

# **Living in single-parent families and the human capital achievement by children aged 15-19 years in urban areas of Iran**

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## **Abstract**

Using the data from the Time Use Survey conducted on Iranian urban households during 2008-2009, this paper examines the effect of family type (single-parent or two-parent) on the amount of time spent, by children, on activities related to human capital. Target population includes unmarried children, aged 15-19 years, living in Iranian urban households. Relevant literature shows that children in single-parent families (either by divorce or the death of a parent) experience more difficulties and barriers towards human capital achievement. Findings show that children in single-parent families have higher levels of dropout and their level of human capital attainment is significantly lower than that of their counterparts in two-parent families. By controlling independent variables especially parental care and supervising activities at home, the negative effect of the family type disappears. Therefore, such family will exert its effect on children's achievement mainly through decreasing parent-child relationship, reducing opportunities for parents to engage in home affairs, and losing parents' supervision over their children's activities. Such negative effect can have important consequences and implications for educational attainment of children in Iran as the country is experiencing a relatively high level of family dissolution now.

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**Keywords:** Human capital achievement, children, divorce, single parent families, adolescent, parent-children relationship, parental monitoring over children

## **Introduction**

Human capital is defined as knowledge, skills, and other abilities which will lead to improvement in the quality and level of production (Centre for Educational Research and Innovation 1998, p. 9). The special focus of this perspective is on literacy, formal education and skill training (Becker 1962; Schultz 1961). The relationship between human capital and development infuses our understanding of the importance of childhood and adolescence activities.

The role of family in this situation would be very important since it is responsible for all opportunities and limitations related to the human capital achievement. Family has a critical position amongst the factors affecting the capital achievement. As Gary Becker, the founder of the theory says, "No discussion of human capital can omit the influence of families on the knowledge, skills, values, and habits of their children" (Becker 1975).

The family in today's world, as with other social, cultural and economic institutions, has experienced many changes. The prevalence of divorce and single-parent family is among the changes that affect the situation of children. Single-parent family not only increases poverty and reduces child welfare (Garfinkel and McLanhan 1986; Duncan and Hoffman 1985), but also decreases parents' control over children's activities (Cheung and Andersen 2003; Astone and McLanahan 1991; Amato and Keith 1991; Haveman and Wolfe 1995).

The Iranian family has also undergone enormous changes in recent years. Total fertility of the country has decreased to a below replacement level (Abbasi-Shavazi et al. 2009). The level of education of parents (especially for women) has increased dramatically and there have been more opportunities for women to enter labor market. Along with the increase in mean age at marriage for both sexes, the rate of divorce has risen substantially (Mahmoudian et al. 2012; Zanjani 1999). The effect of such changes in the situation of children in families, however, has not been addressed adequately. This paper aims to examine the mechanism through which the type of family affects the achievement of human capital by young children in Iran.

## **Theoretical background**

According to the human capital theorists, human capital is the main root and element for development. Therefore, any investment on that would be very important for the future life of children (Horomnea and Istrate 2011; Schultz 1959, 1961; Becker 1962, 1964, 1975). Childhood and adolescence as important periods of life in learning and skill achievement have special position in the human capital theory.

Economists primarily have viewed the process of children's attainment to be an aspect of the theory of family behavior. The family is viewed as a production unit which employs real inputs in order to generate utility for its members. The absence of a parent can impact on the amount of resources available for family members. Sociological and psychological theories on children's attainments complement the work of economists. While the channels of transmission in their framework are quite different from those emphasized by economists, the implications of this perspective are consistent with them. The socialization framework puts emphasize on the transmission from parents to children and importance of having two parents present in a family in order to foster normal personality development. The presence of two parents also strengthens parental control and monitoring, and weakens the potential adverse influence of other factors. Economic deprivation perspective suggests that growing up in poverty has adverse effects on children's development. Stress Theory and Coping Strategies as psychological perspectives suggest that stressful events during childhood may dislodge an individual from an equilibrium path of development. In this perspective events like separation or divorce, are viewed as creating emotional uncertainties that impede normal development.

In fact, psychological resources of parents and their abilities to cope positively influence the performance and attainments of children (Haveman and Wolfe 1995).

## **Background studies**

Most studies in this area have demonstrated the negative effects of single parenthood on investment in children's human capital. Astone and McLanahan (1991) showed that the children, who live in single-parent families, receive less parental support in doing homework at home and thus do less work in school. McLanahan and Sandefur (1994) showed that the percentage of those who enter university is lower for those who live in single-parent families than those who grow up with two parents. Wight et al. (2009) showed that adolescents who live in single-parents family (specially the mother type) spend most of their time in paid-work activities and have less time to study. Applying meta-analysis on many relevant studies, Haveman and Wolf (1995) and Amato and Keith (1991) also showed that growth in single-parent families has negative effects on children's educational attainment.

## **Research method and data**

The research method in this study is secondary data analysis. Data are drawn from the Time Use Survey which was conducted by Statistical Centre of Iran in urban areas during 2008-2009. The survey was done in four phases (spring, summer, autumn and winter). Target population comprises all individuals aged 15 years and over residing in urban areas. The data include the activities done by respondents plus main individual and household socio-economic variables.

Of the four surveys, this study uses the autumn survey randomly. Target population, in this study, includes 6059 never-married children aged 15-20 years. This selection is because of the fact that these children are normally living with their parents and the effect of the family on children's activities would be stronger for them than their older siblings. The achievement of social capital by children refers to all activities related to learning and education.

## **Findings**

Table 1 shows distribution of sample children according to selected characteristics. As shown, 54 percent of the children were male and the rest were female. The majority (99 percent) of them were literate while only 55 percent were currently enrolled at schools. About 8 percent of them lived in single-parent families.

Because of general education, almost all adolescents are literate. Thus, literacy cannot be a good measure for human capital. As shown in Table 2, there is no significant difference in literacy between children with different family type. There are, however, significant differences in enrolment rate at schools among children in the three family types. About 30 percent of children in single-parent family (due to divorce) were not currently enrolled, while the respective figure for children in two-parent was only 19 percent. Therefore, the type of family has an important role in human capital achievement by children.

Table 3 shows the daily average time spent on the achievement of human capital by children according to family type. Children in two-parent families spend an average of 210 minutes per day on activities related to human capital, while this time is 175 and 150 minutes for children in widowed-parent and divorced-parent families respectively. There is a significant different in achieving human capital by children in single-parent families (widowed and divorced parents) and two-parent families (married parent). Although children

in divorced-parent families achieve less human capital than children in widowed-parent families, there is no significant difference in the achievement between these two families (Table 4).

**Table 1:** Distribution of children by selected characteristics

Variable	Values	Frequency	Percent
<b>Sex</b>	Male	3339	54%
	Female	2753	45%
<b>Literacy</b>	Literate	6036	99%
	Illiterate	56	1%
<b>Currently enrolled</b>	Yes	3359	55%
	No	2733	45%
<b>Sex of parent(s)</b>	Male and Female	5615	92%
	Female	477	8%
<b>Marital status of parent(s)</b>	Married	5622	92%
	Widowed	411	7%
	Divorced	78	1%

**Table 2:** Distribution of children by their educational status and family type

			Family type			Sig. ( $\chi^2$ )
			Two parent	Widowed parent	Divorced parent	
<b>Educational status of children</b>	<b>Literacy</b>	Literate	99.3	99.3	99	0.882
		Illiterate	0.7	0.7	1	
	<b>Enrollment</b>	Yes	81	74.5	70.6	0.048
		No	19	25.5	29.4	

Children in single-parent families achieve lower human capital. In order to have a better understanding of the mechanism of the effect, a multivariate analysis (Table 5) was run to control other influential variables. Girls usually need to devote more time to housework (spatially in single-parent families). Therefore the sex of children can be important in children's human capital achievement. The variable sex of children (male=0, female=1) was entered in the first model. As shown, girls have higher level of human capital achievement than boys. Type of family (single parent=0, two parents=1) was added in second model. The results shows that even at this ages, living in single-parent families can have a negative effects on children's human capital achievement.

The other important variables were entered in the following models. Education and sex of parent are important factors in this relationship. Educated parents are more likely to spend for their children's human capital. Female parents are more likely to be in vulnerable situation and their children might have fewer opportunities to increase their human capital. Results show that children of more educated parents achieve more human capital. However, the effect of the sex of parent was not significant. This is consistent with sociological and psychological theories arguing that monitoring, nurturing and social roles of parents are more important than their economic role.

In the last four models, variables related to parents such as work hours outside home, housework, management of home affairs, and child-care activities were entered. Prior to these variables entrance, the negative effect of single parenthood was sustained, but with the arrival of these variables the effect was reduced and eventually disappeared. Human capital theorists believe that the presence of parents at home is essential for children's human capital.

The head in single-parent family spends much more time to paid work outside home and this has a negative effect on children's human capital. He/she also spent less time at home and also has less control over children's behavior and home affairs. All of these make the children of these families deprived from necessary conditions to achieve human capital.

**Table 3:** Daily Mean time (minute) spent on activities related to the human capital by type of family

<b>Family type</b>	<b>Mean</b>	<b>S.E.</b>
Two parent	210	2.97
Single parent (widowed)	175	10.6
Single parent (divorced)	151	24
<b>Total</b>	<b>207</b>	<b>2.8</b>

**Table 4:** Daily Mean time (minute) spent on activities related to the human capital by type of family (One-way ANOVA)

Dependent variable	Post hoc (Multiple comparison)	Family type		Mean difference	S.E.	Sig.
		Reference category	Others categories			
Children's human capital	LSD	Two parent	Single parent (widowed)	34.4*	11.3	0.002
			Single parent (divorced)	58.3*	28.8	0.043
		Widow(er)	Two parent	-34.4	11.3	0.002
			Single parent (divorced)	23.9	30.6	0.435
		Divorced	Two parent	-58.3	28.8	0.043
			Single parent (widowed)	-23.9	30.6	0.435
F=6.532 Sig<0.001						

**Table 5:** Regression coefficients for the effect of selected variables on time (minute) spent (by children) on activities related to the human capital

Model	1		2		3		4		5		6		7		8	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
(Constant)		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001
Sex of children*	0.103	<0.001	0.106	<0.001	0.109	<0.001	0.11	<0.001	0.111	<0.001	0.11	<0.001	0.116	<0.001	0.116	<0.001
Family type**			-0.098	<0.001	-0.073	<0.001	-0.098	<0.001	-0.066	0.05	-0.043	0.053	0.01	0.624	0.01	0.625
Parents' education***					-0.161	<0.001	-0.161	<0.001	-0.157	<0.001	-0.154	<0.001	-0.113	<0.001	-0.112	<0.001
Sex of parent							0.03	0.16	0.045	0.038	0.04	0.065	0.005	0.799	0.006	0.774
Work hours outside home									0.092	<0.001	0.095	<0.001	0.03	0.008	0.042	0.001
Housework											0.057	<0.001	0.02	0.059	0.02	0.066
Management and of House affairs													-0.410	<0.001	-0.409	<0.001
Child-care activities															0.032	0.006
R Square	0.011		0.02		0.045		0.045		0.053		0.056		0.209		0.21	
Adjusted R Square	0.011		0.02		0.045		0.046		0.053		0.057		0.21		0.211	

\* Male =0, female=1

\*\* Single parent=0, Two parent=1

\*\*\* Illiterate=0, Primary=1, Lower secondary=2, Upper secondary=3, Pre-university=4, Diploma=5, BA=6, MA and higher=7

## Summary and conclusion

Human capital theorists argue that in today's world investment in human capital is a prerequisite for development. Family has a critical position amongst the factors affecting the capital achievement. This paper aimed to examine the effect of family type (single-parent or two-parent) on the amount of time spent, by children, on activities related to human capital.

The research method in this study was secondary data analysis. Data were drawn from the Time Use Survey which was conducted by Statistical Centre of Iran in urban areas during 2008-2009. Target population comprised children aged 15-20 years residing in urban areas. The data included the activities done by respondents plus main individual and household socio-economic variables.

Findings show that children in single-parent families have higher levels of dropout and their level of human capital attainment is significantly lower than that of their counterparts in two-parent families. Multivariate analyses show that girls, compared to boys, are better off in terms of human capital achievement. Parents' level of education, their paid work outside the home, and their caring and supervising activities over children's performance have positive effect on the achievement. The sex of parents, however, does not have any significant effect on their children's human capital attainment. By controlling all independent variables especially parental activities at home (like supervision over children's activities), the negative effect of the family type disappears. Therefore, such family will exert its effect on children's achievement mainly through decreasing parent-child relationship, reducing opportunities for parents to engage in home affairs, and losing parents' supervision over their children's activities.

These results can provide important implications for policies. The amount of time parents spend with their children at home plays an important role in their children's human capital achievements. This parental time-consuming is strongly related to socio-economic conditions of single-parent families. As the number of single-parent family might increase in the future, mainly because of high divorce rate, special policies are needed to empower the situation of such families. The empowerment is more critical for single-parent families headed by females. At the same time, implementation of policies for enhancing and stabilizing two-parent families (like divorce prevention) would be of high importance.

## References

- Abbasi-Shavazi, M. J., P. McDonald, and M. Hosseini-Chavoshi (2009). *The Fertility Transition in Iran: Revolution and Reproduction*, New York: Springer.
- Amato, P. R., and B. Keith (1991). Parental Divorce and Adult Well-Being: A Meta-Analysis. *Journal of Marriage and Family*, 53(1):43-58.
- Astone, N. M., and S. McLanahan (1991). Family Structure, Parental Practices and High School Completion. *American Sociological Review*, 56(3):309-320.
- Becker, G. S. (1962). Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy*, Vol. 70, No. 5.
- Becker, G. S. (1964). *Human Capital*, Columbia University Press.
- Becker, G. S. (1975). *Human Capital*, Encyclopedia Essay on Human Capital, [www.econlib.org/library/enc/humancapital.html](http://www.econlib.org/library/enc/humancapital.html).
- Centre for Educational Research and Innovation (1998). *Human Capital Investment: An International Comparison*, Vol. 918, OECD Publishing.
- Cheung, Sin Yi. and Robert Andersen (2003). Time to Read: Family Resources and Educational Outcomes in Britain, *Journal of Comparative Family Studies*, 34, 3.

- Duncan, G., and S. Hoffman (1985). A Re-consideration of the Economic Consequences of Marital Dissolution, *Demography*, 22:485-97.
- Garfinkel, I. and S. McLanhan (1986). *Single Mothers and Their Children*, Baltimore: Urban Institute Press
- Haveman, R., and B. Wolfe (1995). The Determinants of Children's Attainments: A Review of Methods and Findings, *Journal of Economic Literature* Vol. 33:1829-1878.
- Horomnea, E., and M. Istrate (2011). Considerations on human capital concept, *The USV Annals of Economics and Public Administration*, 11(1):159-166.
- Mahmoudian H., Majid Koosheshi, M. Torkashvand, and Marjan Rashvand (2012). A Comparative Study of Social, Cultural, and Economic Characteristics of Provinces with Special Focus on Demographic Indices, Tehran: Iran Civil Registration Organization .
- McLanahan, Sara and Gary Sandefur (1997). *Growing Up With a Single Parent: What Hurts, What Helps*, Harvard University Press.
- Schultz, T. W. (1959). Investment in man: an economist's view, *Social Service Review*, 33(2):109-117.
- Schultz, T. W. (1961). Investment in human capital, *The American Economic Review*, 51(1):1-17.
- Wight, V. R., J. Price, S. M. Bianchi, and B. R. Hunt (2009). The time use of teenagers. *Social Science Research*, 38(4):792–809.
- Zanjani, H (1999). Reviewing divorce rate trends in Iran, Tehran: Behna Information Gate.