## REPORT ON CHILDCARE AT MCGILL UNIVERSITY

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## Introduction

The following report provides context, research, and suggestions as they pertain to the issue of on-site childcare at McGill University (henceforth McGill or the University). The topics covered include the background context, qualitative research, benchmarking research, findings from academia, a quantitative model, and possible funding options. Each section of the report will begin with the key takeaways for that section, so as to make the crucial points readily available to those who do not have time to read the full report.

# Key takeaways

- 1. The lack of on-campus childcare spaces limits diversity and fairness for employees
- McGill has 21% fewer on-campus childcare spaces (equalized for size) compared to the average at comparable universities, 31% fewer spaces than the University of British Columbia and 9% fewer spaces than the University of Toronto
- Academic research demonstrates the benefits of on-site childcare, ranging from sociopsychological benefits for employees to increased productivity and employee retention
- 4. By our estimates, meeting the demand for childcare spaces could provide the
  University with a present value of over \$2 million in cost savings at a conservative
  minimum
- 5. More realistic estimates could see this figure jump in excess of a present value of \$5 million in readily quantifiable cost savings

## **Background Context**

## Key takeaways

- 1. Over 500 children are on waitlists for on-campus daycares that have only 210 spaces
- A proposed project to add 80-120 private daycare spaces on campus is being planned
- 3. In spite of this, a minimum of 450 extra spaces would likely be needed to meet demand

#### Childcare access in Quebec

Quebec provides various types of childcare options for parents based on the age of the child and the type of service they may provide (full/part time or services with flexible scheduling). Most daycares are regulated and monitored by the government. The various types of childcare options available in Quebec are: Early Childhood centres/ Centre de la petite enfance (CPE), private-subsidized daycares, private – unsubsidized daycares and home-based daycares / milieu familial (McGill University)

The Government of Quebec provides financial support to parents for the care of their children through the following two measures: a subsidized childcare program for children aged 0 to 5 and a refundable tax credit for childcare expenses for children aged 0 to 15 years (Government of Quebec). Daily fees at a subsidized daycare start at \$8.35 a day. At an unsubsidized daycare, the daily fees can range from \$35 to \$60 (Finding Quality Childcare). The childcare programs are regulated and administered by two ministries. The Ministère de la famille et des aînés

(MFA) is responsible for services for children 0-4 years and the Ministère de l'éducation, du loisir et du sport (MELS) is responsible for services for school-age children and is also responsible for kindergarten.

There is a centralized waiting list system for all subsidized and unsubsidized daycares and childcare centres called LA PLACE 0-5. There is a high demand for childcare, and given that there are limited number of spaces, parents must start making arrangements as early as six months to a year in advance of the desired registration (McGill University). However, while this recommendation given on McGill's website, McGill CPE Director, Lisa Gallagher, notes that six months to a year is often too little time. There is no guarantee for placement at the time of desired registration.

#### Childcare access at McGill University

#### Current childcare access

McGill provides on campus childcare services to its employees and students through three main centres: McGill CPE and SSMU Day Care at the downtown campus and CPE du Campus on the MacDonald campus.

#### McGill Early Childhood Centre / Centre de la petite enfance (CPE)

McGill has two CPE's: McGill CPE Downtown Campus, and Macdonald Campus Daycare. They hold permits from the Quebec government. They are non-profit childcare centres which provide spaces for a reduced contribution starting at \$8.35 a day. Two thirds of the board of

directors are parents whose children attend the centre. The McGill Childcare Centre (CPE McGill), located in downtown campus, is an independently run centre that can accommodate 110 children, ranging in age from four months to five years. A Campus Day Care Centre, located adjacent to the Macdonald campus, is also an independently run centre that can accommodate approximately 60 children, ranging in age from four months to five years. As space is limited in both the centres, early application is necessary.

#### Student Society of McGill University (SSMU) Day Care

It is a for-profit, privately run daycare which offer spaces for a reduced contribution starting at \$8.35 a day. The Student's Society of McGill University (SSMU) runs the SSMU Daycare in the Downtown Campus. It offers two services: one is for infants, and the other is available for children between 18 months and 5 years of age and priority is given to children of undergraduate students. The children of graduate students and faculty may be accepted if the needs of the undergraduates have been met.

#### Proposed short-term project

In the short-term, The McGill Association of University Teachers (MAUT) and Win4Science – an initiative at the Faculty of Medicine to support women in the Life Sciences – have taken steps toward a proposal to open a private daycare with the potential for an additional 80-120 spaces depending on the legal space requirements of the building. As of the time of writing, the new childcare centre has been proposed to be situated in the Peel Street row houses, a short distance from the current McGill Centre de la petite enfance located at 3491 Peel Street, which

currently houses 110 children and is operating at full capacity with a significant waitlist in excess of 330 children. To add to this, the SSMU daycare has 152 children on the waitlist and the CPE du Campus on the MacDonald Campus has a further 60 children on the waitlist. Thus, the new proposed daycare would not meet the full demand for childcare services, although it will offer a benefit to the McGill community. At the time of writing, the Ministry of the Family is no longer accepting applications for subsidized childcare centres, and therefore the proposed new centre will have to be privately funded.

## Childcare needs long-term

As the proposed new childcare centre would not meet the demand of those in the McGill community, a more robust service offering is needed in the long term to ensure that McGill employees can have their childcare needs met. The remainder of this paper will discuss these needs in greater detail, but an additional 500 childcare spaces would likely be required to meet the demand of McGill's employees. It should also be noted that the Government of Quebec is gradually introducing a school program for four-year olds (Quebec.ca) that will reduce the need for childcare moving forward, even as the University grows.

## Qualitative Research

## Key Takeaways

- 1. The lack of on-campus childcare spaces at McGill has negative externalities that disproportionately affect women due to societal emphasis on motherly care
- 2. Mothers cannot plan their maternity leave, which affects their career advancement and general gender diversity
- 3. Prospective candidates cannot plan childcare, which can lead to them turning job offers down and likely has a negative effect on gender diversity

## **Findings**

In order to understand how McGill employees experienced the childcare situation, we conducted interviews to get a more robust picture of the issues facing childcare at McGill. From these meetings and interviews, one central issue became clear: Childcare expectations fall disproportionately on the shoulders of mothers, which leads to negative externalities that could be remedied in part by better support from the University. For example, for women who would like to plan their maternity leave, the fact that the waitlist for on-campus childcare is long and unpredictable prohibits them from effectively planning (L. Munter, personal communication, March 10, 2013). This can have negative outcomes for those who are looking to continue building their careers in what are often highly competitive fields with other barriers to advancement.

However, the problem does not rest solely with those who are currently employed at the University. In a conversation with McGill's Faculty Relocation Advisor, it was noted that while

she had not explicitly heard from female faculty candidates that they had turned down a job offer because of the scarcity of childcare spaces offered, that it women turn down job offers disproportionately to men, and that many of them cite family reasons without delving into further detail (M. Cubano-Guzman, personal communication, March 12, 2013). Given that McGill's on-campus childcare options are not as abundant as competitor institutions, as is outlined in the section on benchmarking below, it is not unreasonable to assume that childcare could be one of the key issues.

The most common theme that came up in these conversations was the element of fairness and the University's role in improving fairness and diversity in its staff and faculty. It was broadly felt that initiatives such as improving on-site childcare would bolster an element of fairness at the University and that the University has the means and capability to make such a change possible. While there are other initiatives at the University to drive sustainability more broadly, and to comply with government standards on diversity in hiring, initiatives such as these that don't catch the media spotlight are less considered, and as a result, are not undertaken to the detriment of women and diversity in general.

# Benchmarking Research

To better understand this issue as it pertains to universities similar to McGill, we studied the childcare offerings at 35 comparable institutions across Canada, The United States, Europe, and a small selection of institutions around the world and outside of the aforementioned three

geographies. Comparable institutions were chosen based on their ranking, size, and geography.

A tendency was given to public institutions as well. The selected institutions can be found listed in their entirety with further information on each institution in the Appendix.

	Key Takeaways				
1.	Comparable universities tend to have more robust childcare offerings than McGill.				
2.	McGill has 21% fewer childcare spaces per total students, staff and faculty (we				
	have termed these "equalized spaces")				
3.	McGill has 31% fewer equalized spaces than the University of British Columbia and				
	9% fewer equalized spaces than the University of Toronto				

#### **Figures**

Figure 1. Number of Institutions with Subsidized, Paid and No Childcare Options

Subsidized Childcare	Paid Childcare	No Childcare
21	9	5

As can be seen in Figure 1 above, a majority of comparable institutions offer childcare to staff and Faculty that is subsidized in some form. The types of subsidies were varied across institutions, coming in the form of needs-based subsidies, subsidies for conforming with payment programs, tax reductions, amongst many other forms. There were five universities with no evident on-campus childcare. However, three of these universities were the University of Copenhagen in Denmark, Lund University in Sweden and the University of Amsterdam in the Netherlands, countries with extensive childcare programs that are offered by the state, and therefore not imperative. The other two universities were The Hong Kong University of Science

and Technology and Tel Aviv University. At institutions where childcare services were offered, but not subsidized by the university, they were often subsidized at the state level, such as at the Technical University of Munich in Germany and The University of Vienna in Austria.

For all of the institutions surveyed, dedicated places were reserved for staff and faculty regardless of the level of subsidy provided.

For the institutions studied that had available information on the number of childcare places, the average number of places per institution was just over 332 compared with just 210 at McGill. However, this number does not accurately reflect the size discrepancies between the institutions. To equalize the figures, we calculated the number of childcare spaces per institution per total students, staff and faculty (henceforth called "equalized childcare spaces"). The average per university was 0.0063 spaces compared to 0.005 at McGill.

Figure 2. Total Childcare Places and Childcare Places per Total Students, Staff & Faculty

Aver	age	Mc	Gill
Total Childcare	Total Childcare Equalized Childcare		Equalized Childcare
Spaces	Spaces	Spaces	Spaces
332	0.0063	210	0.005

In broader terms, there are 21% fewer childcare spaces available at McGill when compared with the average, in spite of lower numbers at European institutions where childcare options are often readily available from the state. Most notably, McGill had 9% fewer equalized childcare spaces than the University of Toronto and 31% fewer than the University of British

Columbia. It should also be noted that the authors observed a positive correlation between a greater number of equalized childcare spaces and a greater percentage of female faculty, although the data points were not sufficient to draw any conclusions due to a lack of readily available information and further research would need to be undertaken to test this correlation. A small sampling can be found in the Appendix.

# Academic Findings

## **Key Takeaways**

- 1. On-site childcare has a positive effect on attracting and retaining candidates
- 2. Employees are more productive when their childcare needs are met
- 3. Workplace absenteeism is reduced by on-site childcare

Academic studies have shown that providing on-campus daycare facility has a positive impact on the attracting of prospective candidates and positively impacts the decision of candidates when choosing the preferred employer. In fact, organizations that offer on-site childcare are often on the top of the list of "Best Places to Work", thus making them attractive to job seekers (Durekas, 2009). Consequently, organizations are recognizing that childcare is also a business problem. In a Conference Board (1991) study, it was found that an on campus childcare facility was the third-most preferred benefit option indicated by the employees surveyed.

Organizations are now more aware of needs of working couple are more organizations are providing these services. As per the survey done as part of one of the studies, it was found that among the surveyed employees' first benefit choice was flexitime, the second was a formal sick

leave policy and the third was an on-site or near-site childcare facility (David E Gundersen, Elizabeth J Rozell, Calvin E Kellogg, 1995).

Furthermore, the organizational benefits of providing an on-site childcare facility are not limited to helping with recruitment efforts. Research has shown that job performance of employees is affected by the stresses related to childcare. As part of the study, employees discussed spending hours during the day finding a childcare centre for their child, reaching out to different childcare centres to find better childcare arrangement and in process being too upset to focus on work. Participants of the study stated that when they were comfortable with their childcare option, they would experience significantly reduced stress and could offer more complete focus to their job. However, when they were not happy with the situation, they couldn't focus on their work. These findings support the results of previous studies which showed that employees who are concerned or worrying about childcare arrangements while on the job are less productive (Mastroianni 1992) and more recent work that shows improved well-being and available time for work in mothers who had access to reliable childcare (Schmitz 2020).

The supporters of childcare facilities argue that a good quality facility has a positive influence on parents' work behaviour by relieving their concerns about their child's safety and development (Friedman 2001; Milkovich & Gomez 1976). Also, research has indicated that working parents lose a significant number of workdays each year due arranging the right childcare services (Pati 1991). A growing number of organizations are looking to provide

employer-sponsored childcare facilities to help reduce absenteeism among the workforce. (Connelly, DeGraff & Willis 2004). Many parents note other benefits as well. They report that on-site day childcare is convenient for them, as it provides them opportunity to spend more time with their children, reduces their work disruptions and travel time during the day, and thus increases their presence at work and leads to an enhanced work environment.

Research also indicates that providing childcare can reduce absenteeism. This happens for two major reasons. First, it reduces the amount of time that parents may have to be away from work for things such as doctors' appointments, commuting, mild child illness or other common child complications (Casper and Harris, 2008; Wang and Walumbwa, 2007). Second, providing a mother access to her child to breastfeed while at work can help reduce the absenteeism due its role in reducing infant illness (Jones and Matheny 1993). Even though the results of the study were based on a relatively small sample size, it suggested that on-site day care facilities increased the breastfeeding rate which in turn led to reduction in a child's illness and maternal absenteeism associated with the illness. The benefits of on-site breastfeeding also enhance mothers' ability to return to work more quickly – a benefit both for the University and for those mothers who would like to continue advancing their careers (Nowak et al. 2013). Moreover, available research suggests that workplace breastfeeding supports have positive outcomes for both employer and employee, including increased morale (Moore & Jansa 1987), decreased health care costs (Walker, 1991), and improved perceptions of organizational fairness and attractiveness (Seijts, 2002).

Finally, many organizations which have benefited from higher retention and performance due to onsite childcare facilities (Connelley, Degraff, and Willis, 2004). One such organization is Procter & Gamble which has opened a 24X7 childcare facility to accommodate night shift employees who are unable to leave their children at home Trout Blue Chelan Inc, provides On-Campus childcare facility outside the normal business hours (McIntyre, 2000).

## Quantitative Model

## **Key Takeaways**

- Meeting McGill employees' demand for childcare spaces would likely provide present value savings very conservatively estimated at between \$3M and \$6M
- 2. The perpetual cost savings from the reduction in employee absenteeism due to adequate childcare spaces is an estimated present value of between \$1M and \$6M
- The perpetual cost savings from the reduction in employee turnover due to adequate childcare spaces is an estimated present value of between \$1M and \$6M
- 4. The authors suspect that there is a significant financial benefit potentially one in the tens of millions of dollars to increasing gender diversity, particularly amongst academics at the University; however, there is a dearth of information from which quantifiable financial benefits can be estimated

#### Components

In order to understand the opportunity cost to the University of not investing in increased onsite childcare spaces, we sought to create a quantitative model to better understand this cost. Initially, we had hoped to this model would have three components: the cost of absenteeism, the cost of turnover, and the cost of a lack of gender diversity. After conducting research, the cost of absenteeism is well defined, as there is ample current data (McGill University 2019; Statistics Canada; Conzon 2013; He and Long 2019) from which to construct the model.

Moreover, the cost of employee turnover was also ascertainable through much of the same data, as well as other data points (Ryerson University 2019; Stanford University 1999).

However, defining the cost of a lack of gender diversity proved more challenging. This will be discussed at length below, but in short, while there appear to be clear and substantial benefits to gender diversity, quantifying these benefits to the University proved difficult due to a lack of current data.

#### Cost of Absenteeism

In order to construct the cost of absenteeism model, we evaluated three major components. First, we documented how much more often working parents of children under 5 are absent from work due to personal reasons compared with parents of older children. Second, we employed demographic data and McGill employee figures to estimate the number of McGill employees with children under five. Third, we used McGill salary data and employee figures to estimate the average salaries paid to parents of young children working at McGill. Thereafter, we combined these components to get an estimated cost of absenteeism for workers with children under five above that of their colleagues with older children. Finally, we estimated to what extent absenteeism could be mitigated by providing more on-campus childcare.

According to Statistics Canada, working parents with children under the age of 5 are more often absent from work for personal reasons than any other category reported on (working parents with children ages 5-12, working parents with children 13 and older, and those without children) (Statistics Canada). Figure 3 outlines these differences below.

Figure 3. Work days missed to personal reasons amongst workers in Canada

Work days missed due to personal reasons						
	All	Men	Women			
With Children	2.1	1.6	2.6			
Under 5	3.0	2.2	4.7			
5 to 12	1.8	1.4	2.4			
13+	1.5	1.2	1.8			
Without Children	1.4	1.2	1.6			

These figures gave us the basis for constructing the model, as it allowed us to quantify average absenteeism for personal reasons for parents with children under five years of age versus those with older children. From there, we relied on University data and Statistics Canada demographic data to derive the number of workers at McGill that would likely have children under the age of 5, which we estimated as 709 for 2019. For the sake of conservatism, we estimated that 80% of employees would use on-campus childcare if it was available, meaning 567 children of employees would use on-campus childcare services if available. Given the waitlist for on-campus childcare is over 500 children and there are currently 210 available spaces, this estimate seemed logical, if somewhat conservative. This is bolstered by the fact that, in 2013, roughly 85% of respondents of a survey of MAUT members on childcare at McGill

indicated that their child either attended an on-campus daycare or that they would have wanted their children to attend an on-campus daycare but they were not admitted (Conzon 2013). These figures can be found in Figure 4 below.

Figure 4. Estimated number of workers at McGill with Children under the age of five

Implied McGill Employees with Children Under 5	
Canadian families with kids under 5	1,014,190
Total Canadian families (including single person families)	16,378,990
% Canadian families with children under 5	8%
Total staff at McGill	7,600
Average number of children per family in families with at least 1 child (est.)	1.34
Likelihood more than one child is under 5 (est.)	50%
Implied children under 5 of McGill Employees	709
Implied children under 5 of McGill Employees that would use childcare	567

From there, we leveraged McGill salary and employment figures to understand the estimated cost of salaries for McGill employees who are parents of children under 5. For professor salary estimates, we used assistant professor salaries, as they are the most likely to have young children based on their average years of experience. By combining the salary and employment figures with those in Figures 3 and 4, we were able to estimate the cost of absenteeism for employees with children under the age of 5 over and above what the average cost would be for parents with children over the age of 5.

Subsequently, there are two more steps to derive at the present value of the opportunity cost of absenteeism due to a lack of available on-campus childcare. First, we had to derive the perpetual value of the cost. For this, we used a discount rate of 3.5% and a salary growth rate

of 2%. The discount rate was based on benchmarks from a 2019 study (He and Long 2019) and growth was based on inflation. Finally, we estimated by what percentage absenteeism would be quelled by greater on-campus childcare. The results can be seen in Figure 5 below, but in short, the present value of the perpetual cost savings could be over \$1.6 million with just a 10% reduction in absenteeism. In one study (Gullekson et al. 2013), on-site childcare was shown to reduce absenteeism by nearly 30%, a present value of over \$3.5M to McGill.

Figure 5. Estimated total costs of absenteeism

Total Costs of Absenteeism					
	Cost of Absenteeism Potential Cost Savings (Present Value)				
Faculty	2019	In Perpetuity	10%	25%	50%
Agr. & Env. Sciences	\$5,091	\$339,371	\$33,937	\$84,843	\$169,686
Arts	\$13,564	\$904,284	\$90,428	\$226,071	\$452,142
Dentistry	\$2,061	\$137,397	\$13,740	\$34,349	\$68,699
Education	\$3,298	\$219,847	\$21,985	\$54,962	\$109,923
Engineering	\$8,247	\$549,778	\$54,978	\$137,445	\$274,889
Law	\$2,481	\$165,383	\$16,538	\$41,346	\$82,692
Management	\$7,987	\$532,487	\$53,249	\$133,122	\$266,243
Medicine	\$36,169	\$2,411,253	\$241,125	\$602,813	\$1,205,626
Music	\$3,663	\$244,181	\$24,418	\$61,045	\$122,091
Science	\$12,750	\$849,968	\$84,997	\$212,492	\$424,984
Library Sciences	\$3,662	\$244,105	\$24,411	\$61,026	\$122,053
McGill Institution	\$80,087	\$5,339,135	\$533,913	\$1,334,784	\$2,669,567
TOTAL	\$179,058	\$11,937,189	\$1,193,719	\$2,984,297	\$5,968,595

The monetary benefits that greater on-campus childcare could bring to the University and each of its faculties is clear. However, beyond this point, the figures used in this section show that on-campus childcare could also improve fairness for women works with young children.

Referring back to Figure 3, working women with children under five miss work an average of

two days more than men do due to personal reasons. Given that on-site childcare is shown to reduce absenteeism, this could help improve fairness for women in the workplace and improve diversity efforts.

#### Cost of Turnover

A similar model to the above was applied to derive turnover costs. Using the salary and demographic information calculated above, we sought to estimate the present value of the perpetual cost of turnover in employees with children under the age of five. While McGill does not release data on employee turnover, Ryerson University – a similarly sized Canadian University – compiled a report entitled that detailed the turnover rate for both staff and faculty and grouped the reasons for leaving (2019). We removed the turnover due to retirement to derive an estimated turnover of 1.5% for faculty and 5% for staff. To estimate the nominal cost of turnover, we leveraged the results of a study from data from Stanford University that found turnover costs roughly 11.5% of salary for the position in question. Other studies point to much higher figures – in excess of three months' salary (Hinkin and Tracy 2000). However, to maintain a conservative estimate, we used 11.5% as a baseline. The results can be seen below.

Figure 6. Non-retirement turnover estimates for staff and faculty

Turnover	
Staff Turnover (non-retirement)	5%
Faculty Turnover (non-retirement)	1.5%
Turnover cost (as fraction of salary)	11.5%

Figure 7. 2019 nominal cost of turnover and present value perpetual cost of turnover

Turnover Costs		Perpetu	al turnover re	duction	
Faculties	2019 Cost	In Perpetuity	10%	25%	50%
Agr. & Env. Sciences	\$3,397	\$226,486	\$22,649	\$56,622	\$113,243
Arts	\$7,656	\$510,405	\$51,040	\$127,601	\$255,202
Dentistry	\$1,930	\$128,691	\$12,869	\$32,173	\$64,346
Education	\$2,217	\$147,788	\$14,779	\$36,947	\$73,894
Engineering	\$5,591	\$372,761	\$37,276	\$93,190	\$186,381
Law	\$1,544	\$102,962	\$10,296	\$25,741	\$51,481
Management	\$5,103	\$340,215	\$34,022	\$85,054	\$170,108
Medicine	\$28,122	\$1,874,791	\$187,479	\$468,698	\$937,395
Music	\$2,391	\$159,389	\$15,939	\$39,847	\$79,694
Science	\$7,921	\$528,064	\$52,806	\$132,016	\$264,032
Library Sciences	\$3,391	\$226,093	\$22,609	\$56,523	\$113,047
McGill Institution	\$103,651	\$6,910,053	\$691,005	\$1,727,513	\$3,455,026
TOTAL	\$172,915	\$11,527,698	\$1,152,770	\$2,881,925	\$5,763,849

As can be seen in Figure 7 above, the potential for cost savings by reducing turnover is considerable. While there is limited information with regards to how much on-site childcare can reduce turnover in parents with access to it, outdoor company, Patagonia, found that turnover was reduced by 25% for parents that took advantage of their on-site childcare versus employees that did not (World Bank 2017). This corroborates the evidence provided in the section on academic research that on-site childcare reduces turnover (Connelley, Degraff, and Willis, 2004). If McGill were able to achieve this, the present value of the cost savings would be in excess of \$2.8 million. Moreover, if the cost of turnover is higher, as is documented in other studies, this figure could reach \$5-\$6 million.

## Cost of a Lack of Diversity

At the start of our research, we suspected that there would be a cost associated with a lack of diversity that could be reduced by improving childcare offerings. In practice, however, this proved much harder to quantify. The authors believe there is a substantial economic value to gender diversity at McGill, but that unearthing the range of value will require further research. Academia has shown the benefits of workplace diversity, and in fact, McKinsey has shown that greater diversity improves financial performance for corporations (2018). In order to quantify the benefits of gender diversity in academia, we turned to a meta-study of academic papers that found a correlation (r=0.45, p=0.02) between greater gender diversity and the number of times a paper was cited (AlShebli, et al. 2018).

The above was a good starting point for a potential model, and further to that, we were able to find research that showed a correlation between higher earnings for academics who have a greater number of citations on their articles (Diamond Jr. 1986; Hamermesh and Pfann 2012). However, there is a dearth of research surrounding the effect that on-site childcare has on gender diversity. There has been some research indicating that on-site childcare improves gender diversity (World Bank 2017) – but these have been limited to research regarding a few multinationals, often for low-wage positions in developing countries. In short, there are likely significant monetary benefits – potentially in the tens of millions of dollars – to enhancing diversity through improved campus childcare at McGill; however, due to a lack of sufficient data, it is difficult to quantify exactly to what extent this is true.

## Total Potential Cost Savings

Figure 8 below shows the total potential cost savings from a reduction in both absenteeism and turnover due to an improvement in on-site childcare. As has been discussed in the previous subsection, while there may be significant monetary benefits to improving diversity through improved on-site childcare, these will not be quantified. Most importantly, with just a 10% reduction in absenteeism and employee turnover in those employees with children under 5, nearly \$3 million of present value cost savings can be realized.

Figure 8. Total costs and potential savings from absenteeism and turnover reduction

Perpetual Absenteeism & Turnover					& Turnover
	Tot	Total Costs Reduction			
Faculties	2019 Cost	In Perpetuity	10%	25%	50%
Agr. & Env. Sciences	\$8,488	\$565,857	\$56,586	\$141,464	\$282,929
Arts	\$21,220	\$1,414,689	\$141,469	\$353,672	\$707,344
Dentistry	\$3,991	\$266,089	\$26,609	\$66,522	\$133,044
Education	\$5,515	\$367,635	\$36,763	\$91,909	\$183,817
Engineering	\$13,838	\$922,539	\$92,254	\$230,635	\$461,270
Law	\$4,025	\$268,345	\$26,835	\$67,086	\$134,173
Management	\$13,091	\$872,702	\$87,270	\$218,176	\$436,351
Medicine	\$64,291	\$4,286,043	\$428,604	\$1,071,511	\$2,143,022
Music	\$6,054	\$403,570	\$40,357	\$100,893	\$201,785
Science	\$20,670	\$1,378,032	\$137,803	\$344,508	\$689,016
Library Sciences	\$7,053	\$470,199	\$47,020	\$117,550	\$235,099
McGill Institution	\$183,738	\$12,249,187	\$1,224,919	\$3,062,297	\$6,124,594
TOTAL	\$351,973	\$23,464,887	\$2,346,489	\$5,866,222	\$11,732,444

## Possible Funding Options

## **Key Takeaways**

- Funding will be required for both the initial investment into the project and ongoing operational costs
- 2. From an investment perspective, funding from each of the faculties and McGill at the institutional level offers the most direct benefit from investment
- 3. The initial investment required for the proposed 80-to-120-space project is unknown at the time of writing
- 4. Operational costs of the proposed 80-to-120-space project are expected to be \$1.3M to \$1.6M for the 80-space option and \$1.9M to \$2.4M for the 120-space option
- Operational costs to meet the childcare demand of McGill employees (estimated to be around 500 additional spaces) would be roughly proportional to the cost of the proposed project, with some like cost savings from fixed costs

#### Background

Funding for a new childcare centre would require an initial investment, followed by continued annual investment to support the ongoing operations. For the near-term project that is currently being planned, the operational costs of the daycare are estimated to be \$1.3M to \$1.6M for the 80-space option and \$1.9M to \$2.4M for the 120-space option. It could be expected that operational costs for a larger childcare offering that meets the demand of McGill employees would be roughly proportional to the aforementioned costs, with some savings on fixed costs. The initial cost to fund the proposed 80-to-120-space project is not known at the time of writing. The following section will discuss funding options for the initial investment followed by a brief discussion of funding options for ongoing operations.

#### **Initial Funding**

Initial investment for a long-term childcare solution that would meet the demand of the McGill community would be needed for items such as procurement, retrofitting the space and initial hiring, amongst other expenditures. While there are countless ways this could be funded, this report will focus on three main funding options. First, the childcare centre could be funded through funds from within McGill. Second, funds could be raised from the McGill community, either via donation or a loan scheme. Third, McGill could apply for loans from a financial institution.

Within McGill, there are several options for funding. We will discuss funding at the institutional level, at the faculty-specific level, and finally, on a project-specific level. First, the initial investment could be funded at the institutional level from endowment funds. This would likely require a non-trivial time investment from MAUT or other bodies, as the process requires several levels of commitment and approval, including from the initial donor. Second, the initial investment could be funded by dedicated investments from each of the faculties. While this investment would not be insignificant, given the opportunity costs of not having on-campus childcare discussed in the previous section, funding the initial investment would seem to be a worthwhile investment. Again, this would likely require a significant time investment to have all the faculties reach a consensus, perhaps even greater than an endowment-level effort. However, given the figures displayed in the section on the quantitative model, an investment from both McGill and each of the faculties seems the most sensible in terms of direct benefit.

McGill has a number of project-specific funds that are managed by various offices at the University. Of particular note, the Office of Sustainability has a Sustainability Projects Fund that offers seed funding to projects of up to \$400,000. To reach the highest funding bracket, projects must qualify as "large-scale, transformative projects that have a long-lasting impact on McGill's campuses" (McGill University). This is no small hurdle; however, improving childcare aligns with McGill's broader sustainability goals. The University plans to improve its Sustainability Tracking, Assessment & Rating System (STARS) score from the Association for the Advancement of Sustainability in Higher Education (AASHE) from a gold to a platinum rating by 2030 (McGill University). If a new childcare facility was created with the intention not only of social and economic sustainability, but also environmental sustainability, this could improve the chances of receiving funding.

The initial investment for a new childcare centre could also come through fundraising or investment from outside the University's coffers. Universities have long used fundraising to secure investment in university initiatives; however, it is important to note that such donations are often made with students in mind, whereas childcare needs would be disproportionately felt by university staff and faculty. Fundraising would also take a dedicated effort, coordination with many different entities within the University, and finding a significant donor would likely be difficult given the relatively narrow focus. To that end, fundraising might be best served as part of a push to promote gender diversity or social sustainability as a whole.

Conversely, a more novel approach to funding could be utilized. In 2019, Concordia University issued an senior unsecured \$25 million sustainable bond to fund its new Science Hub. While Concordia was the first Canadian university to issue a sustainable bond, Victor Ferreira of the Financial Post noted that "the country's largest institutional investors more than quadruple[d] their output in social and eco friendly [sic] bonds in 2018" (2019). If McGill were to issue a bond to fund the project, and potentially other projects of a similar ilk, the project costs could be spread out over a much longer period of time, which would reduce the strain of finding the initial funding, especially if there are significant construction or procurement considerations. It should be noted that issuance costs of the bond could be significant, and for this reason, this option might make more sense if it is bundled with other like-minded projects that require funding.

One final option for funding that we'll discuss here would be obtaining a traditional long-term loan from a financial institution. While it is the least innovative of the ideas discussed in this paper, a loan would likely be a relatively sound option for a number of reasons. First, it would likely require the least amount of time, in terms of obtaining funding, from the project's managers. Second, it would likely require fewer hurdles in terms of bundling the project with other initiatives, meeting the demands of specific project funds, or approval from different levels of the University. Third, interest rates are at historic lows right now and have been for a period of roughly 10 years. In the long term, obtaining a loan at this time to finance a significant portion of the initial investment could be timely.

## **Ongoing Funding**

Vehicles for the ongoing funding of the childcare centre would likely be similar to some of those mentioned above. In particular, funding received from each of the faculties or McGill itself would be helpful to the childcare centre's success long term. If the project's managers were to follow the strategy of fundraising, the added bonus would be that the funds could be deployed as part of the University's endowment and realize some growth over time, which would be crucial in indexing the costs against the inflation of costs. What would be markedly different about the ongoing funding is that the childcare centre could benefit from tuition fees from the students who attend. It is likely that some contribution from parents, especially those who are financially capable, would be necessary for the ongoing operations of a childcare centre.

## Conclusions

The effects of a shortage of on-site childcare spots available at McGill pervade many different issues. In particular, this affects not only the issue of fairness, diversity and the advancement of women, but also psychological safety for parents and cost savings for the University. Ultimately, McGill's on-site childcare does not meet the standards of other universities in terms of the number of places per student staff and faculty. If the University were to make efforts to improve the number of childcare spaces to meet the demand of its employees, it could realize quantifiable present value cost savings in the millions of dollars. This is irrespective of other aspects that provide obvious benefits, but are much more difficult to quantify, such as improving diversity. In every aspect studied in this report, the value of providing adequate childcare is evident across a broad spectrum of issues.

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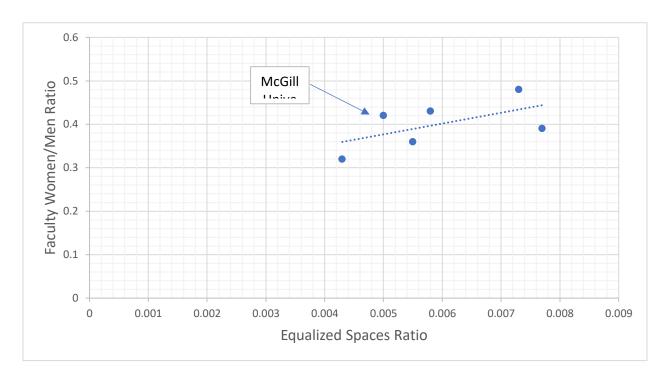
# Appendix

# List of Institutions Studied in Benchmarking Section and Select Equalized Ratios

Institution Name	Country	Equalized Ratios
University of California - Los Angeles	United States	0.008
University of California - Berkeley	United States	0.004
University of Michigan - Ann Arbor	United States	0.003
University of Virginia	United States	
Georgia Institute of Technology	United States	
University of North Carolina - Chapel Hill	United States	
University of California - Santa Barbara	United States	
University of Florida	United States	
University of California - Irvine	United States	
University of Wisconsin	United States	
University of Illinois	United States	
University of Iowa	United States	0.019
University of Texas - Austin	United States	
University of Washington	United States	0.006
University of Georgia	United States	
Stanford University	United States	0.02
University of British Columbia	Canada	0.007
University of Toronto	Canada	0.006
University of Alberta	Canada	
Imperial College London	UK	0.005
University of Manchester	UK	0.003
École Polytechnique Fédérale de Lausanne	Switzerland	
Lund University	Sweden	
University of Amsterdam	Netherlands	
Leiden University	Netherlands	0.002
LMU Munich	Germany	
Technical University of Munich	Germany	
University of Copenhagen	Denmark	
KU Leuven	Belgium	0.008
University of Vienna	Austria	0.001
Australian National University	Australia	
University of Melbourne	Australia	0.002
The Hong Kong University of Science and Technology	Hong Kong	

University of Cape Town	South Africa	0.002
Tel Aviv University	Israel	

## Scatterplot of Gender Diversity and Equalized Ratio at Select Institutions<sup>1</sup>



## A letter from McGill Associate Professor, Judith N. Mandl

Dear Mara,

As you might remember from my maternity leave request from a few months back, I will be having a child at the end of March (my first). I fully intend to be back in the lab as soon as I am able to because I very much want to continue my research. Thus, I was really dismayed to find out that the McGill daycare wait list is currently in excess of 2 years (and there are no guarantees or firm estimates). Although there is a centralized system through which it is

<sup>&</sup>lt;sup>1</sup> The institutions included are limited by the lack of readily available information on all the variables required for this analysis. They include the University of British Columbia, the University of Washington, McGill University, the University of California - Los Angeles, the University of Toronto, and the University of California - Berkeley

possible to apply for day care positions throughout Montreal, and I have been putting my name on wait lists where ever is reasonable (including searching out more costly private options including hiring a nanny, all of which is time-consuming), I wanted to voice the concern that it is a substantial burden not to have a definite solution for child care, and that there seems to be very little university support in this regard. Nor is it clear to me how I can make my voice heard at the university level such that this is a concern that is taken into consideration (and I am certainly not the only one grappling with this issue, given my discussions with colleagues). It seems that providing help with childcare is a very simple means for the university to provide support to faculty, and hence facilitating their ongoing productivity. If you do have any thoughts on who I might voice this to, I would very much appreciate the advice.

best regards,

Judith