

# Understanding how Quality Early Child Education helps to prevent Special Educational Needs in Children

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The lasting benefits of early child education (ECE) on human development are well documented in research literature. National and international studies consistently reach joint consensus that participation in quality early learning environments improves human development, especially for children from disadvantaged backgrounds (McCain et al., 2011; Melhuish, 2012; Melhuish et al., 2016; Pascal, 2009; Pelletier & Corter, 2018). In addition, longitudinal studies from numerous countries conclude that investing in the early years has lasting societal/economic impact for families, communities, and economies (Alexander, 2012; Aos et al., 2004).

Special education has a long history of scholarly inquiry which has informed the evolution of disability services globally. Early identification and intervention are central to discussions around special education, however the discipline has historically viewed intervention as beginning with entry to formal schooling at six years of age. Children who do get identified during the early years often have to wait for services and often experience frustrating disruptions when transitioning to school.

## **Inclusive ECE programs for all children**

Article 23 of the *United Nations Conventions on the Rights of the Child* (1990) addresses the rights of children with disabilities to be active participants within their communities. In order to realize this right, governments must effortfully ensure that individuals with disabilities can access inclusive, quality educational programs on an equal basis with others in the communities in which they live.

International organizations and the European Union (EU) regard quality ECE and inclusive early childhood education (IECE) as an essential foundation for lifelong learning (Stahmer et al., 2011). High-quality ECE programs contain a lower staff-per-child ratio, a higher share of male staff, and a higher share of staff with formal ECE teacher training: factors associated with significant improvements in children's test results (Bauchmüller et al., 2014). The impact of quality ECE is evident which makes the early years particularly critical for children at risk of special educational needs (SEN) when their individual learning or developmental needs are often first detected.

One EU benchmark in the strategic framework for European co-operation in education and training is that at least 95% of children between the age of four and compulsory school age should participate in ECE (Stahmer et al., (2011). There are concerns, however, about the accessibility and quality of ECE/IECE provisions. Despite its importance, the Organisation for Economic Co-operation and Development (2004) reports that only one quarter of children with SEN are included in mainstream ECE programs.

Neither Canada as a whole, nor individual provinces/territories, offer entitlement to service or inclusion for children with SEN in regulated ECE programs. Since the 1980s, community-based ECE programs have voluntarily expanded their mandates, often with the

support of provincial/territorial funding, to include more children with SEN. While early childhood advocates, researchers, service providers and policy makers, have identified inclusive ECE as “best practice”, in Canada it is, however, not yet the reality for families (Halfon & Friendly, 2013). The *Early Childhood Education Report* (2017), which monitors public policy on the early years, indicates that the benchmark “funding conditional on including children with special needs in licensed child care” was only met by Manitoba and Ontario, and partially by Saskatchewan Alberta and Prince Edward Island.

In order to be prepared for educational attainment and adult health, a child should be ready and able to profit from the social and academic environment provided by school (Janus & Offord, 2007). Readiness develops during the early years and is moulded by multiple factors such as qualifications of the staff, curriculum, pedagogical practices and the social and emotional experiences during their days. Children with SEN and those at-risk of developing it require a particularly positive experience during those formative years. Children with complex needs would have a radically different start to school if programs are established in the early years and would consume significantly less service during their school years.

### **The early years for children with Autism Spectrum Disorder**

The burgeoning prevalence rate of young children with ASD, paired with the complexity of their everyday needs, necessitates that they be included in conversations about the benefits of ECE. This well-researched group of children clearly benefits from intervention beginning during the early years but few are enrolled in ECE programs. Early interventions typically appear to take the form of intensive, therapeutic approaches from an evidence-based behavioural framework that may take place in clinical, home, or ECE settings provided by clinicians, and often funded by the government. Everyone involved has much to gain from children with ASD, and their families, participating in ECE programs with well-trained early child educators who can support, scaffold, and generalize skills prior to grade one.

Few reports on ECE (either nationally or internationally) include information that is specific to the ASD diagnosis (Atkinson Centre for Society and Child Development, 2017; Friendly et al., 2018). This may relate to age of diagnosis, a desire for inclusivity, a non-categorical approach, or parents who are concerned about rejection: the latter may be a justified parental concern. One research team, for example, found that 35% of ECE programs in the Toronto, Ontario area refused to admit children who already had disability labels (Killoran et al., 2007). Other provinces report total numbers of children using their support services in childcare settings, but do not specify the number of children with ASD receiving services (Friendly et al., 2018; Data provided by Department of Education in BC & MN).

Training for educators (early child educators and K-12 teachers) is scant when it comes to childhood SEN, inclusion, and specifically ASD, much less on evidence-based strategies used to teach children with ASD. Practical applications of inclusion-related learning within ECE programs and within K-12 settings is an ongoing issue, although inclusion is considered to be the best-practice approach in Canada (Halfon & Friendly, 2013; Maich & Hall, 2014; van Rhijn et al., 2018).

The provision of intensive, therapeutic interventions such as early intensive behavioural intervention (EIBI) is inconsistent within ECE programs. In Newfoundland and Labrador, for example, though EIBI therapists almost exclusively deliver EIBI (termed Intensive ABA in NL) to its 422 children receiving therapy in home settings, they *may* visit ECE programs to support social skills growth and generalization. However, this support is dependent on the willingness of the center itself (Department of Health & Community Services, Government of NL, 2018).

Similarly, in Manitoba, the delivery of therapeutic programming for children with ASD would be both unusual and made on a center by center, case-by-case basis (Data provided by Department of Education in MN). However, this type of collaboration between EIBI and ECE programs is not unusual in Nova Scotia (Data provided by Department of Education in NS). Clearly, such collaboration is possible if not consistently implemented.

Key points in this noteworthy topic include: over half of those diagnosed with ASD receive their diagnosis during the early years; that early intervention in the form of (E)IBI appears to optimize skill development in young children with ASD; and that skills developed in (E)IBI are intended to be reinforced and generalized in classroom settings, including ECE programs. However, early child educators do not typically appear to be specifically trained in either ASD or its evidence-based interventions as a routine feature of professional preparation. Given that children with ASD need highly individualized models of intervention and support with parents as robust partners, it is clear that inclusive ECE programs, with trained early child educators, can and should play a particularly pivotal role in supporting, reinforcing, and generalizing therapeutic interventions to everyday settings and situation.

### **ECE and student mental health**

With the rise of mental health issues, researchers are particularly interested in the impact of ECE on reducing mental health concerns. Research is conclusive that quality ECE enhances children's language skills, strengthens prosocial behaviour, and enhances children's self-regulation skills, all of which are vital to child mental health. Children who can communicate effectively, who are able to interact appropriately, and able to regulate their behaviour and emotions are at a significantly reduced risk for developing mental health issues or being diagnosed with an emotional or behavioural disorder (EBD). However, the research is also clear that early curriculum frameworks need explicit social and emotional learning (SEL) outcomes embedded to reduce mental health issues in our most vulnerable children.

Mental health problems occur in young children but often go unrecognized and are not remediated. While firm diagnoses of mental health disorders in the early years is complex, early warning signs can and need to be identified. Emotional dysregulation, peer rejection, disturbed sleeping and eating, aggression, irritability and defiance are some visible early signs (National Scientific Council on the Developing Child, 2008/2012). These early behavioural characteristics need to be viewed through a developmental lens with the contextual knowledge that some problems may be temporary or transitory. Nonetheless, when behaviours such as these are evident it is important to provide developmentally appropriate supports around both the child and the child's primary caregivers and family (Conroy & Brown, 2004; National Scientific Council on the Developing Child, 2008/2012). Maladaptive behaviours in the early years can be indicative of negative outcomes in adulthood (Burt et al., 2008; Carlson et al., 2007). Young children with developmental disabilities are also at-risk of developing mental health problems, which will further impact their development as they age.

Early behavioural difficulties carry an additional risk: dismissal from ECE programs. These 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, especially for-profit centers, are more likely to expel children with significant mental health issues, especially those with externalized behaviours (Gilliam & Shaha, 2006; Perry et al., 2008). One study looked at expulsions and suspensions in ECE programs and found programs 34 times more likely to expel children with behavioural difficulties than the K-12 average (Gilliam & Shaha, 2006). Expulsions are related to a variety of factors including child characteristics, characteristics

of the class (group size, racial composition), and teacher reported stress and depressive symptoms. Teacher stress has been found to be the most robust correlate with expulsions and suspensions. Poor attendance in ECE programs also places children at-risk (Ehrlich et al. 2018). Children who attend ECE programs, even those children with challenging behaviors, poor attendance, and challenging home environments make a better transition and adaptation to school (Isaacs, 2012). Research also shows that with appropriate interventions these children can be successful in their ECE program (Perry et al., 2008).

Pre-service and in-service training in student mental health can also be an issue in the early identification and remediation of children's behaviour. Most early child educators are not adequately trained to identify early problems. Identification and intervention for children experiencing mental health issues requires a deep understanding of child development, family dynamics, clinical skills, and cultural understanding. Systems working with young children and their families should support comprehensive services that are high quality, and evidence-based, with appropriate standards of care policies (Brown & Conroy, 2011; Conroy & Brown, 2004).

The impact of children attending a Head Start program for two years of pre-school (ages three to five) 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 levels of overall cognitive and adaptive functioning when compared with children who only attended for one year.

Ensuring access to quality ECE is critical for children with challenging behaviours and emergent mental health needs. Keeping them enrolled in ECE programs should be a high priority, especially for those with complex needs. Earlier intervention is vital to mitigating long-term consequences and ensuring optimal outcomes.

## References

- Alexander, C. (2012). *Early Childhood Education has widespread and long-lasting benefits*. TD Economics. Retrieved from: [https://www.td.com/document/PDF/economics/special/di1112\\_EarlyChildhoodEducation.pdf](https://www.td.com/document/PDF/economics/special/di1112_EarlyChildhoodEducation.pdf)
- Aos, S., Lieb, R., Mayfield, J., Miller, M. & Pennucci, A. (2004). *Benefits and costs of prevention and early intervention programs for youth*. Washington State Institute for Public Policy. Retrieved from: <http://www.wsipp.wa.gov/>
- Bauchmüller, R, Gørtz, M., & Rasmussen, A. W. (2014). Long-run benefits from universal high-quality preschooling. *Early Childhood Research Quarterly*, 29(4), 457-470.
- 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/
- Burt, K. B., Obradovic, J., Long, J. D., & Masten, A. S. (2008). The interplay of social competence and psychopathology over 20 years: Testing transactional and cascade models. *Child Development*, 79(2), 359-374.
- Carlson, E., Daley, T., Bitterman, A., Heinzen, H., Keller, B., Markowitz, J., & Riley, J. (2009). *Early school transitions and the social behavior of children with disabilities: Selected findings from the pre-elementary education longitudinal study*. Rockville, MD: Westat. Retrieved from: <https://ies.ed.gov/ncser/pdf/20093016.pdf>
- 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.

- 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
- Friendly, M., Larsen, E., Feltham, L. E., Grady, B., Forer, B., & Jones, M. (2018). *Early childhood education and care in Canada 2016*. Toronto: Childcare Resource and Research Unit.
- 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.
- Halfon, S., & Friendly, M. (2013). *Inclusion of young children with disabilities in regulated child care in Canada: A snapshot. Research, Policy and Practice*. Toronto: Childcare Resource and Research Unit. Retrieved from: <https://www.childcarecanada.org/sites/default/files/Occasional%20paper%2027%20FINAL.pdf>
- Janus, M., & Offord, D. R. (2007). Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioural Science*, 39(1), 1-22.
- Killoran, I., Tymon, D., & Frempong, G. (2007). Disabilities and inclusive practices within Toronto preschools. *International Journal of Inclusive Education*, 11, 81-95.
- Maich, K., & Hall, C. (2014). Are we ready? Examining the level of preparedness of early childhood education students for school-based special education. *Canadian Children*, 39(3), 42-52. Retrieved from: <https://cayc.ca/content/canadian-children-vol-39-no-3>
- McCain, M. N., Mustard, J. F., & McCuaig, K. (2011). *Early Years Study 3: Making decisions, taking action*. Toronto: Margaret & Wallace McCain Family Foundation.
- Melhuish, E. (2016). Longitudinal research and early years policy development in the UK. *International Journal of Child Care and Education Policy*, 10(3). Retrieved from: <https://ijccep.springeropen.com/articles/10.1186/s40723-016-0019-1>
- Melhuish, E., Quinn, E., Sylva, K., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2012). Preschool affects longer term literacy and numeracy: Results from a general population longitudinal study in Northern Ireland. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 24, 234-250.
- Moore, J. E., Cooper, B. R., Domitrovich, C. E., Morgan, N. R., Cleveland, M. J., Shah, H., Jacobson, L., & Greenberg, M. T. (2015). The effects of exposure to an enhanced preschool program on the social-emotional functioning of at-risk children. *Early Childhood Research Quarterly*, 32, 127-138. doi: 10.1016/j.ecresq.2015.03.04
- National Scientific Council on the Developing Child (2008/2012). *Establishing a level foundation for life: Mental health begins in early childhood: Working paper 6*. Retrieved from: <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2008/05/Establishing-a-Level-Foundation-for-Life-Mental-Health-Begins-in-Early-Childhood.pdf>
- OECD (2004). Early Childhood Education and Care Policy: Canada Country Note. Retrieved April 1, 2013 from <http://www.oecd.org/education/school/33850725.pdf>
- Pascal, C. (2009). *With our best future in mind: Implementing early learning in Ontario*. Toronto: Queen's Printer for Ontario.
- Pelletier, J., & Corter, J. (2018, in press). A longitudinal comparison of learning outcomes in full-day and half-day kindergarten. *The Journal of Educational Research*. doi:https://doi.org/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.org/10.1007/s10826-007-9140-7
- Stahmer, A., Akshoomoff, N., & Cunningham, A. B. J. (2011). Inclusion for toddlers with Autism Spectrum Disorders: The first ten years of a community program. *Autism*, 15(5), 625-641. doi: 10.1177/1362361310392253
- United Nations Commissioner for Human Rights. (1990). Convention on the rights of the child. Retrieved October 15, 2018, from <https://www.ohchr.org/en/professionalinterest>
- van Rhijn, T., Baumann, D., Maich, K., Schwartz, L., Britton, D., & Malhotra, A. (2018). *Quality inclusion training in pre-service early childhood educators in Canada* (unpublished manuscript).