

A Study on Gender Comparison among BRICS Countries

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Abstract:

This paper is about the Gender comparison among Brazil, Russia, India, China, South Africa (BRICS) countries in the selected parameters. The aim of the BRICS is that the growth of these countries should be larger than some of the developed countries' economies. The combined GDP of BRICS countries as a percentage of world's GDP has almost tripled from 1990 to 2018. The BRICS are good example for the present study because of two reasons; one, the repaid growth of economies and the second, the high proportionate of world's higher education. In the last few years in the BRICS countries, the status of female has shown both positive and negative sign in some of the key areas. In the present paper, the areas viz. economic participation and opportunity, political empowerment, educational attainment and health and survival are considered to study the gender gap from 2009 to 2018.

Key Words: *BRICS, Gender Gap Index, Economic Participation, Political Empowerment, Educational Attainment, Health and Survival.*

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I. INTRODUCTION

Originally Brazil, Russia, India and China were grouped and coined as BRICs in 2001 by Jim O'Neil and this group officially became a diplomatic-political entity in the year 2006. Later in the year 2011, South Africa joined in the group and called the group as BRICS. The emerging economy of these countries is to forecast to realize real and fast economic growth of the region. The aim of the BRICS is that the growth of these countries should be larger than some of the developed countries' economies. This group countries collective contribution to world GDP has increased from 7.9 per cent in 1990 to 25 per cent in 2018.

This paper is about the female status in the emerging power countries of the world with special reference to BRICS. Such study provides a measure of the extent of gender equality in terms of their efficient utilization of human capital and for enhancing its economic growth. The literature on female status also point to the empowerment of women and competitiveness among countries. It has also been argued that countries that discriminate against female could potentially lose out on the skills and expertise of female.

The last few years in the BRICS countries, the status of female has shown a positive growth in some aspects as well a negative trend in some areas. The BRICS are good example for the present study because of two reasons; one, the repaid growth of economies and the second, the high proportionate (42 per cent) of world's higher education. The economic change in BRICS and their incorporation in to the world's economy will made a positive sign in the change of female status especially in India.

According to the World Banks classification of countries, South Africa, Brazil and China are deemed upper middle income countries, with Russia classified as a high income country and India as a lower middle income country (World Bank, 2012). The growth potential of the BRICS countries has been widely acknowledged and Goldman Sachs economists predicted that the BRIC economies (Brazil, Russia, India and China) would outperform that of the G7 countries (the richest countries) before the middle of the century (Glosny, 2010). A crucial factor is that all BRICS countries hold important stocks of resources and effective utilization of these resources amounts to a positive spinoff for each individual country (Arkhangelskaya, 2011).

China has ranked at 26th place in overall Inclusive Development Index ranking for 2018 released by World Economic Forum (WEF) among emerging economies while it has ranked first among the emerging economies in terms of GDP per capita growth followed by other BRICS economies India (3), South Africa (69), Russian Federation (70) and Brazil (73). The statistics for this group for 2018 is impressive; namely, they comprise almost 50 per cent of the global population and cover a geographic expanse of 39.7 million square meters (which amounts to more than a quarter of the global land surface).

Globally the proportion of women joining the hands in various aspects, such as economic development, higher education acquirements, political empowerment, falling fertility which have transformed female participation rates over the past few years. Rising educational acquirements among women have pushed them to enter the world of work. Economic development can generate jobs that are more suitable to female, for example, the expansion of clerical work in China more recently with the demand for factory work and in India with the demand for service jobs due to outsourcing of jobs call centers (Duflo, 2011) and other service sectors. In the past 15 years the spread of ICTs (Information and Communication Technology) has expanded trade in services and promoted the growth of ICT sectors in developing countries. The Business Processing Outsourcing (BPO) industry in India has grown rapidly since 1990 and led to the formation of many new, well-paid opportunities for women.

Over the past two/three decades, there is reasonably increase in women joining the job sector resulting in the gender participation gap being narrowed. Gender inequality in education and employment reduces economic growth and the same is expressed by many researchers. Gender gaps in employment restrict the existing talent reservoir and would reduce competitiveness and in turn economic growth at the national and international level. It has been found that women’s employment and earnings benefit their bargaining power in the home, which in turn has positive spinoffs on savings, and promotes better investment in children’s health and their education which ultimately benefit economic growth (Klasen & Lamanna, 2009).

The female status in the BRICS countries is discussed in the following sections. The various aspects that covered in these sections are infant mortality rate, life expectancy, literacy, gender ratio and gender gap index. Apart from these, the economic participation and opportunity, political empowerment, educational attainment and health and survival of female based on the gender gap index scores are also discussed.

II. INFANT MORTALITY RATE AND LIFE EXPECTANCY

The infant mortality rate is an indicator that reflects the range of what mothers and infants in a community are experiencing, from access to health care and education, to encounters with violence, to economic security. The leading causes of infant deaths were related to prematurity-related conditions, birth defects, external injuries, and obstetric conditions. Prematurity-related conditions remained the leading cause of infant death. Women are at a higher risk of experiencing high stress levels that can lead to preterm birth and a low birth weight delivery. Women are at a higher risk of experiencing high stress levels that can lead to preterm birth and a low birth weight delivery. The infant mortality rate is widely accepted as one of the most sensitive indicators of the health of a community.

Infant mortality rate i.e. number of deaths per 1000 live births in the BRICS countries for the period from the year 2009 to 2018 are listed in the Figure 1 given below. It shows that there is decrease in infant mortality rates among all the BRICS countries. However the rate of infant mortality is very high in India compared to all other countries in BRICS group.

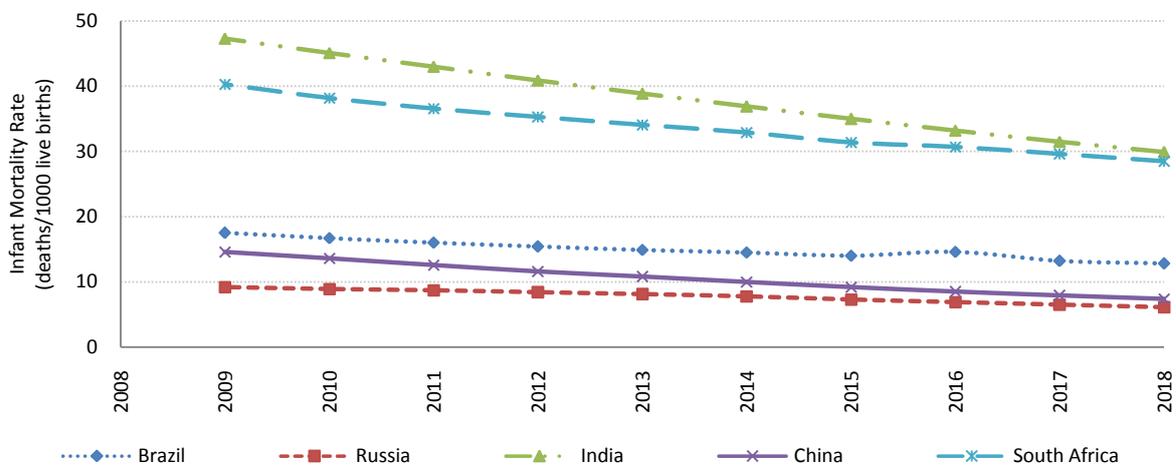
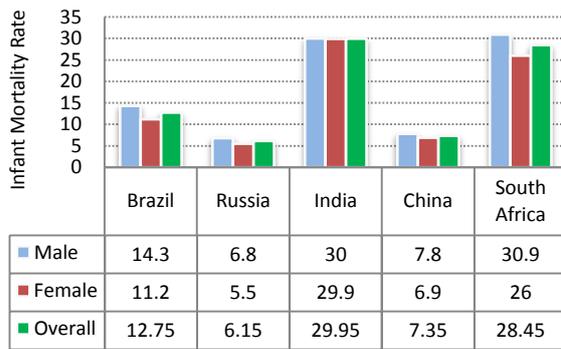


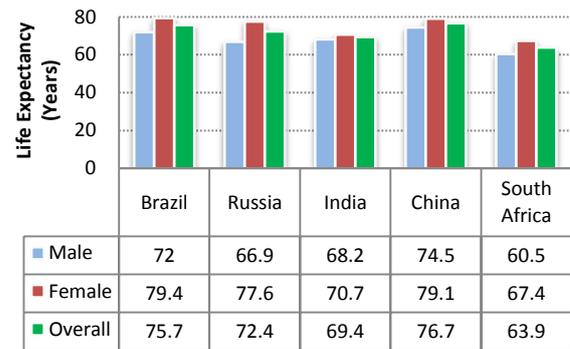
Fig. 1: Infant Mortality Rate among BRICS Countries

The gender comparison in respect of infant mortality rate and life expectancy in the year 2018 are listed in Figures 2 and 3. The infant mortality rate is considered as number of deaths per 1000 live births and life expectancy at birth in years.



Source: Unicef Data 2019

Fig. 2: Infant Mortality Rate in 2018 (number of deaths/1000 live births)



Source: UNDP Report 2018

Fig. 3: Life Expectancy at birth in 2018 (years)

It is observed from Figures 2 that Infant mortality rate (number of deaths per 1000 live births) of female is less than male in all BRICS countries. But at the same time it is to be noted that Infant Mortality Rate of female is highest in India compared to other countries in the group reveals an alarming sign in respect of giving birth to girl child. Total mortality rate is very high in India (29.95 deaths/1000 live births) where as Russia has lowest infant mortality rate among BRICS countries. Female life expectancy at birth is higher than male in all the BRICS countries in the year 2018 and looking at individual countries, the female life expectancy is highest in Brazil (79.4 years) compared to other countries of the group and South Africa (67.4 years) stood at the last in the group. India stood at 4th position among BRICS countries.

III. LITERACY

The literacy is considered as the people of age 15 and above can read and write. The gender comparison in respect of Literacy is given in Table 1 and Figure 4. The percentage of literacy of female in Brazil, Russia, and China is more than 92.71 per cent in 2010 and more than 95.16 per cent in 2018 and where as in India it is only 59.28 per cent in 2010 and increased to 65.79 per cent in 2018. The highest rate of literacy both in male and female is 99.73 per cent in Russia. The percentage of literacy among male and female is increased from 2010 to 2018 in all the countries except in the case of South Africa. It is observed from figure 4 that female are nearly equal to male literacy in South Africa and Russia and the percentage of literacy of female is more than male only in Brazil while male are dominating in literacy area in China and India. It can be observed that the literacy percentage among female and male has wider gap in India compared to other countries.

Table 1: Gender comparison in respect of Literacy among BRICS

Country	Year 2010		Year 2018	
	Female	Male	Female	Male
Brazil	98.32	90.06	99.43	93.01
Russia	99.65	99.73	99.73	99.73
India	59.28	78.88	65.79	82.37
China	92.71	97.48	95.16	98.47
South Africa	91.71	94.14	86.46	87.68

Source: <https://www.indexmundi.com>

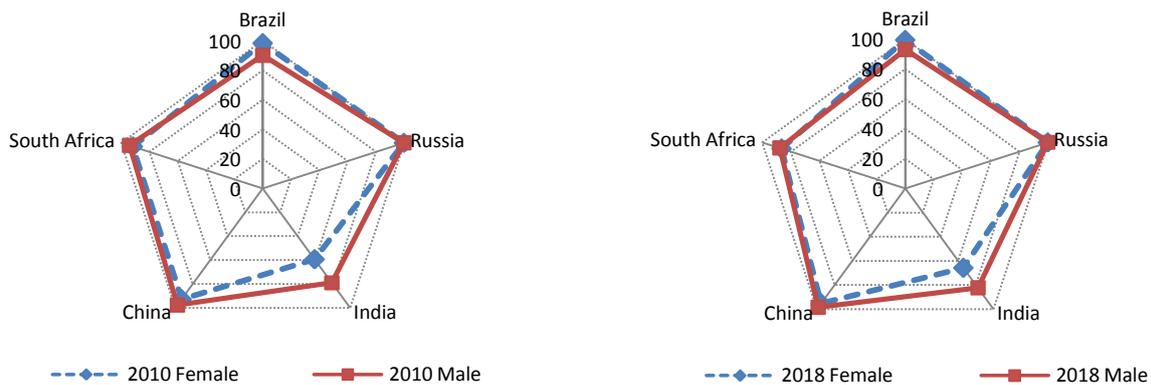


Fig. 4: Gender Comparison of Literacy in 2010 & 2018 among BRICS

IV. GENDER RATIO AT DIFFERENT STAGES OF LIFE

The Male-to-Female ratio at the various stages of life in the BRICS countries is listed in the Table 2. The gender ratio at all the stages is almost same in India and China. Male to Female ratio of total population is less than one in Brazil, Russia and South Africa indicating more female population than male where as in China and India, the ratio is more than one, indicating the male population is dominating female. It can be observed from the data that the male-to-female ratio in Russia in 0.47 in the stage 65 years and above, and is because of more life expectancy of female than male in Russia when compared to other BRICS countries.

Table 2: Male to Female Ratio at Different Stages of Life in BRICS

S.No.	Stage	Brazil	Russia	India	China	South Africa
1	At birth	1.05	1.06	1.11	1.11	1.02
2	0-14 years	1.04	1.06	1.13	1.16	1.00
3	15-24 years	1.03	1.05	1.14	1.13	0.99
4	25-54 years	0.99	0.97	1.07	1.05	1.02
5	55-64 years	0.90	0.77	1.00	1.06	0.87
6	65 & above	0.74	0.47	0.89	0.90	0.72
7	Total Population	0.97	0.86	1.08	1.06	0.98

Source: <http://www.theodora.com/wfbcurrent/> (2018 est.)

V. GENDER GAP INDEX

The statistics of Gender Gap Index in various countries of the world are published by World Economic Forum every year. The details pertaining to the BRICS countries are extracted from these data. Ten years (2009 to 2018) data is considered to measure the gender gap in BRICS countries to know the status of female and studied in four aspects i.e., (i) economic participation & opportunity, (ii) political empowerment, (iii) educational attainment and (iv) health and survival.

The gender gap scores for economic participation and opportunity in the last ten years (Table 3) indicate that the status of female in economic participation and opportunity is very poor in India compared to other BRICS countries and is at the decreasing rate though there was slight improvement from 2011 to 2012. Based on the scores given in Table 4, the scores are less than 0.5 in case of political empowerment in all BRICS countries and reveals that there is more male domination in political area.

Only South Africa and India fared well with regard to the gender gap score for political empowerment. The gender gap score for political empowerment in India is increasing compared to all countries in BRICS and is very low in Russia. The score is almost doubled in the last ten years in India (from 0.273 to 0.433) up to 2016 and then there is decline in the participation in the political area. Though female are taking acting role in the political area till 2016 in India but an alarming sign to be noted for declining from the year 2016 onwards. Figure 7 and figure 8 reveals that the female educational attainment and health and survival in Russia and Brazil and to some extent South Africa are nearer to male counter parts. China, on the other hand, status of female in educational attainment and health and survival is declining from 2014 and one of the reasons could be the food habits.

Coming to India in the group, though with lowest educational standards of female when compared to male but there is increase in the educational attainment of female from 2014 to 2018 (0.85 to 0.95) and similar improvement can also be seen in the areas of health and survival of female. However if we observe the figure 5 (economic participation and opportunity), figure 7 (educational attainment) and figure 8 (health and survival),

the India is at the lower portion. Quoting noble prize winning economist Amartya Sen observed that economic development and women's empowerment had symbiotic relationship. One cannot do without the other. Women's empowerment meets women's ability to access the constituents of development in particular health, education, earning opportunities and political participation. Poverty and lack of opportunities had bred inequality between men and women.

Table 3: The Gender Gap Scores for Economic Participation and Opportunity

Year	Brazil	Russia	India	China	South Africa
2018	0.645	0.741	0.385	0.653	0.645
2017	0.655	0.724	0.376	0.654	0.652
2016	0.640	0.722	0.408	0.656	0.677
2015	0.642	0.731	0.383	0.657	0.670
2014	0.649	0.726	0.410	0.656	0.647
2013	0.656	0.720	0.446	0.675	0.651
2012	0.650	0.720	0.459	0.675	0.659
2011	0.649	0.737	0.396	0.683	0.665
2010	0.643	0.736	0.403	0.693	0.673
2009	0.637	0.740	0.412	0.696	0.663
2009-2018	▲	▲	▼	▼	▼
Change	0.008	0.001	0.027	0.043	0.018

Source: The Global Gender Gap Report by WEF 2015, 2016, 2017, 2018;

Table 4: The Gender Gap Scores for Political Empowerment

Year	Brazil	Russia	India	China	South Africa
2018	0.101	0.085	0.382	0.164	0.404
2017	0.101	0.085	0.407	0.160	0.399
2016	0.132	0.066	0.433	0.162	0.404
2015	0.123	0.066	0.433	0.162	0.400
2014	0.148	0.066	0.385	0.151	0.397
2013	0.144	0.095	0.385	0.160	0.392
2012	0.134	0.095	0.334	0.150	0.392
2011	0.053	0.100	0.312	0.150	0.377
2010	0.049	0.100	0.291	0.150	0.377
2009	0.063	0.076	0.273	0.141	0.449
2009-2018	▲	▲	▲	▲	▼
Change	0.038	0.009	0.109	0.023	0.045

Source: The Global Gender Gap Report by WEF 2015, 2016, 2017, 2018;

Table 5: The Gender Gap Scores for Educational Attainment

Year	Brazil	Russia	India	China	South Africa
2018	1.000	1.000	0.953	0.958	0.992
2017	1.000	0.997	0.952	0.963	0.993
2016	0.998	0.997	0.950	0.967	0.995
2015	1.000	1.000	0.896	0.988	0.987
2014	1.000	1.000	0.850	0.986	0.987
2013	1.000	0.998	0.857	0.988	0.994
2012	1.000	0.998	0.852	0.982	0.980
2011	0.990	0.998	0.837	0.981	0.981
2010	0.990	0.999	0.837	0.981	0.996
2009	0.990	0.999	0.843	0.980	0.996
2009-2018	▲	▲	▲	▼	▼
Change	0.001	0.0001	0.110	0.022	0.004

Source: The Global Gender Gap Report by WEF 2015, 2016, 2017, 2018;

Table 6: The Gender Gap Scores for Health and Survival

Year	Brazil	Russia	India	China	South Africa
2018	0.980	0.980	0.940	0.915	0.980
2017	0.980	0.980	0.942	0.918	0.980
2016	0.980	0.979	0.942	0.919	0.980
2015	0.980	0.979	0.942	0.919	0.980

2014	0.980	0.979	0.937	0.940	0.980
2013	0.980	0.979	0.931	0.940	0.968
2012	0.980	0.979	0.931	0.934	0.968
2011	0.980	0.979	0.931	0.933	0.968
2010	0.980	0.979	0.931	0.929	0.968
2009	0.980	0.979	0.931	0.947	0.975
2009-2018	=	▲	▲	▼	▲
Change	0.000	0.001	0.009	0.032	0.005

Source: The Global Gender Gap Report by WEF 2015, 2016, 2017, 2018;

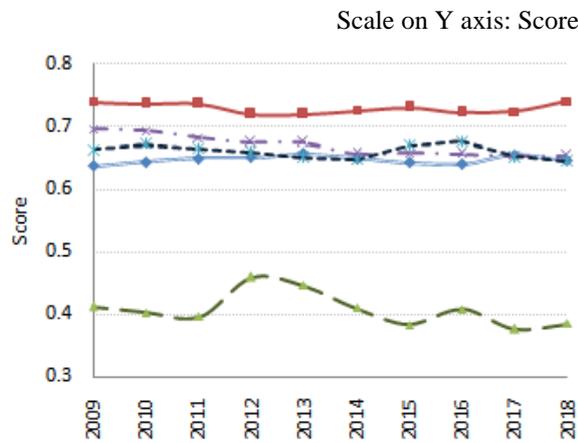


Fig. 5: Economic Participation and Opportunity

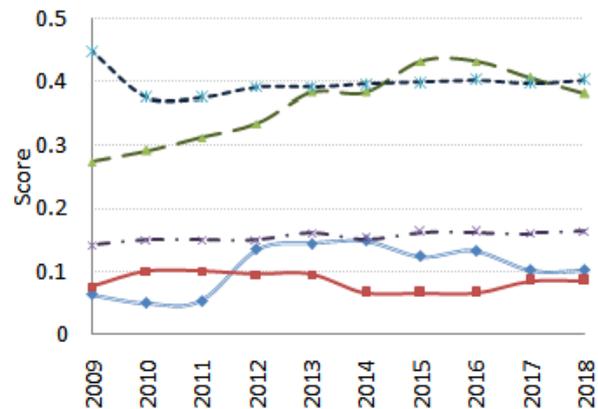


Fig. 6: Political Empowerment

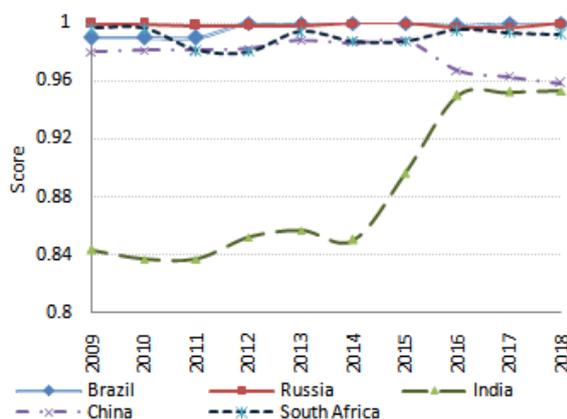


Fig. 7: Educational attainment

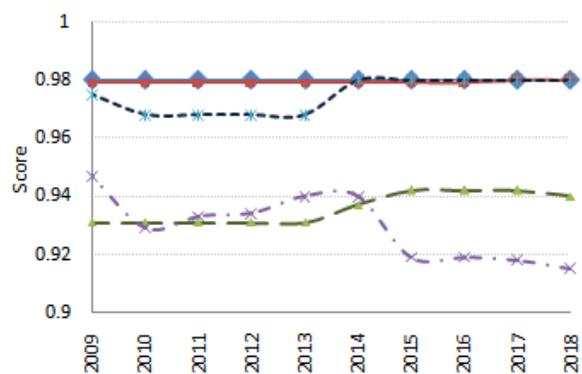


Fig. 8: Health and Survival

VI. CONCLUSIONS

The main aim of the paper is to study the status of female and the scenario in the BRICS countries with regard to Infant mortality rate, life expectancy, literacy, school life expectancy and gender ratio. Also the study is to highlight the status of female in economic participation and opportunity, political empowerment in BRICS countries.

Infant mortality rate of female is high in India compared to other countries in the group. Life expectancy of female is higher compared to male in Brazil, Russia, India and China and is reverse in South Africa. Russia recorded highest rate of literacy of female and male with 99.73 per cent compared to other BRICS countries. Female percentage of literacy in the group is increased from 2010 to 2018 of all the BRICS countries except South Africa. Only in Brazil, the percentage of literacy of female is more compared to male while in all other four countries the male are dominating in literacy area. It can be observed that the literacy percentage among female and male has wider gap in India (65.79 per cent female and 82.37 per cent male in 2018) compared to other countries. Though the Central Government and State Governments are encouraging female to study by way of providing several schemes and programs (Beti Bachavo and Beti padavo by Govt of India) still there is a large gap and it is necessary to create awareness among people to encourage girl education.

The scores indicate the status of female in economic participation and opportunity is very poor in India compared to other BRICS countries and is at the decreasing rate. The score for political empowerment in India is increasing compared to all countries in BRICS till 2016 from 0.273 to 0.433 and then onwards the decrease in the index value is indicating an alarming sign that the female are moving away from political participation. Though with lowest educational attainment of female when compared to male in India, the increase in the educational attainment of female from 2014 to 2018 (0.85 to 0.95) is encouraging and similar scenario can also be seen in the areas of health and survival of female.

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