Presentation to Symposium on Inequality in Canada, Oct 30th, 2015.

I would like to start by thanking Professor Robert Brym for inviting me to talk at this inaugural symposium honoring the great sociologist S. D. Clark about the role of early childhood education and care in fostering greater equality in Canadian society. I am an economist, teaching in a Management Department at University of Toronto Scarborough, and my research area is on the economics of early childhood education and care services in general, and on women, families and child care policy in particular.

Today I want to address the potential role of early childhood education and care in fostering both gender equity and equity of child and family outcomes. And I want to assess how good a job early childhood education and care policies and services are doing in fulfilling this potential. I will suggest some policy directions that I believe will take us towards these goals. Now that we have a new federal government that will, within less than 100 days bring together provincial, territorial and indigenous representatives to discuss constructing a National Framework for Early Learning and Child Care, perhaps there will be a vehicle to promote positive reforms, a vehicle on a road that has been blocked since 2006.

The title of this afternoon’s session is “Gender Equity”, but early learning and child care services have important effects on children’s development and family incomes as well as on women’s roles and position in the economy and society. I have stretched my mandate in this talk in order to talk about three aspects of equity as it relates to early learning and child care – gender equity, equity in the development of children from different backgrounds, and increased equity in family incomes. In my mind, good early childhood education and care policies have to contribute to all of these forms of equity in order to be acceptable.

The essential argument of this talk is that even though there has been dramatic expansion in the use of early childhood education and care services over the last 20 years and more, our progress on gender, child and family equity has been disappointing. While there is some good evidence on reduction in gender inequities in the workforce, motherhood still has important negative effects on women’s incomes, labour force attachment, and on women’s position in society. And, while there is some evidence of moderating trends in child poverty, the socio-economic gradient in child outcomes is still very strong, along with inequalities in family incomes. We can do better, and so I will discuss policy reforms that will expand the positive effects of early learning and child care on equity in Canadian society.

My agenda:

Look at evidence of the expanded use of ECEC services over the last 40 years and particularly the last 20 years

Is there evidence of reductions in gender inequity over the last period of time

Policies that might improve the gender-equity impact of early childhood education and care services.

Evidence about the evolution of child and family inequality in Canada. We are not doing well.

In trying to figure out why….look at evidence about whether children from low-income or relatively disadvantaged families are able to access early childhood education and care services.

ECEC policies that can help reduce child and family inequalities.

**The Expansion in Use of ECEC**

Have a look at this slide.

Over 40 years ago, in 1973, only 7% of preschool children with employed mothers used licensed centre care or nursery school care. And only 3 out of 10 mothers with young children were employed. So, not many children used any kind of non-parental care, and nearly everyone cared for outside their family used informal types of child care.

Fast forward to twenty years later, in 1994-95, a much larger proportion of mothers were employed or studying, but still only a smallish minority (just under 19%) of Canadian preschool children with employed or studying mothers used regulated early childhood education and care services as their primary form of child care. About 45%, well over twice as many children, used unregulated child care, either paid care by a non-relative or care by a relative.

However, by eight years ago (2006-7), over 40% of all preschool children used regulated child care as primary when the mother was employed or studying (and this number would rise to nearly 50% of these children if kindergarten were included as a form of ECEC). Unregulated care by a non-relative had shrunk by more than half. There are many reasons for this, with Quebec’s major child care reforms (offering regulated child care at $5 per day, and free full-day kindergarten for 5-year-olds) being most important. However, the use of regulated child care dramatically increased in Canada outside of Quebec as well, for children with a mother employed or studying.

 The trend has continued in the latest data in 2010-11. Now over 70% of mothers with preschool children are in the workforce. And, 46% of preschool children (1 to 5 years of age) with employed or studying mothers in Canada use regulated child care services, including nursery schools and preschools. Use of unregulated care in total is down to about 22% of these children.

The point of these observations is to say that many Canadian families have embraced regulated early childhood education and care services as their primary mode of care for children while parents are employed or studying. If early childhood education and care services are failing to contribute enough to an equality agenda, it is not due to a parental rejection of regulated care.

Furthermore, the increase in use of regulated care is spread across all kinds of families, not just urban, married families, born in Canada. This slide shows how four types of families all increased their use of regulated child care in the twelve years from 1994-5 to 2006-7 – immigrant families, families headed by a lone mother, rural and small town families, and official language minority families (families in English Canada who primarily speak French and families in Quebec who primarily speak English). Apart from lone mother families who were already big users of licensed child care, each family type more than doubled the percentage using regulated care over this period.

**Gender Equity Issues**

Rosalie Abella is now a justice on the Supreme Court of Canada, but in 1984, Justice Abella was the head of the Royal Commission on Equality in Employment. The Commission’s report famously wrote that “Child Care is the ramp that provides equal access to the workforce for mothers.” More affordable, universally accessible and high quality child care has been a central demand of those fighting for women’s equality since at least the Royal Commission on the Status of Women in 1970 called for a National Day Care Act. In 1986, the Task Force on Child Care established by Pierre Trudeau’s Liberal federal government (commonly called the Katie Cooke report) called for a universal system of affordable child care services to be established in Canada as a matter of urgency.

In the book chapter that will come out of this symposium, I review the evidence on the effects of more affordable early childhood education and care services on the labour force participation and hours of work of mothers of young children. This evidence supports Justice Abella’s observation; more affordable child care helps mothers to enter or stay in the labour force. The size of these effects will vary depending on current labour force participation and policy design.

If early childhood education and care services contribute to gender equity, by providing a ramp into employment, then we might expect important and visible reductions in gender inequality to have occurred in the last 20 years. As the use of early childhood education and care has grown, has gender equity improved?

Without doubt, there has been a massive influx of women into the workforce. In the 1970’s, less than half of women 25-54 were in the workforce. Now, this number is over three-quarters. In the 1970’s, only about 3 out of 10 mothers with children under 6 were in the workforce. In the last 20 years, there has been continuing increase in these numbers, from over 6 in 10 in the early 1990s to over 7 in 10 now.

And there have been dramatic increases in the educational attainment of women. Women 25-54 are now more likely to have post-secondary education than men. And women are spreading out in terms of the types and specializations of education to cover the entire range of professions and highly-skilled occupations.

But, despite recent gains, it is still true that women are concentrated into a small number of occupations in the workforce (most of them being the so-called “helping occupations”). Two-thirds of female workers in 2009 were in four broad occupations: teaching, nursing and health care, office and administrative work, sales and service. Less than one-third of men were in these same four broad occupational groups. And, of course, these groups include a lot of fairly low-paid occupations.

There has been gender-equalizing progress in wages, as there has been in employment and education. In 1988, the average hourly wage of full-time female workers was only 76% that of men. By 20 years later (in 2008), this had risen to 83%, and by 2011 to 87%. An important gender wage gap exists, but it has been narrowing. Depressingly, even for new graduates, there is still a gender wage gap between 7% and 15%.

Especially important for this discussion, an important part of the gender gap in pay is what is called the family gap (sometimes called the motherhood gap in pay) – which is the difference in hourly pay between women with children and women without children. Women with children who are in the workforce earn less than women without children who are in the workforce. The overall motherhood gap in annual income for full-time women workers with the same level of education and the same amount of job experience is over 17%. Of course, some of this is due to different hours of work, in different occupations, in different industries, but even when adjustments are made for these factors, there is an 8% gap in income between women who have children and work full-time and women who have no children and work full-time.

Zhang, writing in 2008, finds a strong time-pattern in the motherhood pay gap. The size of the gap is 30 to 40% during the year a child is born and very substantial in the following year. The motherhood gap in pay only disappears as of the seventh year after the child’s birth. The gap is much bigger for working mothers who change employers after the birth of a child.

There has not been a great deal of research on the motherhood pay gap in Canada, but it is believed to be strongly related to the burden of child rearing that falls particularly on women and affects many of their employment-related decisions. Women with children often take jobs that permit them to have the main responsibility for child rearing – often these are part-time jobs, self-employment, contractual and short-term employment, jobs with flexibility, and not jobs with unavoidable work-related responsibilities. Women in Canada with children spend, on average, more than 50 hours per week caring for them, while men on average put in less than half of this amount of time.

In the U.S., there is evidence of a substantial rise over time in men’s hours of child care. In Canada, the change in fathers’ time has not been as large.

Overall, we can summarize by saying that there is some substantial progress over time on gender inequality. Especially for women with young children, however, there is still substantial employment and wage inequality associated with their roles in the family.

Look at this slide…

**Gender-Related Child Care Policy**

- There appear to be two main factors that affect the impact of children on women’s status in the labour force. One is the affordability of early childhood services. The second is the degree to which children are regarded as women’s work, rather than the work of both parents.

- The cost of child care for preschool children is high. Prof. Michael Krashinsky and I have been working on developing accurate and useful measures of the affordability of regulated child care in Canada. The most relevant measure – something we call the LEAM for Low Earner Affordability Measure. What % of the lower earner’s potential financial contribution to the family would be eaten up by the costs of regulated child care.

Not based on current earnings but the potential earnings she could have if using dependable child care. Net of taxes and benefits.

- According to our research, in two-parent families on average over 40% of her net after-tax contribution to family income would be eaten up paying child care costs. No wonder child care costs continue to be a barrier to full participation in work – they cut women’s potential contributions to family income almost in half. This is especially true for women whose earnings are low because of education/training, immigrant status, First Nations status, ethnic background or other factors.

- To a great extent, the weak position of mothers in the labour force is explained by the fact that they nearly always have primary responsibility for child rearing and for making the labour force accommodations that this responsibility requires. If this burden were, across all of society, more equally shared between men and women, mothers would not face the same forms and degree of discrimination they now do, and employment situations would have to adjust for the expectation that all parents need to spend some time and energy caring for children. Schools, day care centres, and all of society’s institutions need to encourage more fathers to take much more responsibility for child-rearing. The evidence suggests this is beginning to happen.

**-** One obvious way in which to encourage fathers’ participation in child rearing from early in children’s lives is for the rest of Canada to imitate Quebec in introducing “daddy weeks” into parental leave arrangements. Daddy leave are weeks reserved for the “other” parent – the one not taking the bulk of the parental leave. Generally this is the father. Daddy weeks are available on a “use-it-or-lose-it” basis; it is not compulsory that fathers take them, but they are not transferable to the mother. In Europe and Quebec, these type of arrangements have been quite successful in getting fathers to take a larger share of parental leaves.

- The new federal government has proposed increases in total maternity and parental leave to 18 months from 12 months, with no increase in benefits. This kind of reform might be popular with parents, because parents do appreciate spending time with their children. However, if workers have rights to long job-protected leaves, and most of these long leaves are taken by mothers, this will further encourage employers to avoid hiring young women of child-bearing age into responsible positions. Recent research has found that long job-protected leaves can have important negative effects on mothers’ wages.

- It is worth investigating whether Swedish policies that permit parents to combine some of their parental leave with employment has positive effects on children while avoiding negative effects on mother’s earnings. This plan allows either parent to reduce hours of work in the early years of a child’s life to six hours per day and supplements earnings with parental leave benefits.

**Is there Progress in Reducing Child and Family Inequalities?**

What is the state of child and family inequality in Canada? Are child outcome gradients getting flatter? Are family incomes rising for low-income families, those with low levels of education or facing some other sort of disadvantage?

There is a gradient in children’s outcomes that is related to socio-economic status (an SES-related or income-related gradient). Another way of putting it: there is a child outcomes gap between children in families at different levels of SES.

 This pattern is not unique to Canada; it is well known in research in most advanced economies. There are substantial gaps between children from different backgrounds across multiple domains including academic achievement, verbal ability, intelligence, vocabulary and literacy. These associations are persistent in the medium to long term, with low income during childhood predicting adult outcomes including earnings, working hours, use of social assistance, and health.

It is less clear what the mechanisms are by which income affects children’s development, but there is substantial agreement that the quality of the care that children receive both inside the home and in child care services outside the home are two of the important factors; both of these are related to family income.

Recent research (Bradbury, Corak, Waldfogel and Washbrook, 2012) finds that, when children are categorized into SES groupings – low, middle and high, Canada has narrower socioeconomic status-related gaps between low and high SES in child outcomes at age 5 than the US and UK. This includes both cognitive/language outcomes and socio-emotional/behavioural outcomes. However, this is not because of a smaller gap between the bottom and the middle.

In fact, there are substantial average differences between children from low-SES families and children from mainstream backgrounds in each of the four countries examined – Canada, Australia, the U.S. and the United Kingdom. There is a substantial gap in child abilities by the time compulsory schooling starts – about 1/3rd to ½ of a standard deviation gap between the bottom and middle on different measures of cognitive and language abilities. There are smaller, but consistent differences between children from low-SES and mid-SES backgrounds on behavioural indexes (hyperactivity/inattention and conduct).

The evidence in that study is that SES gaps in child outcomes do not increase over the children’s lifetimes, but neither do they narrow. In other words, there is no convergence of outcomes as children age; the SES gradient is maintained.

If we look at family incomes, there is a measure of progress that is familiar – child poverty (or more accurately, poverty amongst families that have young children). Although imperfect, it gives us a sense of whether there has been progress in raising family incomes for those who have children and have low incomes.

In their most recent report card in 2014, Campaign 2000 noted that the level of child poverty in 2012 was 19.1% in Canada, up from 15.8% in 1989, but down from 22.3% in 2000. The Campaign 2000 report uses the Low Income Measure (LIM), which is a measure of relative poverty, valuable for charting social exclusion and inequality.

So, there is some evidence of improvements in child poverty since the late 1990’s. This is reaffirmed by Bouchard (2013) who emphasizes the dramatic decline in poverty since Quebec’s child care reforms were adopted in 1997.

We know that there is considerable research evidence that early childhood education and care services have particularly strong positive effects on children from more disadvantaged and low-income backgrounds. In this context, it is somewhat puzzling that the recent expansion of early childhood education and care services in many countries has failed to narrow income-related gaps in child outcomes; socioeconomic gradients in cognitive and social outcomes appear to be either larger or unchanged compared to the recent past.

**Do Disadvantaged Children Gain Access to ECEC Services in Canada?**

We use education as a marker for family disadvantage. Families with mothers who have a high school education or less are more likely to have low-incomes and the family environment is likely to be less rich in resources for the child.

In Canada, are families who have low levels of education likely to be using regulated child care? In other words, does child care act as a ramp into the workforce for mothers in these families, permitting them to earn somewhat higher incomes. Given that there are child care subsidies in all provinces except Quebec targeted at families with relatively low incomes who are willing to work or study (apparently about $2 Billion per year), we might expect the answer would be yes.

The conventional wisdom about child care use is that both the poor and the rich have access to child care. Therefore, a graph of the use of child care drawn against family income would have a U-shape. Families with low incomes are able to afford to use regulated child care because of the subsidy system (even if it is imperfect). And families with high incomes are able to afford to use regulated child care because they are affluent. This way of thinking leads us to believe that the affordability problem is centered in middle-income families facing high and unsubsidized costs of regulated child care.

What does the most recent data say? The most recent Canada-wide data available is from the Survey of Young Canadians in 2010-2011.

We can break down the use of child care according to the mother’s education level and by whether all parents in the family are employed or studying. When we do that, we find that even for employed or studying parents, when the mother has only a high school education, only 31% use regulated child care (even though most might be eligible for provincial child care subsidies). When the mother has a college diploma or certificate and parents are employed or studying, 47% of children are in regulated care. For a bachelor’s degree, this rises to 50%, and for a post-graduate degree to 61%. In relation to mother’s education, a graph of regulated child care use would not have a U-shape.

Even this description is a bit misleading about use patterns of child care however. What’s missing is that only about half of mothers with a high school education and a child between 1 and 5 years of age are employed or studying. That compares to about 70% of mothers with a college certificate or diploma, about 75% of those with an undergraduate degree and so on.

The vast majority of families with one parent at home do not use regulated child care. Since many families with mothers having high school education or less have a parent providing care, not very many of their children get access to any potential developmental benefits that regulated child care might have.

In fact, in total, less than 20% of the over 400,000 children with mothers having a high school education or less use regulated child care. Sixty-seven percent of these children are cared for by their parents as the primary type of care. And this despite the fact that each province (except Quebec, which has an alternative form of subsidy) has a system of child care subsidies designed to encourage these mothers to be employed or get training and to allow their children to gain access to the potential developmental benefits of regulated child care.

In contrast, for families in which the mother has a university degree or post grad degree, 45% of all of these children (irrespective of employment status of parents) use regulated care.

The evidence seems clear; the child care subsidy system is not achieving its goals. The child care subsidy system is not able to provide persuasive incentives to get enough low-educated parents to work and for their children to get exposure to potentially positive early childhood experiences. Apart from kindergarten attendance, most children who are likely to be disadvantaged do not gain access to ECEC services in Canada.

**ECEC Policies to Reduce Child and Family Inequities**

There is a great deal of evidence that suggests the possibility of positive effects of early childhood education and care services on children, and particularly large positive effects on children suffering from some sort of family disadvantage. However, a review of this research suggests some important lessons:

*Quality and type of care matters*

Generally speaking, the quality of early childhood education and care provided is key to the magnitude of its effects on children’s development. This conclusion comes from a multitude of studies. The type of care also matters, with centre care having positive effects on language and cognitive development and regulated family care not having these positive effects.

*Effects on parenting can matter a lot*

When studies find negative effects of ECEC, these can sometimes be traced to the changed child-rearing behaviours of parents when child care arrangements change.

*Characteristics of later schooling/care matter*

Longer-term effects of early childhood experience partly depend on classroom experiences during at least the first years of school.

*The effects depends on the nature of the alternative care that is replaced*It has often been said that this is one main reason why developmental effects on low-income children are stronger than for higher-income children. For low-income children, access to centre-based ECEC of reasonable quality may be replacing care by a relative, neighbour or parent, when that alternative care may not be done with motivation and enthusiasm, but because better alternatives are not available or affordable.

In summary, there are good reasons to believe that some forms of centre-based child care/preschool/prekindergarten can have important positive effects on children, whether these children are disadvantaged and low-income and from single-parent families or whether these children are from middle-income and 2-parent families. The effect sizes appear to be dependent on several factors including the quality and type of child care/ early education they receive, and the quality (support and stimulation) of the care the children would have alternatively received (often related to the family situation of the child) if they had not been enrolled in such a program. The age, and perhaps the gender, of the child moderates both of these factors, and the persistence of improved child outcomes will depend on later classroom experiences.

*Socioemotional/behavioural effects*

Intensive early intervention projects such as Perry Preschool, Chicago Child-Parent Centres, and Abecedarian have had both strongly positive cognitive and language effects on children, but have also had strongly positive socio-emotional or behavioural effects. In fact, James Heckman and his colleagues (Heckman, 2007; Heckman et al., 2006; Heckman et al., 2014; Cunha and Heckman, 2009) have argued that these non-cognitive advances – the ability to concentrate, the emotional disposition to share and co-operate, reductions in aggressive behavioural tendencies, abilities to self-regulate – are of key importance to beginning a virtuous cycle of learning ability.

However, there have been frequent suggestions that child care, particularly when it is of less than adequate quality, can have negative effects on these non-cognitive traits. For instance, the NICHD-ECCRN (2006) summarized the findings of the NICHD study up to that point. Amongst other things, it said that, amongst children using ordinary child care of different kinds in the U.S., better quality of child care was related to better socioemotional and peer outcomes at some ages. However, more child care hours over the child’s life predicted more behaviour problems and conflict, as reported by care providers. And although more time in centre-based care was related to higher cognitive and language scores, it was also related to more problem behaviours and fewer prosocial behaviours, as reported by care providers.

 Kottelenberg and Lehrer find that negative effects are concentrated in children who begin the use of child care at young ages (2013b). In fact, there are positive developmental effects found for children above 3 years of age. Second, as described above, the authors find that negative socio-emotional and behavioural effects are found only for boys. And further, that these negative effects appear to have been fostered by changes in parenting practices and home environments of parents with boy children. Further, the authors find positive effects for children who are most disadvantaged.

 In a companion analysis (2013a), they find that the average effect of child care across Canada including Quebec is positive for motor and social development and is not significantly negative for any socio-emotional or behavioural indicator. Kottelenberg and Lehrer’s results over this group of articles make it clear that when it comes to assessing the impacts of early childhood education and care services on children, the details matter enormously. Positive effects and negative effects are both possible, and a mix of the two is, perhaps, likely, depending on quality and type of care, child and family background, gender, child age, and the impact of new programs on parenting behaviours.

**Policy Reform Directions for Early Childhood Education and Care Services**

* If early childhood education and care policy is going to continue to child and family equity, it should improve the affordability of child care. The cost of child care continues to be an important barrier to full labour force attachment, especially for women whose earnings are low because of education/training, immigrant status, First Nations status, ethnic background or other factors.
* Child care subsidy arrangements in most of Canada – designed to encourage low-income families (especially single parents) to be employed or in training/a student and to give their children access to good quality early childhood education and care services – do not appear to be working. Less than 20% of children in families in which the mother has a high school education or less use regulated child care. Quebec’s child care policy offering very low fee regulated child care on a universal basis appears to have been much more successful than low-income child care subsidy policies in encouraging mothers with low levels of education into employment and the use of child care. The same experience is true with kindergarten in other provinces.
* Quebec can teach us some lessons by positive example (labour force effects of low-fee regulated care, the benefits of “daddy leave”), but it can also teach us some lessons by negative example. First, when major new early childhood education and care programs are rolled out, it is important to ensure that they especially benefit those who are disadvantaged. Any policy that focuses on lowering current child care prices will initially benefit those currently using regulated child care. As we have seen, this is especially those who are in the middle and upper ranges of the income distribution. Without special measures, and especially when there are budget limitations on serving all families, those who need assistance less may be those who gain the bulk of benefits.
* Another lesson from Quebec: It is difficult to maintain and improve quality when an early childhood education and care system is being rapidly expanded. Quebec’s early childhood education and care system is now a very popular institution and a real acquisition for Quebec parents. However, the prevailing quality of services is not adequate. The not-for-profit Early Childhood Centres (called CPEs) are often of good quality and good places for children to grow and develop. The average quality of the for-profit centres whose spaces are rented by the government because there are not enough CPE’s are much lower, and of problematic quality. Family day care has filled many of the supply needs of a rapidly growing ECEC system in Quebec, and is conveniently available especially in small cities, towns and rural areas. However, the amount of early childhood training and knowledge of family day care providers is minimal; most studies of quality in family day care finds that it is not of the “educational quality” that the Quebec system anticipates. My advice to the rest of Canada would be to build out new ECEC systems more slowly, but build it with good quality services that will serve as the foundation of a system that will last, and which parents and governments will celebrate.
* Parenting and good quality early childhood education and care services need to be complements in children’s development. If ECEC reforms are paired with reduced interest in and attention to parenting, the positive effects of ECEC will be moderated or nullified. If ECEC reforms stimulate an active partnership between parents and child care teachers, their positive effects will be multiplied. This implies a number of things for good early childhood policy. In particular, it implies that early childhood services need to pay attention to parent involvement and encouragement of positive parenting.
* Further, it is important that ECEC policy reforms increase parental time with children as well as increase parental access to good quality services. In particular, I believe that policies should be designed so that the typical child care day is not too long, especially for very young children.

To return to the beginning, I believe that even though there has been dramatic expansion in the use of early childhood education and care services over the last 20 years and more, our progress on gender, child and family equity has been disappointing. While there is some good evidence on reduction in gender inequities in the workforce, motherhood still has important negative effects on women’s incomes, labour force attachment, and position in society. And, while there is some evidence of moderating trends in child poverty, the socio-economic gradient in child outcomes is still very strong, along with inequalities in family incomes. We can and should do better.