The Major Challenges Faced by Middle Class People of Dhaka City in Coronavirus Pandemic Period: A Multivariate Analysis

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Abstract: At present, Covid-19 pandemic creates a vulnerable situation for all over the world. This situation is highly effects on all of the social and economic aspects. Dhaka is the capital city of Bangladesh which is the world's six most densely populated city. The most of the people of Dhaka city are middle class who has been facing different types of challenges due to Corona pandemic situation. The objective of this study is to identify the challenges that has faced by middle class people at Dhaka city of Bangladesh. Questionnaire and interview techniques were used to collect the data of this study. Both descriptive and inferential statistics were used to analyze the data. Descriptive statistics were used to give details about the Corona virus as well as inferential statistics were used to identify the major challenges and show the significant relationship between Covid-19 pandemic and identified challenges which has faced by middle class people at Dhaka city. Factor analysis was used to identify the major challenges that are created by corona virus pandemic situation. Multivariate analysis of variance was used to show that the overall and individual significant effect of Covid-19 pandemic on identified major challenges. Findings of the study show that there are six challenges which are reasonably formed by this circumstance. The identified major challenges are Financial crisis that has led to increase child marriages and divorce due to increase family conflict, Failure to meet basic needs that led to increase child labor , Unemployment rates and occupational changes have increased, Decreased social interaction which led to increase psychological and physical complications among children and adults, Decreased financial ability to meet the cost of education and Frustration grows among the people that increased deviant behavior in the society. The findings of this study may help the concerned line organizations to take necessary steps to overcome the situation of middle class people of Dhaka city in Bangladesh.

Keywords: COVID-19; Middle Class People; Major Challenges; Dhaka City; Bangladesh; Multivariate Analysis.

1. INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-COV-2 virus. (WHO, 2020). It spread all over the world very quickly. It is not only impacting public health but also impacts the social and economic aspects. Around 232,608,482 cases have been found in the world where 4,762,082 million people have died till now due to corona virus. (Worldometer, September 27, 2021). Bangladesh has faced a vulnerable situation in this issue. The present outbreak of covid-19 statistics in Bangladesh is 1,551,351 cases has detected where dead statistics is 27,414 (Coronavirus COVID-19 Dashboard, September 27, 2021). To control the outbreak of COVID-19 disease, the Bangladesh government has imposed some restrictions and has taken several attempts like lockdown, shutdown, etc when many social and economic activities were completely stopped. Dhaka, the capital city in Bangladesh where the population is now estimated

at 21,741,090, with a density of 23,234 people per square kilometer within a total area of 300 square kilometers. (World Population Review, 2021). The outbreak of coronavirus was more in Dhaka city than the others areas of Bangladesh. The middle-class people of Dhaka city have faced more challenges rather than the other classes of people due to the coronavirus pandemic circumstances. Closure of workplace and education institutions, worried about health security and money, cramped living conditions, isolations with peers, neighbor and relatives, movement restrictions, deserted public spaces made urban people life more challenging.

There are some studies that have been conducted about the impact of the COVID-19 pandemic situation. Literature reviews demonstrate that mental stress created due to the COVID-19 because of the lockdown without ensuring the fundamental needs of the vulnerable ones. The poor governance in the healthcare systems and the facilities further exacerbates the general public's

anxiety. The urban COVID-19 testing facilities, long serial to be tested, lowest facilities in the dedicated hospital units for COVID-19 patients hampered the other critical patients to get healthcare services. (Shammi, M., *et al.* 2020). A small-scale quantitative overview about the impact on socioeconomic condition in lockdown wards of Khulna City Corporation (KCC), Bangladesh due to this pandemic. With the socioeconomic stress of COVID-19, people's satisfaction level is measured with well-known index life scale assessment to measure the judgmental component of subjective well-being. (Haque, M. N, *et al.* 2020). With proper intervention, the epidemic progression can be controlled in a graceful manner. An important question is whether the tests being performed by Bangladesh are enough. The ideal number of tests for Bangladesh should be more than 3-fold. However, in such a case, the epidemic progression can be controlled with proper interventions. (Khan, I.M., *et al.* 2020). A significant rise in the poverty rate and a projected shortfall in the country's GDP compared to the previous years. In the last ten years, GDP growth in Bangladesh has been strong, reaching an annual growth rate of 7.9% in 2019. In 2020 Bangladesh GDP was projected to fall to 2% due to economic downturns resulting from COVID-19 economic lockdowns (IMF 04/2020). For the last 15 years, Bangladesh's poverty rate had steadily reduced from 40 percent in 2005 to 21.8% in 2017-2018 and 20.5 percent in 2019 (Dhaka tribune 08/2020; BBS 2019). Since the start of 2020, the General Economic Division's estimation reported that Bangladesh's poverty rate has risen to 29.5% as of June 2020 (a 9% increase from 20.5% in the 2018/2019 fiscal year), highlighting a decline in Bangladesh's socio-economic growth. The aftermath of the COVID-19 pandemic is likely to be millions of people pushed back into extreme poverty in 2020, especially people working in the informal economy, whose incomes dropped significantly since the start of the pandemic. This will make the achievement of Sustainable Development Goals (SDG) in Bangladesh even more challenging. (USAID, November Report 2020). COVID-19 has already impacted RMG workers' health (both physical and mental health status) and wellbeing, and resulted in loss of employment. (Kabir, H., *et al.* 2020). There is a lower-middle-income economy with one of the world's densest populations in Bangladesh. Social distancing is difficult in many areas of the country,

and with the minimal resources the country has, it would be extremely challenging to implement the mitigation measures. Mobile sanitization facilities and temporary quarantine sites and healthcare facilities could help mitigate the impact of the pandemic at a local level. (Anwar, S., *et al*. 2020). The spread of the COVID-19 pandemic, the partial lockdown, the disease intensity, weak governance in the healthcare system, insufficient medical facilities, unawareness, and the sharing of misinformation in the mass media has led to people experiencing fear and anxiety. In society, Psychosocial and Socio-Economic Crisis of COVID-19 has created psychosocial and socio-economic insecurity among people due to the loss of lives and livelihoods. (Bodrud-Doza *et al*, 2020). Prevalence estimates of depression, anxiety and stress (DAS) were, respectively, 76.1%, 71.5% and 70.1% for at least mild symptoms, 62.9%, 63.6% and 58.6% for at least moderate symptoms, 35.2%, 40.3%, and 37.7% for at least severe symptoms and 19.7%, 27.5% and 16.5% for at least very severe symptoms. The present estimates of DAS were more prevalent than in previous pre-COVID-19 studies among Bangladeshi university students. (Islam, M. S., *et al.* 2020) . The substantial labor market impacts both at the extensive and intensive margin, with important variation across areas and gender, largely due to the nature of occupations affected by the crisis and substantial uncertainty about job prospects. (Genoni, M.E., *et al.* 2020). Socio-demographics and questions about knowledge and preventive behaviors related to COVID-19. Participants' being male, being divorced or widowed, consuming alcohol, smoking cigarettes, living in villages, and having no formal education reported lower performing preventive COVID-19 behaviors. Those participants with higher knowledge scores reported higher preventive COVID-19 behaviors. (Hosen, I., *et al.* 2021). The current economic situation may seriously undermine the livelihood of the underprivileged cohort of the population. To overcome this situation, the integrated effort from the state authority as well as concern people of all sectors need to come forward. (Begum, M., *et al.* 2020). The daily wage rates as Bangladesh Taka (BDT) 272.2 in the farm sector and BDT 361.5 in the nonfarm sector. Using the estimated daily wage earnings, this study estimates that a one-day complete lockdown generates a US $64.2 million equivalent economic loss only considering the

wage loss of the daily wage workers. After estimating the daily per capita food expenditure separately for farm and nonfarm households, this study estimates a minimum compensation package for the daily wage-based farm and nonfarm households around the US $ 1 per day per household to ensure minimum food security for the daily wage-based worker households. (Mottaleb, K.A., *et al.* 2020) .

The above-stated studies focused on the impacts of covid-19 virus on psychological and physical condition of people and socioeconomic aspects of Bangladesh. Some study has conducted about the impact of the covid-19 pandemic on education sector. Few researchers discussed about the limitation of the health sector during coronavirus pandemic situation. None of the studies focus on a social class people or the people of a specific area who have been facing massive challenges in their daily life in the period of corona pandemic. This study would try to identify the major challenges that have been facing middle-class people of Dhaka city due to the coronavirus pandemic situation. This study also tries to investigate the relationship between covid-19 pandemic and major challenges.

2. OBJECTIVES

The overall objective of this study is to examine the challenges has been facing by middle class people at Dhaka city in Bangladesh at the time of coronavirus pandemic. The specific objectives of the study are listed below:

1. To identify the major challenges that has been facing by the middle class people of Dhaka city at the time of COVID-19 pandemic situation.

2. To show the significant relationship between this pandemic and identified challenges.

3. METHODOLOGY OF THE STUDY

This study attempt to investigate the impact of COVID -19 on middle class people of Dhaka city in Bangladesh. Primary sources of data were used to perform this study which was collected from respondents through direct interview.

3.1. DETERMINATION OF SAMPLE SIZE

This study includes the conscious people of Dhaka city for its population. At present, there have around 2,17,41,090 people in Dhaka city of Bangladesh. We determined our sample size from approximate 10000000 conscious people of Dhaka city. Random sampling technique was used to select respondents for this inquiry. The sample can be determined by using the following formula suggested by Yamane (1967) with 5 percent sampling error. The formula used in this study is given away below.

$$n = \frac{N}{1+N(e)^2} \qquad (1)$$

Where,

n = Sample Size

N= Population

e = Percentage of sampling error

(1) Population size is > 10000000 people

(2) Percentage of sampling error is 5%

In calculating the sample size the subsequent assumptions were made to find out, n = 399.

3.2. SAMPLE SUFFICIENCY TEST AND SPHERICITY TEST

Table 1 gives information about the hypothesis of factor analysis. The sample sufficiency index KMO by Kaiser-Meyer-Olkin has identified which compares the sizes of the observes correlation coefficients to the sizes of the partial correlation coefficient for the sum of analysis variables is 87.5 percent and it is reliable because it is above 80 percent. In addition, supposition test of sphericity by the Bartlett's Test (H0: All correlation coefficients are not quite far from zero) is rejected on a level of statistical significance p<0.05 for approx. For these data, Bartlett's Test is highly significant (p<0.001). As a result, both acceptances for the conduct of factor analysis are satisfied and we can carry on with it.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0.875**
Bartlett's Test of Sphericity	Approx. Chi-Square	3054.945
	df.	351
	Sig.	.000

3.3. SAMPLE DISTRIBUTION

To perform this study 399 respondents were interviewed from Dhaka city of Bangladesh. We selected our respondents both male and female. Details of sample distribution are given in the following figures.
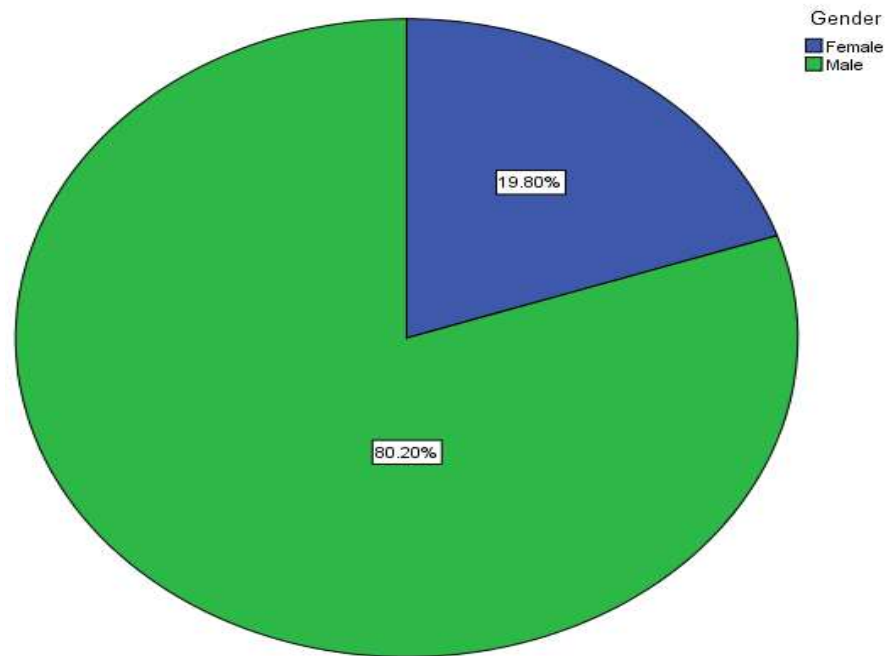

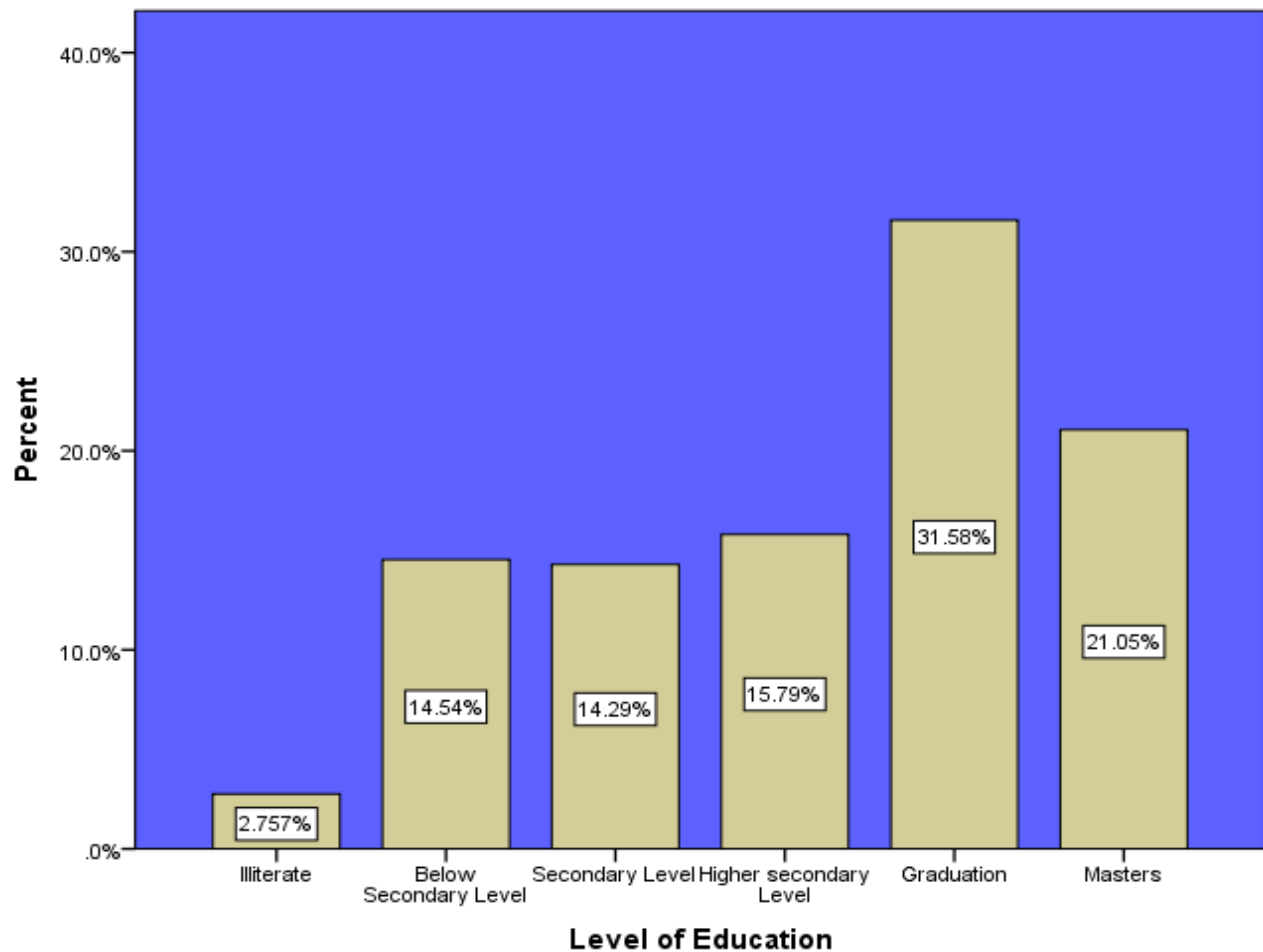**Figure 1:** Gender wise sample distribution

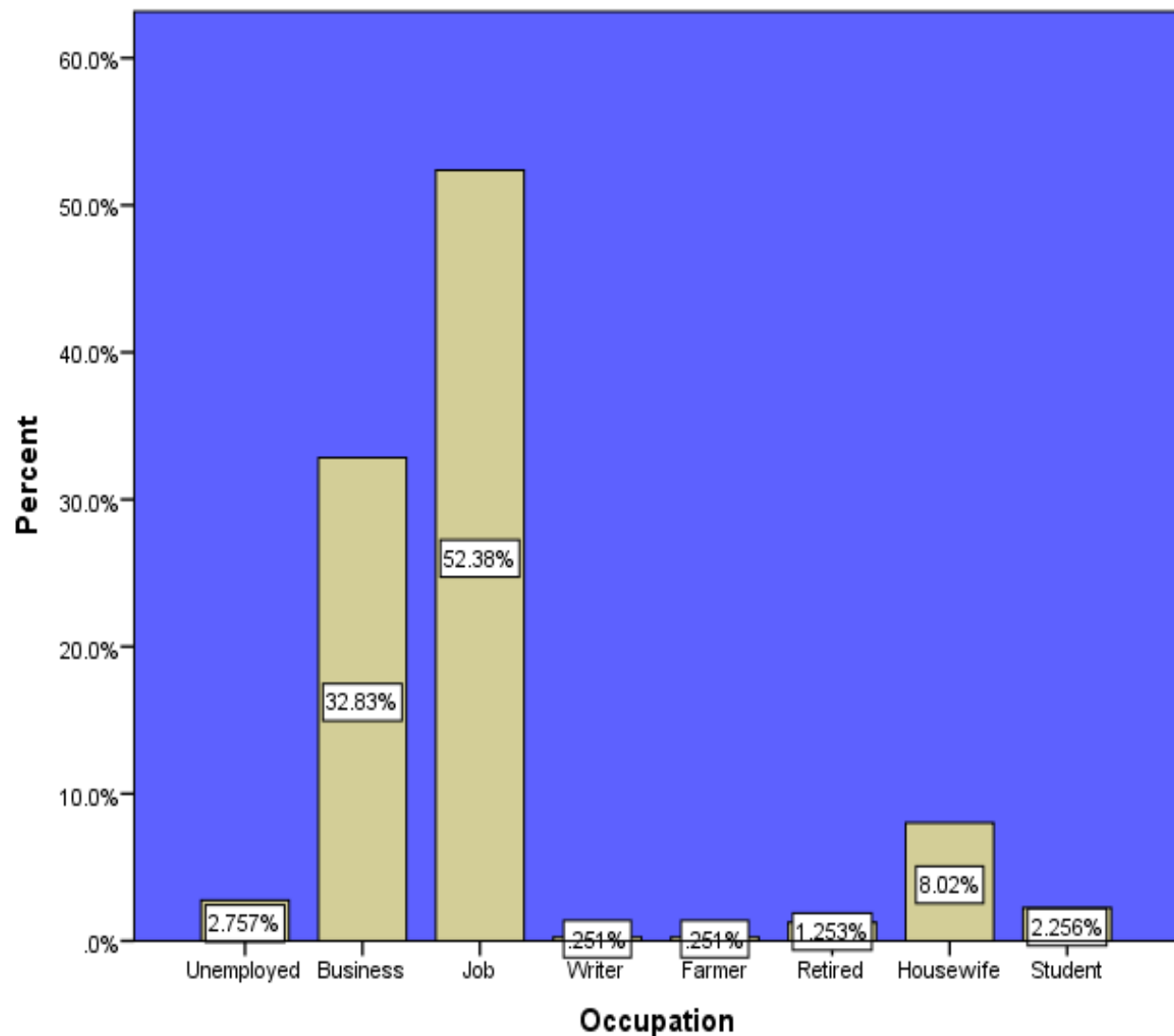**Figure 2:** Education level wise sample distribution.

Figure 3: Occupation wise sample distribution.

3.4. QUESTIONNAIRE SETUP AND TEST OF RELIABILITY

The questionnaire of this study was considered with Likert scale method. Likert scale questionnaire was designed with 5 point scales which range from 5 to 1 where 5 is indicating strongly agree and 1 is indicating strongly disagree. **Table 2** shows the reliability coefficient of the questionnaire. It shows that the Cronbach's alpha of the questionnaire is 0.873 which is excellently acceptable as per Nunnally (1978).

Table 2: Reliability Statstics

Cronbach's Alpha	Number of Items
0.873	27

The questionnaire of the study setup with the following challenges of middle class people at Dhaka city of Bangladesh which are suffered by this pandemic situation. The considered challenges are lost job, increased unemployment, change of profession, decreased income , financial crises, migration, the ability of the middle class to meet the cost of education has decreased, reduced basic needs, decreased calorie intake, declined standard of living, fallen into the vicious cycle of debt, decreased purchasing power, fallen below the poverty line, increased family unrest, enhanced child marriage , risen divorced, the tendency to commit suicide has increased, social distance increased, enlarged frustration, become mentally deranged, youth to engage in socially deviant behaviors, savings have declined, education gap has increased, child labor is increased, increased mental illness, aggravated children's addiction to video games and the internet and the responsibilities towards parents and relatives have decreased.

3.5. DATA COLLECTION TECHNIQUES

A survey has been performed on 80.20% male and 19.80% female respondents at the Dhaka city of Bangladesh. All the data of this study were collected by interview through the questionnaire with random sampling technique. The interviewers were bachelor and masters students of Economics Department of Asian University of Bangladesh. Interviewers were appropriately trained on the matters representing the questionnaire for data collection before resuming the interview. This research was carried out from April 2021 to August 2021.

3.6. DATA ANALYSIS METHODS

This study was used some inferential statistical method for data analysis. Factor analysis in SPSS (Statistical Package for Social Sciences) program was used to reduce the items or affected factors related to the coronavirus pandemic situation in Dhaka city of Bangladesh. Multivariate Analysis of Variance (MANOVA) was used to show the overall and individual significant effect of independent variable on dependent variables for developing a model of this study.

4. RESULTS OF THE STUDY

The two methods were used to identify the findings of the study have been divided into two divisions such as (i) Factor analysis and (ii) Multivariate analysis of variance (MANOVA). Factor analysis identified six major challenges which are created through corona pandemic situation at Dhaka city in Bangladesh. The result shows that the communalities of the variables are reasonably high (The average communality is grater then 0.5) which are indicating the variables used in the data set are reasonably cohesive in nature (Appendix 1). The most important identified challenges are financial crisis has led to increase child marriages and divorce due to increase family conflict (24.794%), failure to meet basic needs which reduced daily calorie intake that led to increase child labor (9.329%), Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced (5.379%), Decreased social interaction which led to increase psychological and physical complications among children and adults (4.735%) , Decreased financial ability of middle class people to meet the cost of education (4.371%) and frustration grows among the people that increased deviant behavior in the society (3.735 %) as shown in **Table 3**.

Table 3: Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	6.694	24.794	24.794
2. Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	2.519	9.329	34.123
3. Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	1.452	5.379	39.501
4. Decreased social interaction which led to increase psychological and physical complications among children and adults	1.278	4.735	44.236
5. Decreased financial ability of middle class people to meet the cost of education	1.180	4.371	48.607
6. Frustration grows among the people that increased deviant behavior in the society	1.008	3.735	52.342

Extraction Method: Principal Component Analysis

Multivariate analysis of variance (MANOVA) indicating that the major challenges identified through the factor analysis are altogether significantly influenced by coronavirus pandemic situation at Dhaka city of Bangladesh. The output of MANOVA has two segments. The first part is Multivariate tests

Table 4: Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta squared	Noncent. Parameter	Observed Power[d]
Intercept	Pillai's Trace	.087	6.184[b]	6.000	390.000	.00	.087	37.106	.999
	Wilks' Lambda	.913	6.184[b]	6.000	390.000	.00	.087	37.106	.999
	Hotelling's Trace	.095	6.184[b]	6.000	390.000	.00	.087	37.106	.999
	Roy's Largest Root	.095	6.184[b]	6.000	390.000	.00	.087	37.106	.999
COVID-19	Pillai's Trace	.811	24.193	18.000	1176.000	.00	.270	435.481	1.000
	Wilks' Lambda	.227	42.191	18.000	1103.572	.00	.390	704.478	1.000
	Hotelling's Trace	3.232	69.777	18.000	1166.000	.00	.519	1255.994	1.000
	Roy's Largest Root	3.180	207.750[c]	6.000	392.000	.00	.761	1246.498	1.000

a. Design: Intercept + Overall
b. Exact Statistic
c. The statistic is an upper bound on F that yields a lower bound on the significance level
d. Computed using alpha=0.5

These results (from **Table 4**) show that there is a significant effect of the covid-19 on the middle class people of Dhaka city who are facing these challenges. There is no one single multivariate test; there are four different ones. In this case, they are all significant (p<0.05), as a result, we can conclude that covid-19 have a significant effect on altogether of identified major challenges faced by middle class people of Dhaka city in Bangladesh.

The second part of the results is univariate tests. The results of the univariate tests used for the effect of COVID-19 pandemic on individual identified major challenges.

Table 5: Tests of Between-Subjects Effects

Source	Dependent Variable	Type 3 Sum of Squares	df	Mean Square	F	Sig.	Partial eta squared	Noncent parameter	Observed Power
Corrected Model	1.Financial crisis has led to increase child marriages and divorce due to increase family conflict	62.919[a]	3	20.973	24.724	.000	.158	74.171	1.000

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	63.049[b]	3	21.016	24.784	.000	.158	74.352	1.000
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	67.766[c]	3	22.589	27.019	.000	.170	81.057	1.000
	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	27.145[d]	3	9.048	9.637	.000	.068	28.912	.998
	5.Decreased financial ability of middle class people to meet the cost of education	74.720[e]	3	24.907	30.432	.000	.188	91.297	1.000
	6.Frustration grows among the people that increased deviant behavior in the society	27.063[f]	3	9.021	9.606	.000	.068	28.818	.997
Intercept	1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	3.461	1	3.461	4.080	.044	.010	4.080	.522
	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	3.245	1	3.245	3.827	.051	.010	3.827	.497
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	3.576	1	3.576	4.277	.039	.011	4.277	.541

Intercept	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	1.877	1	1.877	1.999	.158	.005	1.999	.292
	5.Decreased financial ability of middle class people to meet the cost of education	3.750	1	3.750	4.582	.033	.011	4.582	.570
	6.Frustration grows among the people that increased deviant behavior in the society	.841	1	.841	.895	.345	.002	.895	.157
COVID-19	1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	62.919	3	20.973	24.724	.000	.158	74.171	1.000
	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	63.049	3	21.016	24.784	.000	.158	74.352	1.000
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	67.766	3	22.589	27.019	.000	.170	81.057	1.000
	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	27.145	3	9.048	9.637	.000	.068	28.912	.998
	5.Decreased financial ability of middle class people to meet the cost of education	74.720	3	24.907	30.432	.000	.188	91.297	1.000
	6.Frustration grows among the people that increased deviant behavior in the society	27.063	3	9.021	9.606	.000	.068	28.818	.997
Error	1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	335.081	395	.848					

Error	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	334.951	395	.848
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	330.234	395	.836
	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	370.855	395	.939
	5.Decreased financial ability of middle class people to meet the cost of education	323.280	395	.818
	6.Frustration grows among the people that increased deviant behavior in the society	370.937	395	.939
Total	1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	398.000	399	
	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	398.000	399	
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	398.000	399	
	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	398.000	399	
	5.Decreased financial ability of middle class people to meet the cost of education	398.000	399	
	6.Frustration grows among the people that increased deviant behavior in the society	398.000	399	
Corrected Total	1. Financial crisis has led to increase child marriages and divorce due to increase family conflict	398.000	398	
	2.Failure to meet basic needs which reduced daily calorie intake that led to increase child labor	398.000	398	
	3.Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced	398.000	398	
	4.Decreased social interaction which led to increase psychological and physical complications among children and adults	398.000	398	
	5.Decreased financial ability of middle class people to meet the cost of education	398.000	398	
	6.Frustration grows among the people that increased deviant behavior in the society	398.000	398	

a. R Squared = .158 (Adjusted R Squared = .152)
b. R Squared = .158 (Adjusted R Squared = .152)
c. R Squared = .170 (Adjusted R Squared = .164)
d. R Squared = .068 (Adjusted R Squared = .061)
e. R Squared = .188 (Adjusted R Squared = .182)
f. R Squared = .068 (Adjusted R Squared = .061)
g. Computed using alpha = .05

These univariate tests (shown above **Table 5**) indicated that COVID -19 has a significant effect on individual identified major challenges such as, Financial crisis has led to increase child marriages and divorce due to increase family conflict $\{F(3, 395)=24.724; p=0.000; Partial \eta^2=0.158\}$, Failure to meet basic needs which reduced daily calorie intake that led to increase child labor $\{F(3, 395) = 24.784; p=0.000; Partial \eta^2 =0.158\}$, Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced $\{F(3, 395) = 27.019; p = 0.000; Partial \eta^2=0.170\}$, Decreased social interaction which led to increase psychological and physical complications among children and adult $\{F(3, 395) = 9.637; p=0.000; Partial \eta^2 =0.068 \}$, Decreased financial ability of middle class people to meet the cost of education $\{F (3, 395)=30.432; p = 0.000; Partial \eta^2 =0.188\}$, and Frustration grows among the people that increased deviant behavior in the society $\{F (3, 395) = 9.606; p = 0.000; Partial \eta^2 =0.068\}$.

5. DISCUSSION AND CONCLUSIONS

The main purpose of the study was to identify major challenges which are caused by coronavirus pandemic situation at Dhaka city of Bangladesh.

5.1. SUMMARY OF THE FINDINGS

After analyzing the data our study has got some findings. Factor analysis has identified six factors that generated by COVID- 19 pandemic situation. The identified major challenges are financial crisis has led to increase child marriages and divorce due to increase family conflict (24.794%), failure to meet basic needs which reduced daily calorie intake that led to increase child labor (9.329%), unemployment rates and occupation changes have increased and the big number of people in debt has enhanced (5.379%), Decreased social interaction which led to increase psychological and physical complications among children and adults (4.735%)

, Decreased financial ability of middle class people to meet the cost of education (4.371%) and frustration grows among the people that increased deviant behavior in the society (3.735 %) . The 6 factors as a whole 52.342% significantly influenced by this pandemic situation at Dhaka city in Bangladesh. Multivariate analysis of variance (MANOVA) shows two types of results. The first one is Multivariate tests shows that COVID-19 have a significant effect on altogether of the identified six major challenges which tackled by middle class people at Dhaka city of Bangladesh. The 2nd part is univariate tests which indicated that corona epidemic has the significant effect on individual identified major challenges at this mega city of Bangladesh.

5.2. MANAGERIAL IMPLICATIONS

The study would provide information to the government and concern authority for making necessary policies to overcome the coronavirus pandemic situation.

5.3. LIMITATIONS OF THE STUDY

This study only focused on the middle class people of Dhaka city. It did not include other classes of people and others area of Bangladesh. Another shortcoming of this study is that it did not show the solutions to overcome the situation.

5.4. RECOMMENDATIONS FOR FUTURE RESEARCH

This study has identified that the major challenges which are faced by middle class people at Dhaka city. It also shows the significant relationship between identified major challenges and coronavirus pandemic situation in collectively and individually. But this study did not include any kind of solutions to overcome the situation. Moreover, it did not include all the classes of the people and other cities and rural areas. These distinguish limitations could persuade future researchers for doing further research in this concern.

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APPENDICES

Appendix 1 Communalities of the variables

Sl. No.	Name of the variables	Initial	Extraction
1.	Most of the middle class people have lost their job	1.000	.587
2.	Unemployment among the middle class has risen due to the inability to re-employ	1.000	.687
3.	The change of profession has taken place more among the middle class	1.000	.423
4.	The income of this class of people has decreased and they in financial crisis	1.000	.430
5.	In the case of middle class, migration from urban to rural areas has been more frequent	1.000	.515
6.	The ability of the middle class to meet the cost of education has decreased	1.000	.549
7.	The middle class has been forced to reduce their daily basic needs	1.000	.606
8.	The daily calorie intake of middle class people has decreased	1.000	.580
9.	The standard of living among the middle class has declined	1.000	.482
10.	In order to meet the basic needs , the middle people of the city have fallen into the vicious cycle of debt	1.000	.508
11.	People's purchasing power has declined due to the rising commodity prices and lack of income	1.000	.434
12.	The middle class has largely fallen below the poverty line	1.000	.439
13.	Family unrest has increased in middle class families	1.000	.426
14.	Child marriages has increased in middle class families	1.000	.578
15.	Divorced has increased among middle class families	1.000	.660
16.	The tendency to commit suicide has increased among middle class families	1.000	.630
17.	Corona has increased social distance increasing distance with relatives and neighbors	1.000	.633
18.	Frustration has increased among middle class people	1.000	.547
19.	There is a growing tendency among middle class people to become mentally deranged	1.000	.530
20.	There is a growing tendency among the middle class youth to engage in socially deviant behaviors such as theft , robbery, drug dealing etc.	1.000	.575
21.	Savings have declined as the income of the middle class has declined	1.000	.557
22.	Many families are not able to afford their children's online learning materials	1.000	.621
23.	Due to inability to meet the cost of education , dropout rate or education gap has increased among the students of middle class families	1.000	.457
24.	Middle class school boys are looking for any job and joining. As a result , child labor is increasing.	1.000	.461
25.	Children are being deprived of sports which has increased their mental illness	1.000	.450
26.	School closures have increased children's addiction to video games and the internet, which is detrimental to their mental and physical development	1.000	.399
27.	Among the middle class , the responsibilities towards parents and relatives have decreased.	1.000	.369

Appendix 2 Financial crises has led to increase child marriages and divorce due to increase family conflict

Sl. No.	Name of the Variables	Factor Loadings
1.	Divorced has increased among middle class families	.804
2.	The tendency to commit suicide has increased among middle class families	.772
3.	Child marriages has increased in middle class families	.731
4.	Family unrest has increased in middle class families	.447
5.	There is a growing tendency among the middle class youth to engage in socially deviant behaviors such as theft , robbery, drug dealing etc.	.407

Appendix 3 Failure to meet basic needs which reduced daily calorie intake that led to increase child labor

Sl. No.	Name of the Variables	Factor Loadings
1.	The daily calorie intake of middle class people has decreased	.690
2.	The middle class has been forced to reduce their daily basic needs	.649
3.	The ability of the middle class to meet the cost of education has decreased	.603
4.	Middle class school boys are looking for any job and joining. As a result, child labor is increasing.	.590
5.	Children are being deprived of sports which has increased their mental illness	.436

Appendix 4 Unemployment rates and occupation changes have increased and the big number of people in debt has enhanced

Sl. No.	Name of the Variables	Factor Loadings
1.	Unemployment among the middle class has risen due to the inability to re-employ	.766
2.	Most of the middle class people have lost their job	.689
3.	The change of profession has taken place more among the middle class	.552
4.	The income of this class of people has decreased and they in financial crisis	.404
5.	In case of middle class, migration from urban to rural areas has been more frequent	.404
6.	In order to meet the basic needs , the middle people of the city have fallen into the vicious cycle of deb	.416

Appendix 5 Decreased social interaction which led to increase psychological and physical complications among children and adults

Sl. No.	Name of the Variables	Factor Loadings
1.	Savings have declined as the income of the middle class has declined	.702
2.	Corona has increased social distance increasing distance with relatives and neighbors	.690
3.	School closures have increased children's addiction to video games and the internet, which is detrimental to their mental and physical development	.473
4.	People's purchasing power has declined due to the rising commodity prices and lack of income	.469
5.	The income of this class of people has decreased and they in financial crisis	.430

Appendix 6 Decreased financial ability of middle class people to meet the cost of education

Sl. No.	Name of the Variables	Factor Loadings
1.	Many families are not able to afford their children's online learning materials	.661
2.	In the case of middle class, migration from urban to rural areas has been more frequent	.582
3.	Due to inability to meet the cost of education , dropout rate or education gap has increased among the students of middle class families	.574
4.	In order to meet the basic needs , the middle people of the city have fallen into the vicious cycle of debt	.453

Appendix 7 Frustration grows among the people that increased deviant behavior in the society

Sl. No.	Name of the Variables	Factor Loadings
1.	Frustration has increased among middle class people	.632
2.	There is a growing tendency among middle class people to become mentally deranged	.621
3.	There is a growing tendency among the middle class youth to engage in socially deviant behaviors such as theft , robbery, drug dealing etc	.548
4.	The standard of living among the middle class has declined	.428