

## **Impact of Mothers' Employment on Child Development: Study in Khulna City of Bangladesh**

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**Abstract:** This paper examines the impact of mother employment on children's overall development. Children's overall development is viewed in three dimensions, namely physical, social and behavioral and cognitive development. A total sample of 112 mothers is selected for the analysis, where 60 are working mother and 52 non-working mother. Data collected from the survey is analyzed using both descriptive and inferential statistics. Weighted mean index of three broader health outcomes is calculated and seemingly unrelated regression model is used as inferential statistics. In both types of analysis the evidences shown is that children of non-working mothers' are a step ahead than those of working category. There are some exceptions in case of child's cognitive outcome. In order to lessen the harmful effect of detachment of children from employed mother, the study recommend to establish well-organized child caregiver marketplace and to create congenial atmosphere in working place of mother to keep their children.

**Keywords:** Cognitive development, Mothers' employment, Physical development, Social and behavioral development,

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### **I. INTRODUCTION**

Trend of maternal employment all over the world has been rising rapidly due to increased rate of women education, mobility and seek for better living standard. Paid employment of women faces dilemma as in our contemporary society women are confronted with different challenges especially after marriage. They face tradeoff between taking care of babies and family and financial security. But in exchange, people are not willing to compromise them as a career woman. An example is cited of the global financial crisis of 2008, which left a number of male labors unemployed due to collapse of industries. At that time women played a substantial role in financial security [1]. Developing countries are now constantly fighting against the income gain resulting from women work in the face of decreased or gradually diminishing household well-being in terms of improper physical and mental development of their children. This fact is intense in developing countries as they lack any formal market of quality childcare. Informal support extending from family members like mother, sister, daughter etc. or from any other informal but paid caregivers are the routes through which children of working mothers are taken care of. So the question arises regarding this phenomena is whether this trend of mothers' involvement in paid employment has any bad impact on gradual sound development of children or otherwise.

This study aims to make a comparative analysis of the status of children's physical and cognitive development of working mothers who employed only in formal sector job.

In order to explain the phenomena of social interaction or mother child interaction, two theoretical paradigms can be used, as some studies related to the current study have used these two paradigms. According to the interactionism theory, the people of the society being constrained to the contemporary system have to act like what is dictated. In that case paid employment of women is imposed to them that generate monetary benefit but the other side of the coin is the dilemma they face to carry out such imposition. Thus formal paid caregivers have to be assigned by those women to take care of the child and their development is subject to those caregivers [1] Interactionism analyzes the phenomena of social interaction at very micro level while it is confined to the society only.

Other paradigm is constructionism, which holds that any sort of sociological development theory are not mold within individual in a separate manner but keeping pace with other human beings of the existing society. However, there are some assumptions under this theory- i) human beings gather experience and rationalize it through creating a model of the social world and the way it acts; ii) language is a most crucial mode to construct reality [2].

It is obvious that mother employment has a certain adverse impact on the overall development of children, especially at their early ages when mother care is crucial for them. Different cognitive and psychodynamic theories are concerned with the effect of early childcare on the overall development of the children. Joint parental care is needed for childrens' flourishing. But some psychoanalysts have indicated early mother care as a must for the physical and cognitive development of the children. Lack of infant-mother attachment may induce children vulnerability to depression. [3] In a book regarding psycho-analysis the author has defined infant mother attachment as "unique, without parallel, established unalterably for a whole lifetime as the first and strongest love-object and as the prototype of all later love-relations for both sexes". His statement is now prominent enough in infant-mother attachment theory.

Most of the researches have put emphasis on the cognitive development of children of working mothers in both developed and developing nations. A study [4] has investigated whether mother's employment affects children's cognitive development or not. They have compared this issue between working and non-working mother. Maternal employment have no such risks for their child's cognitive development, rather they have found some demographic characteristics that affect the intellectual development of their children regardless of mother employment. Therefore, this is empirically evident in case of Pakistan. Another study in Pakistan [5] has given almost same evidence that there is hardly any difference between the development of children of working and non-working mother. Two groups have opined about the working mothers' success in ensuring children's intellectual development. Optimistic view says that working mothers can ensure financial solvency along with self-confidence, social awareness and other attributes. Opponents have a view that working mothers always deprive their children from early maternal care and thus affect their mental development.

However, there could be a number of factors that work against the adverse effect of mothers' labor market participation on children's cognitive development and behavioral outcomes. This is the case of United Kingdom, where in most cases fathers are seen to be involved in child raising. This type of joint parental care has a positive impact on their development. Whereas, those mother who have to work full-time and assign their children to those of unpaid childcare or relative, have to face risk of unusual development of their children. But paid child care can averse this risk of negative effect on child development and possibly lead to better cognitive outcome [6].

A study in California [7] has given somewhat negative evidence of impact of maternal employment in a sense that, job stress hampers sound parental care. That is mothers' behavioral change due to work pressure is responsible for the children's improper mental development.

Some study findings suggests that maternal employment has no such remarkable effect on child development but some gives evidence of bad effect of working mothers' time distribution on children's development. Two assumptions regarding this have been tested in a study [8] considering the negative outcome of mother employment. According to them the assumptions are (i) maternal employment reduces the children's time with parents; (ii) That lack of time affects child's development outcomes. Decrease in time allocation of mother in such activities that positively influence child development has no such negative impact. But reduction in time allocation for monitoring those things done by their child and possibly harmful for their development is still alarming. It is evident that balance in time allocation is easier for higher educated mothers and to some extent difficult for those mothers who have only secondary education. In some cases, fathers play an important role by paying extra attention to the children. The conclusion of the assumptions is that it is not obvious that mothers' employment affect child's time with their parents and not always a substantial time allocation privileges child's development.

## **II. MATERIAL AND METHODS**

The study is both exploratory and explanatory in nature. In order to capture the impact the impact of mothers' work on child development, the authors consider both housewife mothers who stay with their children daylong and working mothers who work in formal sector job and remain detached from their children for at least 8 hours and whose children are taken care of by the paid or unpaid caregivers instead of by themselves. Here sample unit is the children aged in between 4 to 7 years of both working and non-working mothers. Data has been collected from the mothers or main caregivers. Total sample size for this study is 112 of which 60 belongs to working category and chosen from *Sonadanga* Residential Area (2nd phase). Another 54 belongs to non-working category mother and chosen from *ChotoBoyra* area. Both of the stated study areas are situated in Khulna city of Bangladesh.

A semi-structured interview schedule has been prepared for conducting a pilot survey in order to prove its validity. After incorporating the findings of the pilot survey, the schedule has been developed for final survey. Primary data has been collected on the socio-economic characteristics of the respondents and child's health outcome.

In order to capture the impact of mothers' work on child development, the authors have used descriptive statistics, Weighted Mean Index (WMI) as well as inferential statistics. The study defines child development as physical development, social and behavioral development and cognitive development of children and estimates the impact of mothers' work on these three types of child development by using seemingly unrelated regression (SUR). Variables used for this study is stated in Table 1.

## 2.1 Variables of the Study

**Table 1:** Variables of the study

Variables	Indicators	Scale of measurement
Child's Health Outcome (Dependent variable)	<b>Physical Development</b> BMI Height Weight Skin Problem Physical movement Oral problem Food allergy <b>Behavioral and Social Development</b> Showing respect Following elders Following daily routine Taking challenge Enjoying school Willingness to go to school Performing religious practice Insistence on any matter Weekly fruits consumption Weekly milk consumption Regularity in bed time	Ratio scale Inches Kg Categorical Three point scale Three point scale Three point scale (Calculated WMI)  Three point scale (Calculated WMI)
	Reactions to excessive anger Intimacy with friends Willingness to play Types of play children like Enjoying to do own work Preference to TV shows Regularity in taking meal Daily activities of the children  <b>Cognitive Development</b> Concentration level Reading interest Writing skill Observation capacity Painting interest	Categorical Dichotomous Dichotomous Categorical Categorical Categorical Dichotomous Dichotomous  Three point scale (Calculated WMI)
Socio-economic Characteristics of the Respondents (Independent variables)	Age of the children Sex of the children Number of the children Family size Family structure Education of the parents Occupation of the parents Family income (Monthly) Food expenditure (Monthly)	Years Categorical Numeric Numeric Categorical Year of schooling Categorical BDT BDT

Child-mother Attachment	Total time spent for the children	Hours
	Time spent for education	Hours
	Time spent for cooking	Hours
	Willingness of child to leave mother	Three point scale
	Child's reaction on mother's leave	Categorical
	Insecurity feeling of child	Percentage
	Caregiving during sickness	Categorical
	Child's complain about affection	Percentage

**2.2 Methods of analysis**

In this study, descriptive statistics has been used for the analysis of socio-economic profile of the respondents. In addition to this, data has been collected on three point scales for 3 indicators of physical development, 11 indicators of social and behavioral development and 5 indicators of cognitive development. After that, the authors have calculated WMI of each individual indicator and compare the index values afterwards between two groups.

**2.2.1 Seemingly Unrelated Regression (SUR)**

SUR model usually explains variation in multi dependent variables at the same time with respect to same set of independent variables. In this study, SUR model has been used to estimate the impact of socio-economic variables on three broader child outcome selected for analysis. In that case, independent variables are same all along for three outcomes. Average score has been calculated for each respondent which is used as a representative for each broader outcome variables. For the variable physical development we have used Body Mass Index of the children calculated by the following formula

$$BMI = \frac{weight(kg)}{height(meter)^2}$$

Average score of other two outcome variables have been calculated through dividing indicator wise horizontal summation of score by number of indicators. For social and behavioral development outcome, 19 indicators have been considered in the study, among which we have taken average of only 11 indicators for SUR model of which weighted mean index were calculated earlier. And, in case of intellectual development we have considered 5 indicators and taken their average score as a proxy for the outcome variable.

Precisely, the formula of calculating average score in this study is

$$\frac{\text{horizontal summation of the scores of respective indicators}}{\text{no. of indicators}}$$

Basically, the generalized form of seemingly unrelated regression is written as matrix form [9]. For any n number of m number of dependent variables and m number of independent variables the form of SUR model is as follows.

$$\begin{bmatrix} Y_1 \\ Y_2 \\ \dots \\ Y_m \end{bmatrix} = \begin{bmatrix} X_1 & 0 & 0 \\ 0 & X_2 & 0 \\ \dots & \dots & \dots \\ 0 & 0 & X_n \end{bmatrix} \times \begin{bmatrix} \beta_1 \\ \beta_2 \\ \dots \\ \beta_n \end{bmatrix} + \begin{bmatrix} \mu_1 \\ \mu_2 \\ \dots \\ \mu_n \end{bmatrix}$$

Now equations are written separately as following

$$Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + \alpha_7 X_7 + \alpha_8 X_8 + \alpha_9 X_9 + \mu$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \epsilon$$

$$Y_3 = \gamma_0 + \gamma_1 X_1 + \gamma_2 X_2 + \gamma_3 X_3 + \gamma_4 X_4 + \gamma_5 X_5 + \gamma_6 X_6 + \gamma_7 X_7 + \gamma_8 X_8 + \gamma_9 X_9 + \delta$$

Here,

$Y_1$  = BMI of the children

$Y_2$  = Average scores of social and behavioral development indicators

$Y_3$  = Average scores of cognitive development indicators

$X_1$  = Mother types (working or nonworking)

$X_2$  = Sex of the children

$X_3$  = Number of the children

$X_4$ = Family structure  
 $X_5$ = Mother's education  
 $X_6$ = Father's education  
 $X_7$ = Father's occupation  
 $X_8$ = Family income (monthly)  
 $X_9$ =Food expenditure (monthly)  
 $\mu, \varepsilon$  and  $\delta$ = Error terms

### III. RESULT

#### 3.1 Socio-economic Characteristics of the Respondents

In this study the author selected two groups of working and non-working mothers and collected their children's socio-economic and demographic data. This study has categorized two types of sex, of which male child are higher in number. Working mothers have 51.7 percent male children and 48.3 percent female children whereas non-working mothers have 61.5 percent male children and 38.5 percent female children. In case of number of children, 28.3 percent of working mother said that they have one child, 61.7 percent have two children and 10 percent have three children. In non-working category, 38.4 percent have two children and 13.6 percent have three children. The authors have categorized two types of family- nuclear and joint. In working mother group, 93.3 percent of families are nuclear and 6.7 percent of families are joint. In non-working category, 98.07 percent of families are nuclear and 1.93 percent of families are joint. Therefore, maximum families are nuclear. In this study, family size has been categorized by the number of family members. Again 88.3 percent of working mothers' family size is 3-4. For 11.2 percent of working mothers, family size is 5-6. In non-working category, 84.61 percent fall under 3-4 family size whereas 15.39 percent fall under 5-6 family size. Therefore, it is evident that maximum children come from smaller family.

Age structure of the children shows that under working mother group, 5 percent of children belong to category in 4 to 5 years, 48.3 percent of children under 5 to 6 years and 46.7 percent of children belong to category of 6 to 7 years. In nonworking category, 21.2 percent are 4 to 5 years of age, 38.5 percent are under 5 to 6 years and 40.3 percent of children belong to category of 6 to 7 years. Table 2 shows the educational status of parents of the children. In working category, 3.3 percent of fathers have completed secondary education and 30 percent and 66.7 percent father have completed their higher secondary and higher education respectively. Again, 15 percent and 35 percent of mother have completed secondary and higher secondary education and 50 percent of mother have completed higher education. In non-working category, 3.8 percent of fathers have completed secondary education and 36.6 percent and 59.6 percent of father have completed higher secondary and higher education respectively. Again, 15.4 percent of mother has completed their primary education. Again then, 44.2 percent and 25 percent of mother have completed their secondary and higher secondary education and 15.4 percent of mother has completed higher education.

**Table2:** Education of parents

Year of Schooling	Working Mother				Non-working Mother			
	Number of Respondents		Percentage (%)		Number of Respondents		Percentage (%)	
	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Primary (1-5)	--	--	--	--	--	08	--	15.4
Secondary (6-10)	2	9	3.3	15	02	23	3.8	44.2
Higher Secondary(11 -12)	18	21	30	35	19	13	36.6	25
Higher (12+)	40	30	66.7	50	31	08	59.6	15.4
<b>Total</b>	<b>60</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>52</b>	<b>52</b>	<b>100</b>	<b>100</b>

(Source: Field Survey, 2018)

With regard to occupation, Table 3 demonstrates that highest 26.7 percent of children's fathers are businessman, 25 percent work in private companies and 16.7 percent, which occupies the third highest category work in NGOs. This is the case for working mothers' category. Under non-working category, maximum number (38.46 percent) of children's father are businessman (38.46 percent), then NGO worker (17.30 percent), followed by job holders at private company, police department, WASA, other sectors, teacher, lecturer and sub-registrar respectively.

**Table3: Fathers Occupation**

Fathers' Occupation	Working Mother		Non-working Mother	
	Number of Respondents	Percentage (%)	Number of Respondents	Percentage (%)
Teacher	1	1.7	3	5.77
Lecturer	6	10	2	3.84
NGO	10	16.7	9	17.30
Company	15	25	5	9.61
Police	5	8.3	5	9.61
Businessman	16	26.7	20	38.46
Sub-register	1	1.7	2	3.84
WASA	4	6.7	3	5.76
Others	2	3.3	3	5.76
<b>Total</b>	<b>60</b>	<b>100</b>	<b>52</b>	<b>100</b>

(Source: Field Survey, 2018)

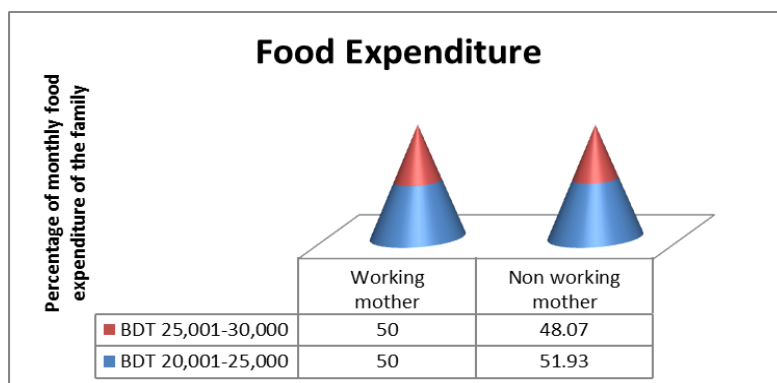
In case of mothers' occupation, Table 4 shows that highest percentage of mothers are lecturer (23.3 percent), followed by NGOs worker (21.7 percent), teacher (18.3 percent), as well as company worker (16.7 percent), family planning (11.7 percent), sub-registrar (5 percent) and other category (3.3 percent).

**Table4: Mothers' occupation**

Mothers Occupation	Working Mother	
	Number of Respondents	Percentage (%)
NGO	13	21.7
Teacher	11	18.3
Lecturer	14	23.3
Sub-register	3	5.0
Family Planning	7	11.7
Company	10	16.7
Others	2	3.3
<b>Total</b>	<b>60</b>	<b>100</b>

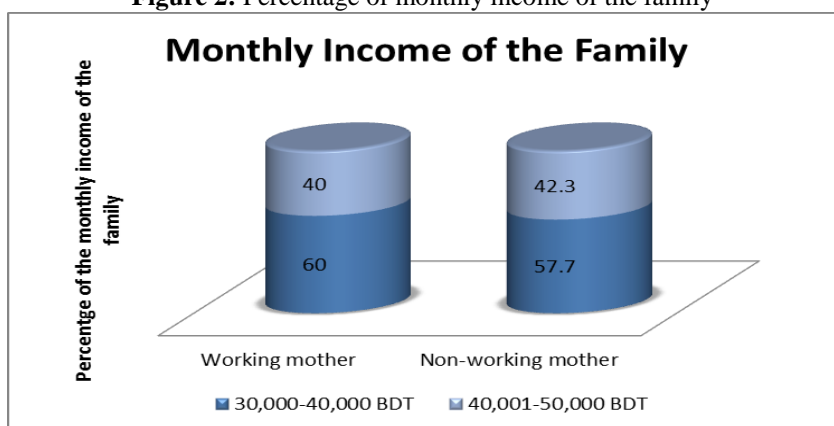
(Source: Field Survey, 2018)

This study observes no significant differences in family income between two categories. In working category, 60 percent of family's monthly income is BDT 30,001 to 40,000 and 40 percent of family's monthly income is BDT 40,001 to 50,000. In non-working category, 57.70 percent of family's monthly income is BDT 30,001 to 40,000 and 42.3 percent of family's monthly income is BDT 40,001 to 50,000. Hence, maximum family's monthly income is BDT 30,001 to 40,000. Similar pattern is also observed in case of food expenditure of the family. According to working category, 50 percent of family's monthly food expenses are BDT 20,001 to BDT 25,000 and 50 percent of family's monthly food expenses are BDT 25,001 to BDT 30,000. On the other hand, in non-working category, 51.93 percent of family's monthly food expenses are BDT 20,001 to BDT 25,000 BDT and 48.07 percent of family's monthly food expenses are BDT 25,001 to BDT 30,000.



**Figure1 :Percentage of monthly food expenditure of the family**

Figure 2: Percentage of monthly income of the family



## 2.3 Children's health outcome

### 3.2.1 Physical development

Physical development of children in the early stages is crucial, because they are considered as future asset. Today's investment in their any sort of development will create benefit for their own and for the economy in broader sense. Table 5 represents some indicators of child's physical development according to working category of mothers separately. Five health indicators are considered. Those are Body Mass Index (BMI), physical movement, oral problem, skin problem and food allergy.

Table 5 demonstrates that in working category, 51.8 percent of children's BMI value belongs to category 10 to 15 ranges, 33.3 percent of children are 16 to 20 range and 6.7 percent of children's BMI value belongs to 21 to 25 ranges and 8.2 percent of children exceed the value of 25 ranges. In non-working category, 73.1 percent of children's BMI value falls under 10 to 15 ranges, 21.2 percent of children's BMI value falls within 16 to 20 ranges and 5.7 percent of children's BMI value belongs to 21 to 25 ranges.

Field survey shows that maximum height of the children is 48 inches and minimum height is 30 inches. For non-working category, maximum height of the children is 48 inches and minimum height is 36 inches. Likewise, maximum weight of the children is 21 Kg and minimum weight is 14 Kg for that of the working category. On the other hand, in non-working category, maximum weight of the children is 21 Kg and minimum weight of the children is 15 Kg. Table 5 also illustrates about skin disease of working and non-working mothers' children. In working category, 31.7 percent of children have allergy problem in skin, 8.3 percent of children have other problems in skin and 60 percent of children face no skin problem. In non-working category, 38.46 percent of children faces allergy problem in skin, 9.61 percent of children face other problems of skin and 51.92 percent of children faces no skin problem. Therefore, it is evident that both types of mothers are conscious about their children's skin care.

Weighted mean index has been calculated for three indicators namely physical movement, oral problem and food allergy. The weighted mean index for physical movement of the children in working category shows the higher value than those of non-working counterparts. Similarly, this indicator possesses the highest value among all indicators of working mothers group. But comparing the two categories, we conclude that, WMI values in working category are seemingly higher than those of values in non-working category for respective indicators other than food allergy indicator.

Table 5: Physical development

Indicators	Ranges/Category	Working mother	WMI (Working mother)	Non-working mother	WMI (Non-working mother)
BMI	10-15	51.8%	....	73.1%	....
	16-20	33.3%	....	21.2%	....
	21-25	6.7%	....	5.7%	....
	25+	8.2%	....	0%	....
Height	Maximum	48 inches	....	48 inches	....
	Minimum	30 inches	....	36 inches	....
Weight	Maximum	21 Kg	....	21Kg	....
	Minimum	14 Kg	....	15 Kg	....
Skin Problem	Allergy	31.7%	....	38.46%	....
	Other problem	8.3%	....	9.61%	....

	No problem	60%	....	51.92%	....
Physical movement	Very good	25%	2.03	19.23%	1.97
	Good	53.3%		57.7%	
	Moderate	21.7%		23.07%	
	Frequently	5%		5.76%	
Oral problem	Sometimes	46.7%	1.57	36.53%	1.48
	Never	48.3%		57.71%	
	Frequently	10%		13.46%	
Food Allergy	Sometimes	26.7%	1.47	32.70%	1.60
	Never	63.3%		53.84%	

Data source: Authors compilation from field survey data, 2018

### 3.2.2 Behavioral and social development

The study has set 11 individual indicators presented in Table 6 and another 8 indicators stated in Table 7 to reveal the behavioral and social development of the children of two types of mothers. Here, Weighted Mean Index (WMI) has been calculated to compare the performance of two types of mothers' children in Table 6.

In case of working mothers' children, doing religious practice shows the highest weighted mean value and practice of showing respect indicates second highest mean value. Likewise, children's challenge taking behavior, enjoying school indicators assumes higher index values.

On the other hand, among all indicators in non-working category, religious practice assumes the highest weighted mean value followed by practices of showing respect, enjoying school, challenge taking behavior, which have higher index values. Now if we compare the index values between two groups, that is, working mother and non-working mother, it is evident that individual index values of non-working category is higher than that of working mother group. This extent of difference is highest for practice of child's insistence on any matter followed by following daily routine, following elders, weekly milk taking habit, regularity in bed time, doing religious practices, enjoying school, showing respect, like to take challenge, weekly fruit consumption. Precisely, the overall weighted mean index indicates that the indicators of both categories separately represents the phenomenon of mothers' absence and presence impact on children's social and behavioral development.

**Table 6:** Social and behavioral development

Indicators	Category	Working mother	WMI	Non-working mother	WMI
Showing respect	Always	37 (61.7%)	2.6	38 (73.08%)	2.69
	Sometimes	22 (36.7%)		12 (23.08%)	
	Never	1 (1.7%)		2 (3.84%)	
Following elders	Always	26 (43.3%)	2.17	30 (57.69%)	2.48
	Sometimes	18 (30%)		17 (32.70%)	
	Never	16 (26.7%)		5 (9.61%)	
Following daily routine	Always	30 (50%)	2.13	35 (67.30%)	2.53
	Sometimes	18 (30%)		10 (19.24%)	
	Never	12 (20%)		7 (13.46%)	
Like to take challenge	Always	40 (66.7%)	2.52	35 (67.30%)	2.58
	Sometimes	11 (18.3%)		12 (23.08%)	
	Never	9 (15%)		5 (9.62%)	
Enjoying school	Always	37 (61.7%)	2.55	39 (75%)	2.69
	Sometimes	19 (31.7%)		10 (19.24%)	
	Never	4 (6.7%)		3 (5.76%)	
Willingness to go to school	Always	31 (51.7%)	2.47	32 (61.54%)	2.52
	Sometimes	26 (43.3%)		15 (28.84%)	
	Never	3 (5%)		5 (9.62%)	
Performing religious practices	Always	35 (58.3%)	2.57	40 (76.9%)	2.77
	Sometimes	24 (40%)		12 (23.1%)	
	Never	1 (1.7%)		0 (00%)	
Excessive insist on any matter	Always	20 (33.3%)	1.70	20 (38.46%)	2.19
	Sometimes	16 (26.7%)		22 (42.30%)	
	Never	10 (16%)		10 (19.23%)	



<b>Weekly fruits consumption of children</b>	Very Much Regular (5-7 days)	14 (23.3%)	2.05	10 (19.23%)	2.11
	Regular (3-5 days)	35 (58.3%)		38 (73.07%)	
	Irregular (2-3 days)	11 (18.3%)		4 (7.7%)	
<b>Weekly milk taking habit</b>	Very Much Regular (5-7 days)	21 (35%)	2.18	29 (55.77%)	2.46
	Regular (3-5 days)	29 (48.3%)		18 (34.61%)	
	Irregular (2-3 days)	10 (16.7%)		5 (9.62%)	
<b>Regularity in bed time</b>	Always	25(41.7%)	2.0	27 (51.93%)	2.23
	Sometimes	10(16.7%)		10 (10.23%)	
	Never	25(41.7%)		15 (28.84%)	

Data source: Authors compilation from field survey data, 2018

Table 7 represents other 8 indicators of child's social and behavioral development. This table illustrates that 53.3 percent of children cry when he or she becomes excessive angry, 33.3 and 10 percent of children shout and become aggressive when excessive angry and 3.3 percent of children show other behavior under the same circumstances. This is the case for working mother category. While in non-working category, 42.3 percent of children cry followed by 23.1 percent shout, 19.2 percent aggressive and 15.4 percent of children show other behavior when he or she becomes excessive angry. Therefore it is clear that, crying is the most observed reactions to anger for all types of children.

As the age of the children under this study ranges from 4 to 7, most of them are newly school goers. Hence, it is needed to assess their attachment with the school. While investigating their level of willingness to go there, present study finds that greater percentage of non-working mothers' children (61.54 percent) are always willing to go to school than those of working mothers' children (51.7 percent). This data presented in working category, 61.7 percent of children prefer to make intimacy with friends and playing with them and 38.3 percent of children do not prefer to make intimacy with friends and playing with them. In non-working category, 67.30 percent of children prefer to make intimacy and play and 32.70 percent of children do not prefer to do that. Therefore, it is understood that, maximum number of children prefers to make intimacy with friends and playing with them.

According to survey, in working category, 85 percent of children like to play with friends, which is a bit higher than non-working counterparts (82.7 percent). Again 15 percent of working mothers' children does not like to play with friends compared to 17.3 percent in non-working category.

According to the result in working category 5 percent of children like climbing, 51.7 percent of children like running and 25 percent of children like jumping and rest 18.3 percent of children like to other type of playing. Respective figures in non-working category are, 5.77 percent in case of climbing, 67.30 percent of children like running and 19.23 percent of children like jumping and 7.70 percent of children like others playing.

While determining maintenance of discipline by the children, result obtained from selected indicators shows that in working category, 43.3 percent of children prefer to wear dress by themselves, 23.3 percent of children prefer to tie of own shoes and 26.7 percent of children prefer to take meal and 6.7 percent of children prefer to do their other works by themselves. In non-working category, 61.54 percent of children prefer to wear dress by themselves, 5.76 percent of children prefer to tie of own shoes and 25 percent of children prefer to take meal and 7.70 percent of children prefer to do their other works by themselves.

Children's preference of TV shows has also been evaluated. The result suggests that in working category, 46.7 percent of children like cartoon, 51.7 percent of children prefer animated movie and 1.7 percent of children prefer to see others programs. On the other hand, in nonworking category, 57.70 percent of children like cartoon, 38.46 percent of children prefer animated movie and 3.84 percent of children like to see others programs.

Insistent behavior of child is also a matter of concern. It has been calculated that 33.3 percent of children shows excessive insist on in any matter, 16 percent of children do not show excessive insist and 26.7 percent of children sometimes show excessive insist on in any matter in working group. In non-working group, 38.46 percent of children show excessive insists on in any matter, and 19.23 percent of children do not show excessive insist and 42.30 percent of children sometimes show excessive insist on in any matter.

**Table 7:** Social and behavioral development

Activities		Working mother	Non-working mother	
Reactions to excessive anger	Crying	32 (53.3%)	22 (42.3%)	
	Shouting	20 (33.3%)	12 (23.1%)	
	Aggressive	6 (10%)	10(19.2%)	
	Others	2 (3.3%)	8 (15.4%)	
Prefer to be intimate with friends	Yes	37 (61.7%)	35 (67.30%)	
	No	23 (38.3%)	17 (32.7%)	
Willingness to play with friends	Yes	51 (85%)	43 (82.7%)	
	No	9 (15%)	9 (17.3%)	
Types of play children likes	Climbing	3 (5%)	3 (5.77%)	
	Running	31 (51.7%)	35 (67.30%)	
	Jumping	15 (25%)	10 (19.23%)	
	Others	11 (18.3%)	4 (7.70%)	
Enjoying to do own work	Wearing dress	26 (43%)	32 (61.54%)	
	Tie of own Shoes	14 (23.3%)	3 (5.76%)	
	Taking food	16 (26.7%)	13 (25%)	
	Others	4 (6.7%)	4 (7.7%)	
Preference to TV shows	Cartoon	28 (46.7%)	30 (57.70%)	
	Animated Movies	31 (51.7%)	20 (38.46%)	
	Other	1 (1.7%)	2 (3.84%)	
Regularity in taking meal	Yes	47 (78.3%)	100%	
	No	13 (21.7%)	00%	
Daily activities of the children	Wash face and hand regularly	Yes	46(76.7%)	49 (94.23%)
		Sometimes	14(23.3%)	3 (5.77%)
	Wash hand before meal	Yes	47(78.3%)	45 (86.54%)
		Sometimes	13(21.7%)	7 (13.46%)
	Brush teeth and take bath	Yes	60(100%)	52 (100%)
		Sometimes	0 (0%)	(0%)
Wash hand using toilet properly	Yes	40 (66.7%)	40 (76.93%)	
	Sometimes	20 (33.3%)	12 (23.7%)	

Data source: Authors compilation from field survey data, 2018.

### 3.2.3 Cognitive development

Weighted mean index has also been calculated in case of intellectual development and shown in table 8. Here, cognitive development indicators from both categories have been calculated. Among all indicators interest to draw picture represents higher weighted mean index in working category. Observation capacity denotes next best index value.

On the other hand, in non-working group, similar indicator shows highest index value that is interest in drawing picture. However, observation capacity shows the next best index value here too.

Regarding intellectual development, children who belong to non-working mother are a step ahead than those who belong to working mother category.

**Table 8:** Cognitive development

Activities	Category	Working mother	Weighted mean Index (WMI)	Non-working mother	Weighted mean Index (WMI)
Concentration level	Good	4 (6.7%)	1.72	3 (5.78%)	1.58
	Medium	35 (58.3%)		24 (46.15%)	
	Bad	21 (35%)		25 (48.07%)	
Reading interest	Good	27 (45%)	2.25	29 (55.17%)	2.38
	Medium	21 (35%)		14 (26.92%)	
	Bad	12 (20%)		9 (17.30%)	
Writing skill	Good	28 (46.7%)	2.20	28 (53.84%)	2.37
	Medium	16 (26.7%)		15 (28.84%)	
	Bad	16 (26.7%)		9 (17.30%)	

Observation Capacity	Good	37 (61.7%)	2.45	39 (75%)	2.71
	Medium	13 (21.7%)		11 (21.15%)	
	Bad	10 (6.7%)		2 (3.84%)	
Painting interest	Good	37 (61.7%)	2.60	40 (76.92%)	2.73
	Medium	22 (36.7%)		10 (19.23%)	
	Bad	1 (1.7%)		2 (3.84%)	

Data source: Authors' compilation from field survey data, 2018

### 3.2.4 Seemingly Unrelated Regression Result

In this phase of analysis, seemingly unrelated regression model has been estimated against socio-economic and demographic profile of the respondents. In this model the outcome variables used are children's body mass index calculated from their height and weight, average score calculated from social and behavioral indicators and cognitive development indicators.

The result presented in table 9 suggests that, on an average, working mothers' children have greater BMI value than that of non-working mother which is significant at 10 percent level. While monthly income shows negative association with BMI value. That is, BMI value will be increased by 3.3 due to one unit increase in income. This result is significant at 1 percent level.

From the analysis it has been found that children of working mothers are lagging behind in terms of social and behavioral development. Average score for social and behavioral development is lower for working mothers to the extent of .096 which is significant at 10 percent level. In case of family structure, children who belong to nuclear family represent lower score for social and behavioral development. Apart from these indicators, other indicators have no such expected significant association with outcome variables.

Most importantly, there is no significant expected outcome for indicators of intellectual development. As cognitive development is a biological aspect and respective model does not contain any genetic factors, other variables have failed to predict the cognitive outcome robustly.

**Table 9:** Seemingly unrelated regression result

Variables	BMI (Body Mass Index)	Average Score of Social and behavioral development Indicators	Average Score of Mental Development Indicators
Mother type	1.890*	-0.0957*	-0.0999
	-1.081	-0.0549	-0.0807
Sex of the children	-0.704	0.0328	-0.0928
	-0.843	-0.0429	-0.0629
Number of the children	-0.56	-0.0284	0.0543
	-0.691	-0.0351	-0.0516
Family structure	0.657	-0.215**	-0.15
	-2.12	-0.108	-0.158
Mothers education	-0.0629	0.0202	-0.0358
	-0.634	-0.0322	-0.0473
Fathers education	-0.242	0.0772	-0.0189
	-1.122	-0.0571	-0.0838
Fathers occupation	0.339	0.00285	0.0122
	-0.253	-0.0129	-0.0189
Monthly income	3.296***	-0.0575	-0.0596
	-0.844	-0.0429	-0.063
Monthly food expenditure	-0.97	-0.0439	-0.0291
	-0.813	-0.0413	-0.0607
Constant	26.78***	2.350***	2.859***

	-5.733	-0.291	-0.428
Observations	112	112	112
R-squared	0.181	0.196	0.077
*** p<0.01, ** p<0.05, * p<0.1			

Data source: Authors' compilation from field survey data, 2018

### 3.3 Children-mother attachment

A mother's attachment to her children is crucial for child development. The study defines attachment as interaction of mother with her child. Child-mother interaction is analyzed under this study in terms of mother's time investment for child's education and cooking; child's reaction during mother's leave for office as well child's feeling about affection of mother.

Field survey shows that higher percentage (35 percent) of working mothers spend 1 to 2 hours for their children's education and 61.7 percent of working mothers spend 2 to 3 hours for their children followed by 3.3 percent of working mothers spend up to 3 hours for their children's education. In nonworking category, 5.76 percent of mothers spend 1 to 2 hours for their children's education and 32.69 percent of mothers spend 2 to 3 hours for their children's education and 61.53 percent of mothers spend up to 3 hours for their children's education. Therefore it is clear that, in nonworking mothers spend more time for their children's education than working mother.

Regarding cooking time, this study shows that, 56.7 percent of working mothers spend 1 to 2 hours and 43.3 percent of working mothers spend 2 to 3 hours for cooking. In nonworking category, 73.7 percent of mothers spend 1 to 2 hours and 26.93 percent spend 2 to 3 hours for cooking. Therefore it's clear that, nonworking category of mother spend more their cook time for their children as compare to working mother.

Whenever mother gets ready to go for office, 30 percent of children always permit their mother to go willingly, 48.3 percent of children permit sometimes to go office willingly and rest 21.7 percent of children never permit their mother to go office willingly. With regard to reactions, 61.7 percent of children cry when their mother go to office, 35 percent of children are normal when their mother go to office and 3.3 percent of children shows other behaviors when their mother go to office.

**Table 10:** Childs' behavior when mother to go office

Child's Permission	Number of Respondents Percentage (%)	Reaction of Child	Number of Respondents Percentage (%)
Always	18 (30.0)	Crying	37 (61.7)
Sometimes	29 (48.3)	Normal	21 (35.0)
Never	13 (21.7)	Others	2 (3.3)
<b>Total</b>	<b>60 (100)</b>	<b>Total</b>	<b>60 (100)</b>

In case of working mothers, 50 percent of main caregivers are relatives and rest 50 percent are maid servants. This study reveals that in case of working mothers' children, 16.7 percent children have greater level of complain against their mothers' about affection and 58.3 percent of children have lower level complain about affection. Only 25 percent children do not have complains against their mother about affection. In addition to this, 76.6 percent of children feel insecure when their mother go to office and rest 23.4 percent of children do not feel insecure during their mothers' absence. Whenever they feel sick, working mothers look after their children in 83.3 percent case, and caregivers look after their children in 16.6 percent in the same situation. But working mothers are very much conscious about the educational quality of the main caregivers. Data shows that 66.7 percent of main caregiver has completed their secondary education and 33.3 percent of main caregiver has completed their higher secondary education. And 100 percent of caregivers are skilled to look after their children.

## IV. DISCUSSION

There exist a number of psychoanalytic theories regarding mother-child interaction. Attachment of children to their mother in the early ages is said to be crucial as their initial flourishing is in the hand of their mother and family in broader sense. A sound attachment of children to their mother hastens their socialization process and it is also needed for their physical and cognitive betterment. The main purpose of the current study is to assess the impact of mother's employment on these types of betterment of children at their early age.

Three types of development outcomes are evaluated in two different ways. Among them, according to the calculation of weighted mean index children's body mass index which is a proxy for physical development indicates better values for the children that belong to working category.

For social and behavioral development, weighted mean index for the selected indicators shows that comparatively children of non-working mother have better performance in case of social indicators and in their daily activities. Mother's absence and presence make this difference. Non-working mothers have enough time to socialize their children and at the same time help growing practice of maintaining discipline, visibly working mothers lack this opportunity as they have to assign their children to caregiver. The index value of one indicator named 'excessive insist on any matter' is also high in case of non-working group. For non-working mothers, children are attached to their mother day long and thus get that space of insisting easily.

In case of cognitive development the WMI values of concerned indicators shows that children in non-working group have better performance except for one that is concentration level which has better index value in working category. This is somewhat biological issue and it may not be simply explained without help of factors related to genetic factors.

Seemingly unrelated regression result for the same development outcomes shows that mothers' working status has statistically significant impact on the BMI value of the children. Children who belong to working mother category have higher BMI value than those in non-working category. Monthly income has an expected positive impact on BMI value. Better living standard promotes better growth of the child. In case of social and behavioral development outcome, mother-type is in a negative association with average scores of the indicators. Here, non-working mothers are in better position than those of working mothers. Family structure has a negative association with this outcome. Comparatively, extended families than nuclear ones mandate sound social development of children.

In case of cognitive development there seems to be no significance in the result. A probable reason for that would be exclusion of genetic factors in the model. Psycho-analysis is better in this regard.

However, in case of other aspects of child mother attachment around 75 percent of the children in working category have complain about their mother's affection and care they deserve. This is a serious acquisition for children of that age. In case of assigning caregiver mothers are concerned enough. Around half of the working mother assigns their children to relatives and other have to assign children to paid caregivers. Therefore, the whole analysis gives the concrete message that in almost everywhere non-working mothers' children are performing better except for some special cases.

## V. CONCLUSION

Though joint parental care is crucial for the entire development of children, mother herself play the most significant role in child's development. Considering this, mother-child interaction has been given primacy with the passage of time. Different psycho-analysts have opined that, children's basic socialization process starts in the family they belong, the surroundings they have. And that initial development has influence on the long run destination of the children. Present study identifies that mother's detachment from child due to employment have some detrimental impacts on their development. Although empirical findings suggest both supportive and adverse view about impact of mothers' employment on child development, this study finding supports the opposing impacts of their mothers' employment in almost all cases. Children's detachment from their mother hampers their social and behavioral development and also their cognitive development. It is also evident that children of working mothers have complain about deprivation of the affection they deserve. This is really harmful for their psychological development and it promote wilderness in their behavior. Therefore, this is a place for policy intervention. In that case an established market of child caregiver is crucial. Respective working place can also play a role by creating place for keeping female employees children and care giving.

## REFERENCES

- [1]. Ering SO, Akpan FU, Echiegu NE. Mothers employment demands and child development: An empirical analysis of working mothers in Calabar Municipality. *American International Journal of Contemporary Research*. 2014; 4(4):184-191.
- [2]. Leeds-Hurwitz. Social construction of reality. In S. Littlejohn and K. Foss (Eds). *Encyclopedia of Communication Theory*, California. SAGE publications. 2009;892-895.
- [3]. Freud S. An outline of psycho-analysis. *International journal of psycho-analysis*. 1940; 21: 21-84.
- [4]. Meherali MS, Karmaliani R, Asad N. Effects of mothers' employment on toddlers' cognitive development: A study in Karachi, Pakistan. *Early Child Development and Care*. 2011; 181(7):877-890.
- [5]. Almani DAS, Abro A, Mugheri RA. Study of the effects of working mothers on the development of children in Pakistan. 2012;2(11):164-171.

- [6]. Gregg P, Washbrook E, ALSPAC Study team. The effects of early maternal employment on child development in the UK. Preliminary results under project: Understanding the impact of poverty on children of the 90's. CMPO Working paper series. 2003; 3(70):1-88.
- [7]. Repetti RL, Wood J. Effects of daily stress at work on mothers' interactions with preschoolers. *Journal of Family Psychology*. 1997; 11(1):90-108.
- [8]. Hsin A, Felfe C. When does time matter? Maternal employment, children's time with parents, and child development. *Department of Health and Human Services, USA*. 2014;51(5): 1-32.
- [9]. Sinaga A. Brief introduction seemingly unrelated regression (SUR). 2015;1-17

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