**RESEARCH PROPOSAL**

**EFFECTS OF MATERNAL EMPLOYMENT IN FIRST YEAR OF CHILD’S LIFE ON CHILD COGNITIVE OUTCOMES IN PRIMARY SCHOOL (3 TO 6 YEARS)**

**RISK OR BENEFIT?**

Submitted By : Shazmeen Virani

Faculty Advisor : Dr. Ghazala Rafique

Committee Member : Ms. Seema Lasi

Date of Submission : September 01, 2013

***The proposal is submitted as a requirement for course III: An Introduction to Research in Early Child Development: (Methodology, Analysis and Reporting) – Early Child Development***

***Aga Khan University – Human Development Programme***

**Table of content**

**Introduction / Background ------------------------------------------------------ 03**

**Literature Review ------------------------------------------------------ 06**

**Research Question ------------------------------------------------------ 13**

**Objectives / Hypothesis ------------------------------------------------------ 13**

**Operational Definitions ------------------------------------------------------ 13**

**Methodology ------------------------------------------------------ 15**

**References ------------------------------------------------------ 18**

**Appendix ------------------------------------------------------ 20**

**BACKGROUND / INTRODUCTION:**

The last half century saw strong changes in families that changed the daily experiences of many young children. Entering of mothers of young children in the labor force increases the numbers of young children spending important hours in various child-care settings (Marshall, 2003). These changes gave rise to a large body of research on the effect of maternal employment on children's cognitive outcomes. However, a full understanding of the role of working mothers requires consideration of the interplay among child care, family, etc.

History gives us clear view that women were considered as weaker gender, both physically and intellectually. Therefore, women were primarily involved in the home chores and raising children. But over the years women entered into the workforce and get challenging positions. Due to the increase in number of women in workforce they are spending less time with their children as compared to past (Burdumy, 2013).

According to National Research Council and Institute of Medicine US (2003), in 1970, only 24% of mothers of children from birth to 3 years of age were in the labor force; but by 2000, it risen to 57%. This growth in early maternal employment also impacted the daily experiences of children as more children are spending quality hours without parents. By 2000, 80% children who are under the age of 6 were in any non-parental care and spending 40 hours or more a week in such care.

The same trend of increase in number of female participating labor force can be seen in developing countries. Female employment rate of Sri-Lanka increased from 26.9% to 36.8% from 1980 to 2001, which shows almost 10 percentage increase in female labor force participation. The rate of female participation also increases in country like Afghanistan from 34.8% to 35.7% from 1980 to 2001 (Bureau of Statistics, 2012).

According to Pakistan Bureau of Statistics (2012), the labor force participation rate has increased from 50.4 percent in 1999-2000 to 52.5 percent in 2006-2007 and 53.4 percent in 2010-2011 in Pakistan. There has been the steadily increased over the last ten years in employment to population ratio i.e. from 46.8 percent in 1999-2000 to 50.4 percent in 2010-2011, especially for women i.e. from 13.7 percent in 1999-2000 to 22.2 percent in 2010-2011.

The question arises, why focus on maternal employment rather than paternal employment. The main reason is that over a period of time, father employment rates have not changed noticeably, especially when their kids are young. On the other hand, employment rate of mothers have increased dramatically, especially when kids are young. Other reason is that existing data sources do not give estimated effects of father employment because there is no data that provide sufficient number of fathers who stays at home and do not work. But it is important to include the influence of characteristics of fathers like; earnings (Aamir, 2004; Meherali, 2010).

The early years are considered very important ones in a child’s cognitive development (Bloom, 2006), yet there has been a marked increase in labor force participation by mothers of young children. The research shows that children in different child care setting are less likely to have one to one interaction which is very important in early years and it effects the cognitive development of children. According to longitudinal study (2001), significant cognitive differences are found in children who had mothers at home and children who had working mothers. This study highlights that maternal employment early in child’s life had negative effects on child’s cognitive outcomes later in life especially in school by the age of 3 or 4. According to Waldfogel (2003) and Han, et. al (2013), maternal employment in first year of child’s life have significant negative impacts in fields like; school readiness and cognitive outcomes later in life. The three cognitive outcome measures that was used to measure cognitive outcomes in this research are; the BayleyMDI at 15 months, the revised Bayley MDI at 24 months and the Bracken School Readiness Scale at 36 months.

Research on both developed and developing countries focused on identifying the factors that affect cognitive development in children. Research in developing countries placed much more emphasis on child health as compared to parenting, as determinant of cognitive development. Many researches in developing countries show the association between cognitive development and malnutrition and iron deficiency (Paper presented in Singapore conference, 2004). Researches in developing countries focus more on malnourishment when cognitive development is concerned as children infected with intestinal helminthsare likely to be malnourished and have iron deficiency that could weaken their ability to study and learn. In comparison, according to U.S. literature, one of the most important factors that increase the cognitive stimulation of children is better parenting skills and presence of mothers in early years of child life (Meherali, et. al., 2010; McGregor, 2007; Glewwe, 2002).

**LITERATURE REVIEW**

**Employment in Pakistan:**

According to Pakistan Bureau of Statistics (2011), since the beginning of the decade female participation rate has continued to rise. Female participation in labor force increase by 5.0% in 1999-2000 to 2006-2007 and again it was observed increase of 3.1% in 2006-2007 to 2010-2011.

Women are highly participating in job markets from last few years in Pakistan. The female unemployment rate was 8.6% in 2006-2007 and that was the lowest in decade. In 1999-2000 the female unemployment rate was 15.85 and it decreases to 9.0% in 2010-2011. However, there is positive developments in female labor force participation rate due to an opportunities in market for women and economic conditions of Pakistan.

The proportion of female working excessive hours during the period of 1999-2000 to 2006-2007 has declined by 5.1% but also increases by 0.7% in 2006-2007 to 2010-2011 (Pakistan Bureau of Statistics, 2011). The overall situation of economy of Pakistan’s and lack of employment opportunities, not only for women but men labor force participation rate has also fallen from 76.7% to 70.3% in last 10 years.

**Family System in Pakistan:**

In order to understand about working mothers in Pakistan, it is important to understand types of family systems. There are two types of systems, one is the joint family system and the other is the nuclear family system. In a joint family system a woman not only lives with her husband and children but also with her in-laws including her husband’s parents, grandparents, brothers, sisters and maybe some other family members. On other hand a nuclear family system is one in which women lives with her husband and children, this system is common in urban areas of Pakistan. No one system can be consider as best as there are many pros and cons of both systems. Households in Pakistan inclined to be large because of the high proportion of the extended and joint family system (PDHS, 2006-07).

Women after marriage prefer to live in nuclear family and initially it sounds good but considering the point of view of mothers than nuclear family is a problem. The main reason is that in Pakistan mostly there are no reliable quality child care centers available therefore for mothers, joint family system is better. Even today, the concept of quality child care is new in Pakistan and elder generations usually do not appreciate this idea and take child responsibility in their hands when mothers are working outside home (Meherali, et. al., 2010).

For a working woman, household responsibilities are a full time job. When she works outside home, it is not possible for her to properly take care of the house. As well as the strong cultural values in Pakistani society is very strong and elder generation is not able to accept the idea of a woman working outside the home easily. Women who work outside home are not able to attend their household activities after her day long job. Especially mothers who come home after long day job are hardly able to take care of her children and husband. Working mothers has less time as compare to non-working mothers to spend with her husband and children. Therefore, mothers really need someone to take care of her children when she is at work. In joint family system it becomes easier for mother to work outside home. One more concept is of care giving in family which is only possible in joint family system because in times of illness and any other unexpected problem atleast person have family members to share the burden. But living together makes life easier as the family shares the responsibility and takes care of the younger ones (Paper presented in Singapore conference by Aamir, 2004).

In Pakistan, child care facilities are not considered as of adequate quality and other than that there is no replacement to the care and love of grandparents. No day care centers and full day maid can give that love and affection to a child. Children who live close with their parents and grandparents have sense of importance of relations. Research shows that children show positive cognitive outcomes when they spend more time with their grandparents or any other close relatives. But in some cases a joint family system (JFS) becomes hard for working mothers when she is expected to fulfill her household responsibilities with her job. Apart from this, a joint family system is still very helpful for the working women as no mother can find a replacement of love and care given by close family members for her child.

Now-a-days western societies are losing the concept of importance of relationships just because of their nuclear families. Large number of working mothers are part of labor market in western countries so mothers keep her children in day cares as no one at home is available to take care of children. Children ask for time and if mothers are working than they are not able to support and take care of children. Similarly in Pakistan the mothers are joining the workforce but rural families usually have elders who stay at home (Aamir, 2004; Meherali, et. al., 2010).

**Early Maternal Employment and Child’s Cognitive Outcomes:**

Early years of child’s life are very crucial for development. In developing countries like Pakistan, poverty is major risk factors and in order to survive, women of the family are working longer hours. Research shows that early maternal employment leads to stress and poor stimulation and interaction with children that can affect brain function thus have long-term cognitive and emotional effects (McGregor, et. al., 2007). Statistics proves that mothers are not just joining the workforce but they are also working for longer hours than ever before, in this way mothers are spending more time at work and less time at home with children. This practice may lead to many cognitive implications for children (DeJong, 2010; Waldfogel, et. al., 2002).

Research gives the idea that early maternal employment does effects the child cognitive outcomes later in life. Mothers who worked in first year of child’s life had significant negative effects on child’s cognitive outcomes by three or four years and these negatives effects can also be seen by the age of seven or eight (Waldfogel, 2002; Han, 2005). The negative effect includes; delay in language, school readiness, scores achieve in mathematics, IQ tests, concept understanding, etc. But on the other hand mothers entering the workforce might also have a positive effect on children as dual earning families are in a position to provide much more to their children. When financial opportunities increased in families, it also increases the opportunities to provide better healthcare, nutrition and educational opportunities (Huston and Aronson, 2005). But mostly maternal employment impacts negatively on children because after work mothers sometimes too tired to interact and play with children and that is very important to provide stimulation that leads to cognitive development (see DeJong, 2011; Reynolds, Callender, and Edwards, 2003).

The negatives effects of working in first year of child’s life are present even when quality of childcare, quality of home environment and maternal sensitivity were controlled, but in second and third years results are depended on other factors. Mothers who worked in the first year and particularly full time might have higher earnings and that higher earnings might be associated with better child outcomes. But now-a-days increasing numbers of mothers with young children entering the labor market and working full time effect cognitive development of young children negatively, especially in the first year of child’s life (Baker and Milligan, 2008; Baum, 2003).

Results of few studies highlight that any differences in cognitive development that is linked with early experience of maternal employment is not for a long time and therefore, it can be concluded that the associations of maternal employment and child’s cognitive outcomes is weak as early experiences fades out with time (Brooks-Gunn, 2003; DeJong, 2011). But some of the researches on verbal output and reading by parents showed that it is associated with language in young children, therefore it can be said that presence of parents especially mother in early years of child life effects cognitive outcomes (Duncan, 2003; Bernal, 2008; Goldberg, et. al., 2008). Studies that prove the links between maternal employment in first year and child outcomes have followed children beyond age 3. Most of these studies have primarily relied on data from the National Longitudinal Survey of Youth Child Supplement (NLSY-CS). All the work using the NLSY-CS shows negative associations between maternal employment in early years of child’s life especial the first year and child cognitive outcomes measured even as late as age 7 or 8 years (Waldfogel 2002; Han, 2005).

Study also found that mothers shared positive effects of working on their children. Research at South Bank University shows that working mothers felt that they were trying to support the needs of their families financially but sometimes their family relationships suffer because of their employment. Some working mothers mentioned that for their children they were being good role models and they valued the time spend with their children. Researchers also asked about the negative impact of mother’s employment on their children so mothers informed that after work they were sometimes too tired to interact and play as much with children as children wanted (DeJong, 2011; Baker and Milligan, 2008).

**Alternative/Non-Maternal Child Care:**

Working mothers of young children usually go for group childcare for their children, which results in less one to one interaction and attention. According to DeJong (2010), there is considerable difference between children whose mothers are working and children whose mothers are not working and staying at home with them. This study highlights the effects of early maternal employment on child cognitive outcomes during early school years.

One research shows that there beneficial effects of early child care on social functioning (Bernal and Keane, 2005; Huston and Aronson, 2005) and on cognitive & linguistic development or academic achievement (Ruhm, 2002; Bernal, 2008; Waldfogel, 2002). Other researchers have highlighted adverse consequences like; children spending long hours in care early in life have socio-emotional and behavior problems (Haskins, 2005; DeJong, 2011). Moreover, few studies shows that effects of child-care do not undergo after the preschool years (Brooks-Gunn, et. al., 2002), whereas others studies says that effects of child-care are long lasting (Belsky, 2002). Almost all researchers examined any one or two feature of the child-care experience, but never all three (Haskins, 2005; DeJong, 2011; Belsky, 2002).

It is very important to define the child-care in order to understand the relation between child care experience and child development. According to Belsky, et. al., (2007), “Any and all non-maternal care that was regularly scheduled for at least 10 hours per week qualified as child care, including care by fathers, grandparents and other relatives”. However, it is important to be kept in mind that maternal employment in early years is not equal to child care because some children whose mothers work do not use any alternative or non-maternal child care on the other hand some children use non-maternal child care even though their mothers do not work.

According to study there were differences in school performance of children who attended child care as compare to who did not. The above figure shows that children who never attended any care outside home have reported that 40% of children perform above average in school, 40% performed between average and above average and 20% performed average. On the other hand children who attended outside home care reported that 60% performed above average in school, 15% between average and above average and 25% performed average in schools.

Literature proves that child care is an important factor in order to gauge cognitive outcomes. When mother goes for work than she leave their kids in alternative child care settings and the result shows that children whose mothers worked less than 30 hours per week were in considerably higher quality care at 3 years as compare to children whose mothers had not worked by that time. On the other hand children whose mothers worked 30 hr or more per week were in care that was not considerably different from children whose mothers had not worked by that time. These results support the idea that poorer quality of child care can explain why children whose mothers work 30 hours or more per week perform more poorly on the Bracken at 3 years as compare to children whose mothers work less than 30 hours per week. Therefore, it is very important to gauge the quality of child care in order to know the effects of maternal employment on child’s cognitive outcomes (Waldfogel, 2002; Burdumy, 2005).

Because the type of child care does matter so research includes the number of times the children had been in different types of care by the time of the assessment. Many researches also include the collective HOME scores and mother’s sensitivity but childcare quality clearly makes a difference. One more reason for considering the child care literature is that early child care might have diverse effects on boys and girls. According to study the sample of children were followed up to the age of 6 years that is 3rd grade and the results shows that high-quality care is associated with higher scores on standardized tests of math, memory and vocabulary skills but results were different for girls and boys (Huston and Aronson, 2005; Han, 2005).

In Pakistan there is lack of adequate child care facilities therefore women employment rate is low as compare to other developing countries. Females in Pakistan are the one who is responsible to take care of their husband, children and other family members so if women go out to work than they have no other choice but to leave their children in child cares centers or to leave their children at home with grand-parents or other close relatives. In this situation where no adequate quality child care facilities are available still female employment rate is increasing since the last decade (Meherali, et. al., 2010).

One of the research in Pakistan shows that the effect of childcare provided by close relatives is negative as compare to care provided by formal day-care centers. In the Pakistani cultural setting, the grand-parents of the child who live in the same household (Aamir, 2004), are just present to feed them without providing any stimulating environment for the child (Meherali, 2010).

**Rational:**

Considering that the women employment rate is increasing in Pakistan from last 30 years and it has continued to rise. Since women constitute half of the population of Pakistan and the young mothers are entering in labor market, leaving their children in any non-maternal child care without knowing its effects in the long-run on cognitive development of children. There is a need for study related to effects of maternal employment and child’s cognitive outcomes. Therefore the findings of this research can be useful and beneficial for young mothers who are entering in work force and also the effects of full time and part time employment on child's cognitive outcomes.

**Research Question:**

Does maternal employment during first year of child’s life effects on cognitive outcomes of children in primary school (3 to 6 years).

**Objectives:**

To study the relationship between maternal employment in first year of child’s life and child’s cognitive outcomes at the age of 3 to 6 years

**Hypothesis:**

* Null Hypothesis:

There is no association between maternal employment during first year of child’s life and child’s academic performance during primary school years.

* Alternative Hypothesis:

There is association between maternal employment during first year of child’s life and child’s academic performance during primary school years.

**Operational Definitions:**

* Maternal Employment:

Mothers working outside home in the first year of child’s life. It includes full time, part time and self employed mothers.

* Full time Employment:

Mothers who are working for more than 30 hours per week, considered as full time employment.

* Part time Employment:

Mothers who are working for 30 hours or less than 30 hours, considered as part time employment.

* Child cognitive outcomes:

Child’s cognitive outcomes are the representation of set of knowledge and skills related to reading, writing, language, picture exploration, creative abilities and conceptual understanding.

* Alternative / Non-Maternal Child Care:

Any and all non-maternal care that was regularly scheduled for at least 10 hours per week qualified as child care, including care by fathers, grandparents and other relatives.

(Adapted from Brooks-Gunn, Han and Waldfogel, 2002)

**METHODOLOGY:**

**Study Design:**

The approach of this research is quantitative using the cross sectional study design.

**Study Setting:**

The study setting will be Ismaili community residential colony in geographic area of Suparco, Karachi.

**Study population:**

The study population includes children 3 to 6 years old studying in two RECs and their mothers, will be requested to take part in this research study.

**Inclusion & Exclusion Criteria:**

**Inclusion criteria:**

* Children of age 3 to 6 years
* Children regularly attending REC
* Only one child (3 to 6 years) will be recruited from one family.

**Exclusion criteria:**

* Children with intellectual disabilities

**Sampling Techniques:**

Universal sampling will be used.

**Sample Size:**

Population will be considered as sample. Total sample size is 200.

**Data Collection Instrument:**

Structured questionnaire will be used as data collection instrument from mothers of children (see Appendix D) and data for academic outcome of children would be based on REC’s academic performance records (see Appendix C).

**Procedure of Data Collection:**

The data collection process is divided into three steps. In first step, after permission will be taken from REC the data will be gathered from the MIS (Management Information System) records related to number of children studying in REC age from 3 to 8 years.

In the second phase, after taking the informed consent from mothers, structured interview will be used to collect the data from both employed and unemployed mothers (see Appendix D). During REC hours all mothers of children will be requested to come in REC office for an interview or data will be collected at their place for their convenience. This might take four to five weeks to collect the data from all the mothers.

In third step, data from REC related to academic outcomes will be taken of those children whose mothers participated in study (see Appendix C). The factors that this research will consider for cognitive outcomes are conversational abilities, reading skills, writing skills, conceptual understanding, picture understanding and creative skills because literature supports these factors and REC evaluate all these factors semi-annually. This research will take the current average year-end scores of children.

Teachers are primarily responsible to grade students because they have idea about skills and understanding of child. Teachers don’t use formal test to gauge the results in primary section in REC but daily activities are designed for assessing development of child. The scores of activities and informal test are than put in the database of school in order to know if the child is performing good, satisfactory or child needs attention. Not more than three days are needed to get this data as the system and software are up-to-date.

**Data Management:**

Initially the data will be collected from the target audience and this data will be edited. The final data will be entered and analyzed using SPSS software.

The questionnaire and records will be kept in separate file even after data entry in the software so it will be easier to keep track and rechecking the data. The ID/Code will be given to each questionnaire and even on each page of questionnaire in order to avoid the loss of data.

**Plan of Analysis:**

In order to analyze the data SPSS software will be used. The frequency tables and graphs will give the idea about the participants and overall categories they fall in. The co-relation will be use to analysis the relationship between dependent and independent variables.

**Timelines/Milestones:**

**Ethical Consideration:**

The Ethical Review Committee (ERC) is a committee of the University Research Council (URC). This research focus on human subjects therefore ERC will provide approval before a study can begin. This research will follow all the written guidelines given my ECR committee on ethical considerations for research involving humans.

Also this research will take informed consent from all the participants of the research as well as approval from the institute where data will be collected. This study will make sure that participants will face no harm of any kind during research and their personal data will be kept confidential.

# REFERENCES

Aamir, N. (2004). The plight of working mothers in Pakistan: Advantages and disadvantages of a joint family system. Conference Paper No.58. National University of Singapore. Retrieved from http://www.spdc-pak.com/publications/Conference%20Papers/CP-58.pdf

Baum II, C. (2003). Does early maternal employment harm child development? An analysis of the potential benefits of leave taking. *Journal of Labor Economics*, 21(2). http://www.academicroom.com/article/does-early-maternal-employment-harm-child-development-analysis-potential-benefits-leave-taking

Belsky, J. Vandell, D. L. Burchinal, M. Clarke-Stewart, K. A. McCartney, K. & Owen, M. T. (2007). Are there long-term effects of early child care? *Child Development*, 78(2), 681-701

Brooks-Gunn, J. Han, W. & Waldfogel, J. (2002). Maternal employment and child cognitive outcomes in the first three years of life: The NICHD study of early child care. *Child Development*, 73(4), 1052-1072

DeJong, A. (2011). Working mothers: Cognitive and behavioral effects on children. Retrieved from http://www.sdstate.edu/jur/2010/upload/Working-Mothers-Cognitive-and-Behavorial-Effects-on-Chidren.pdf

Glewwe, P. (2002). Association schools and skills in developing countries: Education policies and socioeconomic outcomes.*Journal of Economic Literature*, 40(2), 436-482.

Goldberg, W. A. Prause, J. & Himsel, A. (2008). Maternal employment and children’s achievement in context: A meta-analysis of four decades of research. *Psychological Bulletin*, 134(1), 77–108.

Han, W. J. (2005). Maternal nonstandard work schedules and child cognitive outcomes. *Child Development*, 76(1), 137-154.

Huston, A. C. & Aronson, S. R. (2005). Mothers' time with infant and time in employment as predictors of mother-child relationships and children's early development. *Child Development*, 76(2), 467-482.

Meherali, S. M. Karmaliani, R. & Asad, N. (2010). Effects of mothers’ employment on toddlers’ cognitive development: A study conducted in Karachi, Pakistan, *Early Child Development and Care,* 181(7), 877–890.

Pakistan Bureau of Statistics. (2013). Statistics Division. Government of Pakistan. Retrieved from [www.pbs.gov.pk](http://www.pbs.gov.pk)

Ruhm, C. J. (2004). Parental employment and child cognitive development. *The Journal of Human Resources*, 39(1), 155-192.

United Nations. (2006). Full and productive employment and decent work for all. Department of Economic and Social Affairs. Retrieved from http://www.un.org/en/ecosoc/docs/pdfs/ecosoc\_book\_2006.pdf

Waldfogel, J. Han, W. J. & Brooks-Gunn, J. (2002). The effects of early maternal employment on child cognitive development. *Demography*, 39(2), 369-392.

**APPENDIX A: Permission Letter from Ismaili Community School (Gulshan-e-Noor REC)**

To, Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Chairman

Gulshan-e-Noor, REC

Karachi.

Tel: 03458263009

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN COMMUNITY SCHOOL (REC)**

Dear Chairman,

My name is Shazmeen Virani and I am student of Advanced Diploma at the Aga Khan University – Human Development Programme. I am conducting a research on the “Effects of early maternal employment on child’s cognitive outcomes at the age to 3 to 6 years” for my advanced diploma. This study will be conducted under the supervision of Dr. Ghazala Rafique (Interim Director HDP).

I am hereby seeking your consent to conduct a survey in your school premises in order to get data of mothers having children of age 3 to 6 years, studying in your school. I will collect the data from mothers on structured questionnaire attached. I also required the performance records of all children in primary section and for that I need the support of MIS department to provide me data of number of children and the performance scores achieved by children.

My research data will not just help your community school (REC) in particular but society in large because recently REC is trying to create a bridge between the parents and teachers/management of REC. REC can use the results of this research in surveys, sessions, etc arranged for the betterment of students in REC. It will also contribute to understand the influence of mother’s employment on children and at the end of the research I am also willing to share the results with parents and community members.

I am attaching a copy of my proposal which includes copies of the questionnaire and consent forms to be used in the research process. I will also provide you the approval letter as soon as I receive it from the AKU-ERC (Ethics Review Committee).

Upon completion of the study, if you like, I will provide you the copy of the research report. If you require any further information, please do not hesitate to contact me on my email address [virani.shazmeen@live.com](mailto:virani.shazmeen@live.com) or you can also contact me on 0322-2498361. Thank you for your time and consideration in this matter.

Yours sincerely, Signature of Chairman

Shazmeen Virani \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student of Advanced Diploma in ECD

Aga Khan University (HDP)

**APPENDIX B (1): Consent form in English**

**Consent for the study on**

**“Effects of maternal employment in first year of child’s life on cognitive outcomes of children (3 to 6 years)”**

**Supervisor:** Dr. Ghazala Rafique

I am Shazmeen Virani, student of advanced diploma in early childhood development in Aga Khan University – Human Development Programme (HDP). I am conducting a research on children whose mothers were employed in first year of child’s life. This research will help to know the effects of mother’s employment on child’s cognitive outcomes such as, reading, writing, conversational skills, picture reading, conceptual understanding and creative abilities in primary school years and I am conducting this research in RECs of Suparco area, Karachi. You are being asked to participate in this research study as your child is studying in this REC.

This study is designed to focus on one of the most important issue these days as mother’s participation rate in employment is increasing for last 30 years. Mother’s participation in employment effects daily experiences of families and young children. Mothers and family members are not aware of possible risk or benefit that are associated with maternal employment in early years of child’s life. The results of this study will help to understand if the child’s cognitive outcomes also depend on mother’s employment early in child’s life and its effects in long run.

Your voluntarily participation would be highly appreciated. If you agree to participate in this study than you will be asked to answer few questions which are related to your daily life. This interview would not take more than 15 minutes of your time. This information will be used for academic research and I can ensure you that this study will not do any harm to you or your child.

This research is not promising any financial compensation for your participation in this research but you will surely receive a thank you note with a smile.

Your identity in this study will be treated as confidential and in order to ensure confidentiality the codes will be used instead of names for identifying the data. The results of the study may be published for scientific purposes but will not give your name or include any identifiable references to you or your child. Only the principal investigator will know the data and it would not be shared with anyone.

You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate. You are free to refuse to participate for any or no reason. You are also free to not to answer any question that you don’t want to because the only thing that we need from you is your precious time and information.

If you require any further information, please do not hesitate to contact me on my email address virani.shazmeen@live.com or you can also contact me on 0322-2498361. Thank you for your time and consideration in this matter.

**AUTHORIZATION**

I have read and understand this consent form, and I volunteer to participate in this research study. I understand that I will receive a copy of this form. I voluntarily choose to participate, but I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study.

Name of participant (Printed or Typed):

Date:

Signature of participant:

Date:

Signature of Principal Investigator:

Date:

**APPENDIX B (2): Consent form in Urdu**

**اجازت نامہ برائے تحقیق**

**بچےکے ابتدائی سال میں ماﺅں کی ملازمت کے 3۔6 سال کے بچوں کی ذہنی صلاحیتوں پر ہونے والے اثرات**

**سپر وائزر :** ڈاکٹر غزالہ رفیق

میں شازمین ویرانی ہوں اور میں آغاخان یونیورسٹی ہیومن ڈیولپمنٹ پروگرام سے ابتدائی بچپن کی نشو ونما میں ایڈوانس ڈپلومہ کر رہی ہوں۔

میں اُن ماﺅں، جو اپنے بچے کی عمر کے پہلے سال میں ملازمت کرتی تھیں اُن کی ملازمت سے اُن کے بچے(3۔6 سال) کی ذہنی نشوو نما مثلاً پڑھنا، لکھنا، بات چیت کی صلاحیتیں، تصویری اور تصوراتی سمجھ اور تخلیقی صلاحیتوں پر ہونے والے اثرات معلوم کرنے میں دلچسپی رکھتی ہوں۔ میں یہ تحقیق سُپارکو ایریا میں موجود REC اسکول میں کر رہی ہوں۔ آپ سے گذارش ہے کہ آپ اس تحقیق میں حصہ لیں کیونکہ آپ کا بچہ اس REC کا طلبِ علم یے ۔

یہ تحقیق موجودہ دور کے ایک اہم مسئلے کو مدنظر رکھتے ہوئے مرتب کی گئی ہے کیونکہ گذشتہ نصف صدی سے ماﺅں کی ملازمت کرنے کی شرح میں بڑی تیزی سے اضافہ ہو رہا ہے۔ ماﺅں کی ملازمت سے خاندان اور چھوٹے بچوں کی روزمرّہ زندگی پر اثرات مرتب ہوتے ہیں۔

مائیں اور خاندان کے افراد بچوں کی زندگی کے ابتدائی سالوں میں ماں کی ملازمت کی وجہ سے ممکنہ نقصانات اور فوائد سے آگاہ نہیں ہیں۔ اس تحقیق کے نتائج سے آپ کو اور کمیونٹی کو یہ سمجھنے میں مدد دے گی کہ ملازمت پیشہ ماﺅں کے بچوں کی ابتدائی نشوونما پر اُن کی ملازمت سے ان کے آئندہ زندگی پر کیا دور رس اثرات مرتب ہوتے ہیں۔

اس تحقیق میں آپ کی شرکت رزاکارانہ ہوگی ، اگر آپ اس تحقیق میں شامل ہونے پر رازی ہیں تو آپ سے آپ کی روزمرّہ زندگی سے متعلق چند سوالات کیئے جائیں گے۔ اس انٹرویو کے لئے آپ کے صرف ۵۱ منٹ درکار ہیں۔ آپ سے لی گئی معلومات اس تحقیق کے لئے استعمال کی جائیں گے جس سے آپ کو یا آپ کے بچے کو کوئی نقصان نہیں ہوگا۔

اس تحقیق میں شامل لوگوں کے لئے کوئی مالی فوائد نہیں ہونگے البتہ اُن کی اس تحقیق میں شمولیت کو علمی دُنیا میں سراہا جائیگا۔

شرکاءتحقیق کے ناموں کو راز میں رکھا جائے گا۔ رازداری کو یقینی بنانے اور معلومات کی شناخت کے لئے ناموں کے بجائے خفیہ اعداد (Codes) کا استعمال کیا جائےگا۔ آپ کا نام ظاہر کئے بغیر اس تحقیق کے نتائج سائنسی مقاصد کے لئے شائع کئے جاسکتے ہیں۔ اور صرف محقق کو ہی معلومات کا پتہ ہوگا جو کسی سے نہیں بیان کیا جائے گا۔

اس تحقیق میں حصہ لینے کے لئے آپ پر کوئی پابندی نہیں ہے۔ اگر آپ حصہ نہ لینا چاہیں تو آپ پر کوئی جرمانہ بھی عائد نہیں ہے۔ آپ کسی بھی وجہ کے بغیر اس تحقیق میں شامل ہونے سے انکار کر سکتے ہیں۔ آپ کسی سوال کا جواب نہ بھی دینا چاہیں تو آپ پر کوئی پابندی نہیں ہے۔

اگر آپ کو کوئی بھی معلومات چاہیے ہو تو آپ بلا جھجک مجھے اس ای میل virani.shazmeen@live.com یا میرے اس فون نمبر 0322-2498361 پر بھی رابطہ کرسکتی ہیں اور آپ نے جو وقت دیا اس کے لئے آپ کا بہت بہت شکریہ!

**اجازت نامہ**

میں نے اس تھقق کی خصوصیات کو پڑھا اور سمجھ ہے۔ میں رضاکارانہ طورو پر اس تحقیق میں شرکت کر رہی ہوں لیکن میں یہ سمجھتی ہوں کہ میری رضامندی اور میرے قانونی اختیارات کو کسی طور پر لاپرواہی یا قانونی غلطی میں حصہ داری سے مجروح نہیں کئے جائیں گے۔

شرکاءکا نام: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

تاریخ:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

شرکاءکے دستخط:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

تاریخ:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

محقق کے دستخط:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

تاریخ:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**APPENDIX C (1): Framework for Cognitive Outcome**

**APPENDIX C (2) : Framework for Cognitive Outcome**

|  |  |
| --- | --- |
| **EVALUATION OUTCOMES** | **INDICATORS FOR CHILDREN STUDYING IN PRIMARY SECTION OF REC** |
| Understanding of Themes | * Understand the concept in first try and can share it in class * Able to remember the concepts * Ask questions related to concepts * Interested in role play about concepts * Differentiate between concepts * Take part in discussion |
| Creative Abilities | * Ability to take part in imaginative play * Interested in playing with puzzles * Ability to make music with instruments * Interested in drawing new things * Interested in painting and using crayons * Ability to make things from clay * Interested in playing with water and making objects that floats |
| Understanding of Pictures | * Ability to understand pictures * Ability to make story by seeing picture * Ability to connect pictures * Ability to complete story with pictures |
| Conversational Abilities | * Ability to use language effectively * Ability to tell a story * Ability to communicate his/her needs * Ability to articulate clearly, without sound substitution * Ability to understand teacher’s language |
| Reading Skills | * Interest in books (pictures or print) * Interest in reading * Able to attach sounds to the letter * Awareness of rhyming words * Participate in group reading abilities * Able to read simple words (3 letter words) * Able to read complex words (more than 3 letter words) * Able to read simple sentences |
| Writing Skills | * Interested in experimenting with writing tools * Aware of writing directions (left to right for English, right to left for Urdu, top to bottom) * Able to write his or her name * Able to write simple words * Interesting in writing voluntarily * Able to write simple words * Able to write simple sentences |

**APPENDIX D (1): Questionnaire in English**

**“EFFECTS OF MATERNAL EMPLOYMENT IN FIRST YEAR OF CHILD’S LIFE ON COGNITIVE OUTCOMES OF CHILDREN (3 TO 6 YEARS)”**

Participant’s ID: \_\_\_\_\_\_\_\_

**QUESTIONNAIRE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section A: Demographic Information of Mother** | | | |
| **Q.#** | **Question** | **Coding categories** | **Comment / data editing** |
| 1 | Name |  |  |
| 2 | Age (In Years) |  |  |
| 3 | Address & Contact Number |  |  |
| 4 | Your Child’s Name |  |  |
| 5 | Marital status | 1. Married 2. Divorced or Separated 3. Widow |  |
| 6 | Education level | 1. Years of education\_\_\_\_\_\_\_ 2. Less than Metric 3. Intermediate 4. Graduate 5. Post graduate 6. Others   Please specify: ……………. |  |
| 7 | Occupation | 1. Service 2. Business 3. Housewife 4. Others   Please specify: ……………. |  |
| 8 | Family status | 1. Nuclear 2. Extended |  |
| 9 | Number of family members |  |  |
| 10 | Number of earning family members (including you) |  |  |
| 11 | Family’s monthly income (In Rupees) |  |  |
| 12 | Your Children (in numbers) |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Section B: Employment Information** | | | |
| **Q.#** | **Question** | **Coding categories** | **Comment / data editing** |
| 13 | Since how long you have been working (in years) |  |  |
| 14 | Were you employed in first year of child’s life? | 1. Yes 2. No   (If YES than proceed and if NO than Thank You for your time) |  |
| Full Time (working more than 30 hours per week) | 1. Employed in 1st quarter (0–3 months) 2. Employed in 2nd quarter (3-6 months) 3. Employed in 3rd quarter (6-9 months) 4. Employed in 4th quarter (9-12 months) |  |
| Part Time (working 30 hours or less per week) | 1. Employed in 1st quarter (0-3 months) 2. Employed in 2nd quarter (3-6 months) 3. Employed in 3rd quarter (6-9 months) 4. Employed in 4th quarter (9-12 months) |  |
| Not Employed | 1. Employed in 1st quarter (0-3 months) 2. Employed in 2nd quarter (3-6 months) 3. Employed in 3rd quarter (6-9 months) 4. Employed in 4th quarter (9-12 months) |  |
| **Please provide the information from the time following the birth of your child till the next one year (0 to 1 year)** | | | |
| 15 | Who influenced the decision for your employment? | 1. Self 2. Spouse 3. Brother/ Brother-in-law 4. Sister/ Sister-in-law 5. Mother/ Mother-in-law 6. Father/ Father-in-law 7. Others   Please specify: ……………. |  |
| 16 | What were your reasons for being employed? | 1. My employment is main source of income in household 2. Extra income was needed 3. To fulfill my career goal 4. My family asked me 5. Staying home never appealed to me 6. I had free time as my child was in alternative care 7. Others   Please specify: ……………. |  |
| 17 | Who used to take care of your child at home when you were on job? | 1. Spouse 2. Older Child 3. Mother/ Mother-in-law 4. Father/ Father-in-law 5. Brother/ Brother-in-law 6. Sister/ Sister-in-law 7. Friend / neighbor 8. Nanny/Maid 9. Others   Please specify: ……………. |  |
| 18 | Did you find chosen home care effective? | 1. Yes 2. No |  |
| 19 | Did you use any other outside home care facilities when you were on job? | 1. No 2. Daycare 3. Others   Please specify: ……………. |  |
| 20 | Did you find chosen outside home care effective? | 1. Yes 2. No |  |
| 21 | Were there any facilities of child care provided to you by your employer? | 1. Yes 2. No |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section C: Child’s Information** | | | | |
| **Q.#** | **Question** | | **Coding categories** | **Comment / data editing** |
| 22 | Name | |  |  |
| 23 | Age (In Years) | |  |  |
| 24 | Gender | | 1. Male 2. Female |  |
| 25 | Class in which child is studying: | | 1. Nursery 2. KG I 3. KG II |  |
| 26 | Child’s cognitive outcomes: | Understanding of themes | 1. Good 2. Satisfactory 3. Needs attention |  |
| Creative abilities | 1. Good 2. Satisfactory 3. Needs attention |  |
| Understanding of pictures | 1. Good 2. Satisfactory 3. Needs attention |  |
| Conversational abilities | 1. Good 2. Satisfactory 3. Needs attention |  |
| Reading skills | 1. Good 2. Satisfactory 3. Needs attention |  |
| Writing skills | 1. Good 2. Satisfactory 3. Needs attention |  |

**APPENDIX D (2): Questionnaire in Urdu**

**”بچے کے ابتدائی سال میں ماﺅں کی ملازمت کے 3 سے 6 سال کے بچوں کی ذہنی صلاحیتوں پر ہونے والے اثرات“**

**سوالنامہ**

**شرکاءکا شناختی نمبر \_\_\_\_\_\_\_\_\_\_\_\_\_**

**حصہ الف: ماں کے بارے میں معاشرتی (اہم) معلومات**

|  |  |  |  |
| --- | --- | --- | --- |
| **نمبر شمار** | **سوال** | **مخصوص درجہ بندی** | **اظہار خیال ؍ ڈیٹا میں ترمیم** |
| **۱۔** | **آپ کا نام** |  |  |
| **۲۔** | **آپ کی عمر (سال بتائیں)** |  |  |
| **۳۔** | **آپ کا پتہ اور رابطہ نمبر** |  |  |
| **۴۔** | **آپ کے بچے کا نام** |  |  |
| **۵۔** | **ازدواجی حیثیت** | **۱۔ شای شدہ**  **۲۔ طلاق شدہ علیحدہ**  **۳۔ بیوہ** |  |
| **۶۔** | **تعلیمی حیثیت** | **۱۔ تعلیمی سال \_\_\_\_\_\_\_**  **۲۔ میٹرک**  **۳۔ بارہویں جماعت**  **۴۔ بیچلرز ڈگری**  **۵۔ ماسٹرز ڈگری**  **۶۔ اور کوئی:**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۷۔** | **پیشہ** | **ا۔ ملازمت**  **۲۔ کاروبار**  **۳۔ گھریلو خاتون**  **۴۔ اور کوئی**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۸۔** | **گھریلو صورتحال** | **ا۔ علیحدہ رہتے ہیں**  **۲۔ مشترکہ خاندان** |  |
| **۹۔** | **خاندان کی ماہانہ آمدنی (پیسے میں)** |  |  |
| **۱۰** | **خاندان کے افراد کی تعداد** |  |  |
| **۱۱۔** | **گھر میں کمانے والے افراد کی تعداد**  **(آپ کو شامل کرکے)** |  |  |
| **۱۲۔** | **آپ کے کتنے بچے ہیں (تعداد بتائیں)** |  |  |

**حصہ ب: سماجی حالات کے بارے میں معلومات**

|  |  |  |  |
| --- | --- | --- | --- |
| **نمبر شمار** | **سوال** | **مخصوص درجہ بندی** | **اظہار خیال ؍ ڈیٹا میں ترمیم** |
| **۱۳۔** | **آپ کتنے عرصے سے کام کر رہی ہیں؟ (سال بتائیں)** |  |  |
| **۱۴۔** | **کیا آپ اپنے بچے کے ابتدائی تین سالوں میں ملازمت کر رہی تھیں؟**  **کُل وقتی کام (ہفتے میں تیس گھنٹے سے زائد**  **جُز وقتی کام (ہفتے میں تیس یا اس سے کم گھنٹے**  **بے روزگار تھی** | **ا۔ ہاں**  **۲۔ نہیں**  **اگر ہاں تو آگے بڑھتے ہیں۔ اگر نہیں تو آپ کے وقت دینے کا بہت شکریہ**  **۱۔ جب بچہ 0-3 مہینے کا تھا**  **۲۔ جب بچہ 3-6 مہینے کا تھا**  **۳۔ جب بچہ 6-9 مہینے کا تھا**  **۴۔ جب بچہ 9-12 مہینے کا تھا**  **۱۔ جب بچہ 0-3 مہینے کا تھا**  **۲۔ جب بچہ 3-6 مہینے کا تھا**  **۳۔ جب بچہ 6-9 مہینے کا تھا**  **۴۔ جب بچہ 9-12 مہینے کا تھا**  **۱۔ جب بچہ 0-3 مہینے کا تھا**  **۲۔ جب بچہ 3-6 مہینے کا تھا**  **۳۔ جب بچہ 6-9 مہینے کا تھا**  **۴۔ جب بچہ 9-12 مہینے کا تھا** |  |
| **برائے مہربانی اپنے بچے کی پیدائش کے وقت سے لے کر ایک سال تک کی معلومات فراہم کیجئے** | | | |
| **۱۵۔** | **آپ کی روزگار سے متعلق کس کا فیصلہ اثر انداز ہواتھا** | **۱۔ خود**  **۲۔ خاوند**  **۳۔ بھائی بہنوی**  **۴۔ بہن نند**  **۵۔ والدہ ساس**  **۶۔ والد سُسر**  **۷۔ کوئی اور**  **\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۱۶۔** | **آپ کے ایک برسرِ روزگار ماں ہونے کی کیا وجوہات ہیں؟** | **۱۔ میرے گھرانے کی آمدنی کا بنیادی ذریعہ میرا روزگار تھا**  **۲۔ اضافی آمدنی کی ضرورت تھی**  **۳۔ ترقی روزگار کے حصول کے لئے**  **۴۔ میرے خاندان والوں نے مجھ سے کہا**  **۵۔ گھر پہ رہنا میرے لئے کبھی پسندیدہ نہیں تھا**  **۶۔ میرے بچے کی دیکھ بھال کا متبادل ہونے کی وجہ سے میرے پاس فارغ وقت تھا**  **۷۔ اور کوئی**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۱۷۔** | **آپ جب روزگار کے لئے جاتی تھیں تو گھر میں آپ کے بچے کی دیکھ بھال کون کرتا تھا؟** | **۱۔ خاوند**  **۲۔ بڑا بچہ بچی**  **۳۔ والدہ ساس**  **۴۔ والد سُسر**  **۵۔ بھائی بہنوی**  **۶۔ بہن نند**  **۷۔ دوست پڑوسی**  **۸۔ نوکرانی**  **۹۔ اور کوئی**  **\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۱۸۔** | **کیا آپ نے گھر میں دی جانے والی دیکھ بھال کو موثر پایا؟** | **۱۔ ہاں**  **۲۔ نہیں** |  |
| **۱۹۔** | **آپ جب روزگار کے لئے جاتی تھیں تو آپ نے گھر سے باہر بچے کی دیکھ بھال کی کوئی سہولت حاصل کی؟** | **ا۔ انہیں**  **۲۔ ڈے کیئر**  **۳۔ کوئی اور ہے تو برائے مہربانی بتائیں**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **۲۰۔** | **کیا آپ نے باہر سے حاصل کی گئی بچے کی دیکھ بھال کو موثر پایا؟** | **۱۔ ہاں**  **۲۔ نہیں** |  |
| **۲۱۔** | **آپ کے مالک کی جانب سے آپ کو بچے کی دیکھ بھال کی سہولیات فراہم کی گئ تھیں؟** | **۱۔ ہاں**  **۲۔ نہیں** |  |

**حصہ ج : بچے کے بارے میں معلومات**

|  |  |  |  |
| --- | --- | --- | --- |
| **نمبر شمار** | **سوال** | **مخصوص درجہ بندی** | **اظہار خیال ؍ ڈیٹا میں ترمیم** |
| **۲۲۔** | **بچے کا نام** |  |  |
| **۲۳۔** | **بچے کی عمر (سال بتائیں)** |  |  |
| **۲۴۔** | **جنس** | **۱۔ لڑکا**  **۲۔ لڑکی** |  |
| **۲۵۔** | **بچہ کونسی کلاس میں پڑھتا پڑھتی ہے؟** | **۱۔ نرسری**  **۲۔ کے جی ۱**  **۳۔ کے جی ۲** |  |
| **۲۶۔** | **بچے کی عقلی صلاحیت**  **موضوعات کو سمجھنا**  **تخلیقی صلاحیت**  **تصویروں کو سمجھنا**  **بول چال کی صلاحیت**  **پڑھنے کی صلاحیت**  **لکھنے کی صلاحیت** | **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب**  **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب**  **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب**  **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب**  **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب**  **ا۔ اچھا**  **۲۔ تسلی بخش**  **۳۔ توجہ طلب** |  |

**APPENDIX E: Budget for the study**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Items** | **Justification** | **Cost in Pakistani Rupees** |
| 1 | Photocopying (Consent forms and Questionnaires ) | Sample size = 152  Consent form= 2 pages  152x2= **304**  Questionnaire 5 pages  5 x 152 = **760** | 760 + 304 = 1064  Photocopy cost= 2 Rs./page  1064 x 2= 2128 Rs.  For form wastages/ wrong entries:  800 + 2128 = **2928 Rs.** |
| 2 | Stationary  (printer papers, pen, pencils, stapler’s pins, erasers, sharpeners, box files, ring files, envelops, writing pads) | Printer paper rims = 1  One rim cost=350 x 2 = **700 Rs.**  Stationary for data collection = **300 Rs.** | 700+ 300 = **1000 Rs.** |
| 3 | Binding of Thesis | Binding charges and photocopy per copy =200 Rs. | **200 Rs.** |
|  | **Total** |  | **4,128 Rs.** |