



Research Paper

## Perception Analysis for Business Prospects of Childcare Centre

<sup>1\*</sup>. Dr. Md. Mahedi Hasan

Associate Professor, Department of Accounting and Information Systems, Jashore University Science and Technology, Jashore 7408, Bangladesh,

<sup>2</sup>. Zarin Khan Moon

BBA, Department of Accounting and Information Systems, Jashore University Science and Technology, Jashore 7408, Bangladesh, Cell Phone No.

### Abstract

The massive influx of women of Bangladesh in the labour force keeps the parents away from their children, hampering child development. So, there might have a latent demand for an alternative to parental childcare. But it depends on the working parents' perception of child development and childcare centre. There is a lack of sound studies on working parents' perception of child development and a childcare centre in Bangladesh. So, this study aimed at perception analysis for business prospects for a childcare centre. A sample of 100 respondents from Jashore University of Science and Technology was randomly selected for a questionnaire survey. Frequency distribution, chi-square test and binary logistic regression analysis were used as statistical tools. It was revealed that almost all the respondents agreed on  $P_1$ ,  $P_2$ ,  $P_3$  and  $P_4$ . Those who agreed with  $P_1$  were likely to agree with  $P_4$  13.17 times more than those who did not agree with  $P_1$ . Those who agreed with  $P_2$  were likely to agree with  $P_4$  17.21 times more than those who did not agree with  $P_2$ . As an entirely new study, the findings may stimulate people to run startups in childcare centres, contributing to the national economy dwindling the unemployment rate.

**Keywords:** Bangladesh, childcare centre, child development, perception, working parents

Received 24 Jan, 2022; Revised 04 Feb, 2022; Accepted 06 Feb, 2022 © The author(s) 2022.

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### I. Introduction

The history of childcare centres is directly related to the history of women's empowerment with the entry of women into economic activities. Welcoming a newborn baby into the world is a delightful, thrilling, and prodigious experience for the whole family, especially for a mother. However, it comes up with a dilemma for the working mothers as, at times, the circumstance compels them to decide whether to remain with their babies or get back to the workplace. So child protection and sound education is the burning issue for working women (Islam and Khan, 2015). In the latter half of the twentieth century, women's mass incorporation into the paid labour force was a dramatic social transformation (Pettit & Hook, 2005). The massive influx of women in the labour force elevated anxiety about reducing the amount of time mothers spend with their children (Desai et al., 1989; Bayard and Brooks-Gunn, 1991; Gupta and Simonsen, 2010; Havnes and Mogstad, 2015). Working mothers relative to non-working mothers devote less time for their children (Del Boca et al., 2016). As a result, the children's cognitive development is hampered because, for the cognitive development, both parents' time inputs are vital in early childhood (Del Boca, et al., 2014). Some studies revealed that children's language test scores (cognitive development) are negatively affected by maternal employment (Desai et al., 1989; Bayard and Brooks-Gunn, 1991). But childhood care is very important. Many research works divulged that early childhood care influenced child's cognitive and non-cognitive abilities for later life to a great extent because for later learning during childhood, brain development, language acquisition, and early learning are crucial (Carneiro and Heckman, 2003; Heckman et al., 2005; Cunha and Heckman, 2006). If mothers fail to deliver proper parenting, their children face delayed physical and neurological development (Holt and Mikati, 2011), slow language skill development (Baydar et al., 2014) and childhood illness and poor infant growth (Rahman et al., 2004; Cozolino, 2006 and Surkan et al., 2011).

But the development of any nation and the attainment of the Sustainable Development Goals prescribed by the United Nations significantly depends on a future generation that is physically, emotionally, cognitively and socially competent. So, for the cognitive and physical development of the children, there needs child care alternative to parental child care. And child care centre can be the best substitute because childcare centre speeds up the child's cognitive development neutralizing the negative impact of maternal employment (Felfe et al., 2015; Blau and Currie, 2006; Baker, 2011; Almond and Currie, 2011; Ruhm and Waldfogel, 2012; Drange and Rønning, 2020). And so, based on the agenda for child survival, intending to promote young children's psychosocial development, the World Health Organization (WHO) and UNICEF developed Care for Child Development (CCD) (WHO & UNICEF 2012). Maternal employment and child care attendance are endogenously determined (Del Boca et al., 2016). So, nonparent childcare is primarily the result of parental commitment to employment (Brownlee et al., 2007).

In Bangladesh, the rate of working women is increasing with the enhancement of women education (Islam and Khan, 2015). It was nearly 35.6% in 2016 (Khatun, 2018). Besides, the rate of divorce and living single has almost doubled in the country over the past decade (The Daily Asian Age, 2017). According to the Bangladesh Bureau of Statistics (BBS) the divorce rate increased from 0.6 to 1.1 per one thousand people in 2016, and the rate of living separate reached 0.6, up from 0.2 during the same period (The Daily Asian Age, 2017). Children experiencing parental divorce before age 6 exhibited behavioural disorders more than those experiencing parental divorce after age 6 (Clarke-Stewart et al., 2000). The effects are children's play, socialization (Hetherington et al., 1979), behavioural problems, preschool adjustment and task orientation (Hodges et al., 1983), emotional wellbeing, sociability and self-confidence (Peretti and Vitirrio, 1993).

It is a great mental, physical, and psychological disaster for babies, toddlers, or preschoolers when actual separation occurs between parents. In that way, the baby and the custody goes to one of its parents and naturally, he/ she has to work for their subsistence. That causes different types of problems which a baby faces. To alleviate these problems, the parents need a childcare centre to raise their children.

The childcare centre is one of the institutional settings to guarantee early childhood care and growth. It works for sheltering the children while parents get engaged in their professional responsibilities. It ensures psychological and physical development within a framework as a substitute for or an extension of care at home (Islam and Khan, 2015).

During 18<sup>th</sup> -19<sup>th</sup> centuries, the Bangladeshi parents needed not to rear their children alone as they usually had the support of junior and senior members from the joint families (Islam and Khan, 2015). During the 20<sup>th</sup> century, the socio-economical reformation resulted in the need for childcare centres for working mothers (Islam and Khan, 2015).

In Bangladesh, Children's mental and physical growth is hampered by different problems such as parental profession, nuclear family, separation, etc. Jashore is of no exception. In Jashore, approximately 52.31% (296,227) of the people are employed, and the number of divorces or separations is 17984, which is 0.65% (BBS, 2019). Children need age-appropriate physical environments that promote and positively support the child's interaction with many things (Islam and Khan, 2015).

There is a good number of research works which highlighted the effects of maternal employment on child physical and cognitive development (Desai et al., 1989; Bayard and Brooks-Gunn, 1991; Blau and Grossberg, 1992; Vandell and Ramanan, 1992; Ermisch and Francesconi, 2005), less attention has been paid to the effects of the use of formal child care as a substitute for parental care (Brooks-Gunn et al., 2002; Blau and Currie, 2006; Bernal, 2008; Gupta and Simonsen, 2010; Felfe and Lalive, 2012; Havnes and Mogstad, 2015), especially in southern European countries (Felfe et al., 2015); child care and maternal employment rates (Havnes and Mogstad, 2009); the problems, prospects and the increasing demand of healthy day-care centres with the increasing rate of working mothers (Islam and Khan, 2015). But there is no sound study on the perception of childcare centres regarding the physical and cognitive development of the children. Especially studies are not available on how the Bangladeshi working parents think of their children's physical and cognitive development. But it is a crying need because the business prospects of childcare centres depend on the perception of the employed parents regarding the development of their children and the importance of child care centre as the substitute of parental care. This is why this study aims at assessing the business prospects and acceptability of quality child care through the analysis of the perception of child development and importance of child care centre at present socioeconomic condition of Bangladesh especially in Jashore region.

## **II. Research Methods**

### **Sources of data**

This research work was done based on primary data. Primary data were collected by dint of sample survey. A structured questionnaire was designed. Then the data collection process was implemented through a questionnaire survey technique. Relevant literatures were reviewed with a view to collect secondary data by means of content analysis technique.

### Sampling

This study was confined to the analysis of the perception of child development of the employed parents to assess the business prospects of the child care centre in Bangladesh. Therefore, in selecting the study field, three criteria were considered: (i) the presence of employed mothers, (ii) the presence of male employees whose wives were employed (iii) who had a child or expecting a child shortly. The employed parents of all the sixty-four administrative districts (administrative units) of Bangladesh experience almost the same socioeconomic conditions. So the employed parents from any organization of any district can represent the employed parents of the whole Bangladesh. Nevertheless, Jashore University of Science and Technology is one the biggest organizations in Bangladesh especially in Jashore District (administrative unit). There are 659 employees (teachers, officers and subordinates). Among them, there are 200 employees who are either employed mothers or male employees whose wives are employed. The minimum sample size was determined using the following formula (Saunders *et al.*, 2005):

$$n = \frac{Z^2 p(1 - p)}{\epsilon^2} = \frac{Z^2 pq}{\epsilon^2},$$

Here, n = sample size, Z = tabulated value = 1.96 (for large sample at 5% level of significance), p = proportion of success, q = 1 – p = proportion of failure,  $\epsilon$  = margin of error = 0.05. Based on this formula, the sample should be 132 when the population is 200. From the minimum sample size the adjusted minimum sample size was determined using the following formula (Saunders *et al.*, 2005):

$$n^i = \frac{n}{1 + \left(\frac{n}{N}\right)}$$

Here  $n^i$  = Adjusted sample size, n = minimum sample size, and N = population size. Based on this formula the adjusted minimum sample size of 80 was determined. But to improve the research work the researcher determined a sample of 100 respondents from the study area.

### Data collection

A sample of 100 employees was surveyed from June to September 2020 to collect primary data pertinent to the study objective. A content analysis technique was followed to collect secondary data from the relevant books, documents and journals.

### III. Data analysis

Frequency distribution and chi-square tests were used to analyze the data. Four statements were selected to test the working parents' perception of their children's cognitive and physical development and the need for a childcare centre as the substitute for parental care, and each respondent was questioned based on the four statements. Every 'yes' response was coded '1', and 'no' response was coded '0'. The four statements regarding the perceptions were the independent variables-(i) Employed parents fail to provide proper parental childcare {Perception 1 ( $P_1$ )}; (ii) Lack of proper parental care hampers a child's cognitive development {Perception 2 ( $P_2$ )}; (iii) Lack of proper parental care hampers a child's physical development {Perception 3 ( $P_3$ )}; and (iv) We need a childcare centre for child development {Perception 4 ( $P_4$ )}.

Firstly a frequency distribution was made based on the responses the respondents made. Then, it was tried to see whether there was any association between the perceptions ( $P_1, P_2, P_3$ ) and the independent demographic variables (*age, income, assistant, no. of child, gender, brought-up area, residence, and family type*) through chi-square test. Then an effort was made to analyze the relationship between the first three perceptions ( $P_1, P_2, P_3$ ) and the 4<sup>th</sup> perception ( $P_4$ ) (Child Care Centre is very important for child development) by means of chi-square test.

Lastly, the perceptions were converted into two-point (Yes, coded '1'; and No, coded '0') Likert scale for binary logistic regression to measure the degree of effects of  $P_1$  and  $P_2$  on  $P_4$ . In the binary logistic regression model,  $P_4$  (Y) was treated as the dependent variable. The dependent variable was classified in the following manner:

$$Y = \begin{cases} 0, no, \\ 1, yes, \end{cases}$$

Statistical Package for Social Sciences software version 20.0 (SPSS Inc., Chicago, IL, USA) was used for all the statistical analysis.

**IV. Results**

At first, a descriptive analysis was made on the socioeconomic characteristics of the respondents, and it was seen that almost half of the respondents (48%) were working mothers (table 1). More than half of the respondents were brought up in rural areas, but almost half lived in urban areas (table 1). This study divulged that most respondents (66%) belonged to nuclear families. A good number of working parents (32%) had more than one child. In the context of the socio-economic condition of Bangladesh, most of the respondents had substantial monthly income. More than half of the respondents (52%) had their assistants at home to take care of their children (table 1).

**Table 1: Socioeconomic Characteristics of the Respondents (N =100)**

Variables	Categories	Frequency (n)	Percentage (%)
Gender	Male	52	52.0
	Female	48	48.0
Brought-up Area	Rural	53	53.0
	Urban	47	47.0
Residence	Rural	41	41.0
	Urban	49	49.0
Family type	Joint	34	34.0
	Nuclear	66	66.0
Age	Below 30	46	46.0
	Above 30	54	54.0
Income	Below 30000	30	30.0
	30000-50000	41	41.0
	Above 50000	29	29.0
Assistant	Yes	52	52.0
	No	48	48.0
No. of Child	No child	26	26.0
	One child	42	42.0
	More than one child	32	32.0

This study also revealed that almost all the respondents (80%) believed that they failed to provide proper parental care to their children (table 2).

**Table 2: Distribution of the respondents as per their perception about Child Development (N= 100)**

Perceptions	Types of response	
	Agreed	Disagreed
Perception 1: Employed parents fail to provide proper parental child care.	80	20
Perception 2: Lack of proper parental care hampers a child's cognitive development.	81	19
Perception 3: Lack of proper parental care hampers a child's physical development.	84	16
Perception 4: We need a childcare centre for child development.	82	18

Almost all of the working parents (81%) also perceived that their failure to provide proper parental care had a negative impact on the cognitive development of their children, and among them, 84% believed that if they failed to provide proper parental care, the physical development of their children would be hampered (table 2). Most of them (82%) believed that childcare centres could play an important role in child physical and cognitive development.

A chi-square test was done to see any association between the demographic variables and the first three perceptions (P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>).

**Table 3: Associations between perception about Child Development and socioeconomic factors (N=100)**

Factors		P <sub>1</sub>			P <sub>2</sub>			P <sub>3</sub>		
		Yes	No	p values	Yes	No	p values	Yes	No	p values
Gender	Male	38	10	.841	37	11	.337	38	10	.205
	Female	42	10		44	8		46	6	
Brought-up Area	Rural	41	12	.483	41	12	.324	43	10	.406
	Urban	39	8		40	7		41	6	
Residence	Rural	30	11	.155	31	10	.252	37	4	.156
	Urban	50	9		50	9		47	12	
Family Type	Joint	25	9	.246	25	9	.172	28	6	.747
	Nuclear	55	11		56	10		56	10	
Age	Below 30	34	12	.160	37	9	.894	39	7	.844
	Above 30	46	8		44	10		45	9	
Income	Below 30000	23	7	.352	26	4	.912	24	6	.519
	30000-50000	33	8		32	9		35	6	

	Above 50000	24	5		23	6		25	4	
Child	No child	17	9	.073	21	5	.508	19	7	.085
	One child	37	5		36	6		39	3	
	More than one child	26	6		24	8		26	6	
Assistant	Yes	46	6	.028	43	9	.653	46	6	.205
	No	34	14		38	10		38	10	

In associating *gender* with P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, it was seen that the chi-square test result was insignificant ( $p > 0.05$ ). The same results were seen in the case of associating *brought-up area, residence, family type, age, income, and no. of child* with P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>. While associating family *assistant* with P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, it was seen that family assistant is associated with P<sub>1</sub> ( $p < 0.05$ ), and there is no association between assistant and P<sub>2</sub>, P<sub>3</sub>, ( $p > 0.05$ ) (table 3).

Then an effort was made to see whether there was any association between P<sub>4</sub> and P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>. It was revealed that P<sub>4</sub> was associated with P<sub>1</sub> and P<sub>2</sub> ( $p < 0.05$ ), but there was no association between P<sub>4</sub> and P<sub>3</sub> ( $p > 0.05$ ) (table 4).

Table 4: Associations of Perception 4 (P<sub>4</sub>) with Perception 1 (P<sub>1</sub>), Perception 2(P<sub>2</sub>) and Perception 3(P<sub>3</sub>) (N=100)

Factors	P <sub>1</sub>			P <sub>2</sub>			P <sub>3</sub>			
	Yes	No	<i>p</i> values	Yes	No	<i>p</i> values	Yes	No	<i>p</i> values	
P <sub>4</sub>	Yes	76	6	.000	77	5	.000	69	13	.932
	No	4	14		4	14		15	3	

The regression model showed that a working mother or father who perceived that employed parents failed to provide proper parental child care (P<sub>1</sub>) was likely to have a need for a childcare centre for child development (P<sub>4</sub>) 13.17 times (OR: 13.171; 95% CI: 2.573-67.414) more than a working mother or father who did not perceive that employed parents failed to provide proper parental child care (table 5).

Table 5: Logistic Regression predicting the likelihood of deserving P<sub>1</sub> and P<sub>2</sub>

Factors	<i>B</i>	<i>S.E.</i>	Wald	df	<i>p</i>	<i>OR</i>	95% CI for OR	
							Lower	Upper
P <sub>1</sub>	2.578	.833	9.576	1	.002	13.171	2.573	67.414
P <sub>2</sub>	2.846	.836	11.582	1	.001	17.213	3.343	88.635
Constant	-1.951	.709	7.581	1	.006	.142		

The regression model also showed that a working mother or father who perceived that lack of proper parental care hampers cognitive development of a child (P<sub>2</sub>) was likely to have a need for a childcare centre for child development (P<sub>4</sub>) 17.21 times (OR: 17.213; 95% CI: 3.343-88.635) more than a working mother or father who did not perceive that employed parents failed to provide proper parental child care (table 5).

## V. Discussion

The objectives of this study were to analyze how the working parents perceive the physical and cognitive development of their children and thereby analyze the business prospects of a childcare centre in Bangladesh. The study divulged that most parents perceived that the working parents could not provide proper parental care to their children. Their perception goes in agreement with the findings of those of the research works conducted earlier (Del Boca et al., 2016; Bayard and Brooks-Gunn, 1991; Desai et al., 1989; Havnes and Mogstad, 2015; Gupta and Simonsen, 2010). The result might be explained by the fact that both parents spent a remarkable time in their workplaces, so they could not give enough time to their children. The study also divulged that most of the parents perceived that lack of proper parental care hampered a child's development. This perception resembles the findings of some of the former research works (Del Boca et al., 2014; Desai et al., 1989; Bayard and Brooks-Gunn, 1991; Carneiro and Heckman, 2003; Heckman et al., 2005; Cunha and Heckman, 2006; Holt and Mikatit, 2011; Baydar et al., 2014; Rahman et al., 2004; Cozolino 2006 and Surkan, et al., 2011). This result might be explained by the fact that most of the working parents had come from nuclear families, so they could not get child care from their close family members; they had to depend on the family assistants for child care. Besides, the working parents were more educated; they might have read the former research findings regarding child development. All these might have led them to this perception. It was also seen that most of the working parents perceived childcare centres as an essential substitute for parental care, and this perception complies with the former research findings (Del Boca, Pasqua and Suardi, 2016; Felfe et al., 2015; Blau and Currie, 2006; Baker, 2011; Almond and Currie, 2011; Ruhm and Waldfogel, 2012; Drange and Rønning, 2020). The regression analysis results also revealed that the parents who believed that they could not



give proper time and company to their children, which hampered the child development were more likely to perceive the importance of child care centres for child development. This study showed the childcare centre's high marketing and business prospects in Bangladesh.

The limitation of the study was that this study was confined to Jashore University of Science and Technology. The results might vary beyond this study area, and the methodology followed here. Further studies may be conducted on the perception of efficiency and career of the working parents; need assessment for a childcare centre, marketing programs for a childcare centre in Bangladesh, etc.

## VI. Conclusion

The study intended to analyze the perception of the working parents regarding the physical and cognitive development of their children to analyze the business prospects of childcare centres in Bangladesh. This study revealed a positive perception of the importance of childcare centres among most working parents. So, there are high business prospects for a childcare centre in Bangladesh. If a proper marketing program or strategy can be developed, a startup in a childcare centre has every possibility to be a successful business. The unemployment rate is very high in Bangladesh. If the research findings inspire the graduates, they may run the childcare centre business, contributing to the national economy and ensuring sustainable development, dwindling the unemployment rate.

### Ethical considerations

The authors have entirely observed ethical issues (including plagiarism, informed consent, misconduct, data fabrication and falsification, double publication and submission, redundancy, etc.).

### Acknowledgments

The authors are very grateful to the respondents who provided the relevant information during the survey. The authors also acknowledge the valuable comments and criticism of the editor and referees, which may lead to a much-improved version of the paper.

### Disclosure statement

The authors declare that they have no competing interests.

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