Estimating Tolerance and its Impact on Economic Wellbeing:

A Case Study of District Peshawar

Submitted By:

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25/MPhil-Eco/PIDE/2013

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A Thesis submitted to Pakistan Institute of Development Economics, Islamabad, in partial fulfilment of the requirement for the award of degree of MPhil in Economics.

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Islamabad, Pakistan

2016

IN THE NAME OF

ALLAH

The Most Beneficent and the Most Merciful

Dedicated to my Parents

Acknowledgments

All the praises and thanks be to Allah Almighty, the Beneficent and the Merciful. All the respect to His holy prophet Hazrat Muhammad (peace be upon him).

I acknowledge my deep gratitude for my respected thesis supervisor Dr. Wasim Shahid Malik, Assistant Professor at QAU. He is not only a source of guidance, academic and moral support and motivation for my hard work but also an intellectual model for me during all my thesis completion. He always advised me in despite of his academic and official engagements and guided me in every hurdle throughout my research work. I am deeply grateful to Dr. Noor Jehan, Assistant Professor and Ms. Asma Saeed, PhD Scholar at Abdul Wali Khan University, Mardan for guiding and helping me throughout my research, their valuable insights and suggestion transform this piece of research into reality. I also want to acknowledge the support of Bacha Khan Chair, Abdul Wali Khan University, Mardan for providing me an opportunity and resources to conduct the research in this specific area, the moral and intellectual support from the secretary of the chair Dr. Muhammad Sohail is highly commendable. The academic environment at PIDE, profound humbleness of my class fellows, my seniors, and juniors kept me ambitious ever. I found company of my friends Fahim Nawaz, Muneeb ur Rehman, Muhsin Ali, Haseen Shah, Amjad Khan, Kashif Ali, Uzma Bashir, Tahammul Murtaza, Sheharyar Ahmad and many more as a blessing. I have no words to describe the continuous support and prayers by my honorable parents and my brother Muhammad Fahad Saleem.

Muhammad Adil Saleem

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List of Abbreviations

HTI	Household Tolerance Index
OLS	Ordinary Least Squares
BK	Bacha Khan
OECD	Organization for Economic Co-operation and Development
HHI	Household Income
PCA	Principal Component Analysis

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Abstract

Household income plays an important role in increasing the economic wellbeing of households. This study investigates the impact of tolerance on household income which is used as a proxy of economic wellbeing in district Peshawar. The impact of other socioeconomic variables such as family size, level of education, gender, age, dependency ratio, native/immigrant and place of residence of the household is also assessed. The study is based on primary data of 384 households. A well-structured questionnaire is used to collect data from the households in district of Peshawar using three stage sampling technique. Tolerance is measured as a composite index named as Household Tolerance Index (HTI) consisting of 20 items constructed through Principal Component Analysis (PCA). Ordinary Least Squares Method with robust standard errors is applied for the estimation of results. The conclusion of the study show that HTI significantly and positively affect Household Income in district Peshawar. Findings also reveal a positive association between household size, level of education, gender and Household Income. While a negative association is found between the dependency ratio and Household Income. Thus the positive consequences of tolerance can be achieved through inculcating tolerant behavior in the society. In this regard media, Religious and Educational institutions and parents while raising their off springs can engineer the tolerance in the society which will lead to higher living standards.

Keywords: *Household Tolerance Index (HTI), Ordinary Least Squares (OLS), Principal Component Analysis (PCA), Tolerance, Economic Wellbeing.*

CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

Why certain nations are economically more prosperous? There are number of factors that might be responsible for high economic growth like technology, knowledge & human capital. One of the possible factor frequently ignored in economic literature but highly suspected from the history is the tolerating attitude of the individuals in the society. For example, the permission given to religious minorities to enter into Sweden, Netherland and United Kingdom attracted productive people and allowed them to participate in the economy which results in positive outcomes(Berggren & Elinder, 2012). As a matter, it is the tolerance that helped many countries in achieving economic development.

Before explaining how tolerance can contribute to economic growth and wellbeing of a society, it seems important to have a clear idea about tolerance. Tolerance can be defined as "openness, inclusiveness, and diversity to all ethnicities, races, and walks of life", (R. Florida, 2003). This definition means that a tolerant person accepts the presence and participation of all kinds of people in society (Berggren & Elinder, 2012). It can also be defined as the acceptance of differences and opinions that may be different to yours own opinions (Kaukab & Saeed, 2014). It is "respect and appreciation of the rich diversity of our world's cultures, our form of expression and ways of being human" (UNESCO, 1995). There are various determinants of tolerance in the literature such as household's income level, age, education, occupational status, urban location, religiosity, democratic norms, threat perception, interpersonal trust and reading

newspaper (Becchetti, Castriota, & Rossetti, 2007; M. Doorn, 2014; Hodson, Sekulic, & Massey, 1994; Kalin & Siddiqui, 2014; Kirchner, Freitag, & Rapp, 2011; Postic, 2011).

Tolerance plays an important role in economic growth and wellbeing of a society. According to neoclassical growth theories technology and human capital or what is called talent, was considered the key drivers for economic growth and development. As Solow (1956) pointed out that technology played a significant role in economic development. He emphasized on the role of technology in the form of an exogenous factor. Similarly Ullman (1958) recognized the role of human capital in regional development. Later on Romer (1986) formulized endogenous growth model in which he treated technology as an endogenous factor and connect technology to human capital, knowledge and economic growth. Thus it can be concluded that the neoclassical growth models have focused on the role of technology and human capital in economic growth.

However, there are some other factors that can influence economic growth. Tolerance is one of those variables, which can be regarded as an important factor to boost economic growth. Therefore in addition to neoclassical growth theories, recent research has focused on 3Ts (namely Tolerance, talent and technology) theory of economic growth. The idea of 3Ts model was first presented by (Richard Florida, 2002). The 3Ts model identified the significant role of the interaction and integrity of tolerance, talent and technology in attracting innovative and diverse people and thus leading to an increase in economic growth (Paas & Halapuu, 2012). The more tolerant a place, the more it attracts talented people which in turn attract high-tech industries and this lead to a virtuous circle of economic growth(Richard Florida & Gates, 2003). Other studies have also emphasized the important role of tolerance in economic growth. For example, results of studies by (R. A. Boschma, & & Fritsch, 2007; Ottaviano & Peri, 2006)support a correlation between income, growth and tolerance. Noland (2005) also find that there is a positive link

between tolerant attitude and international economic activity outcomes. Alongside its positive economic consequences, it is concluded by (R. Inglehart, R. Foa, C. Peterson, &, & C. Welzel, 2008) that people living in tolerant societies are more happy. It is also pointed out by (Corneo & Jeanne, 2009) that minorities can enjoy protection and political rights only in such type of societies where there is the prevalence of tolerance. As it is cleared from the previous studies that tolerance have important economic consequences, so one can include it in the neoclassical growth model whose empirical estimation can show its impacts on economic growth.

As tolerance have the potential to increase the economic growth of nations. But unfortunately, in case of Pakistan, the problem of intolerance of all types such as social, sectarian and religious intolerance have increased as indicated by a large number of target killings and terrorists attacks (Kaukab & Saeed, 2014). Particularly, district Peshawar remained on the terrorist's hit lists after global war against terror which causes a lot of damages to the country. This situation of intolerance results in the lower rates of investment which in turn results in lowering the economic growth and development of the country (Zahid Iqbal & Lodhi, 2014). The motivation of conducting study in Peshawar is derived from the past in which violent nation of the world, "Pashtun" adopted non-violence against colonial powers. This philosophy of non-violence in the region is introduced by Bacha Khan in the start of 20th century. He preached that non-violence and tolerance is the only way out to lift the living standards of our fellowmen. Thus by creating and promoting an environment of tolerance, its positive economic consequence can be achieved. Therefore the present study examines the impact of tolerance on household income which is used as a proxy of economic wellbeing. The household's tolerance level measured by attitude towards different kinds of neighbors including people of a different race, people having infectious diseases (AIDS, Hepatitis, TB etc.), immigrants/ foreigners, people of a different religion, people who speak

a different language, teaching kid's tolerance, willingness to purchase household items from people of a different race, religion and from people of a different sect, willingness to take people of a different race, different religion and different religious sect as business partners, willingness to work under employer of a different race, different religion and of a different religious sect, provision of religious freedom to workers of different religions, discrimination in work place for people of different race/religion/sect, exercise of religious/ethnic preference among subordinates by a boss and the approval of religion free zone at work. Thus how can tolerance increase the economic growth and specifically the economic wellbeing (Household Income) of a household is the main research question of the present study.

1.2 Motivation of the Study

Society is evolved from Stone Age to current advanced technological society. During the course of evolution, our societies are reformed by different Prophets, saints, philosophers and social reformers. These distinguished peoples of their times have a great influence on mankind, to whom every man is greatly in debt.

One of such prominent personalities who can be credited as leader, statesman, thinker and social reformer and who had a great influence on the society in general and of Pashtun society in particular is the personality of "Khan Abdul Ghaffar Khan" popularly named as "Bacha Khan (BK)". Therefore it is the main reason of conducting such study in Peshawar where majority of Pashtun ethnic people are living. He did tireless efforts to reform and brings awareness in Pashtun fellow men. His thoughts and beliefs are regarded as a benchmark and are transformed into philosophical thoughts. (Shah, 1999) in his extensive study on Khudai Khidmadgars and history of Khyber Pakhtunkhwa pointed out economic backwardness of province in the British colonial era. It is further emphasized that Non-violence and Tolerance is the key milestone of

Bacha Khan Struggle through his movement of the Khudai Khidmadgars. BK preached nonviolence and tolerance to his fellowmen. He emphasized that change in attitude towards evils of society will results in the betterment of society as a whole.

When an individual becomes intolerant he commits violence. This study will reinforce Bacha Khan's vision and thoughts on tolerance and its significant role in boosting the economic wellbeing of the society in the current realm of our country in general and particularly in district Peshawar where most ethnic Pashtuns are residing and suffering from the flames of intolerance and violence which hinders the way of the development of the district. Accordingly the need is to remove them. For this purpose the present study is designed which will be helpful in overcoming the problems of violence and intolerance through emphasizing the importance of tolerance and estimating its impacts on economic wellbeing of the households in district Peshawar.

1.3 Research Question

This study answers the question:

1. What are the impacts of tolerance on economic wellbeing at household level in district Peshawar?

1.4 Objectives

The main objectives of the study are the following:

1. To construct a tolerance index at household level.
2. To estimate the impact of tolerance on household income which is used as a proxy of economic wellbeing at household level in district Peshawar.

1.5 Hypothesis

This study is based on the following hypothesis:

1. Tolerance is positively associated with economic wellbeing (Household Income).

1.6 Organization of the Study

This study is organized as follows:

The introduction of the study consisting statement of the problem, motivation of the study, research questions, objectives and hypothesis is discussed in chapter 1. The relevant literature is discussed in chapter 2. The data and methodology is given in chapter 3. Next to this is the discussion of estimation and results in chapter 4 while conclusion and recommendations are given in chapter 5.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides the review of previous studies regarding the economic consequences of tolerance and discussion about the research gap and contribution of the present study. This is given in the following section.

2.2. Review of Previous Studies

What causes an economic growth? This is a hot debated issue of recent economic research. Since the early 1990, the growth literature has taken an empirical turn and it was observed that along physical capital and labor, human capital also played a significant role in economic growth. For example Barro (1991) and Rauch (1993) provide evidence of the impact of human capital on economic growth. It is also suggested by literature that tolerance may be another important factor which affect economic growth (Berggren & Elinder, 2012). Furthermore the factors determining tolerance and intolerance, religious tolerance and political tolerance have also been discussed by different studies. The review of these previous studies are grouped under various headings as follows.

2.2.1 Tolerance and Economic Growth

The relationship between tolerance, diversity and technology driven economic growth were examined by (Richard Florida & Gates, 2003) with reference to 50 urban zones of US. Their estimation is based on micro level data, Pearson correlations, Spearman rank order correlations and ordinary least square (OLS) method. They concluded that tolerance and diversity played a

significant role in attracting high technology industries which results in economic growth of the urban areas of US.

Marlet and van Woerkens (2005)estimated the nexus between tolerance and creative class, who are crucial for growth of urban employment in Dutch cities. They concluded that creative people are not attracted by tolerance in Dutch cities. Creative people are attracted by job opportunities and city facilities.

Noland (2005) analyzed the impact of tolerance on globalization through economic dimension as measured by foreign direct investment, local entrepreneurship and sovereign rating with reference to OECD[1] and non-OECD countries. Tolerance was expressed by social attitude. Results of the study based on OLS regression and secondary data showed a positive relationship between tolerant attitudes of countries and economic variables of interest implying that more tolerant a country, the more it attract foreign direct investment, local entrepreneurship and sovereign rating which played a significant role in economic growth.

Richard Florida, Mellander, and Stolarick (2008) examined the relationship between education, creative class[2] and tolerance and regional development with reference to US. Wages and incomes were used as an indicators for regional development. They conducted their study in three stages. Structural equation models and path analysis was used for the estimation of results. The study comes to the conclusion that a positive relationship exist between tolerance, education, creative class and regional development measured as wages and regional income.

[1] Organization of Economic Co-operation and Development.

[2]Creative class was used as an indicator for talent that was measured by the proportion of technical and professional workers within the local population including teachers, university professors, scientist, engineers, accountants, lawyers and athletes etc.

Richard Florida, Mellander, and Qian (2008) carried out the same study with reference to china. The conclusion of their study showed a positive relationship between tolerance as measured by Hukou index[3] and regional development as measured by GDP per capita.

Das, DiRienzo, and Tiemann (2008) estimated the role of tolerance in attracting talented workers and economic development through constructing a global tolerance index. Results of the study based on secondary data, Spearman and Pearson correlation coefficients. They concluded that tolerance played a positive and significant role in attracting talented workers and economic development. They also concluded that though tolerance has a positive impact on economic development but alone it cannot spur economic development. And alongside tolerance other economic variables such as stable legal and monetary systems, economic freedoms, levels of corruption, political and civil rights are also important for economic growth and development.

R. Inglehart, R. Foa, C. Peterson, and C. Welzel (2008) estimated the impact of social tolerance and economic development on happiness from global perspective. Using secondary data over the period of 1981-2007 and regression analysis conclusion of the study showed that tolerance and economic development results in higher level of happiness.

R. A. Boschma and Fritsch (2009) evaluated the regional distribution of creative class and its impact on regional development for 7 European states. They used descriptive statistics as well as regression analysis to carry out the estimations. The results of their study showed that tolerance played a positive and significant role in the distribution of creative people. They also concluded that there is a positive relationship between creative people and regional development.

[3] The Hukou index of tolerance is defined as the proportion of the population who are not locally registered as Hukou. The high value of index shows high level of tolerance in the region (i.e. a large proportion of the population is from outside the region) and vice versa.

Khan, Zhang, Hashmi, and Bashir (2010) studied the impact of cultural values on economic growth with reference Asian countries. The world values survey data over the period of 1995 to 2007 and regression analysis was used for the estimation of results. They found a positive relationship between cultural attitudes such as self-determination; teaching kid's tolerance, trust and economic growth. While obedience has a negative impact on economic growth.

Berggren and Elinder (2012) analyzed the relationship between economic growth and tolerance for people of a different race and people who are homosexuals. They used secondary data of attitude towards different types of neighbors (i.e. people of a different race and people who are homosexuals) as a gauge for tolerance from the world value survey (WVS) and regression model. Their study comes to the conclusion that tolerance of homosexual is negatively associated to economic growth while tolerance for people of different race results in positive outcomes.

Bomhoff and Lee (2012) re-examine the linkage between economic growth and tolerance estimated by (Berggren & Elinder, 2012). Using regression analysis and tolerance data from world value survey (WVS) the conclusion of the study revealed that tolerance does not have any effect on economic growth because of the small role of tolerance which is in contrast to the previous study of (Berggren & Elinder, 2012).

Shcherbak (2012) examined the nexus between tolerance and economic modernization. Tolerance was measured by tolerant attitude for gender equality, homosexual and immigrants while modernization was measured by innovation and investment. Using secondary data over the period of 1998 to 2008 and linear regression models he comes to the conclusion that tolerance has a positive impact on modernization.

Berggren and Nilsson (2015) investigate the relationship between tolerance and economic freedom for United States. They find a positive relationship between them that an increase in tolerance is associated with an increase in economic freedom by lowering taxation.

2.2.2 Factors Affecting Tolerance

Bobo and Licari (1989) analyzed the impact of education on tolerance level with reference to the United States. The independent variable is education while the different controlled variables included are household income, gender, age, race and place of residence. Descriptive statistics, factor analysis and multiple regression analysis are used for the estimation of results. The study comes to the conclusion that there is a positive relationship between education and tolerance. This shows that individuals with higher level of education have higher level of tolerance.

Hodson et al. (1994) conducted a research in which they gauged tolerance and its determinants with reference to Yugoslavia. The results of the study were estimated by using primary data and regression analysis. They concluded that age, urban location and education results in increasing the level of tolerance. While marriage, gender (i.e. male), religiosity and reading newspaper negatively affect level of tolerance in case of Yugoslavia.

Moore and Ovadia (2006) studied the impact of religion and education on tolerance level. They used data from general social over the period 1976 to 2000. Hierarchical linear model is applied to the estimation of the results. The conclusion of the study demonstrates a positive relationship between education and tolerance level and a negative association of religiosity with the tolerance level.

Becchetti et al. (2007) assessed the association between household income level and tolerance level. They used secondary data for the period 1984 to 2004, descriptive statistics and regression analysis. The conclusion of the study showed that age, being married and unemployed have a

negative impact on the level of tolerance while household income and education is positively associated with the tolerance. They also found that inflation has a negative impact on tolerance level.

Andersen and Fetner (2008) estimated the relationship between economic inequality and tolerance level with reference to 35 countries. Both micro level (i.e. income, age, gender, education, number of children, religiosity and marital status) and macro level (i.e. per capita GDP and income inequality) determinants were chosen as the independent variables and level of tolerance as the dependent variable. They used data from the world value survey (WVS) over the period from 1990-2002. Hierarchical linear model is applied for the estimation of results. According to their study it was concluded that controlling for the micro level explanatory variables economic development is positively linked to the level of tolerance, meaning that with the increase in the economic development the level of tolerance also increases. On the other hand the level of tolerance decreases with the increase in income inequality. Thus income inequality is negatively associated to the level of tolerance.

Sarkissian (2011) analyzed the factors determining tolerance with reference to seven Arab Muslim's countries. He used secondary data and attitudes towards followers of different religions as an indicator of tolerance. The results indicated that the provision of political Islam and religiosity fuels intolerance for Muslim converts while there is no such link between religiosity and intolerance for minorities. His study also showed that democracy can play an important role in increasing tolerance.

Postic (2011) conducted a research in order to examined the impact of interpersonal trust on political tolerance. He used secondary data, descriptive statistics and ordinary least square (OLS) method for the estimation of results. The conclusion of his study showed that trust has a

significant impact on increasing tolerance. Similarly education has also a positive impact on tolerance. While age, religiosity and gender is negatively associated with tolerance.

M. v. Doorn (2012) estimated tolerance in order to investigate the nature and various factors determining tolerance. The included explanatory variables are income, education, and age, place of residence (i.e. urban area or rural area), gender, religiosity, threat perception and personality variables. His study comes to the conclusion that individuals with high level of income and education tend to be more tolerant. A similar result is shown for aged individuals and individuals living in urban areas. On the other hand religious, threatened and female individuals are less tolerant.

Milligan (2012) studied the nexus between poverty and level of tolerance with reference to 22 countries. This nexus was estimated at both individual level and macro level. The selected independent variables are income, religion, gender, education, marital status, age, gross domestic product (GDP), income inequality and relative poverty. The individual level are taken from the world value survey (WVS) while the country level are taken from various national, international and governments agencies. Descriptive statistics and multilevel models are applied to the estimation of the results. The results of the study demonstrates that poverty have a negative impact on tolerance level. This shows that poor socioeconomic conditions or low level of per capita GDP results in lower level of tolerance. The results also revealed that individuals with high level of income have a higher level of tolerance. So higher level of individual income is positively associated to the tolerance level.

Vermeer and Halman (2012) conducted a research in which they examined the impact of religion on social tolerance level with reference to east and west European countries. The selected independent variables are religiosity, GDP per capita, secularization. Data are used from the

European Value survey (EVS). Results are estimated through descriptive statistics and multivariate analysis. The conclusion of the study indicates that religiosity is negatively related to the social tolerance.

Chzhen (2013) evaluated the nexus between education, tolerance, politics and democracy. He used data from the world value survey (WVS) with reference to six countries including India, China, Argentina, South Africa, Mexico, and Turkey. The selected explanatory variables are education, gender, employment status, age, religiosity and marital status. The multinomial logistic regression is applied for the estimation of the results. The findings showed that higher level of education have a positive and significant relationship with both tolerance and to participate in the politics. A similar relationship is also confirmed with the democracy by the study.

Yorulmaz (2016) studied the relationship between religiosity and tolerance level with reference to Middle Eastern and northern African countries. The selected independent variables are religiosity, age, marital status, education and income. Data are used from the world value survey (WVS) for the period 2010 to 2104. Principal component analysis (PCA) and multilevel regression analysis are applied for the estimation of results. According to their results it was shown that religiosity have a negative impact on tolerance. This means that religious people are less tolerant. The conclusion also shows that both education and income are positively associated to the tolerance level. People with higher level of income and education tend to be more tolerant and vice versa.

2.2.3 Determinants of Income at Micro Level

Smith (2007) studied the factors determining income of the households with reference to Soviet Union. He used data form the world value survey and ordered logit model for the estimation of results. The conclusion of his study showed that education, location of the household and self-employment are the main factors influencing the household income.

Aikaeli (2010) investigate the factors determining household income with reference to rural Tanzania. He used secondary data for the period 2005 and ordinary least square (OLS) method as an analytical tool. The results of the study demonstrates that education was a significant factor determining household income. This means that if the head of the household has a higher level of education this will results in higher household income. The other significant factor is the number of the working members of the households. A household with a larger number of working members has the higher income level. The findings of his study also revealed that male headed household has a higher level of income as compared to the female headed households.

Pede, Luis, Paris, and McKinley (2011) conducted a study in which they analyzed the determinants of household income with reference to Philippines. Primary data collected from 656 farming households and quintile regression model were used for the estimation of the results. They concluded that education of the head of the household and the presence of a migrant member in the household were the significant factors having a positive impact on the household income. Besides education and having a migrant member other factors that significantly influenced household income were location of the house (i.e. urban area or rural area, size of the farm and type of the household.

Lhing, Nanseki, and Takeuchi (2013) examined the socioeconomic factors affecting household's income with reference to Myanmar. Thy used primary data for the period 2008. The estimation

techniques of the study were descriptive statistics and binary logistic regression analysis. According to their study it was observed that education has a positive impact on the household income level meaning that an increase in education results an increase on the household income. Similarly, male headed households, number of crops, and size of the land holding also positively linked with the household income. While age of the head of the household results in a decline of the household income level.

Adunga (2013) investigate the determinants of household income level with reference to farmers of Ethiopia. He used primary data. Descriptive statistics and multiple regression analysis is used to estimate the relationship between household income level and its different socioeconomic factors. It is inferred by their study that households with higher level of education, large household size, near to the market place and size of the land is positively associated with the higher level of household income.

Parvin and Akteruzzaman (2013) analyzed the factors determining income of the households engaged in farm and nonfarm employment with reference to Haor, Bangladesh. Primary data, descriptive statistics and regression analysis were employed for the estimation of the results. Their findings demonstrates that size of the farm and household size is positively linked with the farm income.

Fadipe, Adenuga, and Lawal (2014) conducted a study in which they analyzed the factors influencing household income with reference to rural household of Nigeria. Primary data collected from 90 households was used in the study. The main assessment tools used for the estimation of the results were descriptive statistics and multiple regression analysis. They concluded that both gender and education of the head of the household significantly affect the household income level. This shows that male headed household and higher level of education

results in an increase in the household income. Size of land holding and access to electricity also significantly affect the household income. While family size had a negative effect on household income.

Tuyen (2015) studied the factors determining household income with reference to ethnic minorities of Vietnam. Primary data for the period 2010, descriptive statistics and ordinary least square method is used for the estimation of the results. The results of the study revealed that those households who are engaged in nonfarm activities have a higher income as compared to the households whom main income earning source is farm employment. This implies that ethnic minorities of Vietnam can earn a high level of income through nonfarm employment. Similarly, education and fixed assets also results in improving household income. While family size and dependency ratio has a negative effect on household income and gender of the household has no effect on household income.

2.2.4 Determinants of Income at Macro Level

Zafar Iqbal and Zahid (1998) evaluated the influencing factors of economic growth with reference to Pakistan. They used secondary time series data for the period 1959 to 60 and 1996 to 97. Multiple regression model is employed for the estimation of the results. The chosen independent variables are human capital, physical capital, fiscal deficit, foreign debt, foreign trade and per capita real income. It is concluded by their study that education has a positive and significant impact on economic growth. This shows that an increase in the level of education results in an increase in economic growth. A similar effect has also shown by the physical capital and foreign trade. While budget deficit and foreign debt have a negative effect on the economic growth.

Takada (1999) conducted a study on the causes of the Japan's economic growth. His analysis is based on previous literature to examine the factors influencing the economic growth of Japan. According to their study it was observed that Japan's economy grow because of learning of the people from western knowledge, improvement in the business condition and import of technologies are the main factors which have influence the economic growth of Japan. While the economic policies implement by the government have also increased the economy's growth.

M'Amanja and Morrissey (2006) assessed the influencing factors of economic growth with reference to Kenya. Their estimations are based on time series data for the period 1964 to 2002. The vector error correction model (VECM) is applied for the estimation of the results. According to their study it is found that investment have a positive impact while foreign aids have a negative impact on economic growth.

Rahman and Salahuddin (2009) evaluated the causes of economic growth with reference to Pakistan. Secondary time series data over the period 1971-2006 is used. The selected variables are improvement in the stock market, bank credit, education, foreign direct investment (FDI) and the inflation rate. ARDL and ECM are applied to the estimation of the results in order to investigate the short run and long run relationship between the economic growth and its different determinants. The conclusion of the study exhibited that stock market have a positive impact on the economic growth both in the shorter term and longer term. A same relationship is also confirmed between FDI, bank credit, education and economic growth, meaning that they have a positive impact on economic growth. While inflation have a negative impact on the growth.

Tolo (2011) studied the factors determining the economic growth with specific reference to Philippines. His study used of a panel of 23 markets covering the time period of 1965 to 2008. The estimations were based on secondary data and panel regression analysis. According to their

study it was observed that the increased investment, agricultural exports and research and development were significantly and positively associated with the economic growth. The findings of the study also demonstrates that higher inflation rate, population growth and financial crisis have a negative impact on the economic growth.

Upreti (nd.) conducted a study in which they examined the major determinants of economic growth with reference to developing countries. He used a panel of 76 developing countries over the period of 2010, 2005, 2000 and 1995. Their analysis was based on secondary data and multiple regression analysis. The results of the study revealed that natural resources, life expectancy and export were significant factors of economic growth. This means that with the increase in life expectancy and exports the economic growth also tends to increased. While foreign aid and government debt were negatively linked to economic growth.

Jondell Assbring (2012) analyzed the determinants of economic growth with reference to china. The estimation is based on secondary data and ordinary least square (OLS) method in order to study factors determining the economic growth. The included variables are per capita GDP, investment, savings, education, healthcare services and population growth. The conclusion of the study indicated that the important factors determining the economic growth are GDP per capita, level of investment and population growth. The results demonstrates that healthcare services and level of education are also significant factors influencing the growth.

Ullah, Khan, and Ullah (2014) examined the determinants of economic growth with reference to Pakistan. They used secondary time series data over the period 1980 – 2009. The selected independent variables are domestic investment, FDI, education, export and remittances. The estimation of the study is based on ARDL and ECM. The findings of the study showed that domestic investment, FDI and education are positively associated to the economic growth.

Muqorrobin (2015) conducted a study on the determinants of economic growth with reference to Indonesia. He used secondary time series data for the period 1985 to 2013. The included variables are foreign direct investment (FDI), foreign debt, bank credit and labor force. The error correction model (ECM) is employed for the estimation of results. It is inferred from his study that there is a positive and significant relationship between economic growth and FDI, bank credit and labor force. This means that the increase in FDI, bank credit and labor force results in an increase in economic growth both in the short and in the long run. While foreign debt have an inverse relationship with the economic growth both in the short run and in the long run.

2.2.5 Political Tolerance

Sullivan, Marcus, Feldman, and Piereson (1981) conducted a research in which they studied the determinants of political tolerance. Their estimation is based on the coefficient correlation and maximum likelihood confirmatory factor analysis (LISREL). The selected independent variables are different socioeconomic and demographic variables such as income, age, education, gender, place of residence, personality and political variables such as norms, threat perception and information. According to their study it was observed that socioeconomic and demographic variables have less and indirect effect on political tolerance. While personality variables and political variables strongly affect the political tolerance. Furthermore political variables directly affect and personality variables indirectly affect the political tolerance.

Sullivan and Transue (1999) estimated the relationship between trust, social capital and political tolerance. The conclusion of their study revealed that political tolerance is strongly influenced by the personality of an individual, threat and democratic dogmas.

Hazama (2010) conducted a study on the factors determining political tolerance. He supported his study through the literature on political tolerance. The study comes to the conclusion that

threat perception, education, authoritarianism and contact are the significant factors influencing political tolerance.

Oskarsson and Widmalm (2014) analyzed the relationship between political tolerance and personality factors with reference to India and Pakistan. Primary data collected through the questionnaire is used in the study in order to investigate the linkage between the factors of personality and political tolerance. The selected independent variables are conscientiousness, agreeableness, neuroticism, extraversion and openness. The estimations of the study are carried out through descriptive statistics and logit regression model. The findings of the study shows that openness, agreeableness and neuroticism are positively and significantly linked to the political tolerance. Conscientiousness and extraversion are negatively associated to the political tolerance.

2.2.6 Religious Tolerance

Jha (2008) examined the relationship between religious tolerance, trade and institutions with reference to India. He used secondary data and regression model. The conclusion of his study revealed that the medieval trade was the reason of promoting religious tolerance amongst the people living near the trading ports of India

A. T. Talib, Sarjit S. Gill, Razaleigh Muhamat Kawangit, and Kunasekaran (2013) studied religious tolerance in order to investigate that how Asian countries can be built as one community. For this purpose they carried out their study with reference to Malaysia. Using micro level data the results of the study showed that there is social harmony in Malaysia despite having a variety of ethnic groups. And the reason for this is the prevalence of religious tolerance in that country. So social harmony can be promoted through religious tolerance. Thus any Asian country

can apply the example of Malaysia to their country for building a harmonious society by means of religious tolerance.

Yusuf (2013) carried out a study in which he assessed the ways of promoting social harmony and religious tolerance. He concluded that the objective of the study can be achieved through education. And it should be a part of the primary and secondary level education. He also suggests that students should be encouraged to take part in such types of activities which could increase awareness of religious differences such as entertainment, poetry and singing in order to promote social harmony and religious tolerance.

Sumon (2015) conducted a research in which they examined the issues of religious and ethnic intolerance and terrorism with reference to Bangladesh. He used primary data and descriptive statistics for the estimation of the results. The conclusion of the study showed that the main causes of these issues are the poor social and economic environments and religiosity that spur the situation of ethnic and religious intolerance in the country. He also concluded that education can play their vital role in overcoming these issues.

2.2.7 Personality Factors, Tolerance and Income

Proto and Rustichini (2012) examined the impact of the personality traits on household income. They used BHPS[4] (1996-2008) and SOEP[5] (1984-2009) data sets for the estimation of results. The conclusion of their study revealed openness to experience have positive impact on household income.

Boers (2015) investigate the relationship between the five personality traits (i.e. Conscientiousness, agreeableness, neuroticism, extraversion and openness) and income of a

[4] British Household Panel Survey (1996-2008)

5 German Socioeconomic Panel Study (1984-2009)

person. Using data from the Dutch Longitudinal Internet Studies for Social Sciences, he concluded that openness have significantly increased the monthly gross income of a person.

2.3 Summary of Previous Studies

The literature discussed the impact of tolerance and different socioeconomic and demographic variables on household income or gross domestic product (GDP) both at micro level and macro level. Further there are studies which examines different determinants of tolerance level. The literature also point out studies that relates personality factors to tolerance and income level.

2.4 Contribution of the Present Study

In the past, attempts have been made to link economic growth with tolerance. But there is very little work done about the economic consequences of tolerance at household level in Pakistan. The present study will bridge this gap through constructing a tolerance index and its economic consequences at household level in district Peshawar.

CHAPTER 3

DATA AND METHODOLOGY

3.1 Introduction

This chapter includes the theoretical framework, sampling design, and sample size, construction of household tolerance index and estimation methodology used to achieve the targeted objectives.

3.2 Theoretical Framework

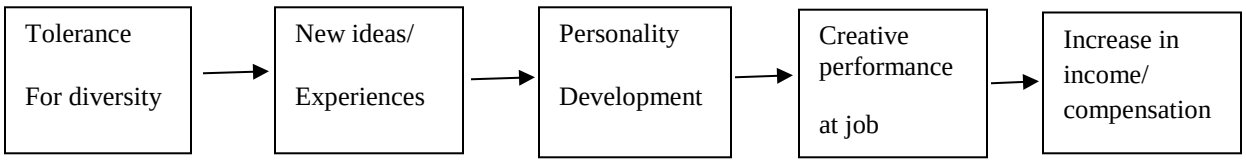
There is a vital role of tolerance in boosting the economic growth as explained by various studies. Richard Florida and Gates (2003) conducted a study in which they evaluated the impact of tolerance on economic growth and concluded a positive relationship between them. They also explained that the more tolerant a place, the more it attracts talented people which in turn attract high-tech industries and this lead to a virtuous circle of economic growth. Das et al. (2008) examined the relationship between tolerance and economic growth. They concluded that tolerance played a significant role in economic development.

Later on other studies have also discussed the relationship between tolerance and economic growth and come to the conclusion that there exists a positive association between them (Richard Florida, Mellander, & Qian, 2008), (Khan et al., 2010) and (Noland, 2005). All of this existing literature has largely presented the economic consequences of tolerance at macro level.

But now the question is this that how can tolerance increase the economic wellbeing of an individual at micro level. And this is the main research question of the present study. To answer this question the present study takes help from psychology literature. In the psychology literature personality is mostly represented by using the five factor model of personality (Costa & McCrae,

1992; Deck, Lee, & Reyes, 2008). Openness to experience is one of the factors in the five factor model of personality (Bucciol, Cavasso, & Zarri, 2014) that describe an individual personality. Openness to experience indicates the degree to which persons are creative, imaginative, broadminded, curious and nontraditional (Bucciol et al., 2014; Sung & Choi, 2009).This also shows that persons who are highly open to experience tend to be more tolerant (McCrae, 1996). Thus persons with high openness to experience tend to be flexible and willing to accept different perspectives, even though they may be unfamiliar which allow greater access to new experiences and perspectives, and this in turn results in increasing creative performance (Sung & Choi, 2009), personality development and income. As shown by the study of Proto and Rustichini (2012) that openness to experience have positive impact on income. The same result is also confirmed by Boers (2015) that openness to experience have a positive impact on the income of a person. Personality development affects the individual performance on the work in such a way that will lead to higher compensation (Judge & Kammeyer-Mueller, 2007). All this discussion shows that tolerance have the potential of increasing the economic wellbeing of an individual through personality development on the work. A schematic picture of the theoretical framework of the study is given in the following figure;

Figure 3.1: Path Model of the Impact of Tolerance on Household Income



The above model assists in understanding the impact of tolerance on household income. The arrows indicate the hypothesized structure of the link among the key variables.

3.3 Sampling

3.3.1 Sampling Design

Peshawar is the capital of Khyber Pakhtunkhwa (KPK) province of Pakistan. According to current estimates of expected population, it ranks fifth in Pakistan and 1st in province of KPK Wendell Cox (2010). Its population and expected growth rate was 2019118 and 3.56% in 1998 respectively (Government of Khyber Pakhtunkhwa, 2014). The population is compounded to the given rate resulting the sum of 3659539 individuals. The current household size is estimated to be 8.5 individuals, therefore there are 430534 households in the district (Government of Khyber Pakhtunkhwa, 2015).

Peshawar District is administratively divided into four towns namely Town 1, Town 2, Town 3 and Town 4, proportion of its share in the total population is approximately 26, 28, 24 and 22 percent (Said, 2001). The proposed sampling strategy in the study is three stage sampling. There are four strata in Peshawar representing each town. One representative Union Council was selected from each stratum i.e. Gulbahar, Mathra, Hayatabad and Mattani from Town 1, Town 2, Town 3 and Town 4 respectively. Gulbahar and Hayatabad represents urban population while Mathra and Mattani represents rural population. And data was collected on convenient basis from each households with in the selected Union council.

3.3.2 Nature of Data and Its Collection

To assess the impacts of tolerance on economic wellbeing the present study is based on primary data and collected through questionnaires (See Appendix-A). The questionnaire consists of the

information relevant to tolerance, household income, age, education, employment status and location of residence (urban area or rural area). The respondent of the present study is the main bread earner of the household. Thus the study is utilizing cross sectional data for the estimations of results.

3.3.3 Sample Size and its Allocation

There are 430534 households in Peshawar. By using Survey Sample calculator by "The Survey System" and by setting confidence level to 95% and confidence interval to 5 we obtained a sample size of 384 out of which 100 sample points were assigned to Town 1 with a proportion of 26% to total population, 108 to Town 2 with proportion of 28% to total population, 92 to Town 3 with proportion of 24% to total population and 84 sample points were assigned to Town 4 with proportion of 22% to total population. One representative Union council was selected from each town and data was collected conveniently from the selected union councils on household level.

3.4 Econometric Modeling

3.4.1Dependent Variable

The dependent variables of the study include household's income level and used as an indicator of economic wellbeing of the households (Richard Florida, 2007; Richard Florida, Mellander, & Qian, 2008; Government of New Zealand, 2007; Perry, 2013).

3.4.2 Independent Variables

The independent variables of the study includes level of education of the main income provider of the household, household size, age and gender of the main income provider of the household, dependency ratio in a family, location of the residence of a family (i.e. urban area or rural area)

and residential status of the household whether the household is native or immigrant and the household tolerance index (HTI) (Berggren & Elinder, 2012; Richard Florida, 2007; Richard Florida, Mellander, & Qian, 2008; Shcherbak, 2012; Tuyen, 2015). The household's tolerance level was measured by attitude towards different kinds of neighbors including people of a different race, people having infectious diseases (AIDS, Hepatitis, TB etc.), immigrants/ foreigners, people of a different religion, people who speak a different language, teaching kid's tolerance, willingness to purchase household items from people of a different race, religion and from people of a different sect, willingness to take people of a different race, different religion and different religious sect as business partners, willingness to work under employer of a different race, different religion and of a different religious sect, provision of religious freedom to workers of different religions, discrimination in work place for people of different race/religion/sect, exercise of religious/ethnic preference among subordinates by a boss and approval of religion free zone at work on a Likert-scale through questionnaire survey (Berggren & Elinder, 2012; Hodson et al., 1994; Kalin & Siddiqui, 2014). The likert-scale has a range of 1 to 5, with 1 indicating complete disagreement and 5 indicating complete agreement. Thus, higher numbers indicate greater tolerance. Respondents were asked their level of agreement with questions concerning tolerance of group other than the one they belong to.

3.4.3 Construction of Household Tolerance Index (HTI)

The household tolerance index (HTI) was created by using the principal component analysis (PCA). PCA is a multivariate statistical technique that can be used to reduce the number of variables in a dataset by converting them into a smaller number of components, each component being a linear weighted combination of the initial variables (Bishoi, Prakash, & Jain, 2009; Vyas

& Kumaranayake, 2006). The results obtained by running the PCA are reported in table 3.1 as follows:

Table 3.1: Eigen Values and Eigen Vectors of Correlation Matrix

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12	PC13	PC14	PC15	PC16	PC17	PC18	PC19	PC20
Eigen Values	12.148	1.425	0.921	0.680	0.651	0.528	0.415	0.388	0.381	0.349	0.320	0.293	0.273	0.255	0.205	0.196	0.186	0.154	0.138	0.091
Variance %	60.740	7.130	4.600	3.400	3.250	2.640	2.080	1.940	1.900	1.750	1.600	1.470	1.370	1.280	1.030	0.980	0.930	0.770	0.690	0.450
Cumulative %	60.740	67.870	72.470	75.870	79.120	81.760	83.840	85.780	87.680	89.43	91.030	92.500	93.870	95.150	96.180	97.160	98.090	98.860	99.550	100
Eigen Vectors																				
Variables	**PC1**	**PC2**	**PC3**	**PC4**	**PC5**	**PC6**	**PC7**	**PC8**	**PC9**	**PC10**	**PC11**	**PC12**	**PC13**	**PC14**	**PC15**	**PC16**	**PC17**	**PC18**	**PC19**	**PC20**
TL1	0.243	-0.171	0.025	0.171	-0.005	0.181	0.105	-0.072	-0.143	-0.491	-0.245	-0.138	0.201	-0.140	-0.011	-0.160	-0.176	0.134	0.593	-0.069
TL2	0.234	-0.140	0.087	0.179	0.158	0.117	0.386	-0.026	-0.143	0.216	-0.099	-0.199	-0.692	0.185	0.219	0.104	-0.016	-0.008	0.074	0.059
TL3	0.201	0.010	-0.159	-0.053	0.744	-0.096	0.072	-0.015	-0.255	0.305	0.184	0.072	0.267	-0.234	0.057	-0.062	-0.089	0.052	0.030	-0.142
TL4	0.186	-0.415	-0.279	-0.262	0.074	0.307	-0.053	0.417	0.165	-0.189	0.371	0.003	0.039	0.219	0.157	-0.072	0.056	-0.031	-0.026	0.291
TL5	0.171	0.267	0.549	0.329	0.175	0.376	-0.291	0.138	0.038	0.051	0.206	0.182	0.054	0.246	-0.175	0.078	-0.027	0.145	0.050	0.094
TL6	0.218	-0.208	0.357	-0.170	-0.040	-0.267	-0.133	-0.182	0.399	0.009	0.325	-0.380	0.024	-0.032	0.194	0.133	-0.052	0.139	0.050	-0.371
TL7	0.247	-0.127	0.226	0.036	0.088	0.100	0.227	-0.117	0.083	-0.209	-0.004	0.138	-0.001	-0.170	-0.191	-0.252	0.574	-0.408	-0.237	-0.189
TL8	0.189	0.419	-0.004	0.006	0.148	-0.370	0.345	0.509	0.279	-0.201	-0.201	-0.179	0.114	0.162	-0.061	0.062	0.056	0.078	-0.048	0.043
TL9	0.236	0.028	0.164	-0.217	-0.142	0.236	0.409	-0.233	0.181	0.103	-0.150	0.267	0.321	-0.041	0.199	0.259	-0.370	-0.134	-0.180	0.185
TL10	0.227	-0.145	0.276	-0.102	-0.267	-0.380	-0.004	0.208	-0.129	0.236	-0.005	0.382	-0.053	-0.249	0.126	-0.239	0.163	0.265	0.195	0.300
TL11	0.249	0.015	0.052	-0.176	-0.117	-0.049	-0.191	0.342	-0.283	-0.199	-0.022	0.197	-0.273	-0.105	-0.097	0.009	-0.461	-0.214	-0.225	-0.414
TL12	0.203	0.322	-0.012	-0.464	-0.108	-0.036	0.085	-0.288	-0.468	-0.210	0.279	-0.085	-0.025	0.229	-0.152	0.178	0.215	0.138	0.065	0.103
TL13	0.258	-0.067	-0.129	0.062	0.011	0.064	-0.068	-0.222	0.064	-0.069	-0.164	-0.129	-0.058	-0.015	-0.189	-0.345	-0.124	0.562	-0.544	0.108
TL14	0.218	0.354	-0.149	-0.249	0.017	0.054	-0.186	-0.179	0.351	0.209	-0.023	-0.044	-0.212	0.017	-0.130	-0.458	-0.165	-0.303	0.309	0.127
TL15	0.248	-0.073	-0.141	-0.066	0.114	0.034	-0.317	0.003	0.159	-0.009	-0.244	-0.039	-0.158	-0.416	-0.273	0.592	0.165	-0.001	0.056	0.232
TL16	0.240	0.193	-0.125	-0.022	-0.031	0.121	-0.370	-0.008	-0.082	0.029	-0.377	0.035	0.113	0.171	0.635	0.003	0.309	0.011	-0.065	-0.200
TL17	0.212	-0.020	-0.300	0.418	0.029	-0.392	-0.055	-0.307	0.145	-0.264	0.228	0.440	-0.089	0.232	0.075	0.129	-0.082	-0.079	0.026	0.049
TL18	0.192	0.302	-0.313	0.310	-0.395	0.253	0.189	0.133	0.026	0.163	0.395	-0.093	0.018	-0.391	0.068	0.039	0.082	0.108	0.009	-0.183
TL19	0.229	-0.273	-0.188	0.006	-0.206	-0.003	0.057	0.062	-0.003	0.431	-0.175	0.068	0.212	0.433	-0.431	0.088	0.088	0.046	0.153	-0.328
TL20	0.242	-0.083	0.069	0.287	-0.152	-0.210	-0.167	0.010	-0.303	0.118	0.038	-0.463	0.267	0.035	-0.004	-0.044	-0.108	-0.430	-0.170	0.360

Source: Author's Estimation

The table 3.1 shows Eigen values and Eigen vectors obtained from the PCA. Eigen values shows the variance of each principal component while the Eigen vectors are the weights assigned to the corresponding principal components by the principal component analysis (PCA). In the principal component analysis those components are extracted which have Eigen values greater than one i.e. PC1 and PC2. This method is considered a standard method for the extraction of the principal components. So the study also extract those components which have Eigen values greater than 1. The table 3.1 reports that the first two components have Eigen values greater than one so these two components are extracted for the purpose of the analysis explaining 68% of the variance cumulatively in the data. These two principal components are computed by using the following equation:

$$P_i = \sum_{j=1}^{n} w_{ji} TL_j \quad \text{---------- (3.1)}$$

Where wji are the weights assigned for the ith principal components and jth TL (i.e. Tolerance) variables. The details of the jth tolerance variables are given in table 3.2 as follows:

Table 3.2: Tolerance Variables Used In the Construction of Principal Components

Variables	Definition
TL1	We encourage kids to learn tolerance at home
TL2	I do not feel comfortable in living with people of a different race in my neighborhood
TL3	There is no problem in living with people who speak a different language in our neighborhood
TL4	I am relaxed in living with people having diseases that can be communicated easily to me.
TL5	There is no problem in living with people of a different religion in the neighborhood
TL6	It is uncomfortable in living with people of a different religious sects in the neighborhood
TL7	I am mostly willing to purchase household item from people of different race
TL8	I am willing to purchase household item from people of other religion
TL9	I am not willing to purchase household item from people of different sects (like Sunni, Shia, Bareli, Deobandi for Muslims), (Catholics Protestants for Christians), (Vaishnavism (Vishnu), Shaivism (Shiva), Shaktism (Devi) and Smartism for Hindus)
TL10	I am not much willing to take people of different race as my business partners?
TL11	I am willing to take people of different religion as my business partners?
TL12	I am willing to take people of different religious sects as my business partners.
TL13	I am willing to work under employer of different race.
TL14	It's difficult for me to work under employer of different religion.
TL15	I feel easy in working under employer of different sects/religious school of thoughts
TL16	Mutual coexistence is essential for the prosperity of the society.
TL17	Different religious workers must be given freedom at work to perform their religious duty.
TL18	There should not be any discrimination in work place for people of different race/religion/sect
TL19	A boss can exercise his religious/ethnic preference among subordinates.
TL20	I am in favor of religion free zone at work

When the principal components are obtained then household tolerance index (HTI) is constructed by using the following expression:

$$HTI = \frac{\sum_{i=1}^{n} P_i E_i}{\sum_{i=1}^{n} E_i} \quad \text{---------- (3.2)}$$

Where Ei's (i.e. E1 and E2) are the Eigen values of the corresponding principal components Pi's (i.e. P1 and P2).

3.4.4 Validity and Reliability of Tolerance Questions/Construct

Before gathering the original data, twenty questionnaires were distributed for pilot survey and feedback. It was given to economic specialist as well as general public. The face validity was confirmed by most of the respondents. There were few suggestions from experts related to the content validity of the overall questionnaires, in light of which some modifications were made and resubmitted to experts who approved its content validity. As far as the validity of questions related to tolerance, their language was not appropriate as per the expert's suggestions. These statements were rewritten as advised. In the end the formatted questionnaire was distributed to experts who approved it as valid in contents and looked good by face validity.

Similarly, the reliability of the tolerance construct was an important factor, as the research was not using already constructed questionnaire. At the pilot survey level, the reliability statistics as measured by cronbatch's alpha was 0.78 which made the researcher confident about it. The overall data resulted into a very promising reliability of 0.966 which is as per rules (McMillan & Schumacher, 1984) very much reliable and we can say that the twenty items for tolerance are complement to each other towards measuring a single tolerance variable(Household Tolerance Index, HTI). The value is given in table 3.3.

Table No. 3.3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.966	.966	20

Source: Survey

The values in the column Cronbach's alpha if item deleted in table 3.4 shows that all the values are less than the overall alpha value which suggests that no item should be dropped for it will not increase validity.

Table No. 3.4: Item-Total Statistics

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
TL1	63.96	290.279	.828	.776	.963
TL2	64.50	290.534	.797	.684	.963
TL3	64.22	302.927	.679	.567	.965
TL4	65.31	303.055	.613	.650	.965
TL5	64.14	300.424	.571	.520	.966
TL6	64.20	292.977	.739	.734	.964
TL7	64.23	289.566	.848	.793	.963
TL8	63.86	301.333	.626	.552	.965
TL9	64.17	291.365	.805	.726	.963
TL10	64.32	293.137	.768	.742	.964
TL11	64.43	290.013	.850	.800	.963
TL12	63.90	302.292	.677	.622	.965
TL13	64.47	284.935	.884	.822	.962
TL14	63.89	300.904	.732	.738	.964
TL15	64.36	293.294	.845	.768	.963
TL16	64.21	291.949	.816	.752	.963
TL17	64.28	300.475	.710	.593	.964
TL18	63.90	306.257	.638	.605	.965
TL19	64.78	290.381	.771	.755	.964
TL20	63.73	296.464	.824	.780	.963

Source: survey

Note: TL mean tolerance likert item and 1 to 20 are number of item

3.4.5: Factor Analysis of Tolerance constructs

In order to know the factors of tolerance, the items were subjected to factor analysis through principal component analysis. The KMO and Bartlett's values showed that the sample was adequate and the spherecity was sound and hence we can perform PCA on our data set.

Table No. 3.5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.944
Bartlett's Test of Sphericity	Approx. Chi-Square	7.194E3
	df	190
	Sig.	.000

Source: Survey

In table 3.6 the initial communalities and its extraction is given for all the tolerance items.

The precondition for PCA is that communalities must be close to one. Our results satisfy this condition.

Table No. 3.6: Communalities

	Initial	Extraction
TL1	1.000	.762
TL2	1.000	.700
TL3	1.000	.505
TL4	1.000	.668
TL5	1.000	.463
TL6	1.000	.647
TL7	1.000	.770
TL8	1.000	.686
TL9	1.000	.683
TL10	1.000	.658
TL11	1.000	.756
TL12	1.000	.651
TL13	1.000	.819
TL14	1.000	.758
TL15	1.000	.756
TL16	1.000	.759
TL17	1.000	.552
TL18	1.000	.582
TL19	1.000	.745
TL20	1.000	.722
Extraction Method: Principal Component Analysis.		

Source: Survey

Table No. 3.7: Rotated Component Matrix[a]

	Component	
	1	2
TL1	.781	.390
TL2	.735	.399
TL3	.534	.468
TL4	.817	.036
TL5	.265	.627
TL6	.746	.300
TL7	.760	.438
TL8	.187	.807
TL9	.613	.555
TL10	.719	.375
TL11	.654	.572
TL12	.297	.750
TL13	.742	.519
TL14	.312	.813
TL15	.717	.493
TL16	.497	.715
TL17	.584	.460
TL18	.283	.709
TL19	.822	.265
TL20	.712	.465
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Survey

The Twenty items are sub-components to these two main components as shown in table 3.7. First factor included 14 items and second factor six. These factors are named as Family life specific tolerance and work specific tolerance. Item no. 1,2,3, 4,6,7,9,10,11,13,15.16,19 and 20 are

grouped in factor one showing in Table 3.8 and items no. 5,8,12,14,17 and 18 as factor two showing in Table 3.9. The updated tolerance construct will look like follows.

Table 3.8: Family Specific Tolerance

TL1	We encourage kids to learn tolerance at home
TL2	I do not feel comfortable in living with people of a different race in my neighborhood
TL3	There is no problem in living with people who speak a different language in our neighborhood
TL4	I am relaxed in living with people having diseases that can be communicated easily to me.
TL6	It is uncomfortable in living with people of a different religious sects in the neighborhood
TL7	I am mostly willing to purchase household item from people of different race
TL9	I am not willing to purchase household item from people of different sects (like Sunni, Shia, Bareli, Deobandi for Muslims), (Catholics Protestants for Christians), (Vaishnavism (Vishnu), Shaivism (Shiva), Shaktism (Devi) and Smartism for Hindus)
TL10	I am not much willing to take people of different race as my business partners
TL11	I am willing to take people of different religion as my business partners
TL13	I am willing to work under employer of different race.
TL15	I feel easy in working under employer of different sects/religious school of thoughts
TL16	Mutual coexistence is essential for the prosperity of the society
TL19	A boss can exercise his religious/ethnic preference among subordinates.
TL20	I am in favor of religion free zone at work

Table 3.9: Occupation Specific Tolerance

TL5	There is no problem in living with people of a different religion in the neighborhood
TL8	I am willing to purchase household item from people of other religion
TL12	I am not much willing to take people of different race as my business partners?
TL14	It's difficult for me to work under employer of different religion.
TL17	Different religious workers must be given freedom at work to perform their religious duty.
TL18	There should not be any discrimination in work place for people of different race/religion/sect

3.4.6: Perception of Respondents Regarding Tolerance

All the twenty statements regarding tolerance represent perceptions related to it. These perceptions are presented in table 3.10. There was 3.3% strong disagreement to the statement that "we encourage kids to learn tolerance at home" and 19.9% disagree while 21.7% remained neutral/undecided. The agree respondents were 21.7% of the total and strong agree were 36.8%. The mean average score/weighted average score for the statement show that overall, the respondents were agree that they encourage their children for learning tolerance at home. There was another statement that I do not feel comfortable in living with people of a different race in my neighborhood for which 18.9% neutral response noted and 33.8% disagree followed by 21% strongly agree response. As a whole a neutral response was found and hence respondents were undecided in this regard. The perception that no problem while living with people of a different language in neighborhood was noted disagree by 12.5%, neutral by 51.9%, agree by 14.1% and strongly agree by 20.7% respondents respectively and the overall response was neutral. "I am relaxed in living with people having diseases that can be communicated easily to me" was responded strongly disagree by 24.6% and disagree by 37.1% respondents and 24.8% recorded

neutral response. The overall response (MAS) was disagreeing. “I am willing to purchase item from people of different religions” and “It’s difficult for me to work under employer of different religion” were both agreed by the respondents and hence we can say respondents perceive these two statements different in terms of work and daily life. There should not be any discrimination in work place for people of different race/religion/sect and I am in favor of free zone at work were also agree by the respondents. The Overall MAS for Tolerance is 3.4 and is leading to neutrality. This is averages and it may converge to neutrality while our aim is to compute HTI through the PCA to assess its impact on HHI.

Table 3.10: Overall Response for each statement

Statement	**SDA**	**DA**	**N**	**A**	**SA**	**MAS**
We encourage kids to learn tolerance at home	13 (3.3)	75 (19.9)	85 (21.7)	74 (18.9)	144 (36.8)	4
I do not feel comfortable in living with people of a different race in my neighborhood	29 (7.4)	132 (33.8)	74 (18.9)	74 (18.9)	82 (21)	3
There is no problem in living with people who speak a different language in our neighborhood	3 (0.8)	49 (12.5)	203 (51.9)	55 (14.1)	81 (20.7)	3
I am relaxed in living with people having diseases that can be communicated easily to me.	96 (24.6)	145 (37.1)	97 (24.8)	36 (9.2)	17 (4.3)	2
There is no problem in living with people of a different religion in the neighborhood	26 (6.6)	42 10.7)	142 (36.3)	91 (23.3)	90 (23.1)	3
It is uncomfortable in living with people of a different religious sects in the neighborhood	9 (2.3)	126 (32.2)	61 (15.6)	77 (19.7)	118 (30.2)	3
I am mostly willing to purchase household item from people of different race	12 (3.1)	114 (29.2)	76 (19.4)	84 (21.5)	105 (26.9)	3

I am willing to purchase household item from people of other religion	25 (6.4)	47 (12)	15 (3.8)	213 (54.5)	91 (23.3)	4
I am not willing to purchase household item from people of different sects (like Sunni, Shia, Bareli, Deobandi for Muslims), (Catholics Protestants for Christians), (Vaishnavism (Vishnu), Shaivism (Shiva), Shaktism (Devi) and Smartism for Hindus)	31 (7.9)	68 (17.4)	76 (19.4)	125 (32)	91 (23)	3
I am not much willing to take people of different race as my business partners	8 (2)	139 (35.5)	60 (15.3)	94 (24)	90 (23)	3
I am willing to take people of different religion as my business partners	35 (9)	86 (22)	110 (28.1)	88 (22.5)	72 (18.4)	3
I am willing to take people of different religious sects as my business partners.	11 (2.8)	44 (11.3)	68 (17.4)	186 (47.6)	81 (20.7)	4
I am willing to work under employer of different race.	57 (14.6)	75 (19.2)	89 (22.8)	89 (22.8)	81 (20.7)	3
It's difficult for me to work under employer of different religion.	17 (4.3)	26 (6.6)	78 (19.9)	196 (50.1)	74 (18.9)	4
I feel easy in working under employer of different sects/religious school of thoughts	10 (2.6)	109 (27.9)	112 (28.6)	89 (22.8)	70 (17.9)	3
Mutual coexistence is essential for the prosperity of the society	38 (9.7)	40 (10.2)	108 (27.6)	134 (34.3)	71 (17.9)	3
Different religious workers must be given freedom at work to perform their religious duty.	13 (3.3)	65 (16.6)	146 (37.3)	108 (27.6)	59 (15.1)	3
There should not be any discrimination in work place for people of different race/religion/sect	8 (2)	36 (9.2)	66 (16.9)	223 (57)	58 (14.8)	4
A boss can exercise his religious/ethnic preference among subordinates.	96 (24.6)	49 (12.5)	106 (27.1)	99 (25.3)	41 (10.5)	3
I am in favor of religion free zone at work	4 (1)	27 (6.9)	126 (32.2)	84 (21.5)	150 (38.4)	4

Source: Survey, Note: The values in parentheses are percentages **(Total MAS = 3.40)**
SD = Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

3.4.7 Estimation Methodology

After the construction of household tolerance index (HTI) the ordinary least square method has also been used to test a base line endogenous growth model by incorporating the tolerance variables with economic variables. This methodology has also been employed by Khan et al. (2010) and Granato, Inglehart, and Leblang (1996). The selected economic variables are level of education of the main income provider of the household, household size, age and gender of the main income provider of the household, dependency ratio in a family, location of residence of a family (i.e. urban area or rural area) and residential status of the household the household is native or immigrant. The model applied for the estimation of results is multiple regression analysis with robust standard errors, it is used because of the reason that there is problem of heteroscedasticity across the cross sections in the data. Thus the household income regression model used in this study takes the following form:

$$\log Y_i = b_o + b_1 E\,\mathrm{cov}_i + b_2 HTI_i + \varepsilon_i \quad \text{..... (3.3)}$$

Where Y_i is the total household Income level measured in rupees per month.

$Ecov_i$ stands for economic variables and includes the following variables:

(i) Household's size measured as number of persons in a household.

(ii) Level of education of the main income provider measured as the number of years of education.

(iii) Age of the main income provider in a household measured as the number of years.

(iv) Gender of the main income provider of the household that whether or not the main income provider is male measured as dummy variable taking value 1 = Male and 0 = female.

(v) Dependency ratio[6] in a family.

(vi) Location (i.e. urban area or rural area) of residence of the household measured as dummy variable taking value 1 = Urban area and 0 = Rural area.

(vii) Residential status of the household whether the household is native or immigrant measure as dummy variable taking vale 1 = Native and 0 = immigrant

HTI is a composite index of household tolerance level constructed from 20 components through PCA which was measured on a Likert-scale ranging from 1 to 5.

And ei is the error term.

As cross sectional data is used for the estimation of the model so it becomes crucial to carry out different diagnostic tests in order to address certain issues concerning the cross sectional data. These tests includes heteroscedasticity, multicollinearity, model specification test and normality of the residual of the model. It is also suspected that the main model of the study suffers from the problem of endogeneity. So the test for the detection of endogeneity problem is also essential. The details of these tests are discussed in chapter 4.

[6] Dependency ratio is computed as Unemployed member in a household/household size.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter comprises the discussion about the diagnostic tests, descriptive analysis of the dependent and independent variables, followed by the multiple regression analysis. This discussion is presented in the subsequent sections.

4.2 Test of Heteroscedasticity

To investigate the existence of heteroscedasticity problem in the data used in the study, Breusch-Pagan test and IM test were conducted. The results of these test are presented in table 4.1 as follows:

Table 4.1: Heteroscedasticity Test Results

Ho: Constant variance	
Test of Heteroscedasticity	Probability
Breusch-Pagan	0.0614
IM Test	0.0150

Source: Author's Estimation

As it is indicated from the above table 4.1 that the probability values for both of the tests are significant at 10% and 5% level of significance. So the null hypothesis (i.e. Ho: Constant variance) is rejected and it is concluded that the problem of heteroscedasticity exists in the data. The problem of heteroscedasticity is addressed by incorporating the robust standard errors in the regression model.

4.3 Test of Multicollinearity

To check the presence of multicollinearity, correlation matrix analysis and the Variance Inflation Factor (VIF) analysis were conducted. The results for the correlation matrix analysis among the repressors are given in Table 4.2 as follow:

Table 4.2: The Correlation Matrix Analysis Results

	U/R	*HHS*	*N/M*	*Dratio*	*HHIncome*	*Education*	*Age*	*Gender*	*HTI*
Urban/Rur	1								
HHS	0.055446	1							
N/M	-0.06893	0.200069	1						
Dratio	0.051825	0.070064	0.025478	1					
HHIncome	0.033844	0.25329	0.012532	-0.02487	1				
Education	0.027618	-0.10425	-0.05617	-0.0212	0.168455	1			
Age	0.057581	0.054227	-0.03861	0.027316	0.063674	-0.0451	1		
Gender	0.014214	-0.02239	-0.02304	0.002316	0.077558	0.032926	-0.01808	1	
HTI	0.140198	0.019358	-0.0721	0.076989	0.241594	0.096479	0.063507	-0.01289	1

Source: Survey

The correlation matrix analysis results shows that the repressors are not strongly correlated. Similarly the results of the Variance Inflation Factor (VIF) analysis are reported in Table 4.3 as follows:

Table 4.3: The Variance Inflation Factor (VIF) Analysis Results

Variables	**VIF**	**1/VIF**
HHS	1.06	0.939818
Native/ Immigrant	1.06	0.944632
HTI	1.04	0.958420
Urban/ Rural	1.03	0.966399
Education	1.03	0.971297
Age	1.02	0.982192
Dratio	1.01	0.986186
Gender	1.00	0.997306

Source: Author's Estimation

The results of Variance Inflation Factor (VIF) analysis also shows that there is no problem of Multicollinearity among repressors.

4.4 Test of Endogenity

As it is doubted that household tolerance index (HTI) and education will cause reverse causality i.e. it will also in turn effect household income in the reverse direction. So it is also essential to test the existence of endogeneity problem in the data. Different determinants of tolerance level such as reading newspaper, television watching, trust, threat perception, feelings of superiority and inferiority and level of religiosity are used as instrumental variables for HTI and reading newspaper is used as an instrumental variable for education in the two stage least square (2SLS) method. The test used for the detection of the problem is reported in Table 4.4 as follows:

Table 4.4: Endogeneity Test Result

Ho: Variables are exogenous		
Tests of Endogeneity	HTI	Education
Durbin–Wu–Hausman test	P=0.8699	P=0.2805

Source: Author's Estimation

The above table 4.4 shows that the probability values of Durbin–Wu–Hausman test is insignificant at 5% level of significance. So it is concluded that the null hypothesis (i.e. Ho: Variables are exogenous) cannot be rejected. This means that both of the variables are exogenous and the data does not suffer from the problem of endogeneity.

4.5 Model Specification Test

The model specification test was conducted through Ramsey Reset Test. The results of the test is reported in Table 4.5 as follows:

Table 4.5: Ramsey Reset Test

Test	**Probability > F**
Ramsey Reset Test	0.1908

Source: Author's Estimations

The results of Ramsey reset test shows that model is correctly specified and there are no omitted variables. Table 4.5 shows the probability of the test with null hypothesis that "Model has no omitted variables".

4.6 Normality Test of Residuals

To check the normality of the residual of the model Shapiro-Wilk W test was conducted. The results for Shapiro-Wilk W test are presented in Table 4.6 as follows:

Table 4.6: Shapiro-Wilk W Test Results

Test	**Probability > z**
Shapiro-Wilk W test	0.69262

Source: Author's Estimation

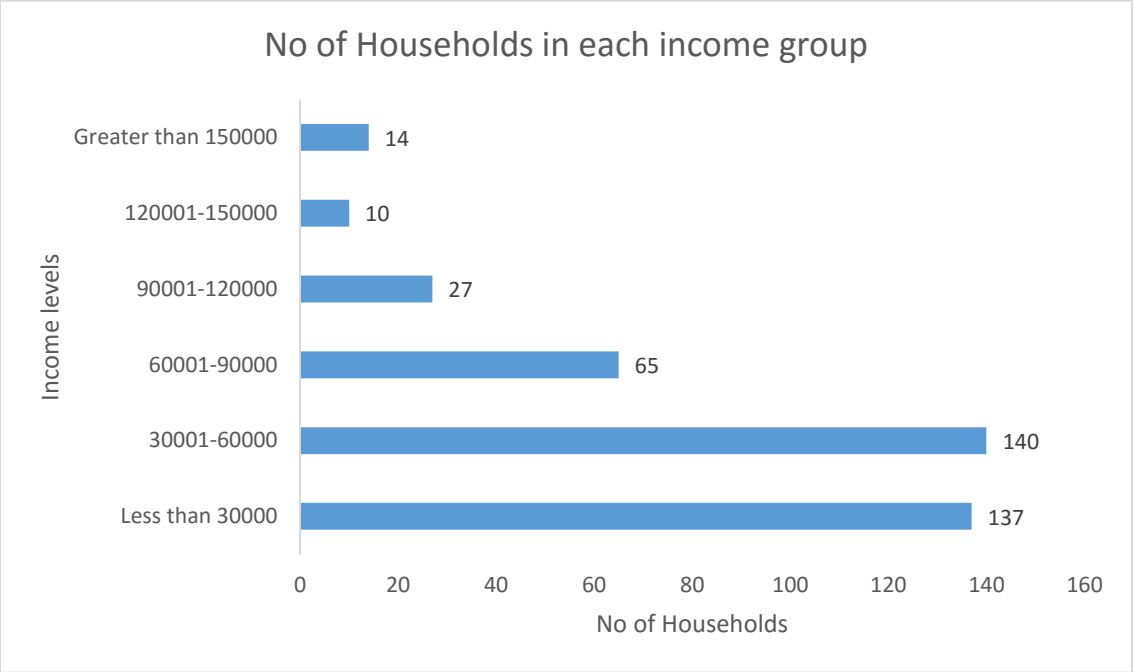
It can be inferred from the test that null hypothesis (i.e. Ho: the residuals of the model are normally distributed) cannot be reject. This showing that the normality assumption of the residuals of the model is satisfied.

Most of the assumption regarding OLS Model is satisfied except the problem of heteroscedasticity. Therefore OLS model with corrected robust standard is used in the study.

4.7 Distribution of Households by Income Groups in District Peshawar

The distribution of households by different income groups is discussed in the following figure:

Figure 4.1: Distribution of Households by Different Income Groups in District Peshawar



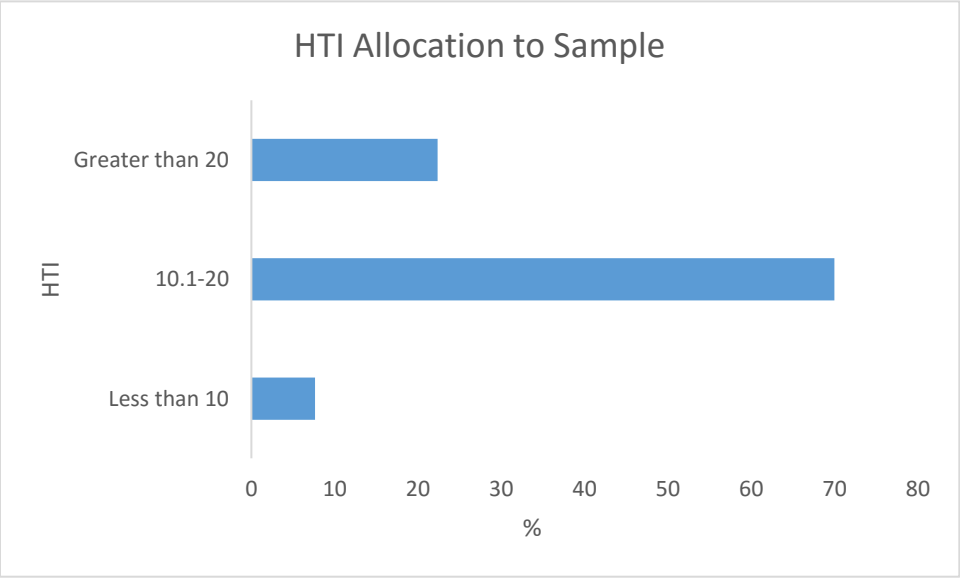
Source: Survey

The above figure 4.1 indicates number of households falling in different income groups ranging from less than 30000 to greater than 150000 in district Peshawar. It is revealed from the figure 4.1 that 137 housholds laying in less than 30000 income group. While 140 households falling in 30001 to 60000 category of the income. This shows that a large number of households earning an income level ranging from 30001 to 60000. The income groups that lies above this income group (i.e. 30001 to 60000) have a lower number of the households. As 65 number of households falling in an income groupe of 60001 to 90000. Similarly 27, 10 and 14 number of households falling in income groups ranging from 90001-120000, 120001-150000 and greater than 150000 respectively. So it is infered from the above figure that majority of the households are eaning an income level of less than 30000 and an income level between 30001 to 60000. And only a small number of the households are earning an income level of 60000 and above.

4.8 Distribution of Household Tolerance Index (HTI) among Sample Size in District Peshawar

The figure 4.2 shows the allocation of household tolerance index (HTI) to sample size as follows:

Figure 4.2: Allocation of Household Tolerance Index (HTI) to Sample Size in District Peshawar



Source: Survey, Author's estimation

Household tolerance index (HTI) was constructed through using principal component anslysis (PCA). The higher value of HTI represents a higer level of tolerance. The figure indicates that 8% of the households have a HTI value of less than 10 showing that a only a small % of the households have lower level of tolerance. While 70% of the households have the HTI value falling between 10.1 to 20. This showing that majority of the households in district Peshawar have a moderate level of tolerance. Only 20% of the household in district Peshawar have the HTI value more than 20 which are high tolerant households.

4.9 Multiple Regression Analysis of the Determinants of Household Income

A Log-lin regression analysis is done to gauge the determinants of household economic well-being. The estimated results for the households are given in table 4.7 as follows:

4.9.1 Impact of the Economic Variables and Household Tolerance Index on Households Income

The coefficient of household tolerance index (HTI) is positive and significant showing that with

Table 4.7 Regression Results of the Determinants of Household Income in District Peshawar

Dependent Variable Yi (Rs.)				
	Coef.	Std.Err	t-Statistics	P-values
HTI	0.0320442	0.0088934	3.60	0.000
Education	0.0288829	0.0079013	3.66	0.000
Household size	0.0695654	0.0134106	5.19	0.000
Dependency ratio	-0.0000175	2.11e-06	-8.32	0.000
Gender	0.3375822	0.1596937	2.11	0.035
Age	0.0038649	0.0028312	1.37	0.173
Urban/rural	0.045249	0.0657783	0.69	0.492
Native/immigrant	-0.0291036	0.0781935	-0.37	0.710
Constant	8.832031	0.2869648	30.78	0.000
R^2	0.1573			
F-statistics	17.99			
Prob. F-statistics	0.0000			

Source: Author's Estimation

The increase in household tolerance level, household income (Yi) increases. A one unit increase in HTI, increases household income by 3.204 percent. The possible reason for this positive and significant relationship is that as tolerance indicates openness (R. Florida, 2003). While openness to experience is one of the factors in the five factor model of personality (Bucciol et al., 2014) that describe an individual's personality. Openness to experience indicates the degree to which persons are creative, imaginative, broadminded, curious and nontraditional (Bucciol et al., 2014; McCrae, 1996; Sung & Choi, 2009). This also shows that persons who are highly open to experience tend to be more tolerant (McCrae, 1996). Thus persons with high openness to experience tend to be flexible and willing to accept different perspectives, even though they may be unfamiliar which allow greater access to new experiences and perspectives, and this in turn results in increasing creative performance (Sung & Choi, 2009), personality development and income. The education coefficient is positive and significant. This depicts that if the main income provider of the household is educated then the household have a high level of income. A one unit increase in education of the main income provider of the household results a 2.888 percent increase in total household income. The reason for this is that the main income provider with higher level of education are more likely to have a good job and can earn a high level of income as compared to those who are less educated. Thus there is a positive association between education and household's total income. This finding is in accordance to (Aikaeli, 2010) and (Fadipe et al., 2014). The coefficient of household size is positive and significant. An increase of one person in the household size increase the household income by 6.957 percent. This is due to the reason that households with large household size are more likely to have more earning persons and more earning activities which results in a higher level of household income. This result is in line with the result of (Parvin & Akteruzzaman, 2013) and (Adunga, 2013) but in

contrast to (Fadipe et al., 2014) and (Tuyen, 2015). The dependency ratio coefficient is negative and significant. This means that an increases of one percentage point in dependency ratio reduces household income by 0.00175 percent. This finding is in accordance to (Jansen, Pender, Damon, Wielemaker, & Schipper, 2006) and (Tuyen, 2015). So there is a negative link between dependency ratio and total household income. The coefficient of gender is positive and significant. This indicates a positive relationship between the male gender of the main income provider of the household and total household income. This shows that if the main income provider in a household is male then it results in an increase of total household income. A male gender of the main income provider of the household results in an increase of 33.758 percent in total household income. This result is in accordance to (Lhing et al., 2013) and (Aikaeli, 2010). The age coefficient is positive and insignificant as in contrast to the expectation. A one year increase in the age of the main income provider of the household increase total household income by 0.386 percent. The coefficient of location of the household is positive and insignificant. The shows that urban area as the place of residence of the households results in an increase of total household income. Urban area increase the total household income by 4.525 percent. The coefficient of native/immigrant is negative and insignificant. This shows that natives are earning less than immigrants by -2.910 percent. The value of R^2 is low due to using cross section data and which is always low as compared to time series regression models. Though the value of R^2 is low but the probability value of F-statistics favors the overall significance of the model.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the conclusions, recommendations, limitations of the study and suggestion for the future research. These are given in the following section.

5.2 Conclusions and Recommendations

The study aims at investigating the impact of tolerant behavior on the wellbeing of the society at micro level. When a person is non-violent it means that he/she is tolerant and is willing to tolerate and accommodate other people which is not of his group. This inclusive behavior leads to a prosperity in the society. As study shows that the households experiencing higher income and are financially stable are more tolerant than those households which are earning less i.e. HTI is positively related to household income (HHI). Other variables such as gender, household size, and education shows a positive relationship while dependency ratio is negatively associated with HHI.

The Tolerant Behaviors led to the development of society as a whole. This evidence is inferred from the study conducted at the household level in district Peshawar. There is a need to inculcate tolerant behaviors in the society to reduce violence and terrorism which is already plaguing the country and specially the region where the study is conducted. Media, Religious and Educational institutions and parents while raising their off springs can engineer the tolerance in the society which will lead to higher living standards. Tolerance will ensure the safety of lives and safeguarding interests of all communities and groups living in the society. Furthermore tolerant behavior towards other groups will lead to greater investments, development and fair distribution of wealth in the society.

Pakistan is entering into new era of economic development by proposed China Pakistan Economic Corridor (CPEC), which will ensure economic prosperity and greater regional connectivity across the region, which means that more and more people will come together for business, employment and tourism purposes. If the society is intolerant toward people of other religion, sects, race and languages; than the essence of economic prosperity through this multi-billion project will be shadowed. We have the examples of European Union, United States and Canada, to a greater extent their prosperity lies in openness and tolerance.

This study strengthen and reinforce the teachings and thoughts of non-violent preachers and Leaders like Bahaullah of Persia, Martin Luther King Jr of United States, Dalai Lama of Tibet, Nelson Mandela of South Africa, Mahatma Gandhi and Khan Abdul Ghaffar Khan of South Asia. The study is conducted in Peshawar to commemorate the struggle of non-violent preacher Bacha Khan. It is evident from the study that the tolerance and non-violence will lead to a better life standards. It is also worth mentioning that Pashtuns were economically and socially backward in the British colonial era, when Bacha Khan emphasize the need of tolerance/nonviolence and education to eradicate all evils of the society in those times. The Philosophy of Bacha Khan is also valid nowadays. Hence our society will be prosperous when we are educated and tolerant.

5.3 The Way Forward

The Limitation of time and resources hinders to shed a light on the following aspect of the study**:**

a. The sample size should be increase to estimate more precise empirical estimates.
b. This study can be extended to whole country.
c. Tolerant Attitudes of individual communities towards other groups can be worth studying.

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Appendix-A

QUESTIONNAIRE

Date: _____/_____/2016.

Town: ---------- Union Council: ----------.

- Urban
- Rural Area
- How many people are living in your house as one family ----------
- What Race do you belong? Please write. ----------
- What is your mother tongue ----------
- Please mention your religion of worship ----------
- Are you living here from ages or migrated here please specify ----------Native=1, Migrant= 2

SECTION A: Kindly fill the given table as per given directions

1. Each column must be filled starting from the head of the family and following by the elder till junior person in family
2. In occupation column technical means jobs related to technology like engineers, doctors and non-technical like teaching.
3. Monthly income for each earning (for non-earning please write "0") member of the family in his/her respecting row from column 1.
4. Each row relates to the person mentioned in column 1 and every column may be filled keeping in mind the respective row in mind.

Household Members	Please specify Head of household in first row followed by other members in ascending order of age in each row (mentioning names are optional)	Gender 01=Male 02=Female	Age of the household members in years	Relationship to head of the household **Codes** **01= direct blood relation i.e.** Head/Wife/husband/Son/daughter Grandchild /Father /Mother /Brother/Sister **02= Relative** Nephew/Niece/ Son/daughter-in-law/Brother/ Sister-in-law/Father/ Mother-in-law **03=** Servant/their relatives and Other	Employment of the household members **Codes** Employed =1 Non employed= 2	What is the main **occupation** ? **Codes** 01=Govt Servent(Technical) 02=Govt Servent(non Technical) 03= Non Govt. servant(Technical) 03= Non Govt. servant(Non Technical) 04=Self Employed	Monthly income of the working members of the household (Rs./month)	**Marital status** **Codes** Single = 1 Married = 2 Nikkah but rukhsati not taken place = 3 Widow = 4 Divorced = 5	**Education of the household members** Please specify number of schooling in years.
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

Household Members	Please specify Head of household in first row followed by other members in ascending order of age in each row (mentioning names are optional)	Gender 01=Male 02=Female		Relationship to head of the household **Codes** **01= direct blood relation i.e.** Head/Wife/husband/Son/ daughter Grandchild /Father /Mother /Brother/Sister **02= Relative** Nephew/Niece/ Son/daughter-in-law/Brother/ Sister-in-law/Father/ Mother-in-law **03=** Servant/their relatives and Other	Employment of the household members **Codes** Employed =1 Non employed= 2	What is the main **occupation** ? **Codes** 01=Govt Servent(Technical) 02=Govt Servent(non Technical) 03= Non Govt. servant(Technical) 03= Non Govt. servant(Non Technical) 04=Self Employed	Monthly income of the working members of the household (Rs./month)	**Marital status** **Codes** Single = 1 Married = 2 Nikkah but rukhsati not taken place = 3 Widow = 4 Divorced = 5	**Education of the household members** Please specify number of schooling in years.
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

2. Household's Tolerance Level:

The following statements concern your perception about yourself in a variety of situations. For each item of the statements below, please indicate the extent of your agreement and disagreement by ticking (√) the appropriate number. Where 1= strongly disagree 2= disagree 3= neutral 4= agree and 5= strongly agree

S.No	**Statement**	**1**	**2**	**3**	**4**	**5**
1	We encourage kids to learn tolerance at home					
2	I do not feel comfortable in living with people of a different race in my neighborhood					
3	There is no problem in living with people who speak a different language in our neighborhood					
4	I am relaxed in living with people having diseases that can be communicated easily to me.					
5	There is no problem in living with people of a different religion in the neighborhood					
6	It is uncomfortable in living with people of a different religious sects in the neighborhood					
7	I am mostly willing to purchase household item from people of different race					
8	I am willing to purchase household item from people of other religion					
9	I am not willing to purchase household item from people of different sects (like Sunni, Shia, Bareli, Deobandi for Muslims) (Catholics Protestants for Christians) (Vaishnavism (Vishnu), Shaivism (Shiva), Shaktism (Devi) and Smartism for Hindus)					
10	I am not much willing to take people of different race as my business partners?					
11	I am willing to take people of different religion as my business partners?					
12	I am willing to take people of different religious sects as my business partners.					
13	I am willing to work under employer of different race.					
14	It's difficult for me to work under employer of different religion.					
15	I feel easy in working under employer of different sects/religious school of thoughts					
16	Mutual coexistence is essential for the prosperity of the society.					
17	Different religious workers must be given freedom at work to perform their religious duty.					
18	There should not be any discrimination in work place for people of different race/religion/sect					
19	A boss can exercise his religious/ethnic preference among subordinates.					
20	I am in favor of religion free zone at work					

3. Household's Level Determinants of Tolerance

S.No		Codes
1	Please evaluate how often you read the newspaper daily, weekly, monthly or never? Daily= 4, Weekly=3, Monthly = 2, Never= 1	
2	Please evaluate how much time TV is watched by you or your family? More than 6 hours =5, between 4 to 6 hours=4, Between 2 to 4 hours =3, less than 2 hours = 2 Never watched= 1	
3	Please evaluate how you feel that most people can be trusted? Lack of Trust = 0 and Trust = 1	
4	Please evaluate do you threatened by a group other than the one you belong to? Threatened = 1 and Do Not Threatened = 0	
5	Do you feel you are inferior or superior to a group other than the one you belong to? Superior=5 Somewhat better= 4, Equal=3, Somewhat worse=2, Inferior=1	
6	Please evaluate how often you prayed a day? 0 = Never Prayed 3= few prayers a day and 5 = Prayed Five Times a Day (For Muslims) or defined obligatory as per your religion (For non-Muslims)	
7	Please evaluate how often you read Quran or your religious book? 0 = Do Not Read 3= read occasionally and 5 = Read Everyday	