

International Journal of Sciences: Basic and Applied Research (IJSBAR)

Sciences:
Basic and Applied
Research
ISSN 2307-4531
(Print & Online)
Photological Street Stre

ISSN 2307-4531 (Print & Online)

http://gssrr.org/index.php?journal=JournalOfBasicAndApplied

Re-Thinking Poverty, Inequality and Their Relationship to Terrorism

OLA TEMITOPE P.

Department of International Relations

Obafemi Awolowo University, Ife, Nigeria

olatemitope34@yahoo.co.nz

Abstract

This study focused specifically on terrorism problem and tried to find some of the determinants of terrorism. This was done by providing a general overview of literature concerning poverty, inequality and their relationship to terrorism. Theories that explain poverty, inequalities, and delinquency's relationship to crime's and terrorism are examined. Structural variables such as crime, poverty and unemployment were utilised to predict and explain the rates of terrorism. It was found that poverty and inequality, GDP, education level, unemployment, population size, age structure, race, drug activity, and firearm availability could indeed account for the prevalence of terrorism. The paper concludes that a strong connection exists between poverty, inequality and terrorism.

Keywords: Poverty; Inequality; Terrorism.

1. Introduction

Little attempt has been made to understand the motivation for terrorist action. Limited attempts have been made to see it as part of long term strategy, or indeed to investigate the political context. Many would agree that terrorism involves using violence as a strategy to achieve certain goals.

* Corresponding author.

E-mail address: olatemitope34@yahoo.co.nz

This violence can be used by those who oppose existing governments, or it can be used by people who want to maintain existing power. Historically, terrorist activities have always included violence to achieve their goals. It might be impossible to stop terrorist activities all over the world, but knowing the factors that are related to terrorism may help to produce valid policies that reduce the terrorism to a minimum level. This study contributes to the identification of some of the factors that are related to terrorism. This would help policy makers build more effective policies that will be able to reduce terrorism.

The paper reveals some of these factors by examining the relationships between poverty, education attainment, unemployment, and terrorism through the lens of inequality. It makes contribution towards a better understanding of some socioeconomic conditions that are related to terrorism specifically poverty, and inequality. It identifies the relationships between socio-economic factors such as poverty, inequality, unemployment, education level and terrorism. Poverty, inequality and crime are used as indicators of the relationship between poverty, inequality and terrorism. The paper is divided into three sections. In the first section, introductory information about terrorism and its history is presented. In the second section theories that explain poverty, inequalities, and delinquency's relationship to crime's and terrorism are examined. The last section of the paper presents the previous studies that related poverty, inequality relationship to crime, terrorism and conflict.

1.1. Definition of Terrorism

Defining terrorism is a problematic issue. Who is identified as a terrorist differs according to who is defining terrorism. One person can be described as a terrorist by one person and then described as a freedom fighter by somebody else [1]. This dilemma helps explain why terrorism does not have a single definition. This is a major problem in defining terrorism, and effects in the ongoing study and development of policies needed to respond to terrorism. Many analyses of terrorism have emphasized its political, social, ideological, and economic aspects. Many of these factors are usually given less emphasis than security factors in policy formation [2]. Besides this, those issues mentioned above are the result of many different motivational factors. This also makes it hard to define the phenomena [3]. A universal definition of terrorism must go beyond behavioural descriptions to include individual motivation, social environment and political purpose.

This study will present some definitions from some respectable agencies, however even these definitions may not be accepted by some individuals or groups. France defines terrorism as 'an act by an individual or group that uses intimidation or terror to disrupt public order' [4]. Germany's terrorism definition is 'an enduringly conducted struggle for political goals, which are intended to be achieved by means of assaults on the life and property of other persons, especially by means of severe crimes' [5]. British Anti-Terrorism Act [6] states, 'terrorism is the use of violence for political ends (including) any use of violence for the purpose of putting the public, or any section of the public in fear' [7].

The FBI defines terrorism as 'the unlawful use of force or violence against persons, or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives' [8]. US department of state's definition of terrorism seems to capture many of these definition; 'The

term terrorism means premeditated, politically motivated violence perpetrated against noncombatant targets by sub-national groups or clandestine agents, usually intended to influence an audience'. 'Noncombatant,' as used above is in reference to civilians, 'military personnel (whether or not armed or on duty) who are not deployed in a war zone or a war-like setting' [9].

The Turkish Anti-Terrorism Act [10] defines terrorism as follows: 'Terror is all kinds of activities attempted by a member or members of an organization for the purpose of changing the characteristics of the Republic which is stated in the constitution, and the political, jurisdictional, social, secular, economic system, destroying the territorial integrity of the state and the government and its people, weakening or ruining or invading the authority of the government, demolishing the rights and freedom, jeopardizing the existence of Turkish government and Republic, destroying the public order or peace and security.' As can be seen from all these definitions, every government, even specific agencies of same government have their own definitions. Despite this there are also some common elements of these definitions such the element of 'violence' which always has a dominant role. Alex P. Schmid and Albert Jongman's [11] study shows that 108 out of 120 definitions use the words 'violence' and 'use of force' as their most common elements. Following violence, ideological or political aims appears in 65%. Following that, definitions and concepts such as fear, threat, or psychological impact are most commonly used. It can be concluded that a broad definition of terrorism needs to include a reference to violence. Therefore, prior to defining a group as a terrorist group violence activity by that group should be present [11]. Some of the following examples of terrorism from the past are defined as terrorist group according to a different criteria depend on time they existed, actions they took, and according to who they targeted. It is of course possible to find some people who do not define one or more of these groups as not terrorist, however, the majority of sources identify groups with these characteristics as terrorists.

1.2. Early History of Terrorism

Terror and terrorism has been in existence since it was discovered that people can be influenced by pressure and intimidation. The main idea of terrorism is the desire for retaliation against perceived wrongdoers. Retaliation is another face of terrorism such as blood feuds that result in a victim's entire family taking revenge on the offenders of another family or clan [12]. 'Kill one and frighten thousand', this technique of intimidation has been used successfully by governments to discipline their people and also by radicals to weaken and overturn established authority since the early history of human nature [13]. Early history of terrorism shows that terrorism was used to maintain power or to overthrow those in power.

1.3. Zealots

Zealots, a Jewish group, are an example of an early terrorist organisation that was active during the Roman occupation of Middle East in the first century [14]. Their name came from the short dagger which they used to commit their murders, mostly against other Jews who were deemed traitors. The assassins were named Sicari's (dagger men) by Romans [15]. They struck down Roman occupation forces, and rich Jewish collaborators in the cities who opposed violent overthrow of the Roman overlords [16]. In the first century A.D. the zealots, conducted a fierce and unrelenting terror campaign against the Roman and Greek occupants of the eastern

Mediterranean. The groups committed their murders in the daylight in front of witnesses. Their aim was to send a clear message of terror to the Roman authorities and Jews who cooperated with victims [17].

1.4. Assassins

Another example of political extremist groups who used violence during the early terrorism of history is *the Assassins*. They emerged in the 11th century in the Middle East [18]. These individuals gained a reputation for being murderers who carried out their lethal missions under the influence of hashish [19]. Hashish was given to them without their knowledge. The aim was to make them forget their conscience. They were a cult based in the mountains of Northern Iran. Their leaders were Hassam-I Sabbah. He established his own terror network to terrorize the region and dominate his enemies. Their targets were politicians or clerics because Hasan-i Sabah believed that power was most quickly attained by murdering those who stood in his way. His main targets were the surrounding powers such as the Seljukee Turks. This may be one of the earliest examples of terrorism by suicide as their tactic was to send assassins alone to kill an important enemy leader often at the price of his own life [references numbers 17 & 18].

1.5. French revolution

Roots of contemporary terrorism can be traced back to late eighteenth century when thousands of French were victimized during the French revolution [20]. The French government was trying to implement its new radical order. The word 'terrorism' started to be used in 1795 in reference to the Reign of Terror initiated by the Revolutionary government [21]. During that time the French regime was trying to protect itself from subversive movements. They alleged that the fight was for justice. French revolutionaries declared terror as the official policy of French state [22–8]. Through this justification, they killed more than 40.000 people by guillotine [23]. This was combined with about 500,000 of the 25 million French citizens being jailed as political suspects [24]. This was also one of the examples that shows that terrorism is often much bloodiest when used by despotic governments on its own citizens [25]. The cruel killings were justified as an attempt to eliminate the revolutionary government's opponents and as a way to instill fear in others trying to overthrow the existing government. The terror created by the French revolutionaries was successful and became a prototype for the future terrorists [25].

After the French Revolution, through the end of the 18th century, anarchism became the new terrorism for the world. The anarchists terrorized many states demanding no authority at all. They sought the solution to all problems through the destruction of all governments. This mental picture led to political assassinations, bombings, and other violent acts which provoked swift retribution in more or less every country in Europe and the US [17].

1.6. Guerilla warfare

During the Spain's war of independence, the French invaded Portugal and Spain. The strategy for the war was determined by the characteristics of the Iberian Peninsula which do not allow the movement of large armies. This resulted in the creation of smaller armies able to resist the invasion, and thus the term "guerilla" meaning

little war emerged [21]. Since then examples of guerilla warfare have been seen in different parts of the world. Guerilla warfare reached its highest level after the Second World War with the collapse of European empires [17]. Guerilla warfare is basically different than terrorism but, some insurgent groups using guerilla warfare are also described as terrorists. This applies to insurgent groups in Kenya, Malaysia, and Palestine [17]. Terrorism has also been used as a strategy by rebels during civil wars such as those in Srilanka Tamils, the Africa National Congress in South Africa, and the IRA in Northern Ireland [26].

Guerilla warfare has also been used by the colonies of the European countries across the Middle East, Asia, and Africa in an attempt to resist European efforts to restart colonial businesses. Rejecting terrorism, most of these nationalist anti-colonial groups utilized guerilla warfare because they could have larger bodies of groups along more military lines than terrorist groups, and because guerilla groups operate in a more defined geographical area over which they have control [15]. Terrorism also is a strategy used to influence policy whereas guerilla warfare is a strategy of control and revolution [21].

Terrorism and guerilla warfare also differ by the damage done to the state, civilians killed, terrorist killed, and the power unevenness between the parties. The terrorist is also a part of a smaller group then those they are fighting. The targets and purpose of the violence also is differs between the two strategies [15]. Although these differences exist between guerilla and terrorist groups, some of the insurgent groups that are defined as terrorist also used guerilla warfare. They also publicized their violent acts meant to intimidate an audience far beyond the immediate geographical location of their violence [15].

1.7. Late 19th century

The most important formation of terrorist groups happened in the late 19th century. This was the formation of small groups used to attack nation-states. The radical political theories shaped the ideologies of many of these groups and the improvements in weapon's technology helped make attacks by these groups easier [26]. One example of a group from this era is the Russian revolutionary group 'Narodnaya Volya' (the people's will) acting between 1878-81. This group was trying to create propaganda through their quick attacks against the current regime. This group has become one of the models for contemporary terrorist organizations [15]. The ideas that they developed were, unique and were to become the characteristics of later terrorism in many countries. In their attacks their main target was the leaders of the oppression. They used different contemporary weapons such as bombs, pistols, etc. It is seen that many of the characteristics of present day terrorist groups derived from this group. Characteristics such as underground, cellular organizations; impatience and an inability to organize the constituents they claim to represent; and the use of violence as a means of force on the group they want to defeat [15].

1.8. Effect of Soviet Union

Another important effect on the history of terrorism was the Soviet Union's assistance to revolutionary movements throughout the Cold War. The Soviets supplied free training and weapon to such groups [27]. Also an ideological basis for terrorism was exported through Marxist-Leninist ideology. Marxist-Leninist theory

supports class warfare by arguing that it is an ideological basis for political terrorism which creates a dynamic sense of disorder aimed at changing the existing order [28]. Many of revolutionary groups all over the world utilize terrorism in support of their political and military objectives. By exporting these ideological theories, the Soviet Union supported revolutionary struggles all over the world in their effort to export revolution to non-communist countries. This strategy resulted in considerable violence and terror around the world [15].

1.9. Late 20th century

In the late 1960s dramatic growth in terrorism began [15]. Through the 1960s and 1970s, organizations motivated by ethnic and ideological considerations such as the Palestinian Liberation Organization (and its many affiliates), the Basque ETA, and the Provisional Irish Republican Army (PIRA) appeared in the terrorist arena besides nationalists [28]. They adopted methods that would publicize their goals and accomplishments. In 1968 the Liberation of Palestine (PFLP) hijacked an Israel airline end route from Tel Aviv to Rome [18, 28]. This was a significant event for many reasons. It is significant because the terrorists used the symbolic value of the air carrier (Israeli) for a specific operational aim. It was also the first time that the deliberate use of the passengers as hostages was used to make demands on the Israeli government. This event gained significant media attention all over the world. This attention was greater than what media previously paid to the battles with Israeli soldiers in previous operations [22].

There were many other terrorist movements that appeared in different part of the world during that time which are not mentioned here. Our aim was to introduce a brief history of terrorism to the reader. Many of these organizations have declined over time while others still exist, such as the Palestinian, Northern Irish and Spanish Basque groups. In addition to that some of these terrorist groups have chosen to act within the political arena rather than continuing to use terrorist tactics [18].

1.10. Recent Changes in Terrorist Activities and Threats

Over the last three decades, terrorist organizations have become more dangerous with the availability of new and destructive weapons. Recent years have also witnessed a change in the identity of the terrorists, their motives, and their financiers [29]. Many countries that once excused terrorism now express disapproval of it. Also, many terrorist organizations simply could not survive because of the fall of the Soviet bloc, which once provided support but longer exists.

Societies that are the most vulnerable to terrorism today are those that are open, and possess a high degree of personal mobility as well as widespread personal freedoms [30]. The developing technologies make the infrastructures of modern societies vulnerable targets for weapons that are increasingly sophisticated and available. In many instances, a small band of determined, knowledgeable individuals can carry out actions that could have far reaching consequences. Today's vulnerabilities include water supply systems, transportation systems, energy systems, communication systems, and computerised management and information systems [16].

Urbanization also increases the accessible of victims. Urbanization can also push potential rebels to adopt different tactics of terrorism [20]. Thus, economic developments and urbanization have caused a shift in the

violent tactics used by rebels. Political assassinations of high-ranking officials have been used by these organizations. Some groups are already involved in drug trafficking to finance their activities. Terrorist organizations increasingly use the internet as an effective means of communications and as an avenue for cyber-attacks [15]. Many terrorist organizations use conventional weapons while others are interested in weapons which allow for mass casualties such as chemical, biological, or nuclear weapons. Transnational terrorist organizations pose a unique threat in that their activities are difficult to predict, track, and penetrate. They receive financial and logistical support from a number of different sources including front organization such as legitimate businesses and nongovernmental organizations.

Although terrorist organizations of the 1970s and 1980s had clear political objectives terrorist's actions have become more lethal. Earlier terrorist attacks were calculated to kill just enough people to get attention for their cause. The more recent attacks have resulted in less public support because a growing percentage of terrorist attacks are designed to kill as many people as possible. During 1990s, as indicated in the National Commission on Terrorism in 2002, terrorist incident are almost 20 percent more likely to result in death or injury than those that occurred two decades ago. Terrorism influences the lives of millions of people, not only throughout victimization, but also throughout fear [31]. There is virtually no place in the world that is safe from terrorism. In the one form or another, terrorism is a disease of the last several decades that has been moving back the freedoms of all people.

Today's terrorism is different from the earliest example of terrorism such as Zealots, Assassins, and French revolutionaries. In the earlier years terrorism was used mostly as means to maintain power by either governments against their own citizens or by opponent groups to overthrow the existing government. Today it emerges through smaller groups but their attacks are now big enough to scare millions of people. They reach their goal by publicizing their activities to billions of people with the help of modern communication devices. These small groups describe their aim as 'ensuring justice'. 'National oppression and social inequalities are frequently mentioned as the root causes of terrorism, and it is, of course, true that happy, contented, groups of people seldom, throw bombs' [17]. Whatever the motive is, today's terrorists may be crueler than their ancestor [21].

1.11. Factors that are related to Terrorism

Next, a brief explanation about the factors that are related to formation of terrorism will be provided prior to moving onto the literature concerning poverty and inequality. In the literature many writer examined the issue under the title of root cause of terrorism. This is hoped to help the reader to understand the concept better. As it is presented in the brief history of terrorism it can be understood that terrorism has always had rationale or moral beliefs supporting it. Most cases show that terrorism and violence are utilized by people who are not happy with some important part of their life. These issues are then used to support the moral acceptance of terrorism and/or violence.

An explanation of the factors that are related to formation of terrorism is difficult. William G. O'Neill [32] agrees that this is difficult because the factors that are related to formation of terrorism differ from country to

country and from group to group. It is true that some terrorist groups operate in wealthy, economically vibrant and well governed democracies such as France, Italy, Germany, US, Japan, Spain. But, on the other hand there are also many poor countries that do not experience terrorism. Combined with that apparent contradiction, most of the leaders of these groups are relatively wealthy and well educated although they operate in poor countries. To begin to understand this complex issue different factors that are related to formation of terrorism should be examined [32]. The factors that are related to terrorism can be classified into numerous groups according to different criteria. Borum [33] describes three factors that are related to terrorism or motivational themes of terrorism: 1) identity, and 2) belonging, 3) injustice.

An individual's search for *identity* may draw him or her to extremist or terrorist organizations in a variety of ways. Some extremist ideologies may be striking to those who feel besieged by the difficulty and stress of navigating a complex world. Individuals can define their identity simply through group membership, and then no sense of (or need for) individuality or uniqueness is required [1]. Another factor that is related to terrorism or motivational factor is explained by Luckabaugh Edward, Fuqua, Joseph Cangemi, Casimir Kowalski [34] as the great need for belonging. For these alienated individuals from the margins of society, joining a terrorist group represented the first real sense of belonging after a lifetime of rejection, and the terrorist group becomes the family they never had" [35]. Among terrorists, injustice is stated as the basic motivation for their joining terrorist groups [36]. Injustice can be divided into different sub groups such as revenge, perception of inequality, grievance. A desire for revenge is seen as a common response to remediate a wrong imposed on another [37]. Revenge can be a powerful motive for violence toward others, especially people thought to be responsible for injustice [1]. Similar to that Ross [38] describes grievances as the most important cause of terrorism, and he argues that grievances may be economic, ethnic, racial, legal, political, religious, or social. Also, they may be targeted at individuals, groups, institutions or categories of people. As Collier and Hoeffler, [39] mentioned, economic inequalities are an objective measure of grievances, income inequality and poverty can be examined under this group.

These main factors that are related to formation of terrorism will respond to robust policies. Sambanis, [25] explains that "terrorism will be constrained when there is considerable government legitimacy or when the economic opportunity costs of violence are too high, or both". If external constraints exist, terrorist groups may not be able to mount a massive rebellion. According to Sambanis [25] only highly committed individuals will join a terrorist organization particularly if a country shows evidence of a strong and legitimate government able to satisfy its citizens. This may explain why terrorism occurs more often in democracies than in autocracies.

Democracies are more likely than autocracies to shape their policy in response to public opinion. This is seen as a good reason to terrorize the public which emerges to formulate government policy. In poor countries it is more possible to develop an insurgency than in richer ones because, there are more bases for terrorist action [25]. Social problems are also a good platform from which terrorist can manipulate and promote their propaganda as they protest violence, protest poverty, inequity, and lack of freedom. Their emphasis on problematic issues becomes the justification for later violent acts [40].

Social disorganization theory, Strain theory of crime and Marxist theory of crime explains successfully occurrence of crime in socially problematic societies. In the next coming part of the second chapter these theories will be examined.

2. Theories Explaining Link between Poverty Inequality and Crime Social Disorganization Theory

Faris [41] describes social organizations as a necessity for an individual's survival, needs, and luxuries. He states that a society with social disorganization may lose its unity and stop being a unit. Although members of this society live in it and continue their activities in it, they are far from being a part of it. Similarly, some degree of social disorganization can result partial breakdown and a failure to achieve the functions of the organization. Bloch [42] categorized indices of sociological break down into two groups 1) sociological and 2) ideological. He used an analogy to explain these indices.

They are symptoms similar to the symptoms observed by the physician in detecting the breakdown of the individual's physical health through factors such as fever, increase in heart rate, etc. These are not disorders but a signs of possible disorder. Similarly, Bloch sees indices of social break down as signs rather than causes of the social disorder. One of these indices is a change in economic conditions of the individuals. Crime may occur as a result of these conditions especially when the economic conditions become severe and poverty become unavoidable. Theories that explain the observed relationship between poverty and crime were constructed on Shaw and McKay's [43]. Their early hypothesis explained that inequality, and the concentration of deprived economic conditions can lead to social disorganization through a failure of social formation and normlessness. This theory was first developed, to explain urban crime and deviance. The most significant finding of their study was that the rate of delinquency in the lower class neighborhoods was highest near the inner city and decreased as they moved toward the more affluent areas [44]. Communities lacking in social capital are less effective in applying informal means of social control through the establishment and maintenance of norms that reduce violence when compared to communities with higher levels of social capital [45].

Unavoidable social change, as a cause of social disorganization, is one of the most important factors. Change can alter the structure of a group which results some members of the groups losing their position in the group while others enhance their position [references numbers 42 & 43]. It is stated that change may result in deprivation for many people. Bloch explained that [42] 'These deprivation includes the categories of socially structured interests, basic value satisfactions, and status determined physical comforts categories which are of key importance to social man.' Frustration as a result of this deprivation may make individuals begin to search for remedies. In a well-organized society an individual may solve their deprivation in the courts, or solve them by approved procedures according to the law and customs. If there is a suppression of functioning social forces and an individual cannot find appropriate solutions this may cause a strain within the entire system. This could lead to further disorder resulting in anti-social anger and possible violent emotional outbursts against any convenient target.

Considering the issues of social disorganization, other researchers have developed 'social disorganization theory' to explain urban delinquency. Social Disorganization Theory estates that the low economic status; high

levels of racial/ethnic heterogeneity and residential mobility affect the community's level of social disorganization [46]. Shaw and McKay's study [43] found that high delinquency rates are characterized by poor housing, physical decay, incomplete and broken families, high rates of illegitimate births, and an unstable population. Comparing low and high socioeconomic communities they found low socioeconomic status communities suffer from a weaker organizational base than higher status communities, therefore these communities have less ability to engage in both social control and the appropriate socialisation of residents [46].

Akers [44] states 'the theory proposes that social order, stability, and integration are conductive to conformity, while disorder and alliteration are conductive to crime and deviance.' Shaw and McKay conclude that the residents in this area were not biologically or psychologically abnormal; rather their crime and deviance were the normal responses of normal people to undesirable social conditions. In other words it is conditions in which antisocial iconoclastic criminal and delinquent traditions were developed and culturally transmitted from one generation to the next [47]. They suggest social disorganization as the result of these characteristics, undermines informal social controls within the community and neighborhood that are directly related to high crime rates rather than proposing urban ecology, depressed economic conditions of urban neighborhoods, and rapid social changes as the direct reasons for these crimes [46].

2. 1. Anomie Strain Theory

Schafer [48] explained the anomic condition as a 'lack of rules, absence of norms, lawlessness, or weakened norms that may lead to deviant behavior.' Anomic theory leans deeply on Emile Durkheim who first used the term anomic to refer to a state of normlessness or lack of social regulation that promotes a higher rate of suicide [49] anomic states that in times of fast economic change, people may find that it is particularly in their best interest to violate law because they are less in control during a time of anomic [46]. Society's members can find themselves in anomic and they feel pressured to achieve through deviant actions. When anomic exists high rates of deviation and high suicide are to be expected [50].

Merton [50] identified inequality as a causal factor in crime. He hypothesizes that "crime is a symptom of specific sort of social disorganization: the unequal distribution of means of success in society necessary to achieve 'the American dream'. He explained that in order to achieve culturally defined success certain individuals engage in crime. This happens when individuals strive toward levels of success that are not consistent with socially available means. In such conditions individuals may experience strain. Since avenues to success are limited, individuals may feel pressure and that can lead to crime. Merton explains that equal opportunity for success does not exists for everyone because disadvantaged minority groups and the lower class do not have the same access to such legitimate opportunities such as conventional educational and occupational opportunities [50]. The social structure effectively limits the possibilities of individuals within certain groups to achieve their goals through the use of accepted means.

Merton's ideas were later expanded to different crime types and studies found that violence crime is also related to inequalities besides property crime. Additionally, absolute deprivation may have its effect on the psychological wellbeing of those affected and can create disturbing situations which can evolve into violence.

Merton [50] identified five types of adaptation to strain. He describes 'Conformity' as an attempt to continue to struggle for achievement within the restricted usual means available. He named the most widespread deviant response as 'Innovation' in which one maintains commitment to successful goals but takes advantage of illegitimate means to attain them. The third, 'Rebellion' rejects the system, altogether, both means and ends, and try to replace it with a new one. The forth, 'Retreatism' refers to giving up on both the goals and the efforts to achieve them. The last one 'Ritualism' gives up the struggle to get ahead and concentrates on retaining what little has been gained, by sticking tightly and zealously to the norms. This strain is produced by the conflict between society's promise of equality and success for all and the actual inequality in the distribution of opportunities within society. This inequality is most severe for members of the lower class, the disadvantaged, and minority groups. Based on the ideas of Durckheim and Merton many scholars have built new hypothesis, this paper will examine some of these in the next section of this paper.

2.2. Marxist Theory

Marxist theory does not directly address the crime problem. Marx and Engels placed the basis of their theoretical attacks against the capital economic system. Marxist theory tends to refer more to the control by the system than to behavior. This theory sees the capitalist economic structure as responsible for crime problems. The main argument of Marx is that people are guided by the economic positions so every person has a deterministic economic foundation [50]. Engels contributed more directly to the crime problem in his paper *The Condition of the working Class in England 1944*. He compared the increased criminality in England with the 1844 economic crisis. He concluded that the crime rate among agricultural workers was higher than those in industrial jobs, and this showed that 'crime depends on the anomic and blocked position of working class which carries all the disadvantage of the social order without enjoying its advantage' [50].

The first systematic application of Marxism to the crime discourse was introduced by Dutch criminologist Willem Bonger [51] who hypotheses that crime was formed by the 'capitalist organization of society'. Marxist theory hypothesizes that both the number and types of crime in a society are a product of the basic conditions of capitalism. With the maximization of profit as its central goal, capitalism promotes competition and individualism to the detriment of the community [52]. According to Borum [33], self-interest and competition are not limited to the working classes but can influence all members of a capitalist society and thus set up conditions conducive to criminal behavior among all classes.

According to Marxist theory, capitalism has a ruling class and a proletariat class. The latter has the majority but nothing to sell except for their labor. The ruling class has the political power because the capitalists' monopoly gives them the power. This power allows them to manipulate the legal and criminal justice system to promote their interest and maintain power. The masses of workers have no power to overcome their domination. Their only choice is to bring down the government and to take the power, and destroy the capitalist economy [53].

In this section of the chapter three main theories that are explaining poverty, inequality crime relationship is explained. In the following section of this chapter the research that is guided mostly by these mentioned theories will be examined. These studies are conducted on broadly defined injustices including poverty, inequality,

unemployment, education, as the independent variables and crime, terrorism, or inter group conflict as the dependent variables. Examination of the literature shows that researchers use social disorganization theory as a pathway to explain poverty and its relationship to crime; however Anomie, Strain Theory and Marxist theory of crime are mostly used as pathways to explain inequality and crime.

3. Previous Studies

Previous works generally study predictor variables in three major groups which includes some socioeconomic variables; economic, demographic, and deterrence variables. In this study economic and demographic variables will be examined as the data. The economic variable consists of income levels, distribution, unemployment and labour force participation rates. The variables to measure inequality are GINI coefficient, and three variables to measure equality of distribution resources by government are as follows: public investment to each province; population per medical doctor in each province; and number of students per teacher in each province. The demographic variables comprise, population size, education level.

3.1. Poverty, Crime and Terrorism

The high crime rates in urban areas with physical decay, poor housing, and heterogeneous population where the residents are from the bottom of the socioeconomic scale with low incomes, low education levels, have taken the attention of researchers [50]. Most significantly Shaw and McKay's [43] study revealed the fact that the rates of deviant behavior in the lower-class environs peak near the inner city and decreased on the outskirts toward the more wealthy regions. These forms of deviance and lawlessness were interpreted as the outcome of social disorganization within these inner city neighborhoods. Shaw and McKay [43] conclude that undesirable social conditions results in a high rate of criminal behavior. The socioeconomic conditions help to develop antisocial iconoclastic criminal and delinquent traditions and these are transmitted from one generation to the next [49].

Following their study many researchers focused on disadvantaged minority groups and crime rates. They considered the relationship between poor living conditions and crime. Studies showed that the poverty crime relationship is not limited to property acquisition alone; violence crime is also related to these [47]. Research of Sampson and Grove [45] brought some other contribution to the issue. They studied the external factor effecting social disorganization such as social class, residential mobility and family disorder. The results of their study showed that social disorganization was a good predictor of rates of crime victimization. Similarly Lin Huff-Corzine et al [54] examined the role of poverty on the deadly violence rate and the suicide-homicide rate for blacks and whites. Their findings show that high rates of poverty are absolutely connected with lethal-violence. Krivo, and Peterson's [55] study also evaluated the disadvantaged groups and relationship to crime. They allege that extremely disadvantaged neighborhoods have higher rates of crime. Using 1990 US census data their findings supported the hypothesis. Danziger and Wheeler [56] conducted both time series analysis and cross sectional analysis. The result of time series analysis found that absolute and relative poverty is significantly related to crime but their cross sectional analysis shows insignificant and negative relationship between crime and poverty.

Besides these studies which concluded that there is a relationship between poverty and crime, findings of some studies showed that the economic circumstances of an area is not related to crime. Bloch, [42] studied both violent and property crime rates by comparing Los Angeles data to Chicago. Findings of the study for both cities showed that median family income was not related to either property or violent crime. Jefferson, and Pryor [57] classified hate groups like the Klu Klux Klan, neo-Nazi, skin-heads in to six groups using the Southern Poverty Center's data of a total 474 hate groups in USA in 1997. Their aim was to see whether special economic conditions were related to the location of these groups. They used logistic regression to look at the likelihood of being a member of a hate group based on the characteristics of counties. Their findings show that the existence of hate groups was unconnected to the divorce rate, percent black, or the gap in per capita income between whites and blacks in the county. They inferred that "economic or sociological explanations for the existence of hate groups in an area are far less important than adventitious circumstances due to history and particular conditions."

Using Jefferson and Pryor's [57] findings as an evidence Krueger, and Maleckova [58] explored the relationship between poverty and participation in political violence or terrorist activities. Their hypothesis states that there is no relationship between economic level, education level and political violence. They looked at the determinants of hate crimes, which they stated were very closely related to terrorism. They started investigating the literature on hate crime because it is commonly defined as crimes against members of religious, racial or ethnic groups due to their group membership, rather than their characteristics or actions as individuals, and they see it similar to terrorism

Their statistical analysis was on determinants of the participation in Hezbollah militant activities in the late 1980s and early 1990s. They analyzed the data from public opinion polls conducted in the West Bank and Gaza Strip in December 2001. This data was examining support for attacks against Israeli targets. Another section of this study also implements a statistical analysis of the determinants of involvement in Hezbollah in Lebanon. They used a sample of data that combined 129 members of Hezbollah's who were killed during paramilitary actions in the late 1980s and early 1990s and compared it to similar aged individuals in Lebanon. Another section of the study included an analysis of the backgrounds of 27 Israeli Jews who were involved in terrorist activities in the early 1980s.

Findings of that study indicated that these individuals, who planted bombs and tried to assassinate Palestinian mayors, were surprisingly well educated and come from well-paying occupations. In another section of this study they implemented an analysis of the incidence of major terrorist acts over time in Israel. They related the number of terrorist acts each year to the rate of economic growth. Krueger and Maleckova [58] state that there is no relationship between violence and the poverty level of perpetrators. Following Krueger, and Maleckova, Claude Berrebi's study [59] examines the link between economic desperation, and participation in terrorist activity using secondary data analysis which was collected from Hamas and the Palestinian Islamic Jihad (PIJ) group members. He specifically aimed to discover the determinants of becoming a suicide bomber. He used the following variables: size of the Israeli and Palestinian populations; the total area controlled by Israel at the time of the attacks; GDP; average wage; age; marital status; place of residence; and status. For their time series analysis the data was gathered from the Israeli Foreign Ministry, National Insurance Institute of Israel and

Israeli Defense Forces (IDF). From this information a data set for every deadly terrorist attack from 1949 to 2003 was constructed. Data from the ICBS (Israeli Central Bureau of Statistics), the PCBS (Palestinian Central Bureau of Statistics), and the CIA World Fact book was used to obtain the size of the Israeli and Palestinian populations, the total area controlled by Israel at the time of the attacks, and some economic variables about the Palestinian population such as GDP and average wage. They gathered the information for suicide bombers versus the general population to be able to find the difference between them. Using this data they performed a Chi square test. Findings showed no significant link between terrorism and poverty. They concluded that suicide bombers are more likely to be of higher economic status than their counterparts in the population. Suicide bombers, however, come from lower socioeconomic groups when compared to other, non-suicidal, terrorists.

It can be seen that both Krueger & Maleckova and Berberi's studies have the same conclusion. However, these studies have some drawbacks. They cannot be generalized to all regions and all times because they are specifically focused on one terrorist group. Also their studies looked at just the terrorism, poverty and education but they didn't consider the role of inequality. By examining the effect of inequality this study may close that gap.

Another variable that can explain poverty is GDP. Daniel Lederman, Norman Loayza, and Ana María Menéndez's study [60] concluded that per capita GDP growth rate is one of the strong determinants of the incidence of violent crime rates. But Claude Berrebi's study [65] looked for the effect of GDP on terrorism on West Bank and Gazza and he found that GDP per capita growth yielded insignificant results under all the specifications. Since GDP is an indicator of poverty level this study also look for the effect of the GDP of geographical regions on terrorist incidents rate [61].

3.2 Inequality, Crime and Terrorism

In most studies the inequalities examined were by income inequalities, however Martin [5], Anderson, [62] stated that there are many kind of indicators of inequalities which have been previously used to examine inequalities between race, gender, age. This part of the study will examine inequalities and its relationship to crime, terrorism, and conflict. Many studies have used income inequality as the only indicator of inequality but this study believes that other inequalities besides income inequality also important to examine in terms of their possible effect on terrorism. Thus more indicators of inequalities such as the inequality of distribution of government resources, and health inequalities will be used as the data is available. Martin, [5] states the meaning of inequality as a 'disparity or variability between different groups.' These disparities may be between race, gender, and/or geographical areas. Inequalities categorized into two groups [5]. One of them was short term and the other one was longer-term inequality. The second one is often referred to as 'chronic inequality'. The first one indicates inequalities which do not continue over a long phase of time; however the second one refers to the inequalities that continue for individuals from their youth, and last for long periods of time. This is accepted as more unjust and sometimes as an indication of discrimination and thus has become more subject of policy consideration [5].

Inequalities in political, economic, and the social arena increases the likelihood of terrorism, because terrorism occurs as a response to injustice [5]. Previous studies showed that lower-class people experience greater subjective feelings of powerlessness, and those who feel powerless are more likely than others to engage in delinquency [17] while some studies found no relationship [50, 51]. Researchers found out that the expected level of crime will be higher in a community with increased inequality [63]. Chester [64] argues that poverty is not the only important issue that should be studied, but rather "perceived relative deprivation" should also be focused on. Danziger and Wheler [56] supposes that "the potential criminal is concerned not only with his own income, but with how this income is compares to that of his reference group, and the relative distribution of income."

Inequality has been understood as primarily a class phenomenon, something that is associated with the distribution of income and wealth and private property. Equality is now thought to be a matter of politics, especially in recent decades where inequities between male and female, whites and blacks and between one country and another have generated important political movements and problems that have focused on unemployment, poverty, and low pay. These differences have begun to displace inequality as the dominant concern of progressive politics [60].

Absolute deprivation may have its effects on the psychological well-being of those affected and can result in a rise in violence [53]. Hojma, [65] tried to prove this in his study concerning the crime rates of Buenos Aires. He designed a multiple regression model which included the variables, unemployment, inequity (GINI coefficient), inflation, and structural change of the economy. His findings showed that both *inequality* and the structural change contributed more to crime in Buenos Aires Argentina, than did unemployment and the poverty rate.

Kennedy, Kawachi, Stith, Lochner and Gupta's study [66] hypothesized that poverty and income are powerful predictors of homicide and violent crime and that the gap between poor and rich contribution to that. According to them income inequality and poverty, play important roles in determining the incidence of violent crime but that this issue has been increasingly neglected in the current policy debate. They also measured the level of social trust as measured by the proportion of residents in each state who believed that "most people would take advantage of you if they got the chance." They also used the per capita density of membership in voluntary groups in each state derived from U.S. General Social Survey. They collected the crime rate data between 1987 and 1994 for each of the 50 U.S. states. Social capital was measured by the weighted responses to two items from the U.S. General Social Survey, poverty and household income. The data for each state was obtained from the 1990 U.S. Census data. They used Pearson's correlation and ordinary least squares (OLS) regression. Finding of this study showed that there is a strong correlation between violent crime and income inequality.

Also per capita group membership and lack of social trust were found to strongly relate to the violent crime rate. State-level variations in income inequality were strongly connected with a lack of social trust. States with a high inequality also had more respondents who agreed that 'most people would try to take advantage of you if they got a chance.' These findings are important because these may be the factors that have indirect effect of inequalities. They infer that as income inequality increases level of social mistrust also increase and this in turn is associated with increases in homicide rates.

Demombynes and Ozler [67] examined the effects of local inequalities on inequalities and violent crime in South Africa. They related the inequalities to crime and they used sociological theories that implied inequality leads the crime. The authors did not find evidence that inequality between racial groups promoted interpersonal conflict at the local level. They hypothesized that inequality and social welfare in general may have effects on crime through other channels. They explained the reason for inequity was as a lack of social capital, lack of upward mobility or social disorganization. They concluded that all of these may result higher levels of crime.

Furthermore, economic inequities between groups may produce conflict in society by consolidating and reinforcing ethnic and class differences. They used secondary data to measure the effect of welfare measures on different kind of crime. Results showed that while there is a strong relationship between property crime and inequality a weaker relation is existed for violent crime. Also their findings indicated that inequality in racial groups is correlated with all types of crime. Isaac Ehrlich's [68] research indicated the existence of a strong positive correlation between income inequality and crimes. He saw crime as a choice between legal and illegal activities. He used economic theory as a basis for his study which explained that in a given period if two activities were mutually exclusive, one would be chosen between them by comparing the expected utility associated with each alone.

Offenders are free to combine a number of legitimate and illegitimate activities. He implemented an ordinary least square regression and used the crime rate as a dependent variable. The independent variable were the average time served by offenders in prison, median income of families, percentage of families below one half of median income, percentage of nonwhites in population, percentage all males between 14 to 24 and 35 to 39, labor force participation rate, mean number of years of schooling of population, per capita expenditure on police. This study found a significant relationship between the crime rate and the share of the population below half the median income across the US states.

Eric Naumayer, [69] studied the link between income inequality and violent crime. He argued that inequality causes a higher rate of homicide and robbery/violent theft. He used the number of robberies and violent thefts per one million inhabitants as dependent variables and GINI coefficient, the gross domestic product (GDP), growth rate, the unemployment rate, the urbanization rate, the female labor force participation rate and the share of males in the age group 15 to 64 as control variables. He utilized a multiple regression model to be able to reveal the relationship of multiple variables on violent crime rate. The study utilized the following two main sources of cross-national data on robbery/violent theft: the United Nations (UN) and the International Criminal Police Organization (Interpol). The unit of analysis was the country. However the results of this study suggested that inequality was not a statistically significant determinant of violent crime.

Blau and Blau, [70] examined the rates of urban criminal violence and racial inequality in socioeconomic conditions, and looked at whether urban poverty or economic inequality was the major source of criminal violence. Their hypothesis stated that "variations in rates of urban criminal violence largely result from differences in racial inequality in socioeconomic conditions. The three central concepts that they focused on were heterogeneity of groups such as racial heterogeneity, income inequality, correlation between two or more dimensions of social differences and consolidate status distinctions. For example, how strongly race was related

to education and income. In this study they used data from 125 of the largest American metropolitan areas. They used rates of major violent crime; murder, forcible rape, robbery, and aggravated assault known to the police, as dependent variables and various independent variables such as Gini coefficient, population size, percent black, percent poor, geographical region, income inequality, percent divorced, and racial socioeconomic inequality. Their findings showed that criminal violence was positively related to location (South). It was also positively related to the proportion of blacks, and it was positively related to poverty.

Blau and Blau interpreted these results as the emphasis on culture of poverty. They concluded that socioeconomic inequality between races, as well as economic inequality generally increases the rates of criminal violence. Significantly, in this study once the economic inequalities were controlled for poverty no longer influenced these rates. So, if there was a culture of violence, one should be able to look at the economic inequalities to identify its roots. Grievance becomes an important factor where inequalities exist. A grievance is a formal statement of complaint, generally against an authority figure. As Marxist theory explains economic inequality causes industrial working class people to rebel because they have nothing to lose except their chains. Consistent with this basis, continual inequality reinforces the demand for political change because it leads to growing degradation and despair. Considering this, Sambanis [25] states that poverty by itself does not cause delinquency or conflict, but group inequality does because it increases grievances. He states that 'the highest risk of violent conflict occurs in societies where there is an overlap between poverty (class cleavages) and ethno religious cleavages, that is, in countries with so-called ranked social systems.' Mansoob Murshed and Scott Gates [71] examined inequality and its relationship to the Maoist insurgency in Nepal. According to them grievance rather than greed was the main motivating force of the insurgency. Horizontal or inter group inequality which represent the ethnic and cast dimension are highly relevant in explaining the Nepalese civil war. Their main hypothesis was that inner group inequality and landlessness played a central role in motivating and sustaining the conflict in Nepal. In addition to the income inequalities, they stated that the different kind of inequalities such as asset inequalities and land distribution inequalities, unequal access to public employment, unequal access to public services and over taxation, economic mismanagement, and institutional failure in Nepal all played a role in the conflict in Nepal. These inequalities assisted Maoist recruitment and retention, because they made the insurgent's life with the Maoist group an attractive option. In their study they used the intensity of the conflict, measured by number of deaths as dependent variable and human development indicators, life expectancy, years of schooling, education, landlessness, road density, and the extent of the mountain terrain. They used human development indicators and district wide data on landlessness as well as geographic characteristics data as a source of secondary data. They used Poisson regression analysis technique, which described the probability that an event might occur. They found that intensity of conflict across the district of Nepal was significantly explained by inequality indicators. They stated that well defined grievances were required for ethnically based conflicts.

Indicators of inequality play a notably strong role in increasing civil conflict. They found that the greater the degree of inequality the greater the intensity of conflict. Resource rich districts were likely to experience fewer deaths due to civil conflict than resource poor districts. They also concluded that other forms of horizontal inequality assist Maoist recruitment and retention making life in Maoist cadres a relatively attractive option.

Similar to Mansoob Murshed and Scott Gates [71] study and Nicholas Sambanis's [25] study looked at the relationship between poverty, inequality and political violence. He argued that 'one of the significant conditions that are necessary for some type of political violence such as civil war or coups is poverty and inequality.' He states that economic inequality may have a direct or indirect effect on the risk of political violence. His dependent variable was civil war onset. He used the control variables population size, income per capita, oil exportation. As Fearon and Laitin [72], who view terrain as part of the technology of insurgency which provides hideouts for rebels, Sambanis also used terrain feature as a independent variable. Results of multiple regression statistical method showed that income per capita, population size and instability were significant factors. He concluded that higher income and educational accomplishments should reduce the risk of political violence by encouraging political participation and channeling conflict through institutional pathways rather than through violence. He inferred that people with the lowest economic opportunity and least education level will be those who do the most fighting. According to the results of the analysis GDP per capita was one of the strongest variables explaining conflict. Sambanis stated that rich, industrialized countries are apparently free of civil war risk whereas middle-income countries have low and declining risks. From the findings of the aforementioned studies this study infers that if conditions of extreme poverty and inequalities prevail, then terrorists can find supporters for their activities and the number of terrorist incident will increase. Most of the previous studies used Gini coefficient as a measurement of income inequality, however there are other variables that can be accepted as inequality indicators.

3.3. Inequalities other than Income

Although it is possible to examine inequality in relation to many diverse parts of life, as can be seen from the examination of the literature, most studies used only income inequalities to refer to inequality. There are many other ways in which inequality can be measured, depending on the issue that best fits the population [64]. Arnartya Sen [73] explained that different forms of inequality become important according to different circumstances. According to their priority they are considered in policy agendas. Policy makers mainly focus on inequalities which appear most damaging or most objectionable to the common notion of justice. According to Tanzi [74] these inequalities may be the status of particular groups, lack of access to particular goods and services, such as education, health or justice, or just an unequal income distribution. In recent times the focus of justice has focused on distribution of resources [75].

3.4. Government Role in Inequalities

Many factors are addressed as reason for inequalities. These systematic factors been described as 'social norms or institutions, broad economic changes, and the role of government.' [75]. Each of these factors has a role as a determinant of inequality, as they shape income and wealth such as 'the fundamental economic, social, and political process that causes levels of inequality to differ over time and /or across countries' [60]. Among these factors government's role as redistribution of resources is important because major structural policies on redistribution of resources carry out an important role in the government's policy agenda which affects inequality, and income and wealth sharing of people [60].

Anderson indicates universal 'public provision' (e.g. health care, education, water and sanitation) as solving problem of disparities. Many government policies aim to provide equal opportunities between members of social groups. These groups may be defined by gender, ethnicity, disabilities, and geographical regions. Policies that aim to reduce inequalities between these groups' focused on different issues such as educational attainment, health outcomes and negative characteristics of areas. However Stratuss [76] focused on the differences between the equality of opportunity and the equality of results explaining that 'government's role is to ensure that everyone starts off from the same location not that everyone ends up in the same condition.' Redistribution of resources constitutes a significant number of efforts in public policy [77] showed evidence from Sri Lanka as to how important the government's policies are on distribution of resources. In this study it was seen that high economic development and low unemployment levels are not enough to ensure public order. Related to distribution issues there were continuing social conflicts and greater political instability in Sri Lanka.

As seen in this example, unequal distribution of resources may result in conflict. The government can have an effect on the distribution of income and wealth by its policies. However, the implemented policies may not produce desired effects if they don't supply equal opportunities [71]. Tanzi's [74] explanation how inequalities between groups emerge or increase give us a very good understanding of the issue; 'Political pressures often push spending away from the intended or the desirable targets and redirect it towards the general population or toward less desirable destinations. For example; spending may be diverted toward tertiary or secondary education and away from primary education; too much health expenditure may go for modern hospitals in big cities and not enough for basic health care especially in poorer areas; too much money may go for new projects and not enough for operation and maintenance expenditure, especially in less developed or poorer areas. It is a common observation that roads in poorer areas are less well maintained than roads in richer areas.'

3.5. Educational Attainment Crime and Terrorism

Collier and Hoeffler [39] stated that 'higher educational attainment should reduce the risk of political violence by encouraging political participation and channeling conflict through institutional pathways rather than violence.' Bloch [42] stated that the responsibilities of schools with respect to delinquency are over estimated because fundamental patterns of a person's behavior are already formed when he/she reached school age.

It is suggested that education should be representative of earnings potential, and that this should be related to the crime rate [78]. There is no consensus on the effects of education on delinquency. Robert D. Crutchfield; Susan R. Pitchford's study [78] point out that education is inversely related with general criminal involvement and violent crime, but does not affect property crime. Involvement in criminal activities is less when youth are participating in school because their involvement in education makes them less likely to engage in crime. Similarly, many other study's findings show significant and positive relationship with delinquency and education level [79]. However some studies found education attainment and crime rates insignificant contrary to the expectations but Ehrlich [68] came up with different proposition for this insignificant, inconsistent, and frequently positive relationship between crime and educational attainment. First of all, the effect of education on unreported crime rate should be considered and secondly, that the unequal distribution of schooling and training is more important than mean level of education which appears strongly related to the crime rate. Merton [50]

pointed out that education plays an important role. He believes this because the lack of education hinders occupational opportunities. This results in limiting the possibilities of individuals within certain groups. They cannot achieve their goal through the use of institutionalized means, and this results other inequalities. However most critiques agree that the relationship between political violence and education level is that leaders of terrorist groups being more educated than followers [25]. The reason for this was explained by Sambanis, [25], as; 'Leaders must take more risks, have a higher capacity to fulfill their missions, and be able to motivate others to fight.'

Jefferson and Pryor's study [57] of 474 hate groups in USA in 1997 looked for whether special economic conditions were related to the location of these groups. The findings of the study showed that the existence of hate groups was unconnected to all the economic variables. But they did find that there was a statistically significant positive result with education level. They concluded that the education level of people in a location is directly related to likelihood of being residence to a hate group. Although Krueger, and Maleckova [58] explored the relationship between education and participation in political violence or terrorist activities, after Jefferson and Pryor's findings, they reached a different result. They could not find any relationship as between education level and political violence. One of the variable that they included in the statistical analysis as a determinant of the participation in Hezbollah militant activities in the late 1980s and early 1990s was education. Richard Rose [80] stated that there was no relationship between violence and poverty levels for the perpetrators and also no relationship between education levels. But Christina Paxson [81] criticized their findings as with an unusual conclusion 'increasing schooling in Lebanon could actually increase the supply of suicide bomber.'

Another interesting finding of Kruger and Maleckova was that although results showed more educated people are likely to support attacks, also more educated people are just as likely to oppose those attacks. According to Paxson [81] a key question of 'whether more education and affluence at some point in the past could have prevented the current situation from emerging' was not examined. Richard Rose's study [reference 80] is a good example of the role that education plays in supporting political violence. He surveyed 1200 individuals from both side of the conflict, and asked whether they supported violent importations against the opposite side and their findings showed that the more educated people from both sides were more likely to disagree. The higher the educational level, the more were the views according to the study's results. Inferring from the results of other studies Krueger and Maleckova's results cannot be generalized to the other regions other than Gaza Strip and West Bank.

Nicholas Sambanis's [25] study looked at the effect of education on political violence although his study's mainly focused on poverty, inequality and political violence. Results of multiple regression statistical method showed that the educational level was related to political violence. His explanation to this was that education encourages political participation and directs people to solve their problems through institutional pathways rather than violence.

3.6. Unemployment, Crime and Terrorism

Another economic variable which has an effect on crime levels is unemployment. Bloch, [42] mentioned the

psychological cost of unemployment. He explained that the loss of a job lower the threshold of social inhibition, and this may make individuals more prone to be criminals. Areas with a high proportion of unemployment will experience more crime than areas with an overall low proportion of unemployment, as Ellis' study [82] proved. He implemented a time series analysis and unemployment was found as a significant effect on crime rates in Jamaica. Poor area residents have limited or no decent job networks. Most well-paying jobs had moved to other areas and available jobs were beyond the skill level of disadvantaged neighborhood residents [83]. Studies of Land et al. [84], Yamada et al. [85], Freeman [86] all indicated that unemployment was positively related to crime. They found that increasing the unemployment rate increases the crime rate.

The study of Gould, et al [87] looked at the relationship between crime and labor market conditions. They looked at the unemployment rates and estimates of the impact of changing labor market opportunities for the young, unskilled workers on crime rates. This study used violent crime as dependent variable and used percentage of workers employed in high wage industries, average wage of a non-college man, age distribution, sex, poverty level, income per capita, and income per retail worker, household income, and unemployment rate. They found that economic conditions are important determinants of violent crime. They ran a county level regression analysis. They obtained the crime data from FBI's Uniform Crime Report and the rest of the data was obtained from US census. They first examined year to year variation by performing a panel regression using annual data from 1979-1995. This Study was trying to a find significant relationship between yearly changes in wage and yearly changes in crime. Then they performed 'a ten-year difference (1979-1989) regression at the county level in order to exploit the low frequency variation in the data.' Results of the study indicated that economic conditions are important determinants of crime. Regression results showed that the wage declines of unskilled men have contributed significant amount of increase in burglary, larceny, aggravated assault, and robbery. Although the unemployment rate was found to be a significant factor, the average increase in unemployment was very small.

Therefore, the 'predicted' increase in most crimes due to the increase in unemployment is in the 1 to 2 percent range. Stephen Machin and Costas Meghir [88] explored the role of economic incentives, particularly wage distribution in crime rates. They hypothesized that in a simple economic model declining labor market opportunities are likely to increase illegitimate (criminal) activities while participation in legitimate (labor market) activity is decreasing. They used data from the police forces in the areas of England and Wales between 1975 and 1996. Time duration was chosen for this study. They found a higher increase in the crime rate in England than rest of the Europe which made the problem an important public policy issue. They used logistic regression to be able to predict probabilities of involvement in crime. One of the data sources they used was the New Earnings Survey (NES) enclosed area-level codes, largely at the county level which also matched to the police force areas. From the available data sets they were able to observe a sample of wages in each police force area. Crime data for each studied area of England and Wales were also collected. They also used the following variables as control variables; real hourly wage, share of people aged 15-24 in population, conviction rate, average sentence length, crime rate, area unemployment rates. Their finding showed a relationship between low wage labor markets and crime. Between the mid-1970s and mid-1990s, areas where wage growth was at the bottom of the wage distribution experienced faster rising crime rates. In this study all studied variables reflecting incentives for committing crimes, were found significant and they had large impacts on crime.

Machin and Costas Meghir [88] study hypothesized that inequality should influence crime positively. They used a time series analysis model, using panel data from seven of the largest Colombian cities over a fifteen-year period from 1986 to 1998. They used income distribution data from previously collected data from the survey of the "Encuestas de hogares" by another researcher Septpeber. Household income per capita, with households being weighted by size, represented the income distribution. From the same survey labor market related variables were extracted. They proposed a structural model which allowed detecting number of people living under a certain income level to have increased crime rates in that area. They used the annual rate of property crime per 100,000 as a dependent variable and for the independent variables they used Gini coefficient, homicide detection rate, guerilla and drug activity, year and city dummies, crime rate. Their findings showed that the crime rate is affected by the part of the population whose welfare lies below 80 percent of the mean of the total population. Additionally to that, the effect of inequality on crime was seen as strongly significant. Unemployment of the young population also was a positive and significant factor, which has affected the crime rate. Wages were not found to have a statistically significant relationship to the crime rate. Mansoob Murshed and Scott Gates's study [reference 71] about the Maoist insurgency in Nepal concluded that the lack of employment opportunities is an important factor that assists Maoist recruitment and retention, making life in Maoist cadres a relatively attractive option.

Some studies are less supportive of the link between crime and unemployment. Holzman's [89] study examined 29,474 men who had at least two convictions resulting in incarceration for robbery, burglary, or both. This data was drawn from the 1974 Survey of Inmates of State Correctional Facilities. Results of the study showed that labor force participation of the target population was high. They concluded that the recidivist in robbery and burglary are highly likely to have a job while they are committing their criminal acts.

Jefferson and Pryor's study [57] on hate groups could not find any connection between unemployment and likelihood of belonging to a hate group. For them, existence of hate groups was unconnected to unemployment rate. Hojma, [65] look for the effect of structure of labor in census tracks to violent crime rates, but he could not find any relationship between unemployment and high crime rates. Rather he found a robust relationship to inequity and crime rates in Buenos Aires Argentina.

Krueger, and Maleckova [58] also looked at the effect of unemployment on political violence in their study. Findings of their study indicated that these individuals, who planted bombs and tried to assassinate Palestinian mayors, were surprisingly coming from well-paying occupations. Following Krueger, and Maleckova [64], Claude Berrebi's study [59] examined the link between economic desperation, schooling and participation in terrorist activity. His secondary data analysis showed that employment status was not statistically significant. In conclusion, although findings of the studies show a discrepancy it is understood that the effect of unemployment to crime rate is an important issue.

3.7. Size of Population

A high population size increases the rates of crime [90]. Results of Arthur's study [91] showed that population size was positively associated with both violent and non-violent crimes. Kau and Rubin's [92] ordinary least

square regression analysis results indicated that the size of an area's population is related to poverty and violent crime rates. Swimmer's study utilized ordinary least square regression analysis's results and showed a positive relationship between population size, murder, rape, aggravated assault, robbery, burglary, and larceny. Blau and Blau's study [70] examined the rates of urban criminal violence and racial inequality in socioeconomic conditions, and they included population size in their analysis. Their findings showed that criminal violence is positively related to population size.

Contrary to these studies other some studies findings show no relation between crime and population size [93]. However the literature overwhelmingly confirms a positive relationship between population size and the crime rates.

3.8. Age/Percent Young

One of the demographic variables that are found to be associated with crime was age [94]. Many studies used percent of young male (population age 15-24) as a control variable to see its possible effect on crime. They stated that young people are more prone to be involved in crime. Furthermore, it is likely that different proportions of young in a city's population contribute to crime rates [95]. Nagin and Land's study [96] alleged that during certain age periods, an individual's possibility of being involved in criminal activities increases. Additionally, these age groups are also more likely to be victimized than the others [97]. The authors in their study [87] looked at the effect of age on the crime rate and they found age was significantly related to crime.

Elli's [82] study also found age structure of a population the most important single factor in criminal violence. Jacson's [98] study of multivariate regression analysis of United States cities between 1970 and 1980 found significant effects on both violent and property crime. Also he concluded that this age group had the most participation in gangs.

Fernando Reinares's study [99] on ETA terrorist organization offered an empirical assessment of ETA. The study examined militants' social and demographic characteristics from data which was derived from oral interviews with militants. The results of the paper showed that most of them were recruited between their late teens and early twenties. It can be inferred that a percentage of the age group between 15-24 might have related to terrorist incidents in a geographic area.

4. Conclusion

The main hypothesis of this study is that terrorism is related to poverty and inequality. Thus, the effects of unemployment, population, young percentage of population, and education attainment that might have an effect on the number of terrorist incidents are examined. A number of studies have found that poverty is an important determinant of crime, delinquency, regional conflict and terrorism. However some studies indicate that poverty alone is not enough to explain the crime, delinquency, regional conflict and terrorism; inequalities between groups, race, gender, or geographical areas should also be considered.

It appears from the findings of this study that poverty and the conditions leading to such poverty are related to the support and spread of terrorism in different regions of the world. It can also be inferred from the results of this study that unequal distribution of education service is contributing to the support and spread of terrorism in many countries. Higher inequalities produce isolation, misery, and aggression, which may find appearance in frequent conflicts and terrorism. There is a relationship between a high percentage of young population and higher terrorist incidents. It is likely that a different proportion of young in population of geographical areas may also contribute to crime rates. This indicates that areas with a high proportion of unemployment would experience more crime than areas with an overall low proportion of unemployment.

This study has broadens the social disorganization theory, anomie/strain theory and Marxist theory of crime by evaluating them in the terrorism area. It has been shown that what these theories are proposing in the area of crime, delinquency and conflict is also valid for terrorism. By comparing low and high socioeconomic communities, social disorganization theory found low socioeconomic status communities suffer from a weaker organizational base than higher status communities; therefore, these communities have less ability to engage in both social control and the appropriate socialization of residents [53]. Social disorganization theory explains that low economic status; high levels of racial/ethnic heterogeneity and residential mobility affect the community's level of social disorganization. It can be inferred that the lower the economic condition of within a country, the higher the possibility of terrorist incidents.

Finally, Anomie/strain theory and Marxist theory explains the reason for crime as inequalities. These theories state that the social structure effectively limits the possibilities of individuals within certain groups to achieve their goals through the use of legitimate means. For example, lower class individuals do not have the same access to legitimate opportunities, such as conventional educational and occupational opportunities, as others and this may cause strain.

This implication is this study is that poverty and inequalities within a country are related to higher terrorist incidents in that country. Ultimately, there is good evidence that lack of economic welfare might be related with the occurrence of crime. The main argument is that the criminals are more likely to come from the bottom end of the wage distribution.

References

- [1] M. Crenshaw. *Terrorism in Context*. Pensilvania: The Pennsylvania State University Press, 2001; J. Lodge (1982). "Terrorism and Europe: Some general considerations," in *The threat of Terrorism* J. Lodge. Ed. (pp. 150). Colorado: West view Press, 1982; H. J. Velter & G. R. Perlstein. *Perspective on Terrorism*. California: Wardsworth, Inc., 1991.
- [2] D. Gold. "Some Economic Considerations in the U.S. war on terrorism," *The quarterly journal*, vol. 3(1), pp. 1-14, 2004.
- [3] G. Wardlaw. Political Terrorism. New York: Cambridge University Press, 1989.
- [4] FAS. (2000). How five foreign countries are organized to combat terrorism. Retrieved January, 12, 2006, from http://www.fas.org/irp/gao/nsiad-00-085.htm

- [5] G. Martin. *Understanding terrorism: Challenges, perspectives, and issues.* CA: Sage Publications, 2003.
- [6] British Prevention of Terrorism Act (1989). Available: http://www.opsi.gov.uk/acts/acts1989/Ukpga_19890004_en_1.htm, [Jan. 27, 2014].
- [7] FBI. "Terrorism in the United States," Internet: http://www.mipt.org/pdf/TerrorismInUS1999.pdf, 1999 [Jan. 23, 2014].
- [8] Website; www.state.gov, date accessed 1\3\2015.
- [9] (Department of State, 2005)
- [10] Turkish Anti Terrorist Act (April 12th, 1991)
- [11] A. P. Schmid, & A. J. Jongman. *Political terrorism: A new guide to actors, authors, concepts, data bases, theories, and literature.* New Jersey: Transaction Books, 1988.
- [12] C. E. Simonsen & J. R. Spindlove. *Terrorism today; The past, the players, the future*. New Jersey: Prentice Hall, 2000.
- [13] R. Clutterbuck. Terrorism in an unstable world. New York: Routlenge, 1994.
- [14] Website; www.cdi.org, date accessed 1\3\2015.
- [15] Website; www.terrorism-research.com, date accessed 1\3\2015.
- [16] N. C. Livingstone. The war against terrorism. D.C.: Lexington Books, 1982.
- [17] W. Laqueur. The new terrorist. New York: Oxford University press, 1999.
- [18] B. J. Hurwood. *Society and the assassin; a background book on political murder*. New York: Parent's magazine press, 1970.
- [19] D. E. Long. The Anatomy of Terrorism. New York: The Free Press, 1990.
- [20] H. J. Velter & G. R. Perlstein. Perspective on Terrorism. California: Wardsworth, Inc., 1991.
- [21] C. C. Combs. Terrorism in the twenty fist century. New Jersey: Prentice Hall, 1997.
- [22] M. P. Carter. 'The French revolution "Jacobin terror", in *The morality of terrorism. Religious and secular justifications*. D. C. Rapoport & Y. Alexander. Eds. New York: Pergamon press, 1982, pp. 133-151.
- [23] Website, www.bbc.co.uk, date accessed 1\3\2015.
- [24] B. Hoffman. *Inside Terrorism*. New York: Columbia University Press, 1988.
- [25] N. Sambanis. Poverty and the organization of political violence," *Brookings Trade Forum 2004*. pp. 165-211.
- [26] R. Goren. The Soviet Union and terrorism. MA: George Allen & Unwin, 1984.
- [27] S. E. Atkins. Terrorism, A reference handbook. CA: ABC-Clio, 1992.
- [28] P. Gilbert. *New terror, new wars*. Washington, DC.: Georgetown University press, 2003; J. R. White. *Terrorism, an introduction*. CA: West/Wadsworth Publishing Company, 1998.
- [29] Turkish National Commission on Terrorism 2002.
- [30] D. E. Long. *The Anatomy of Terrorism*. New York: The Free Press, 1990.
- [31] R. A. Liston. Terrorism. New York: Thomas Nelson Inc., 1977.
- [32] W. G. O'Neill. "Beyond the Slogans: How Can the UN Respond to Terrorism?" presented at the Responding to Terrorism: What Role for the United Nations?, New York City, NY. 26 October, 2002.

- [33] R. Borum. "Psychology of Terrorism," Internet: http://www.ncjrs.gov/pdffiles1/nij/grants/208552.pdf, 2004 [Dec.20, 2013].
- [34] R Luckabaugh, E. Fuqua, J. Cangemi & C. Kowalski. "Terrorist behavior and US foreign policy: Who is the enemy? Some psychological and political perspectives," *Psychology*, vol. 34(2), pp. 1-15, 1997.
- [35] J. M. Post. "Notes on a psychodynamic theory of terrorist behavior," *Terrorism*, vol. 7, pp. 241-256, 1984.
- [36] M. Baregu. "Beyond September 11: Structural Causes of Behavioral Consequences of International Terrorism" in *Responding to Terrorism: What Role for the United Nations?* International Peace Academy. Ed. New York City: Chadbourne & Parke, 2002; F. Gutiérrez. "Terrorism and inequality" in International Peace Academy (Ed.), *Responding to terrorism: What role for the United Nations?* New York City: Chadbourne & Parke. 2002; M. Kučan. "Drug trafficking, terrorism, deepening poverty," Internet: http://www.un.org/News/Press/docs/2002/ga10047.doc.htm, 2004 [Oct. 11, 2013]; O'Neill. 2002, op. cit.
- [37] F. Hacker. Crusaders, criminals, crazies. New York: W. W. Norton, 1976.
- [38] S. J. Rosenstone & J. M. Hansen. *Mobilization, participation and democracy in America*, New York: Macmillan Publishing Company, 1993.
- [39] P. Collier & A. Hoeffler. *Greed and Grievance in Civil War.* Available http://www.worldbank.org/research/conflict/papers/greedgrievance_23oct.pdf, 2001 [Nov. 11, 2013]
- [40] S. Teymur. An analysis of terrorist recruitment by observing DHKP/C terrorist organization in Turkey. University of North Texas, Texas, 2003.
- [41] R. E. L. Faris. Social disorganization. New York: The Ronald Press Company, 1955.
- [42] H. A. Bloch. Disorganization; Personal and Social. New York: Alfred A. Knopf, 1957.
- [43] C. R. Shaw & H. D. McKay. *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press, 1942.
- [44] R. Akers. *Criminological Theories: Introduction, Evaluation, and Application*. Los Angeles: Roxbury, 2000; S. F. Messner & R. M. Golden. (1992). "Racial inequality and racially disaggregated homicide rates: An assessment of alternative theoretical explanations," *Criminology* vol. 30, pp. 421-447, 1992.
- [45] R. J. Sampson & W. J. Wilson. (1995). "Toward a theory of race, crime, and urban inequality" in *Crime and inequality* J. Hagan & R. Peterson. Eds. Stanford, CA: Stanford University Press, 1995, pp. 37-54.
- [46] R. J. Sampson & W. B. Groves. "Community structure and crime: Testing social disorganization theory" *American journal of sociology*, vol. 94(4), pp. 774-802, 1989.
- [47] R. J. Bursik. (1998). "Social disorganization and theories of crime and delinquency: Problems and prospects", *Criminology*, Vol. 26, pp. 519-552.
- [48] S. Schafer. Theories in criminal justice; past and present philosophies of the crime problem. New York: Random House, 1969.
- [49] E. Berman. "Hamas, Taliban and the Jewish Underground: An Economist's View of Radical Religious Militias," Available: http://dss.ucsd.edu/~elib/tamir.pdf, 2002 [Dec. 12, 2013]
- [50] R. K. Merton. (1938). Sociological structure and anomie. *American sociological review*, vol. 3(5), pp. 672-382, 1938.

- [51] W. Bonger. Criminality and economic conditions. Boston: Little Brown, 1916.
- [52] J. Messerschmidt. Masculinities and crime. Lanham, MD: Rowan and Littlefield, 1993.
- [53] M. Lynch & W. B. Groves. *A primer in radical criminology* (2nd ed.). New York: Harrow and Heston, 1989.
- [54] L. Huff-Corzine, J. Corzine and D. C. Moore. (Mar, 1991). "Deadly Connections: Culture, poverty, and the direction of lethal violence," *Social Forces*, vol. 69 (3), pp. 715-732, Mar, 1991.
- [55] L. J. Krivo & R. D. Peterson. "Extremely disadvantaged neighborhoods and urban crime," *Social Forces*, vol. 75(2), pp. 619-650, Dec. 1996.
- [56] S. Danziger & D. Wheeler. (1975). "The economics of crime: punishment or income redistribution," *Review of social economy*, Vol. 33(2), pp. 113-131.
- [57] P. Jefferson & F. L. Pryor. "On the Geography of Hate," *Economics Letters*, vol. 65(3), pp. 389-395, 1999.
- [58] A. B. Krueger & J. Maleckova. "Education, poverty, political violence and terrorism: Is there a causal connection?" Internet: http://www.nber.org/papers/W9074, May 2002 [Oct. 21, 2005]
- [59] C. Berrebi. Evidence About The Link Between Education, Poverty and Terrorism Among Palestinians. Internet: http://www.irs.princeton.edu/pubs/pdfs/477.pdf 2003[Oct. 30, 2013].
- [60] D. Lederman, N. Loayza & A. M. Menéndez. Violent crime: does social capital matter? Internet: http://wbln0018.worldbank.org/LAC/LACInfoClient.nsf/d29684951174975c85256735007fef12/f37a84 5e8a6d211185256801005504b1? 2000 [Sept.14, 2013].
- [61] E. Dansuk. *Türkiye'de yoksulluğun ölçülmesi ve sosyo-ekonomik yapılarla ilişkisi*. Internet: http://ekutup.dpt.gov.tr/uztez/dansuke.html, 1997 [Oct. 21, 2013].
- [62] E. L. Anderson. "Assessing the Risks of Terrorism," A Special Collection of Perspectives Articles by Former Presidents of the Society for Risk Analysis Risk Analysis, Vol. 22(3), pp. 401-405, 2002.
- [63] W. H. Chiu & P. Madden. (1998). Burglary and income inequality. *Journal of Public Economics*, Vol. 69, pp. 123-141.
- [64] C. R. Chester. (1976). "Perceived relative deprivation as a cause of property crime," *Crime and delinquency*, Vol. 22(1), pp. 17-30.
- [65] D. E. Hojma, (2002). "Explaining Crime in Buenos Aires: The Role of inequality, unemployment, and structural change," *Bulletin of Latin American Research*, vol. 21,(1), pp. 121-129.
- [66] B. P. Kennedy, et al. "Social capital, income inequality, and firearm violent crime" *Soc. Sci. Med.* vol. 47(1), pp. 7-17, 1998.
- [67] G. Demombaynes & B. Ozler. *Crime and Local Inequalities in South Africa*. Available: http://wdsbeta.worldbank.org/external/default/WDSContentServer/IW3P/IB/2002/12/14/000 094946_02120504013794/Rendered/PDF/multi0page.pdf, Nov. 2002 [Nov. 1, 2013]
- [68] I. Ehrlich. (1973). "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation," *The Journal of Political Economy*, Vol. 81(3), pp. 521-565.
- [69] E. Naumayer. "Is Inequality really a major cause of violent crime? Evidence from a cross-national panel of robbery and violent theft rates." Internet: http://econpapers.repec.org/paper/wpawuwple/0312002.htm, 2004 [Sept. 29, 2014].

- [70] J. Blau & P. M. Blau (1982 Feb.). "The cost of inequality: metropolitan structure and violent crime," *American Sociological Review* Vol. 47 pp. 114-129.
- [71] S. M. Murshed & S. Gates. Spatial horizontal inequality and the Maoist insurgency in Nepal. Paper presented at the unu/wider Project Conference on Spatial Inequality in Asia United Nations University Centre Tokyo, 28-29 March 2003.
- [72] J. Fearon & D. Laitin. (2003) "Ethnicity, Insurgency and Civil War", *American Political Science Review*, 97, 1: 75-90
- [73] A. Sen, *Economic Policy and Equity: An Overview*. Paper presented at the Conference on Economic Policy and Equity in Washington, DC., June 8-9, 1998.
- [74] V. Tanzi. Fundamental Determinants of Inequality and the Role of Government, 1998. Retrieved January, 2, 2014, from www.imf.org/external/pubs/ft/wp/wp98178.pdf
- [75] R. Solomon & M. C. Murphy. *What is justice; classic and contemporary readings*. New York: .Oxford University Press, 2000.
- [76] D. A. Stratuss. The illusory distinction between equality of oportnity and equality of result. In N. Devins & D. M. Douglas (Eds.), *Redefining Equality*, NY.: Oxford University press, 1998.
- [77] J. V. Ríos-Rull. The Research Agenda: José-Víctor Ríos-Rull on the determinants of inequality, 2001 Retrieved February 10, 2006, from http://www.nyu.edu/econ/sed/News51.htm#agenda; R. Gunatilaka & D. Chotikapanich, D. Inequality trends and determinants in Sri Lanka 1980-2002: A shapley approach to decomposition, 2005 Retrieved February, 22, 2014, from http://www.cshdelhi.com/resources/conference%20Liberalization/GunatilakaChotikapanich.pdf
- [78] R. D. Crutchfield & S. R. Pitchford. Work and Crime: The Effects of Labor Stratification. *Social Forces*, 76(1), 93-118, 1997.
- [79] J. P. Allison. "Economic Factors and the Rate of Crime," *Land Economics*, Vol. 48(2), pp. 193.-196, 1972; L. Mcpheters. "Criminal behavior and the gains from crime," *Criminology*, vol. 14(1), 137-152, 1976; T. F. Pogue. "Effect of Police Expenditures on Crime Rates," *Public Finance Quarterly*, vol. 3(1), pp. 14-44, 1975.
- [80] R. Rose. *Northern Ireland Loyalty Study*. Michigan: Inter-University Consortium for Political Research, 1968.
- [81] C. Paxson. Comment on Alan Krueger and Jitka Maleckova, "Education, Poverty, and Terrorism: Is There a Causal Connection?" 2002, Retrieved January, 15, 2014, From http://www.wws.princeton.edu/rpds/downloads/paxson_krueger_comment.pdf
- [82] H. Ellis. *Identifying crime correlated in a developing society; A study of socioeconomic and socio demographic contributions to crime in Jamaica*, 1950-1984. New York: Peter Lang Publishing, 1991.
- [83] R. F. Sullivan. (1973). "The Economics of Crime: An Introduction to the Literature," *Crime and Delinquency*, vol. 19(2), pp. 138-149, 1973; L. Wacquant & W. J. Wilson. "The cost for racial and class exclusion in the inner city" *Annals of the American Academy of Political and Social Science*, Vol. 501, pp. 8-25, Jan., 1989.
- [84] K. C. Land, P. L. McCall, & L. E. Cohen. Structural covariates of homicide rates; Are there any invariance across time and social space? *American journal of sociology*, 95(4), 922-963, 1990.

- [85] T. Yamada, T. Yamada & J. M. M. Kang.). *Crime rate and the condition of the labor market; A vector autoregressive model*, 1991. Retrieved November, 22, 2014, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=338829
- [86] R. B. Freeman. The labor market. In J. Q. Wilson & J. Petersilia (Eds.), *Crime*. San Fransisco: ICS., 1995
- [87] E. D. Gould, B. A. Weinberg & D. Mustard. *Crime rates and local labor market opportunities in the United States: 1979-1995*, 1998. Retrieved December, 23,2005, from http://www.econ.ohiostate.edu/pdf/weinberg/crimeweb.pdf
- [88] S. Machin & C. Meghir. "Crime and Economic Incentives," *The Journal of Human Resources*, vol. *XXXIX*, pp. 959-982, 2004.
- [89] H. R. Holzman. Criminology: The serious habitual property offender as moonlighter: An empirical study of labor force participation among robbers and burglars. *Journal of Criminal Law & Criminology*, 73, 1774–179, 1982.
- [90] S. F. Messner. "Income inequality and murder rates: Some cross national findings," *Comperative social research*, vol. 3, pp. 185-198, 1980.
- [91] J. A. Arthur. "Socioeconomic prediction of crime in rural Georgia," *Criminal justice review*, vol. 16(1), pp. 29-41, 1991.
- [92] J. B. Kau & P. H. Rubin. "New estimates of the determinants of urban crime," *Annals of Regional Science*, vol. 9, pp. 68-76, 1975.
- [93] C. R. Huff & J. M. Stahura. "Police employment and suburban crime," *Criminalogy*, vol. 17(4), pp. 461-470, 1980.
- [94] OJJDP (Office of juvenile justice and delinquency prevention). "Juvenile offenders and victims. A focus on violence." Internet: http://ojjdp.ncjrs.gov/ojstatbb/nr2006/downloads/NR2006.pdf, 1996 [Jan. 12, 2014].
- [95] L. Baron. & M. A. Straus, M. A. (1988). "Cultural and economic sources of homicide in the United States," *Sociological Quarterly*, vol. 29, pp. 371-390, 1980.
- [96] D. S. Nagin & K. C. Land. "Age, criminal careers, and population heterogeneity; Specification and estimation of a Nonparametric, mixed Poisson model" *Criminology*, vol. 31(3), pp. 327-362, 1993.
- [97] L. E. Cohen & K. C. Land. (1987). "Age structure and crime; symmetry vs. asymmetry, and the projection of the crime rate through the 1990s," *American sociological review*, Vol. 52, pp. 170-183.
- [98] P. I. Jacson. "Crime, youth, gangs, and urban transition, The social disclosure of postindustrial economic development," *Justice Quarterly*, vol. 8(3), pp. 379-397, 1991.
- [99] R. Reinares. "Who Are the Terrorists? Analyzing Changes in sociological profile among members of ETA," *Studies in Conflict & Terrorism*, vol. 27(6), pp. 465–488, 2004.