



THE IMPACT OF HEALTH FACILITIES ON RURAL POVERTY IN SOUTHERN PUNJAB, PAKISTAN

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ABSTRACT

Poverty is a multidimensional global issue and cannot be eradicated with one thrust. Health is most important determinant for the alleviation of poverty. The objective of this study was to determine the impact of health on rural poverty in rural areas of Pakistan. The study designed by using quantitative methodology, data was collected through the structured questionnaire from the households of rural area of Southern Punjab, Pakistan. The estimated results showed that there is significant relationship between health and rural poverty. Research study concludes that health facilities are significant relationship with rural poverty; increase in health facilities, decrease the rural poverty. Study enriches the literature empirically on relationship among health and poverty. Thus, strategies and policies aim to reducing the poverty.

Keywords: Health, poverty alleviation, rural areas, Southern Punjab, Pakistan

JEL Codes: I10, I30

I. INTRODUCTION

Poverty is a global issue (Van der Heijden, 2020 and Khatun, 2015). Poverty has its spread all over the developed and developing countries and is found both in the rural and urban areas (Akerle et al., 2012). Success of developmental goals and objectives can achieved by poverty alleviation (Yusuf et al., 2016). Hence, poverty is global issue not only the issue of China, India, Nigeria and Pakistan. General phenomenon of poverty is perceived to mean “different things for different people at different places and different time.” Poverty is regarded as “*lack of access to basic necessities of life such as food, water, shelter, and clothing as well as inaccessibility to the social, cultural and means necessary to guarantee, productivity, social reproduction, and everyday life of the society*” (Akerle et al., 2012). Another definition of Poverty, “*it a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services*” by the United Nation, 2008. Poverty is totally out of control in the rural areas of Pakistan (Tasleem et al., 2020). Where people are in a state of deficiency with regards to “incomes, clothing, housing, health care, Health and education facilities” (Pervez & Rizvi, 2014). According to United Nation Development Program Report (2016) rural area poverty is 54.6% and urban poverty is 9.3%. Poverty alleviation is considered as an important issue of economic development in the literature, attempts have been made to alleviate poverty by increasing the facilities of health for households in the rural areas of south Punjab, Pakistan.

Modern day concept of poverty is multidimensional, cannot be eradicated with one thrust (Li et al., 2016; Liu et al., 2017). Like education, health is the part of human capital which contribute in the reduction of poverty at individual and community level (Hameed & Karim, 2016). For the world-wide, the most social and chief goal is achieving the best health status. This is because health is a most valuable asset as well as the human right that is necessary for productive improvement. In case of poor health, an individual is faced with a wide variety of actions that he/she can undertake to improve health. Seeking health care is among the many actions that an individual may undertake. However, such an action may be influenced by the individual’s ability to afford the health services (Awiti, 2014; Ali

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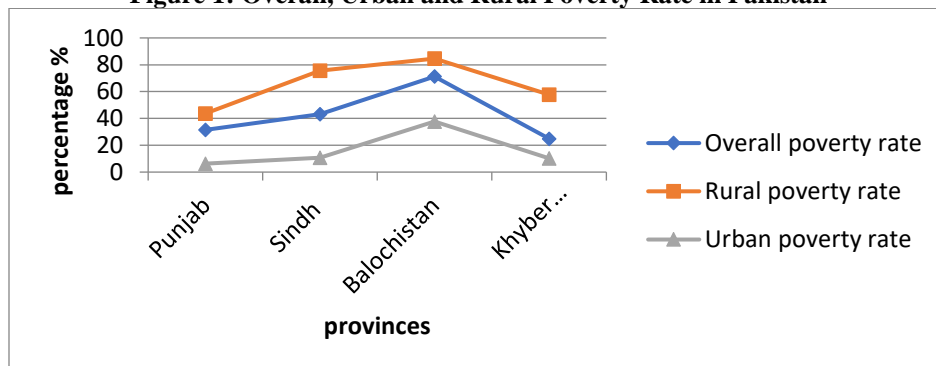
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et al., 2021; Ali et al., 2021; Ali et al., 2015; Arshad and Ali, 2016; Ashraf and Ali, 2018; Audi et al., 2022; Audi and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2016; Audi et al., 2021). Figure 1 shows the Poverty Rate in the different rural, urban and overall poverty rate in Pakistan. Figure shows that rural poverty is greater than the urban poverty in Pakistan.

Figure 1: Overall, Urban and Rural Poverty Rate in Pakistan



II. LITERATURE REVIEW

The problem of poverty has been for an extensive time at the heart of development efforts among the nations of the world (United Nation Organization, 2008). According to the World Bank Report, (2009), 18 percent of the total population of the developing world, was extremely poor and 33 percent was poor. Basically, Poverty is a rural phenomenon in Pakistan (Iqbal et al., 2018). Pakistan is one the developing country with the largest rural poor population. Two-thirds of the population in Pakistan live in rural areas. Rural population is greater than urban population (Singh et al., 2013). Poverty in rural areas is more than the poverty in urban areas (Arif & Iqbal, 2009; Iqbal & Nawaz, 2017; Ali and Naeem, 2017; Ali, 2011; Ali, 2015; Ali, 2018; Ali and Bibi, 2017; Ali and Ahmad, 2014; Ali and Audi, 2016; Ali and Audi, 2018; Ali and Rehman, 2015; Ali and Senturk, 2019; Ali and Zulfiqar, 2018; Ali et al., 2016). Poverty is among the greatest risk factors for poor health worldwide (Sridhar, 2016). Health endowments of the individuals are the necessary and important components of human capital which make them productive and raise their standard of living (Awan et al., 2011; Mughal, 2007; Audi et al., 2021; Audi et al., 2021; Haider and Ali, 2015; Kaseem et al., 2019; Roussel et al., 2021; Senturk and Ali, 2021). Healthy persons are likely to be more productive. Health refers to physical and mental health of human being. When there are no proper health facilities for the human being, such state of affairs has the negative effect on the incomes and efficiency of the poor (Usman, 2009). Socioeconomic status is increasingly related to health outcomes, diseases and deaths across countries and cultures. People with lower socioeconomic status repeatedly have worse health status than individuals with higher socioeconomic status. Similarly, women are more vulnerable to poverty as marginalized community in rural areas of the Punjab (Choudhry et al., 2019). The extent and the steadiness in the impacts of socioeconomic status on health outcomes specified that a person's position in the social ladder is significantly related to health behaviors, beliefs, and practices. While socioeconomic status is commonly measured by factors such as 35 education level, income, and occupational status, the literature indicated other dimensions and levels of socioeconomic status that must be considered by health professionals (Felix, 2017).

III. RESEARCH FRAMEWORK

Previous studies have attempted to explain the extent to which poverty affects education, income, population etc. However, the studies focused on small segment of the population in rural areas of Pakistan, or specific health services and small sections of the country. For current research study, Health facilities plays a role of independent variables and Rural poverty plays a role of dependent variables. Health Facilities includes Presence of Hospitals, Trained Doctors and Infrastructure showed in figure 2.

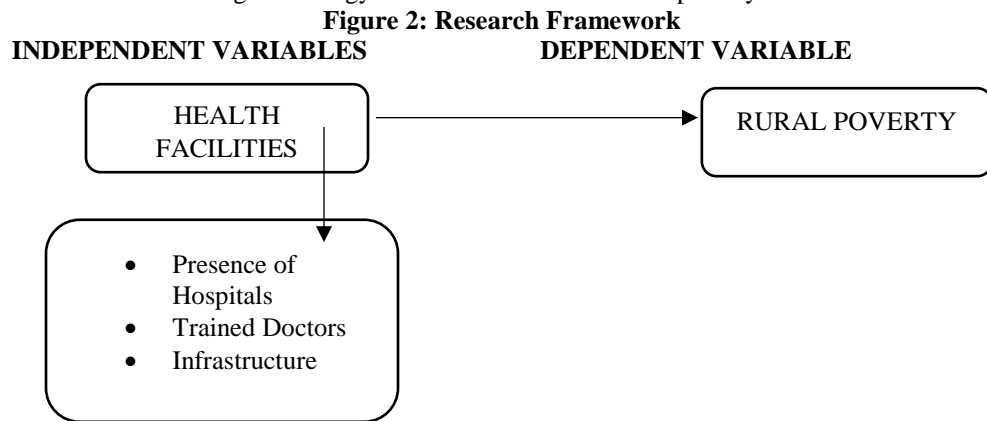
IV. HYPOTHESES DEVELOPMENT

This section deliberates the relationship between the Health facilities “Presence of Hospitals, Trained Doctors and Infrastructure” with rural poverty. The key of economic growth of country is investing in Health. Health helps in the alleviation of poverty and also improve the standard of life as well as economic growth of people and society. Strong link between poverty and health facilities.

H1: There is an association among Presences of hospitals and rural poverty.

H2: There is an association among trained doctors and rural poverty.

H3: There is an association among technology and infrastructure and rural poverty.



V. RESULTS AND DISCUSSION

V.I. DESCRIPTIVE STATISTICS

For the deliberation of the primary features of data, descriptive analysis is performed. Sekaran and Bougie (2016) stated that basically descriptive analysis is explicated via mean, standard deviation, in order to obtain a complete review about how the respondents have responded to questionnaire. Table 1 represents the descriptive statistics. The descriptive statistics include standard deviation, mean, maximum and minimum. The descriptive analysis outcome shows that the mean of all the variables lies in between 3.842 to 4.053. These values lie in an acceptable range.

Table 1: Descriptive Statistics

Sr no.	Variables	N	Minimum	Maximum	Mean	Standard deviation
1	Presences of Hospitals	384	1	5	3.979	0.6455
2	Trained Doctors	384	1	5	3.842	0.6617
3	Technology and Infrastructure	384	1	5	3.975	0.6527
4	Rural Poverty	384	1	5	4.053	0.6787

V.II. TESTING THE NORMALITY

In the study of Pallant (2011), he states that linearity refers to the residuals representing a straight-line relationship with the predicted values of the dependent variable. In this study, linearity was tested by using scatterplots. Normality probability plot “p-p plots” and histogram are tools that confirmed the normality of the regression standard residual and through the Kolmogorov–Smirnov, skewness and kurtosis values. Figures 3 and 4 present normal distribution of data – and its insignificant deviation through the normal curve.

Figure 3: Histogram

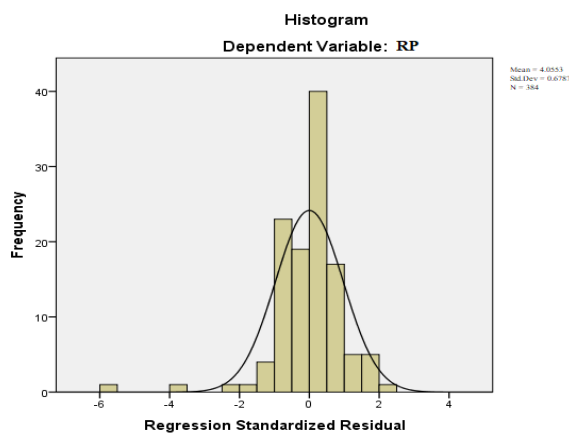
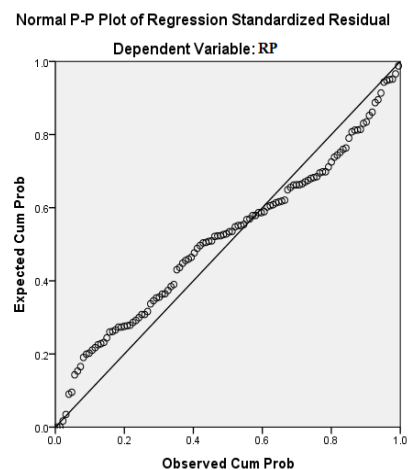


Figure 4: Normal Probability Plot



V.III. TESTING OF HYPOTHESIS

Table 2: Hypothesis Testing Results

Hypothesis	Relationship	B-values	T-values	P-values	Decision
H1	PH → RP	0.086	2.076	0.040	Accepted
H2	TD → RP	0.094	2.064	0.037	Accepted
H3	TI → RP	0.274	2.632	0.00	Accepted

Table 2 shows the hypothesis summary, all variables are direct in nature. Following hypothesis relationships were studied in this study.

H₁: It has been hypothesized in the study that presence of hospitals has a significant impact on rural poverty. The bootstrapping results also show that quality of education casts a significant impact on the rural poverty ($\beta= 0.086$, $t= 2.074$, $p= 0.040$).

H₂: It has been hypothesized in the study that Trained doctors has a significant impact on rural poverty. The bootstrapping results also show that level of teacher's education casts a significant impact on the rural poverty ($\beta= 0.097$, $t= 2.064$, $p= 0.037$).

H₃: It has been hypothesized in the study that technology and infrastructure have a significant impact on rural poverty. The bootstrapping results also show that technology and infrastructure casts a significant impact on the rural poverty ($\beta= 0.274$, $t= 2.632$, $p= 0.000$).

V.IV. SUMMARY OF HYPOTHESIS

Table 3 shows the summary of hypothesis, that all the health facilities shows the positive significant impact on rural poverty. There is a direct relation between the independent and dependent variable and all variables of this study show the supported decisions.

Table 3: Summary of hypothesis

Hypo.	Statement	Sign.	Sig.	Decision
H1	There is an association among Presence of hospitals and rural poverty.	+	Significant	Supported
H2	There is an association among trained doctors and rural poverty.	+	Significant	Supported
H3	There is an association technology and infrastructure and rural poverty.	+	Significant	Supported

VI. CONCLUSION

In conclusion, Health is essential in the life of human. As time goes by, health system changes energetically following the needs of human beings. For the excellent health facilities and system, there is need to change and improved many things. Consequently, for the improvement of health system, also need of involvement of people, so that health system become more effective and efficient day by day. The current study discussed the relationship between presence of hospitals, trained doctors and, technology and infrastructure. The overall research findings can be concluded as, presence of hospitals, trained doctors and, technology and infrastructure showed significant positive impact on rural poverty. Therefore, the research study on the rural poverty is proposed which may provide valued direction to the administration of country about the improvement and alleviation of poverty. Also, this will ensure effective execution of policies regarding alleviation of rural poverty and also helpful to attain goals.

REFERENCE

- Akerele, D., Momoh, S., Adewuyi, S. A., Phillip, B. B., & Ashaolu, O. F. (2012). Socioeconomic determinants of poverty among urban households in South-West Nigeria. *International journal of social economics*, 39(3), 168-181.
- Arif, G., & Iqbal, N. (2009). *Infrastructure and poverty nexus: The case of rural Pakistan*. Paper presented at the Islamic International University, Islamabad.(Conference Paper.).
- Asfaw, A. (2003, April). How poverty affects the health status and the healthcare demand behavior of households: The case of rural Ethiopia. In *International conference on staying poor: Chronic poverty and development policy, Manchester* (pp. 7-9).
- Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. *Policy Brief-Department of Economics, PU, Lahore*. 2017 (1), 1-6.
- Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.

- Ali, A. (2015). *The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan*. (Doctoral dissertation, National College of Business Administration & Economics Lahore).
- Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.
- Ali, A. and Bibi, C. (2017). Determinants of Social Progress and its Scenarios under the role of Macroeconomic Instability: Empirics from Pakistan. *Pakistan Economic and Social Review* 55 (2), 505-540.
- Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 22(2), 218-224.
- Ali, A., & Audi, M. (2016). The Impact of Income Inequality, Environmental Degradation and Globalization on Life Expectancy in Pakistan: An Empirical Analysis. *International Journal of Economics and Empirical Research*, 4 (4), 182-193.
- Ali, A., & Audi, M. (2018). Macroeconomic Environment and Taxes Revenues in Pakistan: An Application of ARDL Approach. *Bulletin of Business and Economics (BBE)*, 7(1), 30-39.
- Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on the gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.
- Ali, A., & Şenturk, I. (2019). Justifying the Impact of Economic Deprivation, Maternal Status and Health infrastructure on Under-Five Child Mortality in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics*, 8(3), 140-154.
- Ali, A., & Zulfiqar, K. (2018). An Assessment of Association between Natural Resources Agglomeration and Unemployment in Pakistan. *Pakistan Vision*, 19(1), 110-126.
- Ali, A., Ahmed, F., & Rahman, F. U. (2016). Impact of Government Borrowing on Financial Development (A case study of Pakistan). *Bulletin of Business and Economics (BBE)*, 5(3), 135-143.
- Ali, A., Audi, M., & Roussel, Y. (2021). Natural Resources Depletion, Renewable Energy Consumption and Environmental Degradation: A Comparative Analysis of Developed and Developing World. *International Journal of Energy Economics and Policy*, 11(3), 251-260.
- Ali, A., Audi, M., Bibi, C., & Roussel, Y. (2021). The Impact of Gender Inequality and Environmental Degradation on Human Well-being in the Case of Pakistan: A Time Series Analysis. *International Journal of Economics and Financial Issues*, 11(2), 92-99.
- Ali, A., Mujahid, N., Rashid, Y., & Shahbaz, M. (2015). Human capital outflow and economic misery: Fresh evidence for Pakistan. *Social Indicators Research*, 124(3), 747-764.
- Arshad, S., & Ali, A. (2016). Trade-off between Inflation, Interest and Unemployment Rate of Pakistan: Revisited. *Bulletin of Business and Economics (BBE)*, 5(4), 193-209.
- Ashraf, I., & Ali, A. (2018). Socio-Economic Well-Being and Women Status in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(2), 46-58.
- Audi, M & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. *Archives of Business Research*, 5(11), 159-170
- Audi, M. & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.
- Audi, M. Sadiq, A. Ali, A. and Roussel, Y. (2021). Performance Evaluation of Islamic and Non-Islamic Equity and Bonds Indices: Evidence from Selected Emerging and Developed Countries. *Journal of Applied Economic Sciences*, 16(73), 251– 269.
- Audi, M., & Ali, A. (2016). A Causality and Co-integration Analysis of Some Selected Socio-Economic Determinants of Fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
- Audi, M., Ali, A., & Al-Masri, R. (2022). Determinants of Advancement in Information Communication Technologies and its Prospect under the role of Aggregate and Disaggregate Globalization. *Scientific Annals of Economics and Business*. <https://doi.org/10.47743/saeb-2022-0009>.
- Audi, M., Ali, A., & Roussel, Y. (2021). Aggregate and Disaggregate Natural Resources Agglomeration and Foreign Direct Investment in France. *International Journal of Economics and Financial Issues*, 11(1), 147-156.
- Audi, M., Ali, A., & Roussel, Y. (2021). Measuring the Tax Buoyancy: Empirics from South Asian Association for Regional Cooperation (SAARC). *Empirical Economics Letters*, 20(12).
- Audi, M., Ali, A., & Roussel, Y. (2021). The Advancement in Information and Communication Technologies (ICT) and Economic Development: A Panel Analysis. *International Journal of Innovation, Creativity and Change*, 15(4), 1013-1039.
- Awan, M. S., Malik, N., Sarwar, H., & Waqas, M. (2011). Impact of education on poverty reduction.
- Awiti, J. O. (2013). *Essays on health determinants in Kenya* (Doctoral dissertation, University of Nairobi).

- Choudhry, A. N., Mutalib, R. A., & Ismail, N. S. A. (2019). Socio-Cultural factors affecting Women Economic Empowerment in Pakistan : A Situation Analysis. *International Journal of Academic Research in Business and Social Sciences*, 9(5), 90–102. <https://doi.org/10.6007/IJARBS/v9-i5/5842>
- Felix, G. (2017). Rural Haitian Women's Experiences With Poor Health Through Poverty.
- Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. *International Journal of Economics and Empirical Research*, 3(11), 550-560.
- Hameed, A., & Karim, S. (2016). Multidimensional Poverty Mapping for Rural Pakistan.
- Iqbal, M., Ping, Q., Abid, M., Abbas, A., Bashir, M., & Ullah, R. (2018). Extent and determinants of rural poverty in pakistan: role of adopting risk management strategies. *JAPS, Journal of Animal and Plant Sciences*, 28(6), 1835-1845.
- Iqbal, N., & Nawaz, S. (2017). Spatial Differences and Socioeconomic Determinants of Health Poverty. *The Pakistan Development Review*, 56(3), 221-248.
- Kassem, M. Ali, A. & Audi, M. (2019). Unemployment Rate, Population Density and Crime Rate in Punjab (Pakistan): An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 8(2), 92-104.
- Khatun, R. (2015). The impact of micro-level determinants of poverty in Bangladesh: A field survey. *Bangladesh: PKSF, Dhaka*.
- Li, Y., Su, B., & Liu, Y. (2016). Realizing targeted poverty alleviation in China: People's voices, implementation challenges and policy implications. *China Agricultural Economic Review*, 8(3), 443-454.
- Liu, Y., Liu, J., & Zhou, Y. (2017). Spatio-temporal patterns of rural poverty in China and targeted poverty alleviation strategies. *Journal of Rural Studies*, 52, 66-75.
- Mughal, W. H. (2007). Human Capital Investment and Poverty Reduction Strategy in Pakistan. *Labour and Management in Development*, 7(4), 1-33.
- Musyoka, P. K., Korir, J., Omolo, J., & Nzai, C. C. (2018). An Empirical Analysis of the Effect of Poverty on Health Care Utilization in Kenya. *Eur Sci J*, 14(22), 101.
- Roussel, Y., Ali, A., & Audi, M. (2021). Measuring the Money Demand in Pakistan: A Time Series Analysis. *Bulletin of Business and Economics (BBE)*, 10(1), 27-41.
- Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(3), 97-109.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Şentürk, İ., & Ali, A. (2021). Socioeconomic Determinants of Gender Specific Life Expectancy in Turkey: A Time Series Analysis. *Sosyoekonomi*, 29(49), 85-111.
- Sridhar, D. (2016). Making the SDGs useful: a Herculean task. *The Lancet*, 388(10053), 1453-1454.
- Tasleem, Z. (2020). Does education eliminate the rural poverty in Pakistan?. *Competitive Social Science Research Journal*, 1(3), 21-31.
- United Nation Development Program (2016). UNDP, Retreved from, Human Development Report 2016 | UNDP. United Nation Organization, (2008). UNO, Retreved from, https://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/mdg_reports/MDG_Report_2008_ENGLISH.pdf
- Usman, M. (2009). Socio-economic Determinants of Poverty. *An MSc Thesis to be Submitted to Aalborg University, Denmark*. 13p.
- Van der Heijden, J. E. (2020). *Period warriors on Instagram Popular Feminism, Digital Activism & Period Poverty* (Master's thesis).
- World Bank Report (2009a). *World Bank Report*, Retreved from, World Development Report 2009: Reshaping Economic Geography (worldbank.org).