Early Childhood Education and Care:
An Analysis of Successful Child Care Models

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EXECUTIVE SUMMARY

Overview

This report identifies elements of child care systems around the world that ensure all children access to early childhood education and care (ECEC) services. By studying methods used in other countries, public officials can develop informed policy that sustainably increases access to ECEC.

Purpose

Child care providers and the parents they serve face significant challenges in New York State. In 2017, 52% of four-year-old children in New York were enrolled in preschool (Barnett et al., 2020) compared to the Organization for Economic Co-operation and Development (OECD) average of 88% in the same year (Snyder, 2019). Out of all 50 states, child care in New York ranks 44th for quality (Colello, 2020) and is the sixth most expensive (Economic Policy Institute, 2020). Throughout the state, the child care system is universally costly and fragmented, placing an undue burden on both providers and working families.

This report will analyze common characteristics that contribute to the success of alternative child care systems, to help identify models that could prove useful in New York.

Alternative Models

This report focuses on child care in Singapore, Quebec, and France. Quebec was chosen because it first implemented its universal, low-fee child care program more than two decades ago, providing substantial data for evaluating its outcomes. Also, while the child care programs that get the most attention are administered at the federal level, Quebec's is a provincial program, offering an example of how such a program can work at the regional level. Singapore, as a young nation, only started to prioritize ECEC within the past decade. This makes its system an interesting model, providing a recent example of how to begin the transition towards a better structure. France's ECEC system includes universal preschool starting at age three, and publicly funded community-based child care programs for children younger than three.

Quebec

Quebec first enacted universal, low-fee child care under the 1997 Educational Childcare Act (ECA) (McClusky, 2018). The policy's two main objectives were to improve outcomes for children and to support work-life balance for working families (McClusky, 2018). Since its start, the program has helped to increase the employment rate of young women to about 86%, the highest labor force participation rate for this population in the world (McClusky, 2018). Employment among mothers increased across the board as a result of the reduced-fee child care program, including among mothers with children above the age of six. This indicates that the program has lasting positive effects (Lefebvre et al., 2009). However, the quality of care varies greatly between centers that receive direct government funding and those that do not (Fortin, 2018). Quebec offers refundable tax credits that compensate families for the cost of attending a full-fee private provider (Kottelenberg & Lehrer, 2017). As a result, childhood outcomes are mixed: children from low-income families disproportionately receive low quality care due to the population's unequal use of indirectly subsidized full-fee centers (Kottelenberg & Lehrer, 2017).

Singapore
As an island nation with few natural resources, Singapore relies heavily on human capital for its economic success. That makes Singapore's declining birth rate a threat to the nation's economic longevity, motivating the government to invest in policies that support families (Tan, 2017). Increasing access to high quality ECEC services is one strategy for reaching that goal. Also, Singaporeans value education highly. Many of the country's child care providers are transitioning from delivering mainly custodial care to educational care and preschool (Bautista & Bull, 2018). Almost all of Singapore's ECEC providers are private entities, but many receive funding from the government in exchange for fee caps, increased quality standards, and additional oversight. Maintaining competition among providers is an important aspect of the hybrid model in Singapore. The Early Childhood Development Agency (ECDA) plans to increase access to government-supported preschool by 30% within the next five years, which means that 80% of children will have a spot in a government-supported preschool, while only 50% had such access in 2019 (ECDA, 2020).

France
France provides free formal education to all three-year-olds, and to two-year-olds from families with financial need, as part of the public education system (Goux & Maurin, 2010). This reduces the need for custodial child care for children aged three and older. About 57% of children younger than three receive care from private caregivers, called *Assistantes Maternelle* (European Commission, 2019). "France is the only European country where more young children [under three years old] are with childminders than in centre-based provision" (European Commission, 2019, p. 33). To make up for the insufficient supply of publicly funded center-based care for young children, the government provides tax credits for parents who use *Assistantes Maternelle* (Fagnani & Math, 2011).

Major Points

Substantial Public Investment is Necessary
The United States is repeatedly one of the lowest ranking countries for ECEC due to stagnant, low levels of participation in ECEC programs (Snyder, 2019). Public funding is the key to success for child care programs. Without government aid, ECEC programs cannot implement fee caps, enforce high quality standards, or achieve stable funding for providers. While the OECD average for public expenditure on ECEC is about 0.7% of GDP, the United States spends only 0.3% annually (OECD, 2019). New York has an opportunity to become a national leader on this issue by increasing its investment in ECEC. Without sufficient resources for families and providers, changes to ECEC policies will not produce sustainable improvements.

Increasing Access to ECEC is Good for the Economy
Given the impact of the COVID-19 pandemic, New York urgently needs policies that support economic growth. Greater access to child care drives workforce participation, as Quebec's example shows. Furthermore, reframing child care as a crucial component of a workforce and population growth strategy could help bring both employers and policymakers to the table. New

York's population is steadily declining. Easily accessible and affordable child care could provide a powerful incentive for young professionals to remain in the state, or even to relocate to New York. This strategy has proven effective in Singapore.

Improving the Child Care System Requires a Holistic Approach

When policymakers turn their attention to child care, they need to start with a basic question: "What are we trying to accomplish?" A strong focus on custodial care will produce different outcomes than a strong focus on educational care. Although custodial care allows parents to work, focusing solely on custodial care is short-sighted. Improving the education that children receive before they enter primary school will have long-lasting, positive effects on society.

Conclusion

New York State has the power to rebuild the child care system to better serve individual and economic interests. Making ECEC accessible and affordable, and improving its quality, will transform family earning potential, educational outcomes for children, tax revenue for the state, and overall quality of life. Policymakers must remember to approach any initiative to improve ECEC with patience. After all, Quebec has had two decades of experience and continues to adjust its programs to address shortcomings. Nevertheless, New York urgently needs to restructure its approach to ECEC. If there was ever a time to build back better, it is now.

INTRODUCTION

Many families across New York State struggle to pay for child care while keeping up with all their other living costs. Whatever they pay, these parents face a child care landscape where the quality of service is uneven, due to high staff turnover and low pay for educators and caregivers. Many child care centers work with such tight budgets, it's impossible to pay employees as much as those professionals deserve. And raising tuition is generally not the answer, given the limits on what families can afford to pay. The cost of operating a child care center was already high before the pandemic. Now, given the added cost of implementing COVID-era health and safety protocols, compliance with state regulations, and paying a newly increased minimum wage, many child care centers find their budgets nearly at the breaking point. All these issues make it harder to deliver high quality care to children in some of the most formative years of their lives.

This report assesses the issues facing New York's child care system, analyzes models that are effective elsewhere, and offers policy recommendations based on the successful elements of other approaches. The following section provides an overview of elements that complicate the ability to improve child care. The report then explains the models of child care delivery in Quebec, Singapore, and France. Lastly, the discussion section examines common themes and makes recommendations based on the positive and negative attributes of alternative systems.

SECTION I
DEFINING THE PROBLEM

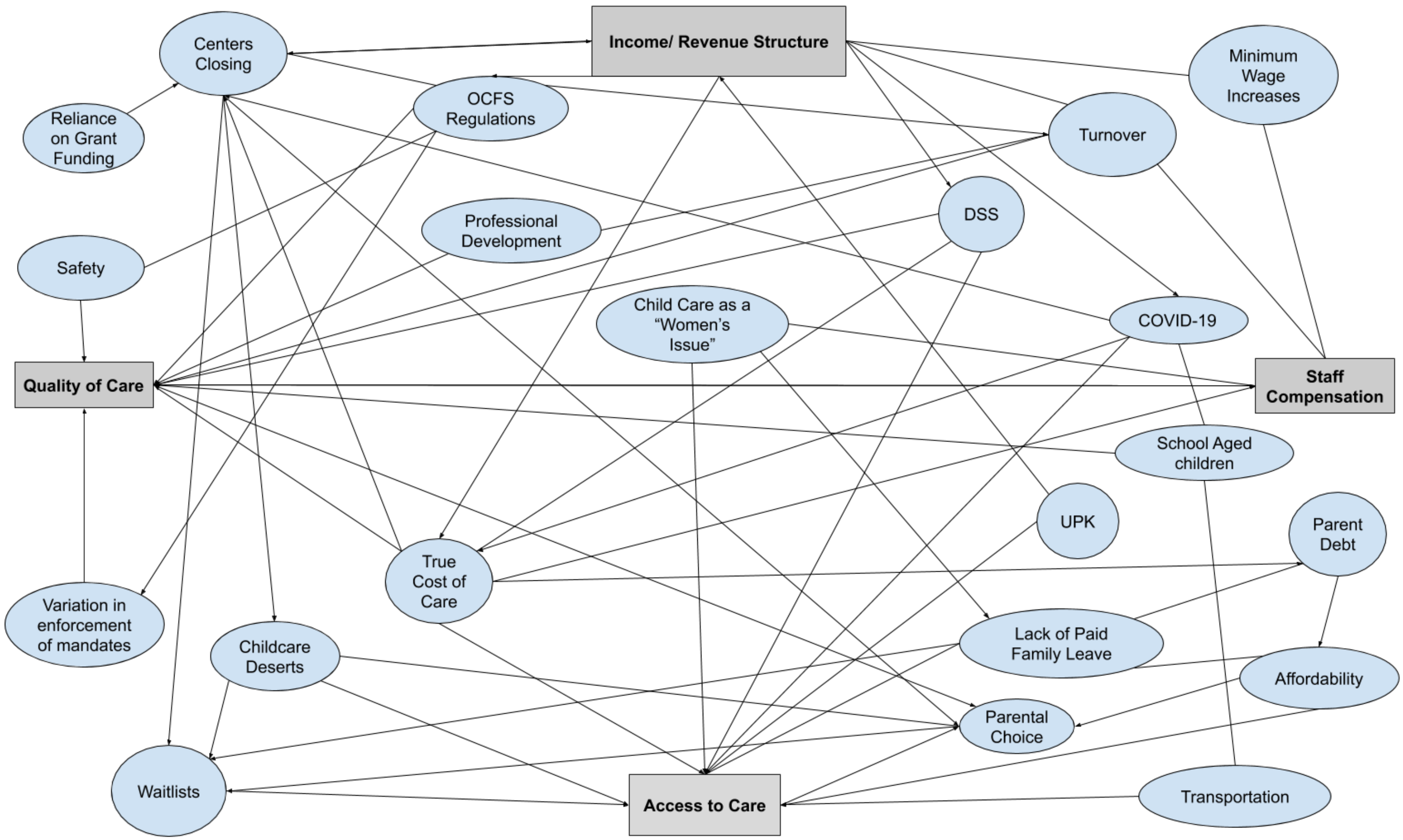
A "wicked problem" is a societal issue that is so complex, it cannot be easily addressed through policy (Camillus, 2008). Child care is a prime example of a wicked problem. Any action taken to develop a solution might make the situation better but would not fix the problem entirely. But just because a single solution can't solve the whole problem doesn't mean we shouldn't try to make as many improvements as possible. It is critical to develop evidence-based proposals to address the child care crisis.

The child care web includes many stakeholders, each with their own interests, which sometimes conflict with others'. The tangled dynamics among child care providers, parents, funders, regulatory agencies, industry, and secondary organizations make it nearly impossible to enact a single solution to benefit all parties. Also, the responsibility to solve the child care crisis lies with each stakeholder, not with any one in particular. The interdependencies among stakeholders make it exceptionally hard to find a solution that works for everyone.

Explanation of the Web of Issues

To illustrate the intricacies of the child care system's failings, the following network map shows key elements that depend on, and are influenced by, one another.

WEB OF ISSUES



Income/ Revenue Structure
The business model that most child care centers follow today relies on tuition payments from parents, limited government subsidies for low-income families, and charitable contributions. This model is insufficient and unsustainable in the long term. For many families, full-time child care costs more than tuition at a state university (FEN, 2020). Even so, tuition fees alone do not cover centers' operating costs, leaving centers to close the gap through fundraising. The pandemic has only exacerbated this problem (Workman & Jessen-Howard, 2020).

Staff Compensation
Although payroll is the biggest expense for providers, child care employees are among the lowest paid workers in the country. Because child care jobs usually come with low wages, providers have trouble attracting and retaining quality employees. High staff turnover is disruptive for children and reduces a program's overall quality. While child care educators are too highly qualified to make minimum wage, increases in that minimum put pressure on centers to raise their employees' wages, imposing extreme financial pressures on tight budgets. Child care providers cannot raise tuition at a rate that offsets concurrent increases in minimum wage and the cost of regulatory compliance.

Access to Care
According to the Family Enrichment Network's (FEN) 2020-2021 needs assessment, both Broome and Tioga counties have seen two-thirds of their family child care programs close within the last decade. The assessment notes difficulty complying with regulations, along with retirement, as the most significant reasons for the decline in providers (FEN, 2020). Additionally, only 11% of new family child care applications complete the entire registration process (FEN, 2020). While Broome, Chenango and Tioga Counties did not experience the same loss of center-based care providers in 2019, 71% of programs had a waiting list for services and very few had available infant slots (FEN, 2020).

Child Care as a Women's Issue
Child care is not purely a family issue. Lack of access to adequate child care affects the workforce, children's development, local economies, and the overall success of a region. It is linked to many other problems, further complicating the ability to find a comprehensive solution. Thinking about child care only as a women's issue has resulted in chronic policy failure. Child care is and always has been an economic issue.

SECTION II
ANALYSIS OF ALTERNATIVE POLICIES

The following section discusses child care models in Singapore, Quebec, and France. Singapore is working towards completely integrating early childhood education with child care through a hybrid model that supports competition between providers while rewarding high quality programs. Quebec uses a universal low-fee model that has successfully increased child care capacity in the province and helped young mothers enter employment at the highest rate in the world. France employs a heavily funded system offering a variety of services, including compulsory preschool for children starting at the age of three. Each of these models has benefits and drawbacks but is effective at achieving its goal.

SINGAPORE

Singapore is a nation-state with a population of around six million (Tan, 2017). After its independence in 1965, the nation experienced rapid economic development due to substantial investment in education and industry (Bautista & Bull, 2018). Singapore does not possess natural resources; instead, it values human capital as its main asset and key to economic success. This strategy has proven effective for the nation, as the education system and academic achievement of students in Singapore are regularly ranked among the highest in the world (Tan, 2017). ECEC plays an important role in the success of students; understanding how Singapore's system fosters high achievement will be helpful for shaping new child care policies in the United States.

Child Care Policy and Programs

Early childhood education and child care are indivisible in Singapore, due to the culture's strong emphasis on education. In Singapore, the term "preschool" refers to any ECEC program that occurs before a child enters primary school, including child care and kindergarten. While preschool is not compulsory, the government encourages families to enroll their children in some form of ECEC before entering primary school at seven years old (Bautista & Bull, 2018). According to the Minister for Social and Family Development (MSF), close to 99% of children have experienced some preschool before the age of six (MSF, 2016).

Most ECEC services in Singapore are currently administered by private entities that are regulated by the federal government, including nonprofit, for-profit, and government-supported operators (Tan, 2017). Funding for ECEC services comes from private contributions as well as government subsidies paid to both providers and families (Bautista & Bull, 2018). The Prime Minister plans to increase annual spending on ECEC to \$2 billion (\$1.5 billion USD) by 2023. The goal is to increase the number of spaces in government-supported preschools, allowing for more than two thirds of preschoolers to attend one of these programs (Yang, 2020; NCEE, 2018).

In 2019 a total of 130,851 children were enrolled in 1,539 child care centers across Singapore (Singapore Department of Statistics, 2020). About 56% of children were enrolled in a publicly subsidized program, known as either an Anchor Operator (AOP) or Partner Operator (POP) (Singapore Department of Statistics, 2020). The remaining children were enrolled in private centers (39%) or in Social Service Agencies (5%) (Singapore Department of Statistics, 2020). Formally regulated in-home forms of child care do not exist in Singapore (Bautista & Bull, 2018).

Anchor Operator Scheme (AOP)

The Anchor Operator Scheme (AOP) was established in 2009 in an attempt to increase access and improve the quality of child care programs (ECDA, 2019-a). AOPs are networks of affiliated private child care centers that receive public funding to minimize out-of-pocket expenses for parents and provide high quality services (ECDA, 2019-a). AOPs cap monthly fees at \$720 (\$542 USD) for child care, \$1,275 (\$959 USD) for infant care, and \$160 (\$120 USD) for kindergarten (ECDA, 2019-A). Families can use subsidies and additional programs to further reduce fees.

Five operators currently participate in the AOP scheme; each operator was required to provide at least 1,000 spaces across at least 10 centers before joining the scheme (ECDA, 2019-a). These operators were chosen based on their financial stability, governance processes, program quality, affordability, and ability to increase capacity (ECDA, 2019-a). In 2018, the five "Anchor Operators operated about 570 centers, and enrolled 60,300 Singapore Citizen children" (MSF, 2019). Close to 40% of children enrolled in child care attend an AOP (Singapore Department of Statistics, 2020).

Partner Operator Scheme (POP)

Launched in 2016, the Partner Operator Scheme (POP) applies the foundations of AOPs to small and midsize ECEC centers (Goy, 2015). Participating providers receive funding from the government in exchange for implementing a fee cap (Goy, 2015). POPs cap their fees at $760 ($572 USD) per month for child care and $1,330 ($1,000 USD) per month for infant care (ECDA, 2020-c). Families can also use subsidies to lower their out-of-pocket expenses for this type of care. The first phase of the POP ended in December 2020 (Han, 2020). Within this phase, 23 operators managed 250 centers and 20,000 children (Han, 2020). The number of centers increased to 324 for the 2021-2025 phase (ECDA, 2020-c). According to the Singapore Department of Statistics (2020) 17% of children enrolled in ECEC attend POPs.

Ministry of Education Kindergarten (MK)

MOE kindergarten (MK) is a government-run kindergarten program that serves a limited number of children between the ages of two and six; about 5,600 children attended one of these programs in 2020 (MOE, 2020-b). MK services cost $160 ($120 USD) per month for families whose children are Singapore citizens, and $320 ($241 USD) per month for families whose children are permanent residents (MOE, 2021-a). "There are currently 36 MKs across Singapore, with a total of about 60 to be opened by 2025" (MOE, 2021-b). MKs offer half-day services during two sessions that typically run for four hours (Bautista & Bull, 2018).

Each MK is located within a primary school in a low- to middle-class neighborhood, with the intention of increasing access to high quality kindergarten for families living nearby (Tan, 2017). Priority for spaces in MKs goes to children with siblings in the program, children from low-income families, and children living within one kilometer of the school (Ang, 2019). Children who attend MKs take priority in admission to the primary schools where their programs are housed (Ang, 2019). This eases the transition from preschool to primary school for children and families.

MOE Kindergarten Care (KCare)

The MOE offers Kindergarten Care (KCare) as an addition to MK, due to the limited hours typically available for kindergarten programs. Families that require full-day services can use KCare before or after kindergarten sessions (MOE, 2020-a). These programs are located within the same facilities as MKs, simplifying the transition between services (MOE, 2020-a). The cost of KCare is capped at $395 ($297 USD) per month, although families with Singapore citizen children are eligible for a $150 ($113 USD) basic monthly subsidy (MOE, 2020-a).

Early Years Centers (EYC)
To give Singapore's youngest citizens better access to high quality ECEC, the government is piloting Early Years Centers (EYCs - MOE, 2021-b). The EYC program bridges Anchor Operators and MKs by facilitating partnerships between preschool and kindergarten programs (MOE, 2021-b). EYCs offer children and families continuity during the transition from preschool to kindergarten, guaranteeing a spot in the partnered MK program once a child reaches the right age (MOE, 2021-b). Singapore's two largest AOPs currently participate, serving children between two months and four years of age (MOE, 2021-b). "These measures constitute a significant expansion in the capacity of Singapore's ECEC system, with over 40,000 new full-day preschool places being added (30% capacity increase)" (Bautista & Bull, 2018, p. 7).

Student Care Center (SCC)
Programs serving school-aged children are in high demand; they benefit low-income families as well as double-income households (Yang, 2016). Families that need care for their school-aged children beyond the traditional school day can use SCCs, which are located within all of Singapore's primary schools (MSF, 2020). Children may attend SCCs from their first year of primary school, at age seven, until they turn 14 (MSF, 2020). Enrollment fees for SCCs vary depending on the program, but the typical cost is between $220 ($166 USD) and $300 ($226 USD) per month (MSF, 2020). Some families are eligible for subsidies that can cover up to 98% of the cost, depending on financial need (MSF, 2020). SCCs are run by external operators that are not an official part of the formal education system (Yang, 2016).

Subsidies and Entitlements for Families

Parental Leave
The federal government offers paid parental leave in the form of maternity leave, paternity leave, adoption leave, and shared parental leave (NCEE, 2018). To qualify for the maximum amount of paid leave, the newborn or newly adopted child must be a Singapore citizen (MOM, 2020). Unmarried parents are not eligible for shared parental leave or paternity leave (MOM, 2020). However, mothers can access maternity leave and adoption leave regardless of their marital status (MOM, 2020). Maternity leave can last up to 16 weeks, reducing demand for infant care in the early months (MOM, 2020). Only about 20% of children below the age of two years old are enrolled in center-based care (Bautista & Bull, 2018). Many children receive care from family members until they enter formal care around the age of three (Chan et al., 2019).

Baby Bonus Scheme
The federal government enacted the Baby Bonus Scheme in 2000 to address Singapore's low birth rate and provide incentives to have bigger families (Goh & Lee, 2015). There are three elements to the Scheme: a cash gift to ease the initial financial burden of raising a child; dollar-for-dollar matching by the government for savings accumulated in the child's Child Development Account (CDA); and the CDA First Step grant (MSF, 2021). The Baby Bonus Scheme reduces parents' financial burden in a child's early years and makes ECEC accessible to all citizens.

Cash Gift

Married parents receive direct cash gifts of $8,000 ($6,020 USD) for the first or second child, and $10,000 ($7,526 USD) for any subsequent children (NCEE, 2018). There are no restrictions on how families can spend the money (Made for Families, 2020). Parents receive the cash gift in five increments over their child's first 18 months, providing continuous financial assistance (MSF, 2021). To be eligible for the gift, the child must be a Singapore citizen and the parents must be married (Made for Families, 2020).

Child Development Account (CDA)

Each child accepted into the Baby Bonus Scheme has a CDA automatically opened (Made for Families, 2020). Any money the parents deposit into the CDA is matched by the government up to a cap that correlates with the child's birth placement (Made for Families, 2020). Parents can contribute to the savings account and receive matches from the government until the child turns 12 (Made for Families, 2020). CDA funds can only be used at MSF approved institutions that provide educational services or healthcare for the child (Made for Families, 2020).

Child Development Account (CDA) First Step Grant

The CDA First Step Grant is a universal program available to all Singapore citizens (Made for Families, 2020). When a new CDA is first opened, the government deposits $3,000 ($2,260 USD) into the account without requiring parents to make a contribution. Any further contributions from parents are matched dollar-for-dollar by the government (Made for Families, 2020).

Basic Subsidy

All families with children who are citizens of Singapore and are enrolled in an ECDA-certified child care or infant care program are eligible for the Basic Subsidy (ECDA, 2020-a). Working mothers can receive a monthly $600 ($452 USD) subsidy for infant care and a monthly $300 ($226 USD) subsidy for child care (ECDA, 2020-a). Non-working mothers can receive a monthly $150 ($113 USD) subsidy for either form of care (ECDA, 2020-a). After applying the basic subsidy to the cost of care in an AOP, families who do not qualify for an additional means-tested subsidy will pay around $420 ($317 USD) per month for child care and $675 ($509 USD) per month for infant care. Children must attend care for at least one day per month to receive this form of subsidy, which is paid directly to the ECDA licensed center (ECDA, 2020-a).

Additional Subsidy

Families with a "gross monthly household income of $12,000 ($9,039 USD) and below, or per capita income of $3,000 ($2,260 USD) and below for larger families" may receive an Additional Subsidy on top of the Basic Subsidy (ECDA, 2020-a). The size of the Additional Subsidy depends on family income; the top rate is $710 ($535 USD) for infant care and $467 ($352 USD) for child care (ECDA, 2020-a). The program considers the parents' employment status when calculating the subsidy amount (ECDA, 2020-a). Like the Basic Subsidy, the Additional Subsidy is paid directly to the ECDA licensed child care center (ECDA, 2020-a). After applying the Additional and Basic subsidies to the cost of care, families who qualify for the maximum amount pay as little as $5 per month for care (Bautista & Bull, 2018).

Regulatory Structure

Early Childhood Development Agency (ECDA)

Established in 2013, the ECDA replaced a fractured regulatory system by assuming the responsibilities of two federal ministries (MOE and MSF) that previously oversaw ECECs (Bautista & Bull, 2018). The ECDA distributes subsidies and grants, enforces quality assurance through inspections, trains ECEC professionals, administers educational public outreach programs, and works to improve the public's perception of ECEC workers (Bautista & Bull, 2018). The ECDA awards licenses based on a common framework that applies to all center-based care, except MKs (Bautista & Bull, 2018). A license is valid for 36 months, after which the center undergoes a fresh inspection to earn a renewal (Bautista & Bull, 2018).

Inspections

The ECDA inspects ECEC providers to ensure quality and assess the implementation of suggested frameworks (NCEE, 2018). A center that violates regulations may receive a sanction (NCEE, 2018). During an inspection, the ECDA evaluates "compliance with regulations, staff qualification and continued professional development, management of the center, children's physical well-being, and curriculum program" (NCEE, 2018, p. 2). The outcome of ECDA inspections is not made public; some observers deem this lack of transparency a problem (NCEE, 2018).

Singapore Pre-school Accreditation Framework (SPARK)

The SPARK framework is used to accredit the quality of preschool programs serving children between the ages of four and six (Bautista & Bull, 2018). There is no equivalent accreditation framework for programs serving children younger than four (NCEE, 2018). The ECDA awards the three-year SPARK certification based on an external evaluation (Tan, 2017). Centers must also submit annual self-evaluations and plans for improvement to maintain accreditation (Tan, 2017). The evaluation examines attributes such as administrative structure, level of parental involvement and collaboration, curriculum, and resource management (Bautista & Bull, 2018). "As of November 2017, 40% of preschools in Singapore had attained SPARK certification" (NCEE, 2018, p. 3). While the SPARK certification is optional, centers seek it because it can qualify them for additional government funding (Bautista & Bull, 2018). AOPs and POPs are strongly encouraged to obtain their SPARK certification as well (ECDA, 2020-c).

Child Care Workers

Positions and Qualifications

There are three career paths for individuals entering the ECEC field: educare, teaching, and leadership (Bautista & Bull, 2018). "SkillsFuture framework, which outlines the qualifications for a broad range of occupations in Singapore, has set criteria for ECEC professionals" (NCEE, 2018, p. 3). An educarer, who works with children between the ages of two months and four years, must hold at least a certificate from a one-year program (Bautista & Bull, 2018). A teacher, who works with children between the ages of 18 months and six years, must hold a diploma from a two-year program. Teachers may also work in kindergartens (Bautista & Bull, 2018). And leaders, responsible for managing staff who work with all ages, must hold advanced diplomas (Bautista & Bull, 2018).

Professionals in each of these positions must meet their educational requirements in an ECDA-approved program but do not need to hold a bachelor's degree (Bautista & Bull, 2018). To address the shortage of ECEC workers, both the MOE and ECDA offer financial assistance to cover the cost of the necessary training and higher education (Bautista & Bull, 2018). The government also subsidizes professional development courses and encourages child care professionals to attend at least 20 hours of training annually (Bautista & Bull, 2018).

Curriculum Frameworks

Child care in Singapore is considered to be more than just custodial care; families expect it to provide some academic stimulation. The curriculum frameworks discussed below are suggested guidelines for providers to follow and are not enforced as regulations.

Early Years Development Framework (EYDF)

The Early Years Development Framework (EYDF) guides programs and professionals serving children between the ages of two months and three years (Bautista & Bull, 2018). The EYDF contains information about developmentally appropriate activities for children, as well as best practices. It was first introduced by the Ministry of Social and Family Development (MSF) in 2011 and was adopted by the ECDA upon its inception (Tan, 2017).

Nurturing Early Learners Kindergarten Curriculum Framework (NEL)

The NEL framework guides programs and professionals serving children between four and six years old. It was last updated in 2012 (Tan, 2017). MOE developed the NEL curriculum to standardize kindergarten programs and ensure that all children would receive a high quality education before entering primary school (Tan, 2017). The framework is not mandatory but provides teachers with a guide for promoting children's development (Tan, 2017).

Analysis

Strengths

One of the most evident strengths of Singapore's approach to ECEC is that the government regulates providers to help families while also allowing the market to operate freely (Bautista et al., 2018). Generous subsidies on both the demand and supply side of child care make services affordable for all families. Additionally, when the government introduced fee caps to the ECEC market, that reduced the median cost of both child care and infant care (ECDA, 2020-b). A provider that does not partner with the government must either reduce fees or increase quality to remain a viable option. Government policy makes the ECEC market competitive, and families can choose among a variety of providers to find programs that best suits their needs (Bautista et al., 2018).

Singapore has more available ECEC spaces than children to fill them (MSF, 2017). Capacity in child care centers exceeded enrollment by 45,000 in 2019 (Singapore Department of Statistics, 2020). Wait lists do exist in areas with a high demand for child care, but at least some of the children on wait lists for favored centers are already enrolled in other facilities (MSF, 2017). Making preschool or child care widely available is a top priority for the government, which is working to expand capacity among government-funded programs to be able to serve 80% of preschoolers by 2025 (ECDA, 2019-b).

Because Singapore prioritizes education, its students consistently rank among the best in the world (Bautista et al., 2018). However, the pre-primary years only became a focus for the government in 2012. In an effort to improve early childhood experiences, the government took direct action to increase the quality, affordability, and accessibility of preschool (ECDA, 2019-b). Within the past five years alone, Singapore's government has made significant reforms to ECEC and doubled spending in this area, which will reach $2 billion ($1.5 billion USD) by 2023 (Yang, 2020). The high value placed on education in Singapore's culture is one of biggest factors behind the success of its ECEC programs: both the government and the people are inclined to support policies that enhance the quality of ECEC for children at all levels, even though they can be expensive.

Weaknesses

The rapid expansion of ECECs in Singapore has made it difficult to recruit and retain sufficient staff. (MSF, 2017). At first, ECEC spaces opened faster than new teachers could earn the credentials to staff them. But even as the talent pool caught up with the need, staffing problems persisted. Low pay and low job satisfaction trigger significant turnover and reduce the number of qualified applicants (Craig, 2013; Pek-Greer & Wallace, 2017). In 2013, only 56.5% of new graduates with ECEC credentials had entered the workforce within 12 months after graduating (Craig, 2013). Factors such as negative experiences during training, low regard for the profession socially, and a lack of professional independence discourage new people from entering the field (Craig, 2013). And high staff turnover keeps ECECs from fulfilling their missions. "High turnover of ECEC professionals results in a lack of stability in the care and education of children, and difficulty establishing professional communities within centers" (Bautista & Bull, 2018, p. 21).

With too few people available to staff ECEC centers, the government altered ratio requirements (Perisamy & Wu, 2020). Educarers who work with children between the ages of two and 18 months may be responsible for up to five children at a time (Perisamy & Wu, 2020). Among all the professionals who work in ECECs, educarers require the least training. (Perisamy & Wu, 2020). Thus, "the youngest children in their most formative years are being taught and cared for by the least qualified educators" (Perisamy & Wu, 2020, p. 1). Assigning the care of as many as five infants and toddlers to staff with slim qualifications creates a weakness in Singapore's system.

Children with disabilities are also at a disadvantage in Singapore's ECEC system. Some families with children with disabilities have trouble accessing care because so few centers offer inclusive services (Bautista & Bull, 2018). Also, according to a study conducted in 2018, most ECEC professionals in Singapore lack the skills to adequately care for children with disabilities (Bautista et al., 2018). In addition, "there is no statutory support for inclusion of children with disabilities in preschool education and care" (Bautista & Bull, 2018, p. 118).

Applicability

Competition among providers is an important aspect of the hybrid model in Singapore. Because ECEC services are delivered by private operators, the government does not need to spend as much as it would if public agencies owned and operated the services (Bautista & Bull, 2018). Fee caps for AOPs and POPs encourage private providers to lower their fees or improve their services to remain competitive. Fee caps for providers who get funding from New York State could help to reduce the median cost of ECEC while supporting providers themselves.

Much like Singapore, New York State faces population decline (Spector, 2020). Between July 2019 and July 2020, New York's population fell by 0.65%, the biggest decline in the United States (Spector, 2020). Singapore is trying to combat population decline by implementing policies that reduce economic pressure on a person's decision to have a child. Reevaluating New York State's child care policies to better support working families could offer parents the economic relief they need to remain in or relocate to New York.

Conclusion

Singapore is much smaller in population, land mass, and GDP than New York State. The economic significance of human capital and the cultural importance placed on education likely make it easier for Singapore to prioritize ECEC. While there is room for improvement, the nation's efforts to make ECEC widely available and affordable are showing positive results. Subsidies and entitlements for families lower the barriers to care. The federal government assumes most of the true cost of care in an AOP or POP to support families and aid children's development. Because Singapore citizens know they are entitled to these programs, they are not afraid of the cost of ECEC.

QUEBEC

The Canadian province of Quebec often functions in a different way from the rest of the country (Behiels, 2020). Most of its people speak French, and about half are descendants of original French settlers (Behiels, 2020). Maintaining the cultural identity of French speaking "Québécois" is important to this population, and many have tried to preserve it by attempting several times to secede from Canada (Behiels, 2020). These secession movements led Quebec to operate by different standards, a fact that is reflected in many of its social programs (Behiels, 2020).

Child Care Policy

The 1997 Educational Childcare Act (ECA) made many changes to family policy in Quebec, including the start of the province's universal low-cost child care program (Fortin, 2018). Since its initial application, this program has helped to increase the employment rate for young women in Quebec to about 86%, the highest in the world for women in this age group (McClusky, 2018). The government made these changes because it wanted to improve outcomes for children and foster a work-life balance for parents (Fortin, 2018).

Subsidized Child Care

The Quebec government gives child care providers direct subsidies to reduce out of pocket expenses for parents (Lefebvre et al., 2009). Child care is delivered through a hybrid system of public and private providers (McClusky, 2018). Reduced-fee providers include: *centres de la petite enfance* (CPEs) (nonprofit child care centers), family child care providers, and for-profit private centers that conform to specified conditions (MFA, 2020). Parents who use reduced-fee providers can access 10 hours of child care per day for a total of 261 weekdays per year (Fortin, 2018). These services are available to children below the age of five, with spaces awarded via a lottery system (Williams, 2018). Children are admitted to reduced-fee programs based on factors such as proximity to providers, number of siblings, and specific educational needs (Williams, 2018).

Indirectly Subsidized Child Care

Only about 17% of children in care are enrolled in full-fee programs (Fortin, 2018). These children usually attend for-profit child care centers called *garderies* (Fortin, 2018). A parent who chooses a full-fee provider can deduct child care expenses from both provincial and federal taxes (Fortin et al., 2012). These tax exemptions make the price of *garderies* extremely competitive with directly subsidized providers (Fortin, 2018).

The Formal Education System

The provincial government does not provide preschool, although there is a plan to provide it free of charge to all four-year-olds within the next few years (Shingler, 2019). Allowing parents to choose between low-fee daycare and free preschool will likely increase the number of available spaces in subsidized child care centers (Shingler, 2019). However, Quebec has yet to release the logistics of its plan, nor has the provincial government explained how it will handle barriers such as the present shortage of early childhood educators and professionals (Shingler, 2019).

Full-day kindergarten became available in Quebec as part of the 1997 ECA (Lefebvre et al., 2009). In 2009, 98% of five-year-old children in the province were enrolled in a full-day program (Lefebvre et al., 2009). Publicly funded kindergarten is available to all Canadian five-year-olds; however, most provinces offer only half-day services that do not compare with what is offered in Quebec (Lefebvre et al., 2009). Kindergarten is not compulsory throughout Canada but is administered in a school setting and is controlled by the Federal Department of Education (Lefebvre et al., 2009).

School-Aged Children

Along with early childhood education, Quebec offers before-and-after-school programs at a reduced rate (Lefebvre et al., 2009). In 2004, more than half of kindergarten students in Quebec attended a reduced-fee program before or after school (Lefebvre et al., 2009). These programs are also available for children in higher grades (Lefebvre et al., 2009).

Parental Leave Policy

In addition to child care, parents and guardians in Quebec are entitled to various types of paid leave. The *Ministère du Travail, de l'Emploi et de la Solidarité sociale* (MTESS) administers parental leave under an income replacement plan called the Quebec Parental Insurance Plan (QPIP) (MTESS, 2020-a). This program is designed to encourage parents and guardians of newborns and newly adopted children to take parental leave. (MTESS, 2020-a). Anyone who receives a salary, wages, or self-employment earnings may obtain benefits (MTESS, 2020-a).

Parents and guardians can receive up to 75% of their weekly remunerations, depending on the length of their leave and the plan they select (MTESS, 2018). Families may receive the benefit for up to 52 weeks after a child's birth or adoption (MTESS, 2018). When coverage starts depends on the type of leave taken. For example, maternity leave can start 16 weeks before the expected birth date, paternity leave can start the week the child is born, and adoption leave can start the week the adoptive parent receives the child (MTESS, 2018).

Employers and self-employed individuals pay employment insurance premiums to fund the QPIP program. Since the QPIP replaces federal family leave programs in Quebec, those who pay the premiums can deduct a portion of that sum from federal taxes (MTESS, 2020-b).

Before Quebec implemented the QPIP in 2006, parental leave was available but widely underutilized, especially among fathers (MTESS, 2020-a). The QPIP has successfully encouraged parents and guardians to use family leave. One of the most effective features of the parental leave policy is that paternity leave is an individual, non-transferable benefit. This encourages fathers to use their leave or forfeit the benefit (Silcoff, 2018). About 80% of fathers in Quebec use paternity leave, as compared to 15% of fathers in the rest of Canada (Silcoff, 2018). Quebec's family leave program reduces demand for child care among parents and guardians of newborns and newly adopted children.

Family Allowance Policy

All families with dependents under the age of 18 are eligible for a yearly Family Allowance payment (Retraite Québec, n.d.-a). A family is automatically signed up for the program on the day a child is born or may apply for the benefit when a child is adopted (Retraite Québec, n.d.-b). Additional benefits are available for families with handicapped children and those who need financial assistance for school supplies (Retraite Québec, n.d.-a). The amount a family receives depends on its income, number of dependents in the family, custody status (shared or not), and marital status of the beneficiary (Retraite Québec, n.d.-b). The standard maximum amount is about $2,550 ($2,005 USD) per year (Retraite Québec, n.d.-c).

Cost of Implementation

Cost for the Government

To support the universal child care program, Quebec's provincial government pays reduced-fee providers about $10,000 ($7,860 USD) per year per child in direct subsidies (Fortin, 2018). In recent years, austerity measures have forced the province to cut back on some of its financial support to CPEs (Williams, 2018). Some CPEs then turned to philanthropy to make up the difference (Williams, 2018). Quebec's government also provides tax subsidies for parents who choose to use full-fee *garderies.* Children attending *garderies* typically cost the government about $24 ($19 USD) per day, while children attending CPEs cost the government about $50 ($39 USD) per day (Fortin, 2018). In 2016, government investment in all child care subsidies, including reduced-fee and full-fee providers, totaled $2.5 billion ($1.97 billion USD) (Fortin, 2018).

The benefits of this investment appear to more than make up for the expense. Quebec recovers about 40% of the program's cost in the short term through the payroll taxes it collects from working parents and a decrease in child benefit expenditures (Baker et al., 2008). Other societal benefits of the program compensate for the rest of the government's expense, and even generate fiscal surpluses (Fortin et al., 2012). Long term reductions in social benefit payments and an increase in all types of tax revenue generate these surpluses for the government (Fortin, 2018).

Cost for Parents: Reduced Fee Providers
When Quebec first implemented its child care policy, all parents were required to pay $5 ($3.90 USD) per day for child care, guaranteeing a fixed price of $1,300 ($1,022 USD) per year for a space in subsidized care (Lefebvre et al., 2009). But the policy regarding out-of-pocket expenses for parents has changed over time, most recently in 2019 (Revenu Quebec, 2019). Prior to that change, fees to parents were assessed on a sliding scale based on income (Fortin, 2018). The highest additional contribution above the required base rate was $21.20 ($17 USD) per day; this applied only to parents making over $151,000 ($118,675 USD) per year (Fortin, 2018).

In 2019, the provincial government decided to eliminate the sliding scale for additional contributions as part of a legislative campaign to "put money back in the pockets of Quebecers" (Leavitt, 2019). The government started working to eliminate additional contributions for parents, returning to a universal basic contribution, set at $8.35 ($6.56 USD) per day (Revenu Quebec, 2019). Parents and guardians in Quebec who use subsidized child care may not deduct the expense from their local and provincial taxes but can be reimbursed by the federal government (Lefebvre et al., 2009, p. 494).

Cost for Parents: Full Fee Providers
Both the federal and provincial governments provide tax credits for parents who use the full-fee option, further decreasing the cost of child care for parents who opt out reduced-fee care (Fortin, 2018). By reducing the cost for *garderies* via tax credits, the government made the price of for-profit providers competitive with reduced-fee providers. This essentially eliminated waiting lists for care in the province (Fortin, 2018). Spaces in *garderies* proliferated, while reduced-fee providers also expanded (Fortin, 2018).

Implementation

Quebec transformed its old child care system into a new one by increments, allowing everyone concerned to adjust to the changes without significant disturbance (Fortin, 2018). "On September 1, 2000, all children aged less than 59 months (not entitled to kindergarten because their fifth birthday is after September 30) became eligible for reduced price child care spaces" (Lefebvre et al., 2009, p. 491). About a third of children between the ages of one and four had access to reduced-fee care in 2000. This number increased to 65% in 2008 (Lefebvre et al., 2009). Quebecers use child care today at a rate that far exceeds the average in the rest of Canada (Perlman et al., 2019). On the 2011 General Social Survey, 71% of parents in Quebec reported using some form of child care on a regular basis, compared to 50% throughout the rest of Canada (Perlman et al., 2019). "[T]he country percentage of children in licensed care drops by almost eight points if Quebec's contribution is removed" (Perlman et al., 2019, p. 13).

Quebec's government was, and still is, heavily involved in implementing the reduced-fee child care program. Cost control measures included in the original policy helped to avoid a rapid spike in the cost of care per space, keeping the rate of increase to 1.8% per year (Fortin, 2018). These measures were necessary because the policy included pay increases for child care workers and higher quality standards for care (Lefebvre et al., 2009).

Quality

The *Ministère de la Famille* (MFA), which oversees all child care providers in Quebec, currently assesses the quality of CPEs, subsidized day care centers, and non-subsidized day care centers (MFA, 2020-b). Among other things, the MFA evaluates the quality of facilities, interactions with children, and educational planning (MFA, 2020-b). All recognized child care providers must comply with standards established by the ECA (MFA, 2018-a).

About 35% of children in care attend CPEs, which are highly regarded for their services and positive outcomes (Fortin, 2018). Full-fee centers do not follow the same quality standards as reduced-fee providers and do not get the same level of oversight (Fortin, 2018). Observers have noted inconsistency in quality among different types of child care providers as one of the weaknesses of Quebec's program.

Home-Based Care

To operate legally, a home-based or family child care provider must join an agency licensed by the provincial government (Perlman et al., 2019). These coordinating offices evaluate adherence to quality standards, provide educational guidance and support, administer and manage subsidies, place children in available spaces, and perform other services (MFA, 2018-b). The MFA does not currently assess family child care providers for the quality of the education they provide, but it plans to do so in the future (MFA, 2020-b).

Child Care Workers

Pay for child care workers has increased by 2.3% per year since Quebec implemented the reduced-fee child care program (Fortin, 2018). Part of the reason for these raises is that the program requires child care workers to complete more professional training (Fortin, 2018). In recent years, however, budget cuts have pushed down pay for child care workers, leaving the industry with a growing number of open positions (The Canadian Press, 2020). At the same time, family providers who receive a subsidy for each child they care for have complained about their earnings, going on strike several times in the past year (The Canadian Press, 2020).

Current working conditions make it difficult to retain child care workers in Quebec. Pay is low, there is scant opportunity for advancement, and society does not value the profession. Centers often close because too many employees are out sick or have left for other employment. To address the shortage of child care workers, the MFA is currently running a pilot program that pays individuals to earn a diploma in early childhood education while working in a child care center (The Canadian Press, 2020). These students can then fill in for staff in case of illness, helping centers remain open in the short term (The Canadian Press, 2020). The province has also centralized hiring efforts by publishing job openings on an employment platform called Jetravaille (The Canadian Press, 2020).

Analysis

Quebec's reduced-fee child care program was first implemented over two decades ago, generating enough data to allow detailed analysis of its successes and failures. Quebec's program is different from those in France and Singapore in a few ways. First, it is truly universal, not restricting access to benefits based on employment, marital status, or income (Fortin, 2018).

Second, it is funded and operated by the provincial government, not Canada's federal government, allowing for a comparison of results between Quebec and the rest of the nation.

Strengths

Child care is significantly more affordable for parents in Quebec than in the United States. The average cost to parents for each child in Quebec was $10 ($7.86 USD) per day in 2016, or about $2,600 ($2,043 USD) per year (McClusky, 2018). The average cost of care for a preschool-aged child in Broome County is about $10,000 per year for center-based care (FEN, 2020).

Employment among mothers increased as a result of the reduced-fee child care program. The fact that this increase included mothers with children above the age of six points to the longevity of the program's effects (Lefebvre et al., 2009). Because mothers can keep working, and retain portions of their salary that would otherwise be spent on child care, they gain increased earning potential and are more likely to remain in the workforce longer (Lefebvre et al., 2009).

Quebec has more than enough spaces for children in care, thanks to the wide range of options on the market, generous government funding for reduced-fee programs, and tax credits for parents who choose to use unsubsidized *garderies* (Fortin, 2018). An overwhelming majority of people who use the reduced-fee system agree that it meets their needs, indicating high levels of satisfaction with available options (Fortin, 2018).

The policy in Quebec was not developed solely to decrease the cost of care for parents. It also aimed to increase salaries for child care workers and provide stable funding, so the province could develop new child care centers and increase the number of spaces available (Lefebvre et al., 2009).

Quebec's child care infrastructure has remained relatively stable during the pandemic due to its funding model (Hurley, 2020). Because the government pays for child care, many centers were able to remain operational when individuals no longer needed services. Subsidized child care is more resilient to economic hardship because it does not rely on individuals for financial stability.

Weaknesses

The quality of child care in Quebec varies a great deal from one provider to another (Fortin, 2018). Low quality care is a problem especially among unsubsidized *garderies*, or full-fee providers, which about 17% of children in care attend (Fortin, 2018). Thirty-six percent of *garderies* were reported as inadequate, and fewer than 18% of *garderies* follow the quality standards for staff that apply to reduced-fee providers (Fortin, 2018). Parents still choose to use *garderies* because there are not enough spaces in higher quality programs, such as CPEs. Given the tax credits available to parents who use *garderies*, the cost to use the two kinds of programs is similar (Fortin, 2018).

Low-income families disproportionately utilize full-fee *garderies*, so more of the educational and developmental benefits of the reduced-fee program go to middle- and upper-class families (Kottelenberg & Lehrer, 2017). Reasons for this disparity include a comparative lack of subsidized spaces in low-income areas, the increased likelihood of nontraditional work hours among lower-income parents and guardians, and cultural values among less-affluent families that emphasize parental involvement (Turgeon, 2014).

Although the child care program boosts earnings for Quebec's provincial government, most of the tax revenue and economic benefit go to the federal government (Fortin et al., 2012). This is a problem, since the federal government does not pay for the reduced-fee program, putting much of the financial burden on Quebec's taxpayers (Fortin et al., 2012). This situation makes it hard to measure how sustainable the reduced-fee program is, although it has largely proven successful for two decades. Although some CPEs now resort to fundraising to make up for gaps in funding, Quebec's model continues to be used as an example across the world.

Impact

Throughout the rest of Canada, only 30% of parents report using licensed child care (Perlman et al., 2019). Unlicensed care can hinder child development over the long term and reduce child safety. Quebec demonstrates the importance of increasing access to licensed care. When parents can send their children to high-quality, licensed care at an affordable price, an overwhelming majority do so (Perlman et al, 2019).

Unlike parents in the rest of Canada, who tend to use family-based care, parents in Quebec favor center-based care (Lefebvre et al., 2009). Quebec's child care policy has increased the amount of time children spend in care and helped to make center-based care the most common option for parents (Lefebvre et al., 2009).

Since Quebec implemented its reduced-fee program, labor force participation among mothers of children from birth to five years old has increased four times as much as in the rest of Canada (Fortin, 2018). This growth is significant because those working mothers can build capital while their children are young, when they might otherwise not have worked (Lefebvre et al., 2009). Mothers who work during this period are more likely to remain in the workforce and earn more money over their lives than mothers who stay home with young children (Lefebvre et al., 2009). Workforce participation due to the policy change was especially strong among less-educated mothers (Lefebvre et al., 2009).

Applicability

The cost of implementing a policy like Quebec's would be high initially but would be recovered over time. Quebec's child care system is not particularly expensive by global standards; the cost to taxpayers is consistent with the OECD average, about 0.7% of GDP (Fortin, 2018). The United States is far behind other developed countries in terms of public investment in child care.

Quebec's model is worth studying because it is operated by a province rather than a federal government. New York State can, and should, consider investing in child care at a rate similar to the OECD average, regardless of the federal government's stance. Comparisons with child care programs in other Canadian provinces clearly show that Quebec's reduced-fee child care program delivered benefits to the province's citizens.

Lefebvre et al. (2009) do point out that the success of Quebec's policy was influenced by a period of strong GDP growth and a flexible labor market (p. 500). The authors also suggest that a similar policy might have less success in regions where a mother's involvement in child rearing is considered to be sacrosanct (Lefebvre et al., 2009).

Conclusion

When considering Quebec as a possible example for New York State, it is crucial to remember that the province's child care policy has had uneven success. The program has emphasized the quantity of spaces it could provide over the quality of service, leaving many children from low-income families at a disadvantage. However, Quebec's child care policy has had a remarkable impact on women's participation in the workforce and the province's overall view of child care as a necessity. Although this program falls short of outstanding as a policy for supporting the development of children, it is effective as an economic policy that promotes gender equality.

FRANCE

The largest member of the European Union, France has the third largest GDP in Europe (Drinkwater, 2021). Family policy is important to the French public; "the 'family' as such is legally recognized as an institution that plays an important role in the maintenance of social cohesion" (Fagnani & Math, 2011, p. 549). Early childhood education and care (ECEC) in France is considered to be high quality and highly effective, with almost all children attending preschool by the time they reach three years of age (European Commission, 2019).

Child Care Policy and Programs

Overview

The French government gives priority to policies that promote women in the workforce and help facilitate a work-life balance for families (Fagnani & Math, 2011). As a result, French policy makes it possible for families to comfortably pursue two incomes (Fagnani & Math, 2011). As the availability of child care has increased, so has the number of women participating in the workforce (Fagnani & Math, 2011). "France has one of the highest employment rates for mothers with young children and its fertility rates top the list for the EU along with Ireland" (Fagnani & Math, 2011, p. 558). Almost 60% of French children are enrolled in some form of ECEC between the ages of zero and two, and nearly 100% of children attend preschool by age three (OECD, 2019-b).

Universal Early Childhood Education

Preschool is compulsory for children between the ages of three and six, or until the first year of primary school (European Commission, 2019). Pre-primary schools are part of the French public school system, and about a third of children are enrolled by the age of two (Goux & Maurin, 2010). Nearly every child is enrolled in an *école maternelle*, or preschool school program, by age three (Fagnani & Math, 2011). The *écoles maternelles* focus on fostering children's development and providing a stimulating learning environment to improve academic outcomes (European Commission, 2019). Funding for *école maternelle* programs comes from a combination of federal and local government financing (Adamson & Litjens, 2016).

Child Care Centers (Crèches)

Crèches were first publicly funded in the 1970s, but some remain privately operated (Fagnani & Math, 2011). Although much of the cost to attend one of these centers is covered by the government, some parents pay more than others, depending on income (Adamson & Litjens, 2016). *Caisses d'Allocations Familiales* (CAFs) are the local agencies that distribute government funding for child care centers and oversee the implementation of policy developed by their national organization, the National Family Allowance Fund (CNAF) (Fagnani & Math, 2011). According to a survey conducted by CNAF in 2017, "seven out of ten families who wished to enroll their child (aged 6 months to 1 year) in ECEC obtained a place" (European Commission, 2019, p. 63). The supply of spaces in child care centers does not meet the demand, and spots in *crèches* can be difficult to come by in major cities.

There are multiple types of *crèches*, including: *la crèche parentale* (non-profit center operated by a group of parents and occasionally nannies); *la crèche d'enterprise* (privately operated center that is funded by a company for its staff); and *la crèche familial* (a few families split the cost of hiring a child care professional) (McNally, 2015). *Crèches* are typically open for 11 hours per day, except on holidays, and are closed in August (McNally, 2015). Children between the ages of zero and three attend crèches. Spaces are limited and are allocated by a locality's town hall (Chang, 2019).

Private Caregivers

Families that cannot acquire a space in a child care center often choose to use an *Assistante Maternelle* (a registered babysitter or nanny). About 57% of children below the age of three receive care from one of these professionals (European Commission, 2019). These individuals, also known as *nounous*, can care for up to four children at a time (McNally, 2015). "France is the only European country where more young children [under three-years-old] are with childminders than in centre-based provision" (European Commission, 2019, p. 33). This is due in part to the importance of parental choice for the French government. Families can find a *nounou* by inquiring with their town hall and may even attend events to get to know available *nounous* before making a commitment (Chang, 2019).

Tax breaks are available for parents opting to use a private caregiver (Fagnani & Math, 2011). This financial incentive is designed to help promote the growth of private caregiving as an employment sector (Fagnani & Math, 2011). It is relatively easy to qualify for this assistance, with criteria based on family income (Fagnani & Math, 2011). A family pays at least 15% of the cost of hiring an *Assistante Maternelle* (McNally, 2015).

To get this subsidy, parents with at least one child under the age of six must be employed, enrolled in a training program, or registered as unemployed (Fagnani & Math, 2011). Six hundred sixty-three thousand families received this financial incentive in 2008 (Fagnani & Math, 2011). This program was created to address a gap between supply and demand for formal child care services, especially among parents working unconventional hours (Fagnani & Math, 2011).

Parental Leave

Both maternity and paternity leave are compulsory in France (European Commission, n.d.). The French government enforces and pays for eight weeks of statutory leave for mothers before and after birth (Rodrigues & Vergant, 2019). Maternity leave may be extended beyond those 16 weeks in the case of multiple births or if the mother is having her third child or more (European Commission, n.d.). Paternity leave was recently lengthened to a total of 28 days (European

Commission, n.d.). Both parents may reduce the time they spend working during the first three years of a child's life without repercussion from employers (Rodrigues & Vergant, 2019). Adoptive leave, which parents may share, is typically 10 weeks for one child and 22 for the adoption of multiple children (European Commission, n.d.).

Regulatory Structure

France's federal government monitors the quality of service and staff in child care settings (Adamson & Litjens, 2016). It conducts quality inspections to ensure compliance with regulations and uses self-assessments and parental surveys (Adamson & Litjens, 2016). The French government distinguishes between pre-primary programs and other forms of child care in its regulatory structure (Adamson & Litjens, 2016). "Provision for younger and older children is managed by different ministries" (European Commission, 2019, p. 18). France is one of only seven European countries that issues top-level recommendations for easing the transition from home-based care to center-based care (European Commission, 2019).

Oversight of *Crèches*

France's Ministry of Social Affairs and Health regulates child care for children aged three and younger. Essentially, it deals with child care for all children before they enter a pre-primary program. There is also local oversight, provided by the Child and Maternal Protection Agency, or *Protection Maternelle et Infantile* (PMI), and the Family Allowances Fund, or *Caisse des Allocations Familiales*. The PMI licenses day care services as well (Adamson & Litjens, 2016). The Guidelines of Public Health and Facilities ensure quality in child care settings (Adamson & Litjens, 2016). Inspections of child care providers focus on staff qualifications, resource management, and working conditions (Adamson & Litjens, 2016). A provider who does not pass an inspection must participate in training and pass a follow-up evaluation, with the most significant repercussion being closure (Adamson & Litjens, 2016).

Pre-Primary Education

The Ministry of National Education is responsible for children six and under enrolled in pre-primary programs, which includes children aged six and under (Adamson & Litjens, 2016). Pre-primary programs are accredited and licensed by the federal and local governments, and guided by a national curriculum, *L'école maternelle: un cycle unique, fondamental pour la réussite de tous* (Kindergarten: a single cycle, fundamental to the success of all) (Adamson & Litjens, 2016). Government inspections of pre-primary programs for children aged three to six focus on child development outcomes and the program's adherence to curriculum (Adamson & Litjens, 2016).

Child Care Workers

Professionals throughout France's ECEC system are considered highly qualified (European Commission, 2019). An ECEC professional must hold a bachelor's degree to work with young children, and a master's degree to work with older children (European Commission, 2019). Only staff working with older children must complete continued professional development courses throughout their careers, although staff working with younger children may also participate in these courses (European Commission, 2019, p. 16).

Assistants in ECEC programs must obtain a one-year certificate to work with young children and a two-year certificate to work with older children (European Commission, 2019). Assistants working with older children are considered municipal employees (European Commission, 2019). Child minders must go through 120 hours of training and complete part of the same course that assistants working in centers must take (European Commission, 2019). Completing the other portions of the training course would allow a child minder to work in a center as an assistant (European Commission, 2019).

Analysis

Strengths

The French approach to child care prioritizes families and is intended to make it as easy as possible for parents, specifically mothers, to reenter the workforce as soon as possible. As a result, mothers with young children are employed at some of the highest rates in the EU (Adamson & Litjens, 2016).

Making preschool compulsory for children above the age of three greatly reduces the need for other forms of child care. This institutionalization of early childhood education prepares children to enter primary school and gives them nurturing experiences at a critical time in their lives.

Weaknesses

France spends a significant amount on child care in its various subsidies and programs. The country devotes about 1.4% of its GDP to child care, compared with less than 0.4% of the GDP in the United States (OECD, 2019-a). Although the French model may be something to aspire to, it is currently unrealistic to expect the United States to provide as much public funding for child care.

Applicability

One element of the French system that might be useful in New York is the financial incentive for private caregivers. If parents in New York received a similar tax break when they used in-home care providers, that might encourage more people to start in-home child care businesses. The French model focuses on creating more jobs for child care professionals. A similar policy in New York could help to create jobs here, increase the number of available spaces in child care and give parents more choice.

Both maternity and paternity leave are compulsory in France, reducing the need for professional care for France's youngest children (European Commission, n.d.). With no such policy in place in the United States, worries about where to find child care begin much sooner for many families.

New York State is working toward universal pre-kindergarten for three and four year olds, giving children of that age some of the same advantages as French children. This is a step in the right direction, as early exposure to education is crucial for children's success.

Conclusion

The ECEC sector in France is successful in part because the government has made preschool part of the public education system. Also, with many options available, most families feel satisfied with the choices they make for their children's care. Because French society values 'the family' as the most important unit of society, the government makes ECEC a high priority, providing the significant financial support that makes care affordable for all families.

SECTION III
DISCUSSION

Parental Leave as Part of a Holistic Approach
Singapore, France, and Quebec all guarantee paid parental and/or family leave. The length of parental leave that a country provides influences the demand for child care. Paid leave is a factor in all successful systems and works in tandem with accessible child care to make reentering the workforce as easy as possible. Disproportionate demand for infant care is an unintended consequence of New York's Universal Pre-K program. Paid parental leave would help stabilize the issue.

Increase Qualifications for ECEC Professionals
Like the United States, Quebec and Singapore have trouble retaining qualified staff. France does not seem to have this problem because preschool is part of that country's public education system. French ECEC professionals hold bachelor's degrees, which likely prevents the profession from being devalued as it is in other systems. The United States has historically placed a low economic value on caregiving professionals. Increasing educational requirements for child care positions, while making professional development resources available, would encourage greater respect and better pay for child care professionals, helping to reduce turnover.

Increasing Access to ECEC is Good for the Economy
If there were ever a time to try new child care strategies, it is now. New York State's population is declining, and thousands have lost their jobs because of the COVID-19 pandemic. Providing child care will help working families return to work and start re-fueling the economy. As Quebec's example shows, better access to child care can significantly increase workforce participation, particularly among women.

Framing Child Care as a Way to Prevent Population Decline
Singapore, Quebec, and France provide supportive family policies and programs to help encourage more births. New York experienced the nation's largest loss of population in 2020. One effective way to advocate for better child care and family policies could be to frame it as a way to attract and retain a strong workforce. Providing young professionals with easily accessible and affordable childcare is a powerful incentive for them to remain in New York or relocate from other states. The future of New York depends on the next generation, and policymakers must consider measures that will retain and attract young professionals.

New York Should Make a Substantial Investment in Child Care
When OECD ranks countries on the success of their ECEC services, the United States repeatedly ranks near the bottom of the list (Snyder, 2019). Public funding is the key to developing successful child care programs. The positive elements found in the systems we have considered in this report, such as fee caps, high quality standards, and stable funding for providers, are not possible without government assistance. While the OECD average for public expenditure on ECEC is about 0.7% of GDP, the United States spends only 0.3% annually (OECD, 2019). New York State has the opportunity to assume national leadership on this issue by increasing funding for ECEC to at least meet the OECD average. Without sufficient resources for families and providers, changes to ECEC policies will not produce sustainable improvements.

CONCLUSION

Singapore, France, and Quebec all understand the importance of ECEC for children, families, and the economy. As a result, they treat ECEC as a public good deserving of public investment. Better access to high quality ECEC services improves the well-being of the entire public. The American child care system is in desperate need of such investment. Fees that are unaffordable for many families are nevertheless too low to cover operating expenses. Letting the child care system languish on the margins of our economy serves no one's best interests. To support today's working families, while investing in the education of tomorrow's, is simply good business.

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