

RELATIONSHIP BETWEEN UNEMPLOYMENT, POVERTY AND CRIME: AN EMPIRICAL CROSS-SECTIONAL ANALYSIS OF PESHAWAR, KHYBER-PAKHTUNKHWA

¹Dr. Anwar Ul Mujahid Shah, ²Mr. Nauman Reayat, and ³Syed Arshad Ali Shah*

¹Lecturer in Sociology, Bacha Khan University Charsadda, Pakistan.

²Lecturer in Pakistan Studies, Abdul Wali Khan University, Mardan, Pakistan.

³Lecturer in Management Sciences, Bacha Khan University Charsadda, Pakistan. *Corresponding Email: arshad@bkuc.edu.pk

ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: 22 June 2019 Revised: 21 Aug 2019 Accepted: 11 Nov 2019 Available Online: 02 Mar 2020</p> <hr/> <p><i>Keywords:</i> Unemployment, Poverty, Cross-Sectional, Structural Equation Modelling</p> <hr/> <p><i>JEL Classification:</i> M11, O35</p>	<p>The current research studies the impact of crime on unemployment and poverty in Peshawar. The survey was carried out in Khyber Pakhtunkhwa, and a cross-sectional method was used, and a total of 190 respondents were interviewed through an organized questioner. The main dependent variable was crime while the independent variable education, unemployment, and poverty. Structural equation modeling was employed, and as a tool, Smart Pls and SPSS were employed for analysis. Results show that unemployment and poverty had a positive impact on crime. The study followed a descriptive method rationally using a survey questionnaire for data collection. In total, a sample number of 116 responses is valid applied led to a conclusion. These individuals are easily tempted into criminal activities largely due to their low-slung socio-economic background. Furthermore, the study recommended a holistic adult empowerment programs be supported by government stakeholders as well as non-government to alleviate unemployment and poverty. Resultantly, boost up the adolescent concentration, directing towards better and rewarding activities; more strategically smart youth.</p>

© 2020 The authors, under a Creative Commons Attribution-Non-Commercial 4.0

1. INTRODUCTION

Unemployment is seen throughout the globe as one of the main barriers to social progress, contributing in turn to criminality in communities. Pakistan being part of the global world is not exceptional case where the unemployment rate is highest in the region touching 5.8 % and a labour force of 65.50 (Economic Survey of Pakistan, 2019) which is the highest rate of unemployment in the region. With a population of 207 million Pakistan is ranked sixth populous country in the world (UNDP, 2019) Pakistan faces several challenges including highest growth rate of 2.4 %, inflation 10.3 % corruption, illiteracy, corruption, large fiscal imbalances, high level of bureaucratic red-tape criminality and depressing rates, law and order situation, and internal & external debt and many other obstacles (Pasha, 2018; Abbasi, 2019). Among all the evils, poverty and unemployment are considered as one of the main obstacles. Given that the escalating rates of armed robbery, abduction, burglary and different aspects of conflict and violence are rooted largely in the incidence of poverty and unemployment in the world. This gave rise to different cultural, political, social, and economic problems that badly affected the well-being of the populace. Both poverty as well as the unemployment rate in Pakistan consistently increased despite plenty of financial support by the private sector and non-government sector and has become the most important problem. It crippled the lives of Pakistani youths, hence giving rise a serious danger to society as a whole. According to the National Human Development Report – 2017, people with age below 30 constitute 64% of the total population and people between the ages of 15 and 29 years constitute 29% of the total population. Unemployment gives rise to dissatisfaction, disheartening, misery and reliance on relatives and companions who additionally experience their own issues. This problematic context has caught youngsters in a ruinous pattern of poverty that shatters their trust and threatens a brilliant future every day. The scale and volume of destitution and unemployment represents a major risk and considered as perhaps the greatest test in the country today, which has driven numerous individuals towards criminal activities and adversely influenced the physical well being of the individuals (Martin & Goldney, 1997).

Crime not only poses a threat to an individual, but it also damages the country's overall social development, destroys the main communal relationships, so crime prevention and control should be given constant attention in a democratic country (Sakalauskas, 1999). In recent years the crime rate in Pakistani societies is increased due to the

increase in population, poverty, unemployment and inequality. There have been claims that poverty leads to criminal tendencies; in any case, there is pretty much nothing, and the scale of crimes is more extraordinary in urban settings than countryside because of significant levels of urban destitution, scarcity of job opportunities, joblessness, average cost for basic items, complication and increasing debauchery going up against the urban context. In spite of the fact that wrongdoing emerges due to a variety of circumstances, yet Becker (1968) argued that an individual expects to involve in criminal activities as a rule due to the assumption that their utility will be more noteworthy than if they utilized their time and assets in different movements while as indicated by Ehrlich (1973) joblessness is the base for crimes in a general public. As Unemployment and materialistic desires make a person commit a crime and people steal; commit various crimes to have money in order to support their living standard and family. Similarly, some argue that poverty is the main cause of criminal activities. To fulfil the basic necessities of life one and break the vicious of poverty a person get involved in criminal activities, poverty in the most general sense is the lack of the goods of primary importance and in daily use of people. It is this need that drives an individual towards those criminal activities that can quickly address his or her basic problems and get goods of primary importance and basic use.

Global scholars, such as (Akoum, 2008; Smith, 2010) discuss the idea of deprivation. Such authors point out that deprivation contributes to frustration with the basic personal needs of people. Clean water, sanitation, accommodation, clothes and health care are typically included in personal needs. Reports of research show that deprivation is a socio-economic problem that is multidimensional based on race, age, history, social and economic influences, the sources of deprivation. Factors of suffering are interrelated. The definition of deprivation is also correlated with deteriorating physical well-being of people, the increase in mortality, corrupt practices in society, i.e., an increase in criminal activities or other drivers that are not beneficial to economic growth and social welfare. Poverty contributes to robbery because it can be easier or quicker for people.

Poverty leads to crime as robbing can be cheaper or easier than going through the process of finding a job and sustaining a career "(Taylor, 2000). Researchers Fadaei and Green (2002) point to economic factors such as unemployment, violence, cultural factors (especially education), rapid population growth as the key causes of crime. Past studies in Pakistan have used many indicators such as poverty, corruption, high growth rate population, a lack of resources and lack of job opportunities, weak law enforcement, lack of justices and various other indicators that have been the reason of criminal activities in society. But very few cross-sectional studies have been carried out in Peshawar with the indicators of unemployment and poverty that give rise to crime. The current research aim is to fine-tune the contemporary impact of poverty and unemployment on crime in the Khyber Pakhtunkhwa Region. In this regard, cross-sectional data were collected Peshawar.

Literature Review

Various factors that are responsible for crimes have been established in existing literature, but there is no agreement on the causes of crime. It is generally accepted, however, that offenses have had various social and economic consequences for culture. Because of crime community has to bear various costs include injury triggering health problems, loss of work for the family of the victim, loss due to incapacity to attend school, spending on rehabilitation from mental trauma induced by violence, adverse effects on quality of life and expenditure on security systems such as security guards, locking devices, alarm systems, self-defense etc. (Becker, 1968; Ezell & Cohen, 2012). Stevans, 1983; Masih and Masih, 1996; Gaviria and Pagés, 2002, states that crime in any country or society has emerged from three deterrents namely Demographic, Economic factors and lastly due to the deterrent factors. The demographic variable, mostly comprises of education level, lack of schools in the area of crimes and sex ratio, while the economic variables include poverty status in the area, income level, unemployment and GDP of the state. Whereas the deterrent factors include arrestment and conviction to determine the expected crime outcome (Becker, 1968; Ehrlich & Brower, 1987). All the variable have either a positive or negative impact on society. Gillani et al. (2009) studied the impact of inflation, unemployment and poverty on crime using secondary data and the results of the study showed that variables had a positive impact on the crime. Similarly, the results were studied by Jalil and Iqbal (2010) using time series data reveal that the main reason for the crime was due to lack of literacy and unemployment. Likewise, Gumus (2004) used the socio-economic and demographic variable for their effect on crime in US cities and found that poverty and income were the main cause of crime while unemployment had less role in emerging of crimes. Omotor (2010) used secondary data to envisage the impact of income, literacy, inflation, unemployment on crimes in Nigeria. The study reveals that the high population and low literacy rate had no impact on crime, unemployment was significant in relation to crimes in Nigeria.

Unemployment affects crime rates in two opposite ways through the impact of criminal incentive and the effect of criminal potential, according to (Cantor and Land, 1985). The extent of these two factors relies on whether unemployment has a positive or negative impact on crime rates.

In the short term, the overall impact of unemployment on crime rates appears to be negative: the effect of criminal incentives are likely to be more important than the effect of criminal incentive, because unemployment decreases the supply of individuals and property, thus reducing the potential number of victims and vulnerable properties. Ukpere and Slabert (2009) applied a qualitative approach and found a positive relationship between crime and unemployment, income inequity and poverty. Likewise, Coomer (2003) examined the impact of macroeconomic factors on crime using cross-sectional data. Among the variables poverty, unemployment and inflation were found significant while education and population were non-significant. İmrohoroğlu, et al. (2006) investigated the impact of various socio-economic factors on the crime rate in various countries using cross-sectional analysis. The results of the study reveal unemployment to lack of education had a positive impact on crime in most of the countries. The present study is an attempt to explore the effect on crimes in Pakistan for the duration 1984-2013 of social, economic and political influences and the case of 9/11. Of global, economic and social variables, three equations were calculated separately. Asghar et al., 2016 examined the impact on crime in Pakistan of political and economic influences. The analysis of the author indicates that the political influences such as populism, law and order, 9/11 case, have been found to increase criminality, while the stability of the government decreases the crime. Economic factors such as inflation are raising violence, while global remittances and foreign debt are reducing crime. Human rights, human capital, income inequality, and population density are raising violations of social factors.

Hazra and Cui, (2018) analyzed the connection between the magnitude of crime, inflation, joblessness, and on-ground GDP per capita in India. In view of the national-level information, the Johansen cointegration test affirms the nearness of cointegration connection between the factors and results. The relationship shows that macroeconomic markers, particularly joblessness, can altogether influence the scale of crime in India. Thus, Imran et al., 2018 led an investigation on the connection among destitution and wrongdoing Using time-arrangement information of the USA over the period from 1965 to 2016. The writer utilized distributed lag approach to distinguish the impact of poverty on the degree of crime. The results affirm a positive co-incorporating connection between the magnitude of crime and poverty.

Adekoya and Razak (2016) explored the connection between the extent of poverty and the magnitude of the crime. The examination inspected the cointegration of these factors. The investigation utilized dataset from 1990 to 2012 and broke down information through the vector error correction model, the estimation of limits test; and Granger causality test. The outcomes indicated that there is a momentary impact of an increase in crime on brutality and a single direction causality of destitution influenced wrongdoing using Granger causality that affirms the wrongdoing riche theory. Consequently, the investigation proposed that government officials would advance estimates that can animate monetary development with the capability of an increase in crime in the country and its implications. Abbas, S., Shouping, Sidra & Sharif (2018) conducted a study to explore the impact of crime on the socio-economic development of the country in Pakistan. The purpose of the study was to comprehend the increasing crime rate and to know its influences on socio-economic progress. To examine the crime and its impacts on country development, a field survey was conducted, and questionnaires were developed to understand the ground situation. For the purpose of the interviews, the members of the community were selected by using simple random sample technique. This study is found that the crime rate is cumulative due to dissimilar socio-economic snags like poverty, unemployment, uses of drugs, etc. Further, this study highlights the causes and recommends possible solutions for the curbing the threat of crime in Karachi. The main focus of this research paper is to find out the pathways to overcome crime in Pakistan.

2. RESEARCH METHODS

A quantitative approach was used, and as quantification makes easier in comparing, aggregating and summarizing the data (Babbie, 2015). In addition, the quantitative approach helps in finding the cause and effect relation between the variables (Delpont, 2005). According to Bhattacharjee (2012), after the collection of qualitative data, two types of statistical analysis is applied to the data that includes descriptive and inferential statistics. The former helps in presentation, arrangement and aggregation of the raw data on the base of associations between constructs, in short, it starts with the data preparation phase, which should prepare collected data for statistical analysis while inferential analysis employed for testing the hypotheses (Bhattacharjee, 2012). The data were analyzed using structural equation modelling, and an analysis tool, Smart PLS was used. The respondents of the research consisted of those individuals who had committed crime in Peshawar. A total of 116 respondents were interviewed using a personally administered questionnaire. Due to the unspecified number of youth/adults, purposive- sampling was used to get the respondents who had committed crimes in the society. Ethical Considerations, the informed consent were taken into consideration when this study was conducted.

Before signing the consent form, the researcher explained the study intently to the participants. The authors have stated that they will remain anonymous and confidential throughout their involvement in the analysis.

2.1 Participants' biographical information

Table 1 shows that the majority of the respondents 38 belong to the age group 26-30. While criminal activities between the age of 15-20 were less i. e only 12 respondents as compared to the other groups. The female participation in the survey was 21 while the male was 95.

Table1. Respondents by age and gender

Age	Respondents	Gender	Total
15-20	12	Males	95
21-25	19	Females	21
26-30	38		
31-35	31		
36-40	16		

3. RESULTS AND DISCUSSION

3.1 Measurement model

The Structural equation model consists of two parts, measurement model and structural model. Measurement basically shows the relationships among the indicator items and constructs. The measurement model includes indicator reliability, convergent validity, and discriminant validity (Hair et al., 2016). Indicators reliability is based on factor loading and the threshold for each factor loading is greater than 0.4 (Hair et al., 2016). Based on the 0.4 rule of thumb, all the indicators were greater than .04 as shown in table 2. Similarly, the Convergent validity is analyzed through the composite reliability score and average variance extracted (AVE). Based on Churchill (1979), the minimum required level for a composite reliability score is 0.7 or more while the minimum criteria for average variance extracted (AVE) were should be 0.5 or more (Hair et al., 2016). In Table 2 all of the values regarding the average variance extracted are greater than the value of 0.5, showing sufficient convergent validity.

Table 2. Loadings, Convergent Validity

Variables	Loading	CR	AVE, (AVE > 0.5)
Poverty	0.568 - 0.895	0.871	0.534
Jobless	0.525 - 0.865	0.878	0.597
Crime	0.598 - 0.952	0.906	0.667

3.2 Discriminant validity

Discriminant validity was assessed through heterotrait-monotrait HTMT recommended by Henseler et al., (2015) and the threshold for HTMT are below 0.85 (Franke and Sarstedt, 2019). As mentioned in Table 3, all the values are above the minimum required level, satisfying the discriminant criteria.

Table 3. Discriminant validity

Variables	Crime	Jobless	Poverty
Crime			
Jobless	0.692		
Poverty	0.826	0.59	

Discriminant validity was assessed through heterotrait-monotrait HTMT recommended by Henseler et al., (2015) and the threshold for HTMT is below 0.85 (Franke and Sarstedt, 2019). As mentioned in Table 3, all the values are above the minimum required level, satisfying the discriminant criteria.

3.3 Structural model

The structural model illustrates the overall findings of the hypotheses testing using the Bootstrap procedure. The path coefficients are tested using t-values presented in Figures 1. In addition to reporting path coefficients (β), which represents the strength of the correlation, the p values are also reported in Table 6-6. All theorized relations are found

significance, as shown in Table 4 that summarizes the path results and the corresponding t-values at 0.05% (1.96) (Hair et al., 2016).

Table 4. Path coefficients

Relationships	Beta	t-value	P Values
Jobless -> Crime	0.39	6.97	0
Poverty -> Crime	0.547	11.231	0

* $p < 0.05$, t-value greater than 1.96

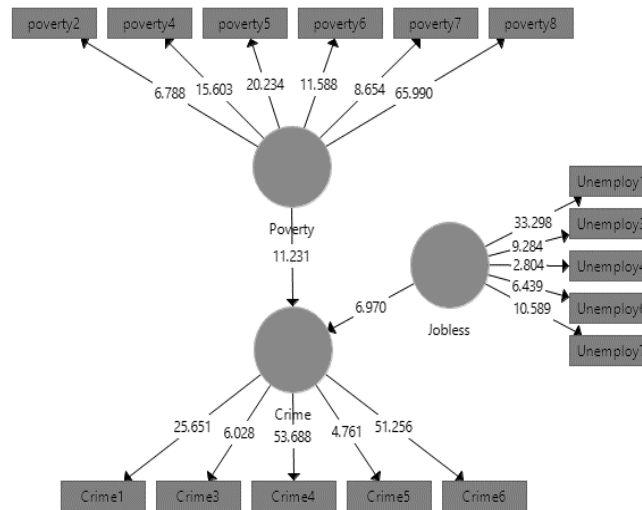


Fig. 1. Structural Model

4. CONCLUSION

This paper adds to the literature by exploring the relationship among adults and youth in Peshawar between un employment poverty and crime. To the best of our knowledge, this is a first attempt to study this relationship in Peshawar using cross-sectional data and to employ structural equation modelling. Based on the findings of the study, the relation was found significant that poverty and unemployment had a significant impact on the crime among adults and youths in Peshawar. To order to reduce the crimes the government and private organizations should provide loans to the youth so that they can set up a small company to arrange programs and seminars for the youth and adults to teach them about crimes and penalties along with the financial support of the government and neighbourhood leaders. The researcher also recommends that further studies be conducted in the area to identify what causes young females to commit lesser crime than males.

REFERENCES

Abbas, S., Shouping, L., Sidra, F., & Sharif, A. (2018). Impact of Crime on Socio-Economic Development: A Study of Karachi. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 3(3), 148-159.

Abbasi, J. (2019). Are probiotics money down the toilet? or worse? *Jama*, 321(7), 633-635.

Adekoya, A. F., & Razak, N. A. A. (2016). Effect of crime on poverty in Nigeria. *Romanian Economic and Business Review*, 11(2), 29.

Ahmad, Z. (2019). An Analysis of the Causes and Consequences of Unemployment in District Peshawar. *Journal of Social Sciences & Humanities*, 1(1 & 2), 85-97.

Akoum, I. F. (2008). Globalization, growth, and poverty: the missing link. *International Journal of Social Economics*.

Asghar, N., Qureshi, S., & Nadeem, M. (2016). Effects of socio-economic and political factors on the crime rate in Pakistan. *Journal of Political Studies*, 23(1), 183.

Babbie, E. R. (2015). *The practice of social research*. Nelson Education.

Becker, G. S. (1968). Crime and punishment: An economic approach. In *The economic dimensions of crime* (pp. 13-68). Palgrave Macmillan, London.

- Bhattacharjee, A. (2012). Social science research: Principles, methods, and practices.
- Cantor, D., & Land, K. C. (1985). Unemployment and crime rates in the post-World War II United States: A theoretical and empirical analysis. *American Sociological Review*, 317-332.
- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, 16(1), 64-73.
- Coomer, N. (2003). America's underclass and crime: The influence of macroeconomic factors. *Issues in Political Economy*, 12(1).
- Delpont, C.S.L. 2005. Quantitative data collection methods. In De Vos, A.S., Strydom, H. Fouché C.B. & Delpont C.S.L. Research at the grass roots for the social sciences and human service professions. 3rded. Pretoria: JL Van Schaik Publishers.
- Economic Survey of Pakistan, 2019. Economic Survey of Pakistan Retrieved from http://www.finance.gov.pk/survey/chapters_19/12-Population.pdf
- Ehrlich, I., & Brower, G. D. (1987). On the issue of causality in the economic model of crime and law enforcement: Some theoretical considerations and experimental evidence. *The American Economic Review*, 77(2), 99-106.
- Ezell, M. E., & Cohen, L. E. (2012). *Desisting from crime: Continuity and change in long-term crime patterns of serious chronic offenders*. Oxford University Press.
- Fadaei-Tehrani, R., & Green, M.T. (2002). Crime and society. *International Journal of Social Economics*, 29(10), 781-795.
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*.
- Gaviria, A., & Pagés, C. (2002). Patterns of crime victimization in Latin American cities. *Journal of Development Economics*, 67(1), 181-203.
- Ghori, S. A., Saleem, U., & Shahbaz, T. (2019). Social Media Impacts among Students. *Advances in Social Sciences Research Journal*, 6(7), 330-338.
- Gillani, S. Y. M., Rehman, H. U., & Gill, A. R. (2009). Unemployment, poverty, inflation and crime nexus: Cointegration and causality analysis of Pakistan. *Pakistan Economic and Social Review*, 79-98.
- Gumus, E. (2004). Crime in urban areas: An empirical investigation. *Akdeniz IIBF Dergisi*, 4(7), 98-109.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hazra, D., & Cui, Z. (2018). Macroeconomic determinants of crime: Evidence from India. *Journal of Quantitative Economics*, 16(1), 187-198.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Imran, M., Hosen, M., & Chowdhury, M. A. F. (2018). Does poverty lead to crime? Evidence from the United States of America. *International Journal of Social Economics*.
- İmrohoroğlu, A., Merlo, A., & Rupert, P. (2004). What accounts for the decline in crime?. *International Economic Review*, 45(3), 707-729.
- Jalil, H. H., & Iqbal, M. M. (2010). Urbanisation and crime: A case study of Pakistan. *The Pakistan Development Review*, 741-755.
- Martin, G. and Goldney, R.D. (1997). "Guns and suicide in Australia." *MJA*, 166, 5
- Masih, A. M., & Masih, R. (1996). Temporal causality and the dynamics of different categories of crime and their socioeconomic determinants: evidence from Australia. *Applied Economics*, 28(9), 1093-1104.
- Omotor, D. G. (2010). Demographic and Socio-economic determinants of crimes in Nigeria (A panel data analysis). *The Journal of Applied Business and Economics*, 11(1), 181.
- Pasha, H. A. (2018). Growth and Inequality in Pakistan. *Vol-1, Pg, 9*. <https://www.sdpi.org/publications/externalpublications/growth-and-inequality-in-Pakistan-agenda-for-Reforms-hafiz-a-pasha.pdf>
- Reza, F. T., & Thomas, M. G. (2002). Crime and society. *International Journal of Social Economics*, 29(10), 781-795.
- Sakalauskas, G. (1999). Crime. Report on the human social situation in Lithuania, 139–153.
- Semise, K. E., Radzilani-Makatu, M., & Nkoana, S. E. (2015). Identification of Causes of Criminal Behaviour among Youth of Muledane Village, Vhembe District Municipality. *Journal of Social Sciences*, 44(1), 46-52.
- Semise, K. E., Radzilani-Makatu, M., & Nkoana, S. E. (2015). Identification of Causes of Criminal Behaviour among Youth of Muledane Village, Vhembe District Municipality. *Journal of Social Sciences*, 44(1), 46-52.
- Šileika, A., & Bekerytė, J. (2013). Theoretical issues of relationship between unemployment, poverty and crime in sustainable development. *Journal of Security and Sustainability Issues*, 2, 59-70.

- Smith, N. (2010). Economic inequality and poverty: where do we go from here?. *International Journal of Sociology and Social Policy*.
- Stevens, L. K. (1983). *Urban Property Crime and the distribution of Income* (Doctoral dissertation, Oklahoma State University).
- Taylor, J. B. (2000). Low inflation, pass-through, and the pricing power of firms. *European economic review*, 44(7), 1389-1408.
- Ukpere, W. I., & Slabbert, A. D. (2009). A relationship between current globalisation, unemployment, inequality and poverty. *International Journal of Social Economics*.
- UNDP, (2019). Population Growth: Implications for Human Development. http://www.pk.undp.org/content/pakistan/en/home/library/development_policy/dap-vol6-iss1-population-growth.html
- Yaacoub, S. Poverty, Inequality and the Social Causes of Crime: A Study between United States and Europe.