



Department of
Educational & Counselling
Psychology

Children's Development of School Readiness Skills: An Evaluation of Collective Community Services' Early Head Start Program

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Centraide
of Greater Montreal

Executive Summary

Talwar Child Development Lab

Dr. Victoria Talwar and her research team at McGill University conduct research in children's social-cognitive development. Their research is informed by the disciplines of psychology, education and law to examine children's behaviours that are pertinent to children's adaptive development, child witness testimony and professionals who work with children. Dr. Talwar and her students conduct research on children's adaptive development by examining how children learn social rules and conventions, understand others' feelings and beliefs, and how they develop social behaviours and manage social interactions.

Collective Community Services (CCS)

CCS is a registered charity, and has served Montreal as a not-for-profit social agency for over 85 years. CCS improves the quality of life of individuals by significantly reducing the effects of isolation and poverty and effectively supporting children, youth, and families, primarily within the English-speaking community of Greater Montreal. One of CCS's programs is the Early Head Start program which is designed for parents and children between the ages of 0 and 5.

The Current Report

The aim of this report is to evaluate the efficacy of the Early Head Start program (EHS) run by CCS in terms of developing children's school readiness skills and strengthening parent-child relationships. A total of 22 parents were interviewed about their overall perception of EHS, as well as their impression of their child's various school readiness skills.

Overall, parents' reports noted distinct improvements in children's language, sensory-motor and social-emotional skills. This was also supported by children's scores on standardized

tests. Specifically, children who have spent more time in the program had higher scores than those who had spent less time. Moreover, parents reported high rates of satisfaction with the program and expressed having their expectations largely met.

The following report briefly presents EHS, the methods used by the researchers to evaluate the program, main findings pertaining to the evaluation, and parent suggestions for program improvement.

Program Description: Early Head Start

EHS is a program designed to strengthen family relationships and prepare 0- to 5-year-old children for school. The program is offered throughout the regular/academic school year and runs Monday to Thursday mornings. The program's primary educator, Emilie Zervos, facilitates activities aimed at developing children's broad school readiness skills (e.g., fine and gross motor skills, language development, etc). By encouraging parents to become active participants during activities, the educator promotes parent-child bonding. Moreover, when funding permits, field trips are also organized. For instance, in the past year, EHS has organized trips to Montreal's Botanical Garden and the Redpath Museum at McGill University. Within the past year (2018), group sizes have ranged from 10 to 13 parent-child dyads. These families are given ample opportunity to interact with each other which also promotes community ties. EHS is currently funded by Centraide and Services intégrés en périnatalité et pour la petite enfance (SIPPE)- through the Quebec Health Ministry (CIUSSS Centre-Sud).

Aim and Objectives of the Current Evaluation

The general aim of this report is to evaluate the influence of EHS on parents' overall satisfaction with the program and children's kindergarten readiness skills. In young children, there are a number of skills that are predictive of kindergarten readiness and success. For

instance, early reading, writing and arithmetic skills, social-emotional development, motor and sensory development, and oral language development. Given the age range of the CCS Early Head Start Program, children's language, motor and sensory, and social and emotional development were assessed using standardized measures. Also, as part of the evaluations, interviews with parents were conducted. Specifically, this report aims to identify differences in children's language, motor and sensory, and social and emotional development as a function of the amount of time they have spent in the program (objective 1). It also aims to identify parent perceptions of the program itself (objective 2), and parent suggestions for program improvement (objective 3).

Methodology

Procedure

Two McGill University researchers attended the CCS Early Head Start Program on five occasions between March 22nd and October 17th 2018. During these visits, the researchers spent time interacting with the educator, parents, and children in the program. At the beginning of each visit the researchers were introduced by the educator and would participate in activities with the parents and children in order to develop rapport with the families. Then, the researchers conducted semi-structured interviews with each parent individually. Prior to beginning the interview, parents were asked to sign a written consent form. Interviews took place in a quiet corner of the room in which the program was being held while the children participated in a group activity. The researchers also worked individually with each of the children who were three-years-old and above. Parents were asked to sign an additional consent form for their child's participation, and children were asked for their verbal assent. The children worked with a

researcher for approximately ten minutes in a quiet corner of the room in which the program was being held.

Participants

All parents within the program who were approached agreed to participate. A total of 22 parent-child dyads participated in the evaluation. Children were aged between 5.4 months and 60.5 months ($M^1=30.74$, $SD^2=14.69$). Parents had been attending the program for an average of 15.41 months ($SD=18.19$) and 2 days a week.

Parents of all 22 children completed the semi-structured interview and the MacArthur-Bates Vocabulary Checklist (Fenson, Pethick, Renda, Cox, Dale, & Reznick, 2000). Six of the 22 children were aged three-years-old and above ($M=49.72$, $SD=6.78$), and were therefore old enough to complete the standardized assessment.

Measures

As previously mentioned, children's improvement with regards to kindergarten readiness was assessed. Specifically, their oral language, sensorimotor, and social and emotional development were assessed as a function of their time in the program.

Oral Language development involves the ability to understand language when spoken to (receptive vocabulary), as well as the ability to produce language (expressive vocabulary). Upon entering Kindergarten, children are expected to be able to use language to communicate their needs, interact with peers, and in order to follow directions from their teachers (Pivik, 2012). Oral language development is also a predictor of literacy development (Hill, 2011).

In Kindergarten, children are also expected to have certain gross and fine motor skills. For instance, fine motor skills are needed in order to manipulate pencils, scissors, and other small

¹ Mean

² Standard Deviation

objects effectively. These skills contribute to the development of academic skills and have been shown to predict academic achievement in later grades (Pivik, 2012). Gross motor skills such as being able to walk, jump, and walk up and down stairs are also necessary for children to have mastered before reaching Kindergarten.

Social and Emotional Development also contributes to positive outcomes in Kindergarten (Ladd, Herald, Kochel, 2006). In a school setting, children are required to interact with their peers, as well as teachers. During this time, children's ability to take into account others' perspectives improves, contributing to the development of social empathy. These skills allow for more positive social interactions in the classroom, and overall positive school experiences (Boivin & Biermean, 2014).

In order to assess these skills, parents of children younger than three-years-old participated in a semi-structured interview with the researchers and completed a *language checklist* (MacArthur-Bates Short Form Vocabulary Checklist; Fenson et al., 2000) as a parent-report measure of children's language skills. For children who were three-years old and above, we were able to directly assess their abilities using select subtests of the *Developmental Neuropsychological Assessment, Second Edition (NEPSY-II)* and a measure of mental state understanding (i.e., an important aspect of social and emotional development). Raw scores were used in each of the analyses.

Parent interview

Semi-structured interviews were conducted with parents to assess their perception of their child's improvement with regards to kindergarten readiness skills. These included sensorimotor development (e.g., "Is your child able to hold a crayon as well as a peer of the same age?"), social-emotional development (e.g., "Does your child show interest in others?"), and language

(e.g., “Does your child know the names of different colors?”). Items measured within each of the kindergarten readiness skills were given a score of 1 if met, and 0 if not met. Parents were also asked open-ended questions about their overall satisfaction with the program (e.g., “What were your expectations when you enrolled in the program?” and “Have those expectations been met?”), and their suggestions for program improvement (e.g., “What else would you like to get out of the program?”). Finally, parents were asked about their general impressions of their child’s evolution within the program (e.g., “Do you believe your child has improved in any way since beginning the program?”; “In what ways do you think they have improved?”).

Research Tests Conducted

MacArthur-Bates Short Form Vocabulary Checklist, level II (Fenson, et al., 2000).

Parents reviewed 100 words (e.g., bye, please) and indicated the words they heard their child say. Children received one point for each word that their parents indicated they were able to say for a possible total of 100 points.

Subtests of the Developmental Neuropsychological Assessment, Second Edition (NEPSY-II).

Body Part Naming and Identification. This task was designed to assess basic components of expressive and receptive vocabulary. Children are asked to name various body parts on an illustrated picture of a child. Next, they are asked to identify the body part on the picture after being given the word.

Comprehension of Instructions. This task was designed to assess the ability to receive, process and execute oral instructions of increasing syntactic complexity. Children are given a number of short instructions that increase in difficulty. For instance, they are asked to point to a blue bunny, and then asked to point to a small blue bunny.

Imitating Hand Positions. This task was designed to assess the ability to imitate hand/finger positions. In this task, children are asked to imitate the hand position that the researcher makes, with increasing difficulty.

Mental State Understanding (Diverse Desires and Diverse Beliefs, Wellman & Liu, 2004). This task was used as a measure of social perception and is designed to assess the ability to understand mental functions such as belief, and intention, as well as the ability to understand that others have their own thoughts, ideas and feelings that may be different from one's own. In this task children are asked to identify what a character in a story would prefer to eat when it is in conflict with what the child would prefer to eat. They are also asked to identify where a character will look for a lost pet, when the character's belief differs from the child's.

Findings

Due to the small sample size and age of the participating children, descriptive statistics are presented for objective 1 and qualitative evidence derived from parent interviews are presented for objectives 2 and 3.

Program Influence on Kindergarten Readiness Skills (Objective 1)

Language Development. Figure 1 illustrates differences seen on each of the language measures as a function of time spent in the program. Descriptive statistics are presented below.

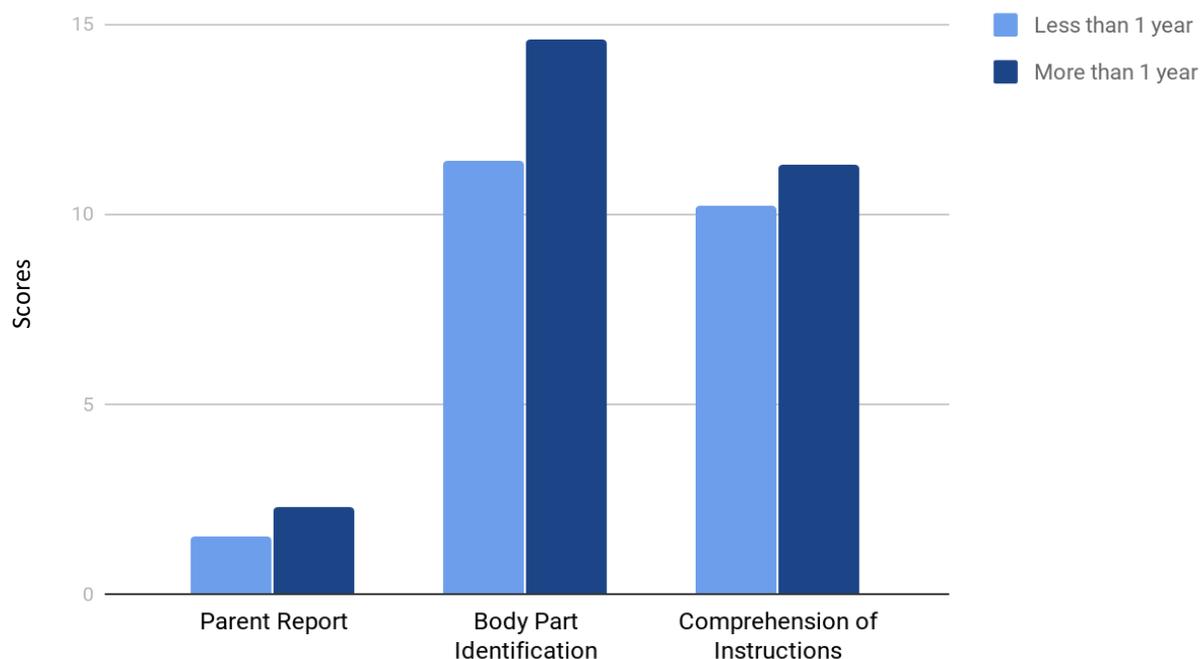


Figure 1. Children's scores on language development measures according to time spent in the program.

Parent reports. Differences in parent reports of children's language abilities were found according to the amount of time their child has been in the program. Specifically, children who have been in the program for less than one year scored an average of 54.40 ($SE^3=17.92$) on the MacArthur Vocabulary Checklist, while children who have been in the program for more than one year scored higher with an average of 61.60 ($SE=18.77$). A similar pattern was found for parent reports derived from the semi-structured interview, where children scored an average of 1.50 ($SE=0.52$) when attending the program for less than one year, and 2.30 ($SE=0.56$) when attending the program for more than one year.

Standardized assessment. Of the six children who completed the standardized assessments, differences can be found on both the Body Part Identification and Comprehension

³ Standard Error

of Instruction subtests. Specifically, children who have been attending the program for less than one year scored an average of 11.40 ($SE=1.25$), and 10.20 ($SE=0.97$) on the Body Part Identification and Comprehension of Instructions subtests, respectively. Children who have attended the program for more than a year showed higher scores. Specifically, they scored an average of 14.59 ($SE=0.21$) on the Body Part Identification subtest and 11.32 ($SE=.53$) on the Comprehension of Instructions subtest.

Sensorimotor Development. Figure 2 illustrates differences seen on each of the sensorimotor measures as a function of time spent in the program. Descriptive statistics are presented below.

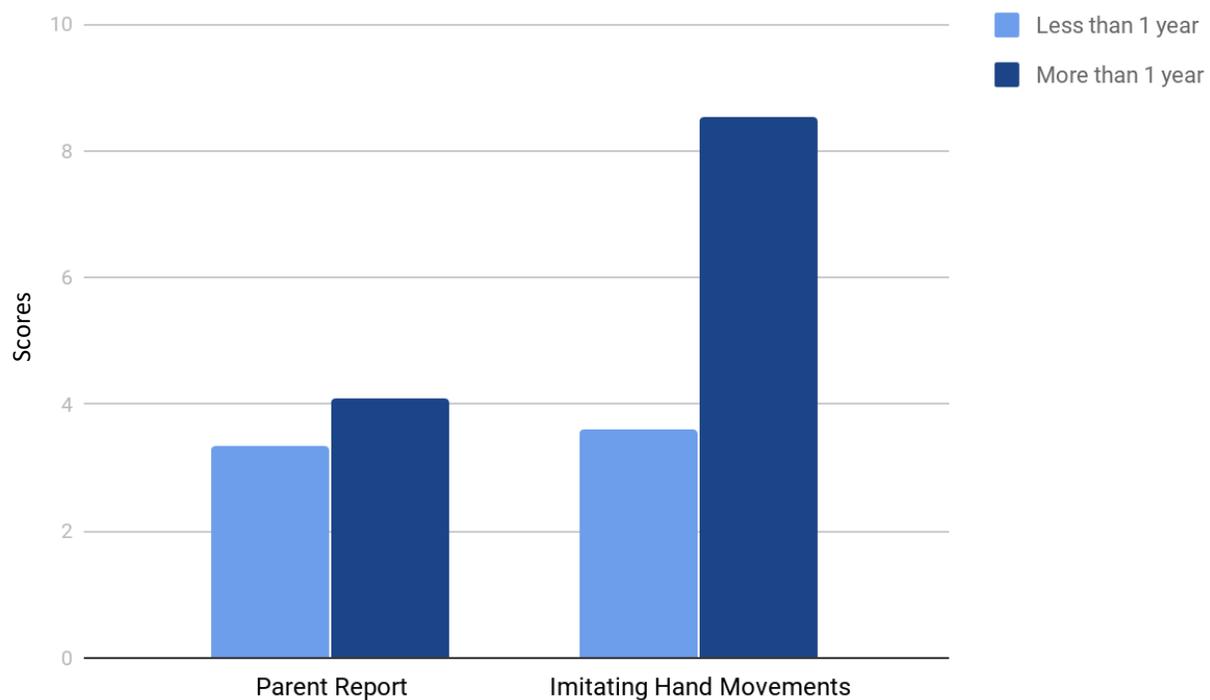


Figure 2. Children's scores on sensorimotor development measures according to time spent in the program.

Parent reports. Differences in parent reports of children's sensorimotor activities were also found according to the amount of time their child has been in the program. Specifically,

according to parent reports, children scored an average of 3.33 ($SE=0.36$) when attending the program for less than one year, and 4.10 ($SE=0.99$) when attending the program for more than one year.

Standardized assessments. Of the six children who completed the standardized assessments, differences can be found for the Imitating Hand Movements subtest. Specifically, children who have been attending the program for less than one year scored an average of 3.6 ($SE=1.69$), while children who have attended the program for more than a year scored an average of 8.52 ($SE=1.34$).

Social and Emotional Development. Figure 3 illustrates differences seen on each of the social and emotional development measures as a function of time spent in the program.

Descriptive statistics are presented below.

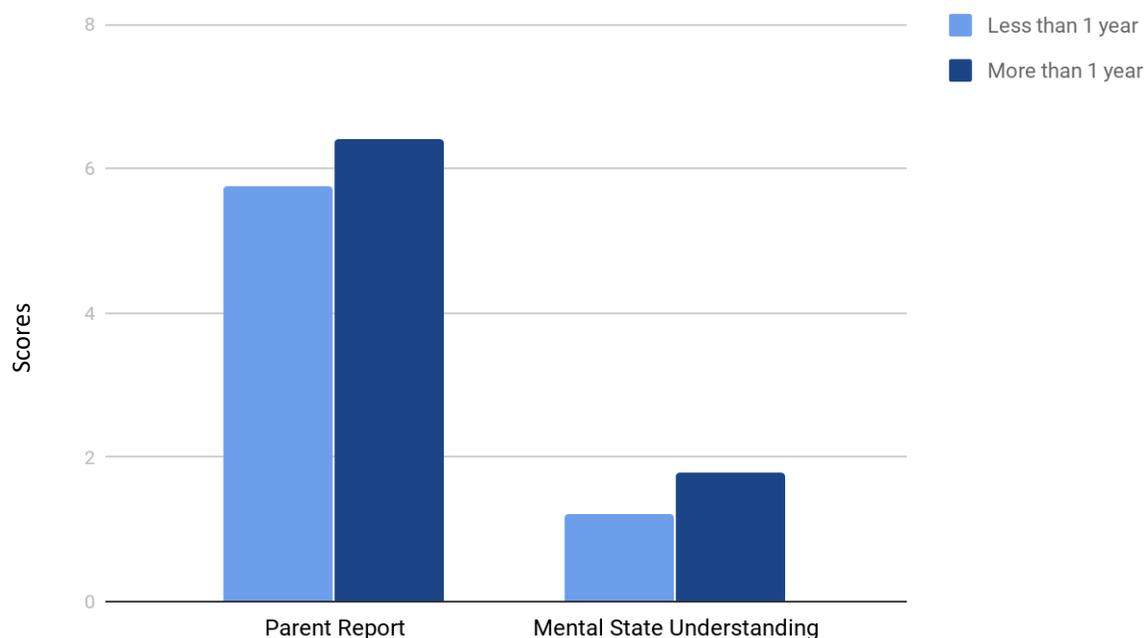


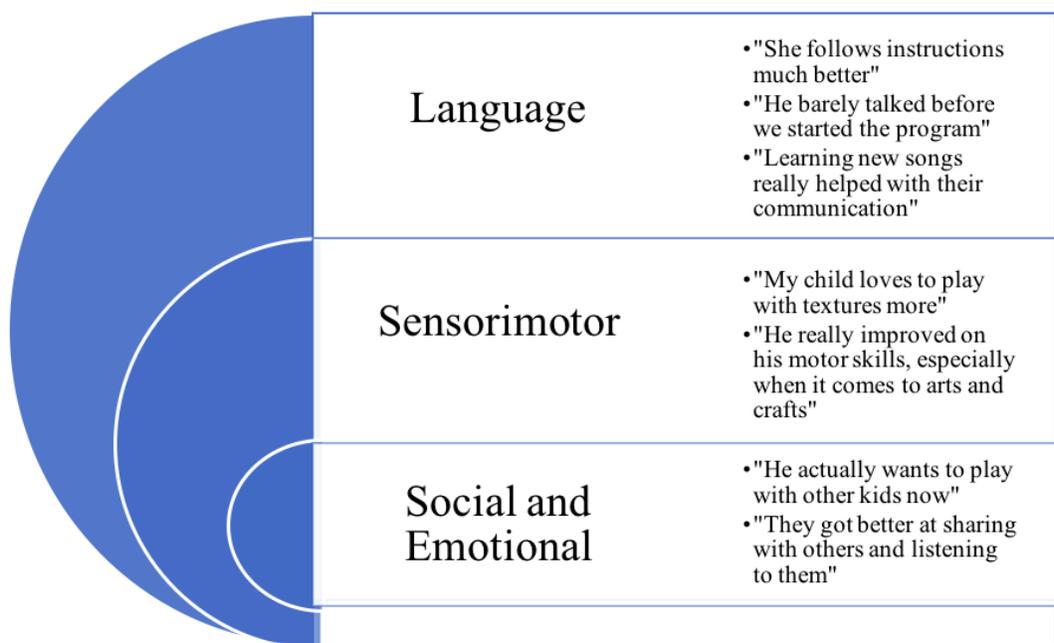
Figure 3. Children's scores on social and emotional development tasks according to time spent in the program.

Parent reports. Differences in parent reports of children's social and emotional skills were also found according to the amount of time their child has been in the program. Specifically, according to parent reports, children scored an average of 5.75 ($SE=0.49$) when attending the program for less than one year, and 6.40 ($SE=0.62$) when attending the program for more than one year.

Standardized assessments. Of the six children who completed the standardized assessments, differences can be found on *the mental state understanding task*. Specifically, children who have been attending the program for less than one year scored an average of 1.20 ($SE=0.49$), while children who have attended the program for more than a year scored an average of 1.80 ($SE=0.51$).

Parent Perceptions of the Program (Objective 2)

Parent Perceptions of Child Improvement. Parents perceived general improvements in their children in the realms of language, sensorimotor, and social and emotional development. Figure 4 shows examples of improvement that parents cited. Overall, parents indicated that their child's oral language abilities have improved since beginning the program. Parents also reported that their children's social skills were improving. Specifically, parents spoke to their children's developing ability to share appropriately, and an increasing amount of comfort and confidence interacting with other children and adults.



Language	<ul style="list-style-type: none"> •"She follows instructions much better" •"He barely talked before we started the program" •"Learning new songs really helped with their communication"
Sensorimotor	<ul style="list-style-type: none"> •"My child loves to play with textures more" •"He really improved on his motor skills, especially when it comes to arts and crafts"
Social and Emotional	<ul style="list-style-type: none"> •"He actually wants to play with other kids now" •"They got better at sharing with others and listening to them"

Figure 4. Citations from parent reports of their children's improvements according to their language, sensorimotor, and social and emotional development.

Parent Satisfaction. Overall, 91% of parents expressed satisfaction in the program as indicated by their desire to continue attending EHS. Kindergarten enrolment and desire for their child to attend a French daycare setting were the main reasons reported by parents who did not plan to continue the program. Moreover, while some families have been attending for less than one year with their youngest child, some families reported attending the program with multiple children. For instance, one parent reported that she has been attending EHS since the birth of her eldest child who is now eleven years-old. She has remained loyal to the program "because [she] sees the positive impact that the socialization and educational activities that the program provides for [her] children, and [she has] also grown as a parent". Figure 5 shows the overwhelming proportion of parents that continue in the EHS program and cites reasons given by parents to continue or stop the program.

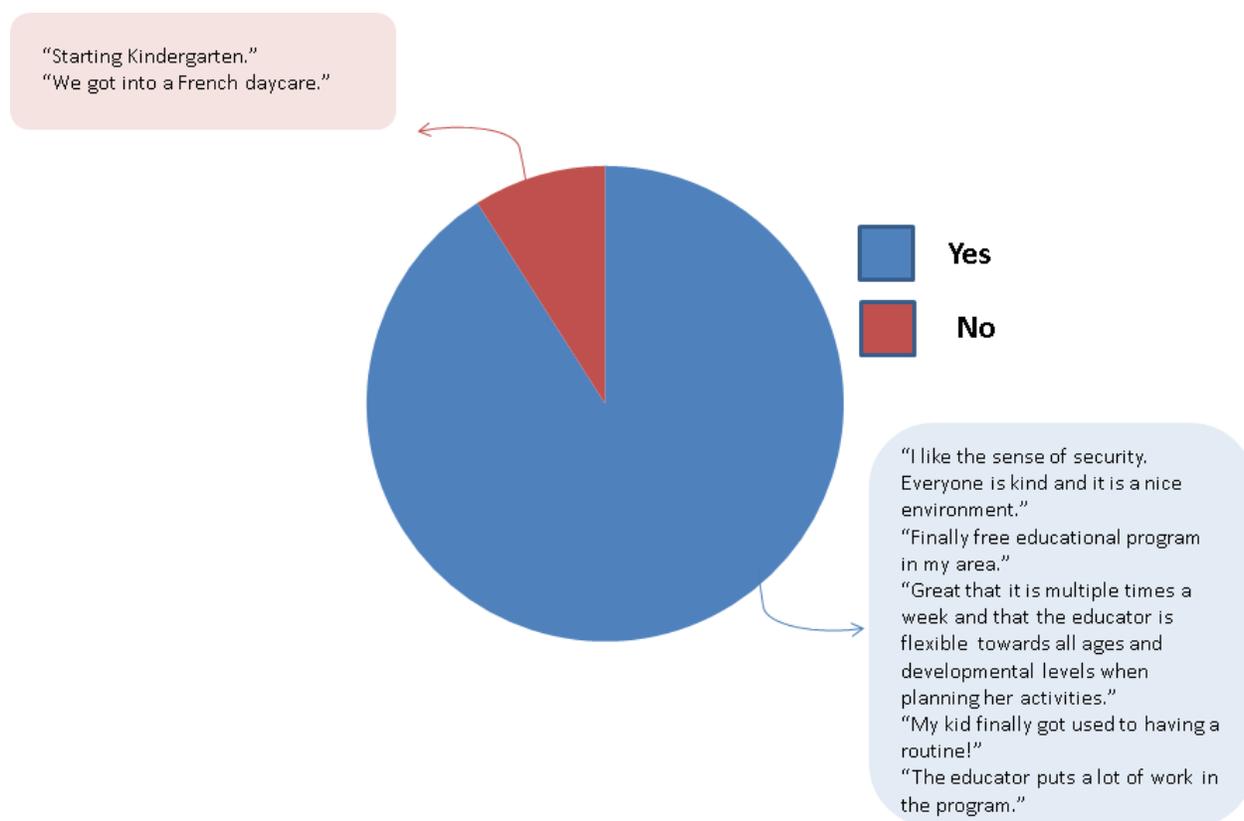


Figure 5. Parents' responses and reasoning for continuing the program.

Parents also expressed satisfaction with regard to their expectations upon entering the program (91%). Parents reported that they expected their children to have the opportunity to interact with other children, improve their language abilities, and to participate in educational activities.

Program exceeding expectations. Additionally, the majority of parents spoke to the ways in which the program had exceeded their expectations. A common theme that emerged from the interviews was the social support and sense of community that parents had gained. Parents mentioned that "[they] also get to socialize!", and that "[they] found sources of support in [their] community". Given the influence that parental stress and wellbeing has on children's outcomes,

this type of access to support is important to their children's development (Cronic & Low, 2002). Therefore, not only were parents' expectations for their children met, they were also able to gain valuable resources themselves.

Parent Suggestions for Program Improvement (Objective 3)

During the interview, parents were asked about what types of improvements they believed would benefit the program. One example included having smaller group sizes in order for educators to provide more one-on-one feedback to parents. Another example included having more field trips, and especially those involving familiarizing the children with animals. Parents also suggested having the program remain in a stable location in order to create a more child-friendly environment (EHS was relocated to a better location in September 2018). Finally, parents suggested having additional resources and games geared towards a younger age range (i.e., 0 to 2 years of age).

Conclusions

Improvements in children's language, sensory-motor and social-emotional skills were observed by parents, and this was supported by the children's scores on standardized tests according to their time spent in the program. The clear pattern of findings shows that children who have been in the program over a year showed gains in language, sensory-motor and social-emotional skills. Each of these constructs play a part in children's school-readiness, therefore, these improvements speak to the efficacy and importance of what the Early Head Start program is accomplishing. Additionally, the vast majority of parents reported being satisfied with the program and plan to continue attending. Ninety-one percent of parents' expectations of what their children would gain from the experience were met. Notably, parents reported that the program has also benefited their own well-being by providing a social support network.

Although parents had suggestions for ways in which the program could be improved, their feedback and outlook on the program was very positive.

Acknowledgments

The Talwar Child Development Team from McGill University thanks the parents for their openness and active contributions to this research. Such research contributes to the growing body of academic knowledge that preparing children well in early childhood dramatically contributes to them becoming fully functional contributors to themselves and their communities in later years.

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