor for up to 60% of mental health issues observed across the lifespan.

Adults may more readily recognize externalizing behaviours in preschool children, such as attention-deficit/hyperactivity disorder or oppositional defiant disorders, than internalizing behaviours such as anxiety, depression, withdrawal, and somatization (Carter et al., 2010; Gardner & Shaw, 2008; Poulou, 2015). Kulkarni et al. (2019, p. 14) suggested that children who are withdrawn, lack interest in social relationships, have low energy, appear anxious, lack curiosity about their environment, appear perfectionistic, and seem irritable over an extended period of time may also require monitoring, intervention, and/or treatment.

Early intervention has been supported by research, from pregnancy through the early years, as this is considered the most vulnerable period in a child's life and the period of most rapid development (Heckman, 2011; Sylva et al., 2009). Cohen et al. (2012) stated that mental health issues in preschool age children should be identified early and children and their families should be provided effective and timely treatment. These researchers suggested that treatment should be dyadic, based in relationship, and focused on building healthy relationships between the child and significant adults in their lives to establish trust in their relationships.

Research also suggested treatment is both more effective and less costly if the problem behaviour is identified and treated early (Conroy & Brown, 2004; Moffitt et al., 2011). Russell and Gleason (2018) discussed that safe and effective treatments for mental health issues in the preschool years do exist; however, access is difficult for families. Interventions need to be evidence-based as well as developmentally and contextually appropriate (Eyberg, Nelson, & Boggs, 2008; Gleason et al., 2016; Substance Abuse and Mental Health Services Administration, 2011).

Barriers to Early Identification

The literature identifies a number of barriers to early identification and early intervention. First, children's behaviour may be temporary and should be viewed from a developmental lens. Identification should be dependent on a number of factors including the context of when and where behaviour occurs and the frequency of the behaviours, as well as the behavioural intensity (Wakschlag et al., 2014). Individual differences, family expectations, and/or familial cultural expectations influence children's behaviour. However, behaviours during the preschool years require attention and intervention to ensure maladaptive behaviours are not reinforced (Bricker et al., 2004). Behaviour problems in children with other developmental concerns should also be attended to, as it can negatively impact developmental outcomes (Roberts, Mazzucchelli, Taylor, & Reid, 2003).

Primary health care physicians are generally the first contact for many families with children experiencing behavioural difficulties (Leslie et al., 2016). Physicians act as the gatekeepers for more specialized services and mental health screening. Primary health

care physicians may not recognize serious mental illness in young children, and as a result, children under five years have the lowest rate of diagnosis (Bricker et al., 2004).

Strict eligibility criteria and limited resources also pose significant barriers. The diagnostic criteria for mental health disorders often requires behaviours be present for a specified period of time, be qualitatively severe, and be inconsistent with the child's developmental level (American Psychiatric Association, 2013; Wakschlag et al., 2010). The diagnoses may be difficult to obtain, as the frameworks available for diagnosis during the early years may be vague; yet a diagnosis may provide families with eligibility to access services, treatments, and supports (Cohen et al., 2012). Often practitioners are reluctant to diagnose mental health problems in children, making access to services difficult. Proactive and early interventions are often not provided, due to a wait-and-see approach whereby medical personnel let the child age in the hope that they outgrow the issue (Conroy & Brown, 2004; Government of Newfoundland and Labrador, 2016).

Mental health services for young children are limited, and those that do exist are often independent of one another (Cohen et al., 2012). Most interventions that are available for young children are for cognitive, motor, language, and adaptive functioning concerns (Bricker et al., 2004). A further barrier is personalizing the child as the problem and not contextualizing the behaviour with the systems in which the child interacts. Often when services are implemented, they are provided to the child and not the family or other care providers, or they are provided to the parent and not to the parent-child relationship (Cohen et al., 2012).

Families are often the best positioned to identify mental health problems in their children; however, parent's opinions are often discounted. Many parents have ongoing involvement with their children and a unique understanding of their children's behaviours. Parent's knowledge and opinions about their children and their mental health status is not often considered by the gatekeepers, making access to treatment services more difficult (Bricker et al., 2004; Smith & Fox, 2003).

Cohen et al. (2012) stated that a significant barrier to providing services to young children with mental health issues was the lack of adequate training and education for mental health professionals and service providers for children in this age group. Other issues noted by Cohen et al. included time required to implement interventions and the difficulty service providers experience with being reimbursed for their services.

In the field of education, pre-service and in-service education in children's mental health can also be an issue with early identification and remediation (Bricker et al., 2004; Smith & Fox, 2003). Most teachers and early childhood educators have not obtained adequate education, professional development opportunities, mentorship, and/or supervision to identify and intervene with children who present with behavioural problems (Brackenreed, 2008; Hemmeter, Santos, & Ostrosky, 2008; Leslie et al., 2016). Identification and intervention for children experiencing mental health issues requires a deep understanding of child development, family dynamics, clinical skills, and cultural understanding. Educators and other systems working with young children and their families should have the necessary resources, and provide comprehensive services that

are high quality and evidence-based, with appropriate standard of care policies (Brown & Conroy, 2011; Conroy & Brown, 2004).

A recent national scan completed by Schonert-Reichl, Kitil, and Hanson-Peterson (2017) supported the claim that pre-service educators are not provided with the necessary education during their university preparatory programs to understand students' social and emotional development. The scan examined teacher certification requirements for each state and the core courses for a representative sample of college and university teacher education programs in the United States. While many states had some core components of SEL as a requirement for teacher certification, there was a huge disconnect with the required education course that teachers received. "The majority of the teacher education programs in the 49 states did not address any of the five core students' SEL dimensions. Only Utah and the District of Columbia addressed just one of the five core competencies" (p. 11). This is an alarming finding that needs to be addressed within post-secondary institutions universally to aide in the building of quality education for young children.

Hemmeter et al. (2008) surveyed ECE faculty members from institutions across nine U.S. states on preparation of their graduates regarding social and emotional development and challenging behaviours in preschool children. These researchers looked at differences between 2-year and 4-year programs as well as programs that included a special education component. The results suggested that graduates from the 4-year program with special education components were rated as more prepared than those graduating from the 4-year program without special education components; however, graduates from the 4-year programs with and without special education components were rated higher than graduates from the 2-year programs. Researchers reported that many graduates have "emerging skills" and do not have the necessary skills to meet the everyday needs of children with challenging behaviours. These authors stated that "beginning teachers are likely to need mentoring, coaching, feedback, and technical assistance focussed on their everyday interactions with children with challenging behaviours" (p. 336).

The Role of ECE in Fostering Student Mental Health

While families are primary deliverers of care, research indicates that the strongest influence outside the family is children's participation in quality ECE. Quality ECE can mediate adverse risk factors for children (Sylva et al., 2009). ECE programs are the second most frequent environment in which children spend time, and the quality of the program plays a significant role in determining developmental outcomes (Blewitt et al., 2018; Peisner-Feinberg et al., 2001). The quality of children's ECE experience is a strong predictor for school readiness.

Children who attend ECE programs—even children with challenging behaviours, poor attendance, and challenging home environments—make a better transition and adaptation to school compared with children with no ECE experiences (Isaacs, 2012). Research also showed that with appropriate interventions, children with disruptive behaviour can be successful in their ECE program when the necessary education, supports, and interventions were provided (Ehrlich, Gwynne, & Allensworth, 2018; Perry et al., 2008; Zinsser, Christensen, & Torres, 2016). Unfortunately, not all children are

able to avail themselves of high quality ECE programs. A recent report noted that child care for children in the infant–toddler age range can cost from \$175 to approximately \$1,500 a month depending the province (Macdonald & Friendly, 2019). The high costs of ECE programs can leave families of low socio-economic status with few options for their children to attend high quality ECE programs, or any ECE programs at all. This is concerning, as many longitudinal ECE studies we reviewed suggested that children who come from families of low socio-economic status benefit the most from high quality programs and are less likely to be labelled as “at risk” as they get older (Barnett, Jung, Youn, & Frede, 2013; Peters et al., 2010; Reynolds, Temple, Robertson, & Mann, 2002; Schweinhart & Weikart, 1997).

Quality ECE predicts improved cognitive skills, improved self-regulation, and pro-social skills (McCain et al., 2011). Integrated services (for example, those that include home, community, and school) showed a positive influence on social development, positive behaviour, and self-regulation (McCain et al., 2011). While the largest impact was on the cognitive outcomes (McCain et al., 2011), there were also positive results for social skills and school progress. Corter and Pelletier (2010) investigated an integrated approach that brought child and family services into a school site in an integrated model. Known as Toronto First Duty, the neighborhood school became a one-stop site for families. The ECE programs were housed in neighborhood schools and many related services such as health care were available at the same site. Findings from the project were significant. There was a strong positive association between staff teamwork and quality of programs. The program benefited parents by empowering them, as they experienced fewer parenting hassles and less difficulty navigating between child care and school. They reported receiving greater supports, continuity of care, and seamless services. Positive effects included social and emotional development, and more intense use (defined as more hours or dosage) predicted better cognitive and language skills. Universal access to these programs helped reduce stigma, provided pressure to improve quality by drawing in middle-class parents, and reached children from diverse backgrounds. Integrated services improved child development, promoted healthy lifelong development, strengthened school readiness, and prevented problems later in life.

Reynolds, Temple, White, Ou, and Robertson (2011) also examined the long-term mental health benefits of ECE by examining children’s participation in a Chicago Child-Parent Center program. In this study, children began the program in preschool and continued through their early school years. The programs were located in or near schools and included educational and other family supports. It examined participation beginning in preschool and found that children who participated in the program showed multiple positive outcomes including well-being, higher income, higher educational attainment, higher socio-economic status, and health insurance, as well as lower rates of criminality and substance abuse.

Quantity of time in ECE programs matter. The impact of the various types of kindergarten was also investigated (Cryan, Sheehan, Wiechel, & Bandy-Hedden, 1992). Researchers compared half-day kindergarten (HDK), alternate-day kindergarten (ADK), and full-day kindergarten (FDK). The researchers suggested that FDK had a more positive impact than either HDK or ADK programs on both academic and behavioural outcomes. The authors reported that as compared with HDK and ADK

programs, children in FDK spent more time in play. The benefits lasted well into the second grade. A Canadian study also examined HDK versus FDK during Ontario's phase-in of FDK (Pelletier & Corter, 2018). The results of their study were similar: Children who attended FDK (for two years), as compared with children who attended HDK, obtained significantly better outcomes on provincial achievement examinations in grade three. As well, there was a statistically significant difference noted for children's self-regulation skills.

The impact of children attending a program named Head Start for two years of pre-school (ages 3–5) was investigated and compared to children who only attended for one year (Moore et al., 2015). The results suggested children who attended pre-school for two years scored higher on measures of social and emotional competency as well as higher on measures of overall cognitive and adaptive functioning as compared with children who only attended for one year.

A meta-analysis on the effects of FDK on student achievement and social development was also completed (Cooper, Batts Allen, Patall, & Dent, 2010). Children who attended FDK performed better on academic achievement measures as compared with children who attended only HDK programs. Small positive associations were found between FDK and attendance (positive but not significant), self-confidence (varied), and ability to play with others. There was a statistically significant difference in children who attended FDK compared with children who attended HDK on self-regulation tasks.

Bulotsky-Shearer and Fantuzzo (2011) examined interactions between children attending a Head Start program and their teachers and peers under three conditions: structured, unstructured, and during games or play. They examined five dimensions of behaviour: oppositional behaviour, aggression, inattention and hyperactivity, withdrawn and low energy, and socially reticent behaviour. Early behaviour problems in structured learning situations differentially predicted lower levels of both literacy and language skills by the end of kindergarten and Grade 1. Problems with peers predicted lower levels of phoneme segmentation and reading fluency rates by the end of Grade 1. Children with early behavioural problems within structured teacher-initiated learning and peer-mediated learning were at the greatest risk for poor academic outcomes. These researchers draw attention to active engagement, and highlight the link between SEL and early identification. These authors caution against pathologizing the child, and advocate for increasing the capacity for teachers and staff to use developmentally and contextually appropriate assessment and interventions to prevent significant mental health issues within this population. They recommend greater collaboration across disciplines and systems to guide and sustain meaningful interventions.

Timmons, Pelletier, and Corter (2016) investigated children's self-regulation responses in a variety of classroom contexts, including small-group instruction, play, large-group instruction, and during transitions. These researchers examined children's self-regulation and engagement across a variety of contexts. The results found the highest level of self-regulation occurred during small-group instruction, followed by play, then large-group instruction, and finally during transitions. Engagement was highest during play, then next highest during small-group instruction, followed by large-group instruction and transitions.

Curriculum: The Importance of Explicit SEL Outcomes

Play-based pedagogy with explicit SEL outcomes are seen in the curriculum frameworks for many provinces in Canada. A 2014 review of provincial and territorial curricula frameworks found social and emotional development was featured in all of the ECE frameworks studied in Canada (McCuaig, 2014). However, the implementation of SEL in the provincial curriculums are varied. According to Schonert-Reichl et al. (2017), SEL involves five competency areas: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. A thorough examination of SEL in ECE provincial curriculums in Canada (McCuaig, 2014) discussed the teaching of SEL in all provincial ECE curriculums, but no provincial curriculum addresses all five competency areas. Quebec was the closest to including all competency areas, as their curriculum included teaching about relationship skills, social awareness, responsible decision making, and social management, with the teaching of self-awareness lacking.

A meta-analysis (Durlak, Weissberg, Dymnicki, Schellinger, & Taylor, 2011) focused on the use of SEL in the K–12 system examined multiple outcomes including: social and emotional outcomes, attitude toward self and others, positive social behaviour, conduct problems (externalizing behaviours), emotional distress (internalizing), and academic performance (literacy and numeracy). The findings of the meta-analysis suggested the largest overall effect size in determining positive outcomes was for SEL. A second meta-analysis investigating social and emotional programs implemented in American schools found that social and emotional skill development was the best predictor of a student's well-being, regardless of the demographic group. The study found that the development of social and emotional skills had the added benefit of improving skills in other areas, for example, social skills and relationship development (Taylor, Oberle, Durlak, & Weissberg, 2017). The study also found that educators can effectively implement SEL programs and have them incorporated into the regular classroom routines. Taylor et al. identified two significant variables that influenced the effectiveness of the programs included in the meta-analysis. First, the programs had to be well designed and have four qualities: sequenced, active, focused, and explicit. Second, the programs needed to be properly implemented to be successful (implementation fidelity). This study highlights the importance of providing appropriate education, professional development, mentorship, and supervision to educators to ensure fidelity in implementing good quality programs.

While play-based learning has received attention in the development of social and emotional skills, problem behaviours may not be adequately addressed by play alone. Studies that examined the impact of manualized programs that provided teachers with a scope and sequence of SEL curriculum showed positive impact on social and emotional competencies as well as reductions in problem behaviours (Ashdown & Bernard, 2012; Bierman et al., 2008). It was reported that pro-social engagement and self-regulation are closely linked with emotional competence and social problem solving.

Bierman et al. (2008) found that children who managed their behaviour were able to meet classroom expectations and exhibited higher levels of achievement. This study provided teachers with a curriculum guide, ongoing mentoring, and ensured implementation fidelity. Bierman et al. used emotional coaching and social-emotional

problem solving during free play. The findings were significant. Children who participated in the program showed improvement in vocabulary, literacy, emotional and social problem solving, social behaviour, and learning engagement (Bierman et al., 2014).

The Mental Health of Educators: The Importance of Relationships

The mental health of early child educators impacts child development outcomes (Gilliam & Shahar, 2006; Oberle & Schonert-Reichl, 2016; Zinsser et al., 2016). The best predictors of positive mental health outcomes are the quality of care, curriculum, and staff-child interactions (Hall et al., 2009, p. 346). However, challenging behaviours are linked to high levels of teacher stress and burnout (Brackenreed, 2008; Gebbie, Ceglowski, Taylor, & Miels 2012; Nislin et al., 2016) and affect teachers' sense of self-efficacy (Bullock, Coplan, & Bosacki, 2015; Zinsser et al., 2016). In a study of early child care educators (Wagner et al., 2013), it was found that accessibility to resources, knowledge of problem-solving, coping skills, job satisfaction, perceptions of job control, and work pride all contributed to positive outcomes for children. These authors recommended that recruitment and retention of quality early childhood educators should be an important goal for current policy makers, and the reduction of factors that lead to job-related stress may be one avenue for achieving this goal.

A longitudinal study (Peisner-Feinberg et al., 2001) found that the closeness of relationships between educator and child tended to be a strong predictor of the child's behaviour and social skills. However, relationships with children exhibiting problem behaviours may be impeded if the educator does not have sufficient knowledge and skills to intervene (Hemmeter et al., 2008). While the research suggested that relationships with children are important, policy documents and curriculum frameworks often do not explicitly reflect this concept for children and early childhood educators, especially for children under the age of 2 years. In the early childhood environments, emotional connections and being attuned with the child are of equal value to keeping children safe and/or providing for their needs (Davis & Dunn, 2018). Davis and Dunn (2018) examined three curriculum frameworks: Australia, New Zealand, and England. They found that emotional relationships were not explicitly outlined in the frameworks. These authors suggested that explicit curriculum can influence teacher decision making around their interaction with children.

Another factor that predicts mental health outcomes for children is the classroom management techniques used by educators (Rimm-Kaufman, Curby, Grimm, Nathanson, & Brock, 2009). In one study, classroom management emerged as the most significant factor influencing both behavioural and academic outcomes. Classroom management was defined as a teacher's ability to implement effective behaviour management, productivity through instructional time and routines, and instructional learning formats to facilitate learning opportunities (Rimm-Kaufman et al., 2009). Teachers with better classroom management and who employed more varied approaches to learning had better results. Classroom management emerged as the most salient finding across multiple outcomes, such as behavioural and cognitive skills, self-control, work habits, engagement, and off-task behaviour (Rimm-Kaufman et al., 2009).

Summary

When intervention is considered for young children, research is explicit in showing that quality ECE correlates with overall better academic, behavioural, and developmental outcomes (McCain et al., 2011; Sylva et al., 2009). The provision of universal ECE programs, regardless of children's SES or behavioural needs, reduces stigma and mitigates long-term consequences (Corter & Pelletier, 2010). Mental health issues can be identified during the early years, and families should be given appropriate support (Conroy & Brown, 2004). However, the provision of explicit SEL teaching outcomes embedded in early curriculum frameworks provides added protection for all students, not just children who are struggling (Ashdown & Bernard, 2012; Bierman et al., 2008). Continuity of curriculum as well as continuity of pedagogical practice are critically important, and play-based teaching affords a valuable opportunity for this to occur (Bergen & Pronin Fromberg, 2009; Corter & Pelletier, 2010).

Families, early childhood educators, and medical and mental health professionals need to work together to provide young children with an environment that ensures successful outcomes (Cohen et al., 2012; Kulkarni et al., 2019). The literature supports a collaborative approach to working with families and caregivers to provide seamless services (Corter & Pelletier, 2010), as well as expert assistance in evidence-based practices for children who are struggling with regulating their emotions and behaviours (Eyberg, Nelson, & Boggs, 2008; Gleason et al., 2016; Substance Abuse and Mental Health Services Administration, 2011). Children with problem behaviours are far more likely to be excluded from ECE programs (Gilliam & Shahar, 2006; Hoover et al., 2012).

The literature is equally clear in concluding that the mental health status of early child educators, their stress, and their working conditions impact outcomes for young children. When teachers are stressed, when they do not have the knowledge or skills to intervene, children can be adversely impacted (Hoover et al., 2012; Zinsser et al., 2016). Therefore, considering the education and experiences of early educators is a critical factor in improving outcomes for children and quality of the ECE programs (Hemmeter et al., 2008).

Early childhood educators need to be knowledgeable about child mental health and skilled in both recognizing issues and intervening (Brown & Conroy, 2011; Conroy & Brown, 2004). They need to be skilled in general classroom management techniques, with prevention of problem behaviours as a focus (Rimm-Kaufman et al., 2009). They should be provided education and support in developing these skills and in acquiring expertise in evidence-based practices (Bricker et al., 2004; Hemmeter et al., 2008; Leslie et al., 2016).

Quality ECE can aide young children and their families in receiving effective treatments earlier in life (Moffitt et al., 2011), and can aide in identifying mental health concerns in the early years (Cohen et al., 2012). Children who attend ECE programs tend to make better transitions to school (kindergarten), and adapt more positively than children with no ECE experience (Issacs, 2012). Quality ECE has also been associated with the learning of positive behaviours, such as self-regulation and pro-social skills (McCain et al., 2011). Policy makers need to consider the benefits of ECE for all children, especially in relation to mental health benefits for children, their families, and society.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Anders, Y., Sammons, P., Taggart, B., Sylva, K., Melhuish, E., & Siraj-Blatchford, I. (2010). The influence of child, family, home factors and pre-school education on the identification of special educational needs at age 10. *British Educational Research Journal*, *37*(3), 421–441.
- Ashdown, D. M., & Bernard, M. E. (2012). Can explicit instruction in social and emotional learning skills benefit the social-emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal*, *39*(6), 397–405. doi:10.1007/s10643-011-0481-x
- Barnett, W. S., Jung, K., Youn, M.-J., & Frede, E. C. (2013). *Abbott Preschool Program Longitudinal Effects: Fifth grade follow-up*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers University. Retrieved from <http://nieer.org/wp-content/uploads/2014/09/APPLES205th20Grade.pdf>
- Bayer, J. K., Ukoumunne, O. C., Lucas, N., Wake, M., Scalzo, K., & Nicholson, J. M. (2011). Risk factors for childhood mental health symptoms: National longitudinal study of Australian children. *Pediatrics*, *128*(4), e865–e879. doi:10.1542/peds.2011-0491
- Bergen, D., & Pronin Fromberg, D. (2009). Play and social interaction in middle childhood. *Phi Delta Kappan*, *90*(6), 426–430. doi:10.1177/003172170909000610
- Bhutta, A. T., Cleves, M. A., Casey, P. H., Cradock, M. M., & Anand, K. J. S. (2002). Cognitive and behavioural outcomes of school aged children who are born preterm: A meta-analysis. *Journal of American Medical Association*, *288*(6), 728–737.
- Bierman, K. C., Domitrovich, C., Nix, R. L., Gest, S. D., Welsh, J. D., Greenberg, K. E., & Gill, S. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI program. *Child Development*, *79*(6), 1802–1817.
- Bierman, K. L., Nix, R. L., Heinrichs, B. S., Domitrovich, C. E., Gest, S. D., Welsh, J. A., & Gill, S. (2014). Effects of Head Start REDI on children's outcomes 1 year later in different kindergarten contexts. *Child Development*, *85*(1), 140–159. doi:10.1111/cdev.12117
- Blair, C., & Raver, C. (2012). Child development in the context of adversity: Experiential canalization of brain and behavior. *American Psychologist* *67*(4), 309–318. doi:10.1037/a0027493
- Blewitt, C., Fuller-Tyszkiewicz, M., Nolan, A., Bergmeier, H., Vicary, D., Huang, T., ... Skouteris, H. (2018). Social and emotional learning associated with universal curriculum-based interventions in early childhood education and care. *JAMA Network Open*, *1*(8), e185727. doi:10.1001/jamanetworkopen.2018.5727
- Brackenreed, D. (2008). Inclusive education: Identifying teachers' perceived stressors in inclusive classrooms. *Exceptionality Education Canada*, *18*(3), 131–147.
- Brauner, C. B., & Stephens, C. B. (2006). Estimating the prevalence of early childhood serious emotional/behavioral disorders: Challenges and recommendations. *Public Health Reports*, *121*(3), 303–310. doi:10.1177/003335490612100314
- Bricker, D., Schoen Davis, M., & Squires, J. (2004). Mental health screening in young children. *Infants and Young Children*, *17*(2), 129–144.
- Brown, W. H., & Conroy, M. A., (2011). Social-emotional competence in young children with developmental delays. *Journal of Early Intervention*, *33*(4), 310–320. doi:10.1177/1053815111429969
- Bullock, A., Coplan, R. J., & Bosacki, S. (2015). Exploring links between early childhood educators' psychological characteristics and classroom management self-efficacy beliefs. *Canadian*

- Journal of Behavioural Science / Revue canadienne des sciences du comportement*, 47(2), 175–183. doi:10.1037/a0038547
- Bulotsky-Shearer, R. J., & Fantuzzo, J. W. (2011). Preschool behavior problems in classroom learning situations and literacy outcomes in kindergarten and first grade. *Early Childhood Quarterly*, 26, 61–73. doi:10.1016/j.ecresq.2010.04.004
- Butler, M., & Pang, M. (2014). *Current issues in mental health in Canada: Child and youth mental health* (Publ. no. 2014-13-E). Ottawa, ON: Library of Parliament.
- Canadian Institute for Health Information. (2015). *Care for children and youth with mental disorders*. Ottawa, ON: Author. Retrieved from https://secure.cihi.ca/free_products/CIHI_CYMH_Final_for_pubs_EN_web.pdf
- Carlson, J. S., Mackrain, M. A., Van Egeren, L. A., Brophy-Herb, H., Kirk, R. H., Marciniak, D., ... Tableman, B. (2012). Implementing a statewide early childhood mental health consultation approach to preventing childcare expulsions. *Infant Mental Health Journal*, 33(3), 265–273. doi:10.1002/imhj.21336
- Carter, A. S., Godoy, L., Wagmiller, R. L., Veliz, P., Marakovitz, S., Briggs-Gowan, M. J. (2010). Internalizing trajectories in young boys and girls: The whole is not the sum of its parts. *Journal of Abnormal Child Psychology*, 38, 19–31. doi:10.1007/s10802-009-9342-0
- Centers for Disease Control and Prevention. (2013). Child development: Developmental monitoring and screening for health professionals [Web page]. Retrieved from <http://www.cdc.gov/ncehd/childdevelopment/screening-hcp.html>
- Center on the Developing Child at Harvard University. (2016). *From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families*. Retrieved from www.developingchild.harvard.edu
- Clinton, J., Kays-Burden, A., Carter, C., Bhasin, K., Cairney, J., Carrey, N., ... Williams, R. (2014). *Supporting Ontario's youngest minds: Investing in the mental health of children under 6*. Ottawa, ON: Ontario Centre of Excellence for Child and Youth Mental Health. Retrieved from www.excellenceforchildandyouth.ca
- Cohen, E., Oser, C., & Quigley, K. (2012). *Making it happen. Overcoming barriers to providing infant-early childhood mental health*. Washington, DC: Zero to Three.
- Collishaw, S. (2015). Annual research review: Secular trends in child and adolescent mental health. *Journal of Child Psychology and Psychiatry*, 56(3), 370–393. doi:10.1111/jcpp.12372
- Comeau, J., Georgiades, K., Duncan, L., Wang, L., & Boyle, M. H., & 2014 Ontario Child Health Study Team. (2019). Changes in the prevalence of child and youth mental disorders and perceived need for professional help between 1983 and 2014: Evidence from the Ontario Child Health Study. *Canadian Journal of Psychiatry*, 64(4), 256–264. doi:10.1177/0706743719830035
- Conroy, M. A., & Brown, W. H. (2004). Early identification, prevention, and early identification with young children at risk for emotional and behavioural disorders: Issues, trends, and call for action. *Behavioral Disorders*, 29(3), 224–239.
- Cooper, H., Batts Allen, A., Patall, E., & Dent, A. (2010). Effects of full-day kindergarten on academic achievement and social development. *Review of Educational Research*, 80(1), 34–70.
- Corter, C., & Pelletier, J. (2010). Schools as integrated service hubs for young children and families. *International Journal of Child Care and Education Policy*, 4(2), 45–54.
- Cryan, J. R., Sheehan, R., Wiechel, J., & Bandy-Hedden, I. G. (1992). Success outcomes of full-day kindergarten: More positive behavior and increased achievement. *Early Childhood Research Quarterly*, 7, 187–203.

- Davis, B., & Dunn, R. (2018). Making the personal visible: Emotion in the nursery. *Early Child Development and Care, 188*(7), 905–923. doi:10.1080/03004430.2018.1439487
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Schellinger, K. B., & Taylor, R. D. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school based universal interventions. *Child Development, 82*(1), 405–432. doi:10.1111/j.1467-8624.2010.01564.x
- Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: Presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry, 47*(3/4), 313–337. doi:10.1111/j.1469-7610.2006.01618.x
- Ehrlich, S. B., Gwynne, J. A., & Allensworth, E. M. (2018). Preschool attendance matters: Early and chronic absence patterns and relationship to learning outcomes. *Early Childhood Research Quarterly, 44*, 136–151. doi:10.1016/j.ecresq.2018.02.012
- Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child and Adolescent Psychology, 37*, 215–237.
- Gardner, F., & Shaw, D. S. (2008). Behavioral problems of infancy and preschool children (0–5). In M. Rutter, D. V. M. Bishop, D. S. Pine, S. Scott, J. Stevenson, E. Taylor, & A. Thapar (Eds.), *Rutter's child and adolescent psychiatry* (5th ed., pp. 882–893). Oxford, UK: Blackwell Publishing. doi:10.1002/9781444300895
- Gebbie, D. H., Ceglowski, D., Taylor, L. K., & Miels, J. (2012). The role of teacher efficacy in strengthening classroom supports for preschool children with disabilities who exhibit challenging behaviours. *Early Childhood Education Journal, 40*, 35–46. doi:10.1007/s10643-011-0486-5
- Gilliam, W. S., & Shahar, G. (2006). Preschool and child care expulsions and suspensions: Rates and predictors in one state. *Infants and Young Children, 19*(3), 228–245.
- Gleason, M. M., Goldson, E., & Yogman, M. W., & AAP Council on Early Childhood. (2016). Addressing early childhood emotional and behavioral problems. *Pediatrics, 138*(6):e20163025. doi:10.1542/peds.2016-3025
- Government of Newfoundland and Labrador. (2016). *Mental illness/mental health statement*. Retrieved from http://www.ed.gov.nl.ca/edu/k12/studentssupportservices/pdf/MI_Mental_Health_statement.pdf
- Hall, J., Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2009). The role of pre-school quality in promoting resilience in the cognitive development of young children. *Oxford Review of Education, 35*(3), 331–352.
- Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator, 35*(1), 31–47.
- Hemmeter, M. L., Santos, R. M., & Ostrosky, M. M. (2008). Preparing early childhood educators to address young children's social and emotional development and challenging behaviour: A survey of higher education in nine states. *Journal of Early Intervention, 30*(4), 321–340. doi:10.1177/1053815108320900
- Hoover, S. D., Kubicek, L. F., Rosenberg, C. R., Zundel, C., & Rosenberg, S. A. (2012). Influence of behavioural concern and early childhood expulsions on the development of early childhood mental health consultation in Colorado. *Infant Mental Health Journal, 33*(3), 246–255. doi:10.1002/imhj.21334
- Isaacs, J. B. (2012). *Starting school at a disadvantage: The school readiness of poor children*. Washington, DC: Center on Children and Families at Brookings. Retrieved from

- <https://www.brookings.edu/research/starting-school-at-a-disadvantage-the-school-readiness-of-poor-children/>
- Jones, P. (2013). Adult mental health disorders and their age of onset. *British Journal of Psychiatry*, 201(S54), S5–S10. doi:10.1192/bjp.bp.112.119164
- Kulkarni, C., Khambati, N., Sundar, P., Kelly, L., Summers, N., & Short, K. (2019). *Beyond building blocks: Investing in the lifelong mental health of Ontario's three- to six-year-olds*. Ottawa, ON: Ontario Centre of Excellence for Child and Youth Mental Health.
- Lavigne, J. V., Cicchetti, C., Gibbons, R. D., Binns, H. J., Larsen, L., & DeVito, C. (2001). Oppositional defiant disorder with onset in the preschool years: Longitudinal stability and pathway to other disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(12), 1393–1400.
- Leslie, L. K., Mehus, C. J., Hawkins, J. D., Boat, T., McCabe, M. A., Barkin, S., ... Brown, R. (2016). Primary health care potential home for family-focused preventive interventions. *American Journal of Preventive Medicine*, 51(4) Supplement 2, 106–118. doi:10.1016/j.amepre.2016.05.014
- Macdonald, D., & Friendly, M. (2019). Developmental milestones: Child care fees in Canada's big cities 2018. *Canadian Centre for Policy Alternatives*, 1, 1–36.
- Malla, A., Shah, J., Iyer, S., Boksa, P., Jooper, R., Anderson, N., ... Fuhrer, R. (2019). Youth mental health should be a top priority for health care in Canada. *The Canadian Journal of Psychiatry*, 63(4), 216–222. doi:10.1177/0706743718758968
- Masi, L., & Gignac, M. (2015). ADHD and comorbid disorders in childhood psychiatric problems, medical problems, learning disorders and developmental coordination. *Clinical Psychiatry*, 1(1), 5.
- McCain, M. N., Mustard, J. F., & McCuaig, K. (2011). *Early Years Study 3: Making decisions, taking action*. Toronto, ON: Margaret & Wallace McCain Family Foundation.
- McCuaig, K. (2014). *Review of early learning frameworks in Canada*. Retrieved from https://www.oise.utoronto.ca/atkinson/UserFiles/File/Resources_Topics/Resources_Topics_CurriculumPedagogy/Review_of_Early_Learning_Frameworks_in_Canada-.pdf
- McMartin, S. E., Kingsbury, M., Dykxhoorn, J., & Coleman, I. (2014). Time trends of of mental illness in children and adolescents in Canada. *Canadian Medical Association Journal*, 186(18), E672–E678. doi:10.1503/cmaj.140064
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... Sears, M. R. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108(7), 2693–2698. doi:10.1073/pnas.1010076108
- Moore, J., Rhoades Cooper, B., Domitrovich, C. E., Morgan, N. R., Cleveland, M. J., Shah, H., ... Greenberg, M. T. (2015). *Early Childhood Research Quarterly*, 32, 127–138. doi:10.1016/j.ecresq.2015.03.04
- National Research Council and Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, DC: The National Academies Press. doi:10.17226/12480
- National Scientific Council on the Developing Child. (2004). *Children's emotional development is built into the architecture of their brains: Working paper no. 2*. Retrieved from www.developingchild.harvard.edu
- National Scientific Council on the Developing Child. (2008/2012). *Establishing a level foundation for life: Mental health begins in early childhood: Working paper no. 6* (Updated ed.). Retrieved from www.developingchild.harvard.edu

- Nislin, M. Sajaniemi, N., Sims, M., Suhonen, E., Maldonado, E. F., Hyttinen, S., & Hirvonen, A. (2016). Occupational well-being and stress among early childhood professionals: The use of an innovative strategy to measure stress reactivity in the workplace. *Open Review of Educational Research*, 3(1), 1–17. doi:10.1080/23265507.2015.1128352
- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science and Medicine*, 159, 30–37. doi:10.1016/j.socscimed.2016.04.031
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 1534–1553.
- Pelletier, J., & Corter, J. (2018). A longitudinal comparison of learning outcomes in full-day and half-day kindergarten. *Journal of Educational Research*, 112(2), 192–210. doi:10.1080/00220671.2018.1486280
- Perry, D. F., Dunne, M. C., McFadden, L., & Campbell, D. (2008). Reducing risk for preschool expulsion: Mental health consultation for young children with challenging behaviours. *Journal of Child and Family Studies*, 17(1), 44–54. doi:10.1007/s10826-007-9140-7
- Peters, R. DeV., Nelson, G., Petrunka, K., Pancer, S. M., Loomis, C., Hasford, J., ... Van Andel, A. (2010). *Investing in our future: Highlights of Better Beginnings, Better Futures research findings at Grade 12*. Retrieved from <http://bbbf.ca/Portals/15/pdfs/Grade%2012%20report%20FINAL%20version.pdf>
- Poulou, M. S. (2015). Emotional and behavioural difficulties in preschool. *Journal of Child and Family Studies*, 24, 225–236. doi:10.1007/s10826-013-9828-9
- Ravers, C.C. (2003). Young children's emotional development and school readiness. *Society for Research in Child Development's Social Policy Report*, 16(3), 3–19.
- Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers. *Educational Evaluation and Policy Analysis*, 24, 267–303.
- Reynolds, A. J., Temple, J. A., White, B. A. B., Ou, S., & Robertson, D. L. (2011). Age 26 cost-benefit analysis of the Child-Parent Center early education program. *Child Development*, 82(1), 379–404.
- Rimm-Kaufman, S. E., Curby, T. W., Grimm, K. J., Nathanson, L., & Brock, L. L. (2009). The contribution of children's self-regulation and classroom quality to children's adaptive behaviours in the kindergarten classroom. *Developmental Psychology*, 45(4), 958–972. doi:10.1037/a0015861
- Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgement of problems in transition to kindergarten. *Early Childhood Research Quarterly*, 15(2), 147–166. doi:10.1016/S0885-2006(00)00049-1
- Ritchie, H., & Roser, M. (2018). *Mental health* [Online resource]. Retrieved from <https://ourworldindata.org/mental-health>
- Roberts, C., Mazzucchelli, T., Taylor, K., & Reid, R. (2003). Early intervention for behaviour problems in young children with developmental disabilities. *International Journal of Disability, Development and Education*, 50(3), 275–292. doi:10.1080/1034912032000120453
- Russell, D., & Gleason, M. M., (2018). Starting early: Promoting emotional and behavioral well-being in infant and toddler well-child care. *Pediatric Annals*, 48(8), e317–e322. doi:10.3928/19382359-20180703-01

- Sandieson, R.W., Kirkpatrick, L. C., Sandieson, R. M., & Zimmerman, W. (2009). Harnessing the power of education research databases with the pearl-harvesting methodological framework for information retrieval. *Journal of Special Education, 44*(3), 161–175. doi:10.1177/0022466909349144
- Schonert-Reichl, K. A., Kitil, J., & Hanson-Peterson, J. (2017). *To teach the students, teach the teachers: A national scan of teacher preparation and social and emotional learning*. A report prepared for the Collaboration for Academic, Social and Emotional Learning (CASEL). Vancouver, B.C.: University of British Columbia.
- Schonkoff, J. P., & Garner, A. C. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232–e246. doi:10.1542/peds.2011-2663
- Schweinhart, L. J., & Weikart, D. P. (1997). The High/Scope Preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly, 12*(2), 117–143.
- Smith, B. J., & Fox, L. (2003). *Systems of service delivery: A synthesis of evidence relevant to young children at risk of or who have challenging behavior*. Tampa, FL: University of South Florida, Center for Evidence-Based Practice: Young Children with Challenging Behavior.
- Substance Abuse and Mental Health Services Administration. (2011). *Interventions for disruptive behavior disorders: How to use the evidence-based practices KITs* (HHS Pub. No. SMA-11-4634). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from <https://store.samhsa.gov/system/files/howtouseebpkits-idbd.pdf>
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2009). *Effective Pre-school and Primary Education 3–11 (EPPE 3–11). Final report from the primary phase: Pre-school, school, and family influences on children’s development during Key Stage 2 (age 7–11)*. London, UK: Institute of Education, University of London.
- Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj, I. (2015). *Effective Pre-school, Primary, and Secondary Education (EPPSE 3-16+) project. How pre-school influences children and young people’s attainment and developmental outcomes over time* (Research brief RB455). London, UK: Department for Education. Retrieved from http://dera.ioe.ac.uk/23344/1/RB455_Effective_pre-school_primary_and_secondary_education_project.pdf
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weisberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156–1176. doi:10.1111/cdev.12864
- Timmons, K., Pelletier, J., & Corter, C. (2016). Understanding children’s self-regulation within different classroom contexts. *Early Childhood Development and Care, 186*(2), 249–267. doi:10.1080/03004430.2015.1027699
- Waddell C., Hua, J. M., Garland, O. M., Peters, R. D., & McEwan, K. (2007). Preventing mental disorders in children: A systematic review to inform policy-making. *Canadian Journal of Public Health, 98*(3), 166–173. doi:10.1007/BF03403706
- Waddell, C., McEwan, K., Peters, R. D., Hua, J. M., & Garland, O. M. (2007). Preventing mental disorders in children: A public health priority. *Canadian Journal of Public Health, 98*(3), 174–178. <http://www.jstor.org/stable/41994906>
- Wagner, S. L., Forer, B., Cepeda, I. L., Goelman, H., Maggi, S., D’Angiulli, A., ... Grunau, R. E. (2013). Perceived stress and Canadian early childcare educators. *Child Youth Care Forum, 42*, 53–70. doi:10.1007/s10566-012-9187-5
- Wakschlag, L. S., Briggs-Gowan, M. J., Choi, S. W., Nichols, S. R., Kestler, J., Burns, J. L., ... Henry, D. (2014). Advancing a multidimensional developmental spectrum approach to

- preschool disruptive behaviour. *Journal of the American Academy of Child and Adolescent Psychiatry*, 53(1), 82–97.
- Wakschlag, L. S., Tolan, P., & Levental, B. (2010). “Ain’t misbehaving”: Towards a nosology for preschool disruptive behaviour. *Journal of Child Psychology and Psychiatry*, 51(1), 3-22. doi:10.1111/j.1469-7610.2009.02184.x
- Whitley, J., Smith, D., & Vaillancourt, T. (2012). Promoting mental health literacy among educators: Critical in school-based prevention and intervention. *Canadian Journal of School Psychology*, 28, 56–70.
- Whitted, K. S. (2011). Understanding how social and emotional skill deficits contribute to school failure. *Preventing school failure*, 55(1), 10–16. doi:10.1080/10459880903286755
- World Health Organization. (2016). *Mental health: Strengthening our response* [Web page]. Geneva, Switzerland: Author. Retrieved from <http://www.who.int/mediacentre/factsheets/fs220/en/>
- World Health Organization. (2017). *Depression and other common mental disorders: Global health estimates*. Geneva, Switzerland: Author. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf>
- Zinsser, K. M., Christensen, C. G., & Torres, L. (2016). She’s supporting them: Who’s supporting her? Preschool center-level social-emotional supports and teacher well-being. *Journal of School Psychology*, 59, 55–66. doi:10.1016/j.jsp.2016.09.001

Authors’ Note

Correspondence concerning this article should be addressed to Sharon C. Penney, Memorial University, Faculty of Education, G.A. Hickman Building, St. John’s, NL, A1C 5S7. Email: scpenney@mun.ca