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Pre-school education – a high return investment (topic 2)

A Chinese philosopher Laozi said that “Give a man a fish and you feed him for a day. Teach him how to fish and you feed him for a lifetime”. This sentence also expresses my point that helping the poor doesn't always have to be about their immediate needs but how to help them out of this predicament. Giving the poor a decent living cash is undoubtedly costly so it might not be best way. However, in my opinion education is the best way to lift the poor out of poverty because it might be not noticeable for a short time, but it benefits several generations for long term.

The Canadian government seems start noticing this also. In 2021 election most parties mention the childcare problem. They aim to reduce the cost of daycare to an average of \$10 a day. Some parties have promised to spend tens of billions of dollars over the next few years to do this. One might wonder why early education is so important. Why is the government spending so much money to reduce the cost of childcare, and why isn't that money directly subsidizing the poor? This can directly benefit them because they can buy more books, food, clothes for their children. It seems to me that people tend to think this way without taking externalities into account. People ignore the positive

externality of education. From an economic point of view, if we only consider money, we have not achieved social efficiency.

First, we do some calculations to demonstrate the benefits of an early education policy. Suppose a family is a single mother living in Ontario with a 3-year-old child. The data obtained from the Canadian government's official website is that if the family's adjusted income is less than \$32,797, then their annual subsidy is up to \$6,997 per year. So, what is the price of unsubsidized childcare? According to the data given by the website arrivein, the cost of full day childcare in Ontario is between \$781 and \$1,299 per month, or \$9,372 to \$15,588 per year. Assuming the mother is taking care of the child full time, that means there is no income, so she won't put the child in childcare because she can't afford it. With a \$10 a day policy, the maximum annual cost is \$3,650. This mother can afford childcare with subsidies. Assuming the child is in daycare all day, the mother has leisure time when she does not need to take care of the child. It also means mothers can go to work. At Ontario's minimum wage, a mother working 8 hours a day, 5 days a week for 50 weeks a year would earn about \$31,000 before tax, plus subsidy after childcare costs.

Childcare policies are not only about income, but also increase the likelihood that they will no longer be poor. A study called Benefits of Compensatory Preschool Education by W. Steven Barnett of the University of Wisconsin Press confirms this. An experiment called the Perry Preschool Project began in 1962 in a black community in Ypsilanti

Michigan. In the experiment, children from low-income families were randomly divided into experimental group and control group to test the effect of preschool education on children. To exclude other factors, the experimental group and the control group had similar numbers of children, average IQ, number of children in the family, years of parental education, number of single-parent families, male-to-female ratio, and father's working ratio were all very similar. of. Except that the mothers in the control group worked 20% higher than the experimental group, but I agree with the report that this is not a big effect. They don't even have to pay for any preschool education, so I think the experiment is well-designed and convincing.

Table 7
Characteristics of Treatment and Control Groups at Study Entry
(standard deviations in parentheses for means)^a

Characteristic	Treatment Group (N = 58)	Control Group (N = 65)
Age in months ^b	42.7 (6.2)	41.9 (5.9)
IQ (Stanford-Binet)	79.6 (5.9)	78.5 (6.9)
Number of children in family	4.9 (2.4)	4.9 (2.7)
Mother's years of schooling	9.5 (2.4)	9.4 (2.0)
Father's years of schooling	8.4 (2.3)	8.8 (2.5)
Percent female	43%	40%
Percent two-parent families	55%	51%
Percent receiving welfare	57%	45%
Percent with working mother	13%	33%*
Percent with working father	48%	45%

Source: Weikart, Bond, and McNeil 1978

Table 8
Selected Findings of the Perry Preschool Study^a

Outcome	Treatment Group (N)	Control Group (N)	p ^b
Intelligence Test Scores			
At study entry	79.6 (58)	78.5 (65)	—
After 1 year	95.5 (58)	83.3 (65)	.001
Age 6	91.3 (56)	86.3 (64)	.024
Age 7	91.7 (58)	87.1 (61)	.040
Age 8	88.1 (55)	86.9 (62)	—
Age 9	87.7 (56)	86.8 (61)	—
Age 10	85.0 (57)	84.6 (57)	—
Age 14	81.0 (54)	80.7 (56)	—
Achievement Test Scores			
Age 7	97.1 (53)	84.4 (60)	.216
Age 8	142.6 (49)	126.5 (56)	.079
Age 9	172.8 (54)	145.5 (55)	.042
Age 10	225.5 (49)	199.3 (46)	.040
Age 14	122.2 (49)	94.5 (46)	.003
Age 19	24.6 (52)	21.8 (57)	.059
School Success (to age 19)			
Years spent in special education	16% (54)	28% (58)	.004
Classified mentally retarded	15% (54)	35% (58)	<.05
Graduated from high school	67% (58)	49% (63)	<.05
Received post-secondary education	38% (58)	21% (63)	<.05
Economic Success (at age 19)			
Employed	50% (58)	32% (63)	<.05
Median earnings ^c	\$3,860 (58)	\$1,490 (63)	.061
Self-supporting	45% (58)	25% (62)	<.05
Receives welfare	18% (58)	32% (63)	<.05
Social Adjustment (to age 19)			
Arrested	31% (58)	51% (63)	.021
Average number of arrests	1.3 (58)	2.3 (63)	.001
Average number of teen pregnancies	.7 (25)	1.2 (24)	.076

Sources: Statistical appendices in Schweinhart and Weikart(1980) Berreuta-Clement et al. (1984)

The experimental results convincingly demonstrate the benefits of preschool education. Children in the experimental group had an average of about 12 higher IQs after one year of preschool than those in the control group, although the gap was almost non-existent after age 14. But from the age of 7 to 14, the children in the experimental group had significantly higher Achievement Test scores compared to the children in the control group. Moreover, as they grew up, the children in the experimental group had significantly higher employment rates, higher incomes, less receiving welfare, lower arrest rates, etc., than the children in the control group.

One might ask why is early education so effective? Assuming that children are not

receiving early education and childcare when they are 2 to 5 years old, then they will most likely stay at home, maybe they will accompany their parents to work, maybe they will be playing with the neighbor's children all the time. When they reach the age of primary school, these children will probably not adapt to the feeling of learning, because they have no awareness and habit of learning when they are very young, and they will have difficulty accepting learning. Most have this consensus that our ability to learn is particularly fast when we are young. And childhood experiences often affect us throughout our lives. So what are the advantages for children who go to childcare? One is that more time for parents means more income, which also means better family situations and more self-confidence for children. For children themselves, childhood inspirations and interests plant a seed in their hearts. Acceptance ideas are always deeply rooted in childhood. Understanding good and evil at an early age can greatly increase crime rates in adulthood. In the process of happiness and exploration, it will also make them fall in love with learning new knowledge, and it will also change the concept of some parents that learning is very important and beneficial. This could also explain why the children in the experimental group had a higher graduation rate.

We are now seeing all kinds of benefits from preschool education. One might ask, these are for the poor who enjoy low-cost pre-school education. In order to subsidize their expenses, the government will undoubtedly spend more money. Will this increase the burden on society? I think it will become a burden for some societies in the short term, because the cost of childcare is reduced, institutions may not be profitable, which means

that the government needs to subsidize these institutions. But in the long run, I think society will move closer to the point of social efficiency. This is because preschool education reduces the crime rate and increases the employment rate, which not only saves the cost of maintaining law and order, but also increases the self-sufficiency rate, which means that they are out of poverty and no longer need to take social subsidies. In same study of W. Steven Barnett, it shows the cost and benefit of the Perry Preschool Project. They calculated the cost of preschool programs, the cost of kids getting into college, the benefits of reduced crime rates, the benefits of reduced receiving welfare, and more. Surprisingly, for the society it not only covers the project cost but also brings the same net benefit as the project cost. And it eases the burden on other taxpayers because more people become self-sufficient which means no government subsidy is needed and the government can reduce taxes. For the participants they are better off because they are educated and have a job, which is undoubtedly higher than the subsidy. And this benefit is not only good for them but also for generations to come, as their parents are lifted out of poverty. It's a virtuous circle.

Now we have fully demonstrated the benefits of early education for children to society. But the question is how do we get more children into early education? How to set a new policy? How much should the new policy cost? As we have discussed many parties have spent more of their budgets in the general election to lower the cost of childcare to \$10 a day over the next five years. This plan is good for all, but the question is whether it will be so good for the poor. This undoubtedly saves a lot of money for those

who can afford it, but obviously they are not the people who need the policy the most. For the poor, \$10 a day may not be that cheap. Because the subsidy for children from low-income families is only about \$6,000 a year. So even with lower costs, poor people may not necessarily choose to send their children to childcare. If everyone got cheaper childcare, the government would need extra tax to cover that cost. On the other hand, lowering the cost of pre-primary education means that most childcare is no longer profitable and can only rely on government subsidies. This means that the government loses tax revenue of them. I have two options for reducing government spending on this. The first is that the government could reduce some of the existing subsidies for families and instead use the money as a subsidy for pre-school education. This motivates more children to go to preschool. The second method can be combined with the first point that the government can also set different subsidy thresholds like the existing child subsidy. Families with different incomes have different preschool education costs. Or it can just set a ratio where childcare costs are directly proportional to income. If it is a low-income family, then they can enjoy subsidized or even free childcare, and if it is a wealthy family, they should pay full or more expensive childcare. And, for the poor, free childcare is more effective than giving tuition-equivalent cash directly. While the cost is the same, the people receiving the money may not spend it on their children's early education. But free childcare has an incentive for the poor to give their children early education.

To sum up, preschool education is very beneficial in all aspects. Especially for the kids

involved. Happy, fulfilling, and inspiring experiences in childhood will make them more successful in the future. Especially for poor families, this not only helps children and families realize the importance of education, but also tells children what the right path is. This benefit can even affect many generations if it is eventually lifted out of poverty. It also brings a high return to society, and it helps society to a more efficient level. But on the other hand, the cost of reducing the cost of preschool education is very high, and its return, although high, will take many years. In the early-stage people may bear too much burden such as too much tax. So rather than letting everyone enjoy a lower cost of preschool education, I am more supportive of the family who can afford it pay full or more fee, and the poor pay a little or nothing. The benefit of this is that the government doesn't have to spend as much, while many childcare providers remain profitable meaning they retain the ability to pay taxes.

(1827 word)

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