



Correlates of Criminal Behavior

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Abstract:

This review paper traces the ardently debated correlates of criminal behavior and its associated factors. A short overview of crime and criminality has been discussed. Systematic relationship of crime and criminal behavior is enlightened that how certain factors within a system including ecological, macro-level or social and micro-level or individual factors affect an individual personality that eventually will contribute to criminal acts such as robbery, homicide, child abuse and sexual assault etc. Emphasis on different mechanisms established between an individual and environmental factors settled during life developing process has been reviewed that may cause a crime to occur. Positive or negative correlations between crime and other factors such as biological, religiosity, political and psychological factors have been observed. The findings of these correlates on an individual and society exposed outcomes of crime and criminal activity.

Keyword: Crime, Causes of Criminal Behavior, Correlation of Criminal Factors and Crime.

1. Introduction

Crime is an action or an omission against the norms of a society that is outlawed and punished by the law in the form of fine or imprisonment. Common examples are homicide, rape and child abuse, robbery, drunken driving and failure to tax payments. Nevertheless, many renowned criminologists like Sampson and Laub (1993); Gottfredson and Hirschi (1990) have just studied and observed that concentrating on essential features of all criminal behaviors is the key aspect of understanding crime rather than emphasizing on particular criminal activity. As

an alternative, we are required to identify the common factor in all of types of crime rather than understanding them as separate crimes. However, in past most of the crime researches have been conducted on the politico-legal factors instead of behavioral description [1, 2].

The behavioral description or characterization of crime is centralized on criminality in the form of certain personality sketch or profile that may result into most frightening categories of crimes including murder or assault etc. The purpose of all criminal behaviors is to gain material or symbolic resources by using force, deception or secrecy. According to Gottfredson and Hirschi (1990), criminality is a smart

deliberated and intentional behavior described as self-interest, insignificance towards grief and desires of others and little self-discipline. Spontaneous people are more attractive towards smart behavior of criminality by having instant satisfaction via comparatively easy or modest tactics that normally can be dangerous and thrilling. As a result, they cause pain or distress to the victims by contributing insufficient and miserable benefits as they frequently affect the family and friends, and professions. Therefore, it is declared that the variability of absenteeism of an individual in a sample is same as those of serious assault, drug use and vehicle accidents. In this scenario, criminality has a tricky association with other legal crimes. For example, some criminals simply may represent themselves as business people whose dealings are in the form of illegal activities like tax cheats, prostitutes and drug suppliers etc. These types of criminals psychologically may not be differentiated from other ordinary citizens who more or less may commit small legal crimes once throughout their lives. However, a large number of legal crime is committed by individuals through common criminal scheme [2].

Crime in this regard describes a wide range of criminal activity with the fact that each individual tends to be specialized not only in one type of crime but also has the tendency to be stable for a long period of time in committing crime with increased severity. Such as executives as compared to others are more impulsive by being self-centered and careless when committing white collar crimes. Human resources for which crime is committed, can be of material, symbolic or

hedonistic value. For example, theft crimes involve property as material resource taken from an individual without his or her will. Similarly, those involve in committing narcotics trafficking and gambling crimes, try to gain money as a material resources. Sexual assault and drug abuse crimes involve hedonistic resources to obtain pleasurable feelings. Likewise, political crimes involve terrorism or election deception to have power or prestige as symbolic resources [2].

Correlations of Criminal behavior discover the links between specific crimes and non-criminal factors. These non-criminal factors are identified through study of criminology based on crime dynamics that involve the use of correlational data. The correlational data help to identify certain factors associated with specific criminal behavior. Such criminal behavior leads to cause specific crimes that can leave diverse emotional, mental, physical and material effects on the crime victims [1]. These effects are terrible and more tragic that indirectly damage the society. Prevention of crime through criminal justice system interfere our private lives by threatening personal freedoms and individual rights. Moreover, crime persuades mistrust, bias and destruction of social unity [2].

2. Systematic Relationship of Criminal Factors and Crime

Systematic process of nature is a composite of individual, ecological and societal factors and their interactions lead to criminal behavior during life development. More simply, interactions of our personal behaviors,

physical environment and interactions with other institutions, groups and people can intensely influence the intellectual, physical and emotional attributes that we develop. This systematic connection can affect the transmission of traits from generation to generation that are associated with increased crime rates. To understand the systematic association of criminal factors that cause crimes, we must know the individual components of that system and their effects as follows;

2.1. Geographical or Ecological Factors

Geographical or ecological factors involve associations of people and their activities with physical environment including topography, crowding, population, neighborhood quality and residential mobility, bar and alcohol density, temperature and pollution, tourist and recreational prospects [1,2]. These elements as described in table 1, can affect the physical and emotional development of people lives as well as their feelings the way they experience from moment to moment, such as to feel fear or anger or being in dark lonely parking portion or tranquil park contrary to a crowded subway.

Ecological factors further provide that what sort of opportunities can exist for a crime to occur as they involve the interactions of people with the ways directed by physical environment. In a physical setting, human routine activities can have significant effects on crime opportunities i.e. when and where to happen. A crime can only occur in the absence of capable guardianship such as physical barriers or people where a motivated offender meets a property, illicit substance, victim or

behavior [2].

2.2. Macro-level or Societal Factors

Macro-level or societal factors describe the systematic interactions between different social groups. They explain how a society is structured through relative distribution of the population and flow of information or resources or people among the groups. Societal factors incorporate the diversity and heterogeneity of different groups of society and their beliefs, behaviors and economic relations, such as racial, cultural, ethnic and prolific as an immigrant [2].

Countries with diverse ethnic/racial geographical areas are subjected to higher crime rates as compared to uniform areas with homogeneous populations. However, this phenomenon is different for different countries. Likewise, immigrants found to have higher crime rates among such populations. Crime rates based on immigrants vary with respect to the country of origin as some regions have lower while the native born have higher crime rates [1]. Both the concepts about the immigrants to have tendency to commit crime and to commit more or less crime than that of native born vary geographically. For example, census data within the United States show less number of imprisoned immigrants for a crime than those who were native born residents. The census data count for total number of immigrants residing both legally and illegally in an area irrespective of their nationality status [4].

AFFECTS OF	ON		
	<i>Ecological Factors</i>	<i>Microlevel Factors</i>	<i>Macrolevel Factors</i>
<i>Ecological Factors</i>	X	<ul style="list-style-type: none"> -Environment reinforces (& perhaps counteracts) temperamental propensities. -Pollution hazards degrade learning, cause hyperactivity, etc. -Exposure to danger increases aggressiveness and/or fear. -Deviant models provide opportunities to learn deviant behaviors. -Criminal opportunities increase temptation. -Overcrowding may increase hostility. 	<ul style="list-style-type: none"> -Physical resources provide economic opportunities. -Geographic barriers reinforce class/ethnic boundaries and self-interestedness. -Ecological interactions drive population-level evolution of culture.
<i>Microlevel Factors</i>	<ul style="list-style-type: none"> -Routine activities of individuals affect opportunities for crime. -Individuals can modify local environment. -Individual historical and genetic variation assures some variation between the abilities, motivation, and strategies of interacting individuals. 	X	<ul style="list-style-type: none"> -Individual variation provides grist for evolutionary processes. -Individual actions change average payoffs for criminal and noncriminal behaviors. -Individuals form interest groups to change government.
<i>Macrolevel Factors</i>	<ul style="list-style-type: none"> -Government modifications of built environment channel population movement and change location of criminal opportunities. -Sociocultural heterogeneity creates more opportunities for crime. -Weak regulation or guardianship creates opportunities for crime. 	<ul style="list-style-type: none"> -Cultural beliefs influence parenting styles and parental behavior. -Economic inequality creates pressures for crime via poverty and greed. -Poverty increases child developmental risks by creating strains on parents, & degrading education and health care. -Unequal access to information and education creates power inequities. 	X

Table 1: Examples of important direct effects that can produce interactions among ecological, micro-level, and macro-level factors associated with crime [2].

On the other hand, socioeconomic factors measure three variable of socioeconomic status including occupational level, years of education and income (or property) that correlate negatively with large crime rates other than illegal drug use. Crime has an inverse relationship probably with higher

parental socioeconomic status whereas higher unemployment frequency and unstable employment have relatively positive correlations with criminality [1, 24]. Similarly, it is considered that low socioeconomic status correlates positively with higher level of anxiety that eventually effects the mental and psychological stress. The increase in stress level will intern correlate with the tendency of committing crime [25].

The idea of low level of income and education,

high income inequality and population under the poverty line is inconsistent and shows a positive relationship with crime rate in said area [1]. A study from Sweden completed in 2013 shows that neighborhood deprivation has little effect on crime rate as compared to observed and unobserved family or individual level factors living in economically deprived areas have higher correlations with crime rates [26]. According to a World Bank study, “inequality and crime rates have positive correlations within and specifically between countries that reflects the interconnection from inequality to crime rates, although other determinants of crime are controlled” [27].

2.3. Micro-level or Individual Factors

Crimes are actually committed by the individuals and the factors always have association with criminal act. Crime can have involvement of other ecological and societal factors but the individual factors are measured as the central cause of crime. The individual or micro-level factors defines the driving force behind a person's actions that motivates him/her to commit a crime. Motivation is not limited only to what “I want” but it includes what a “person could,” what “it will cost,” what “he/she will get,” and “if it is wrong or right.” Motivation involves the process of goal formulation, assessment of costs and benefits, and application of internal controls on behavior. All these components may vary among the individuals, time and situations. For example, sometimes rational decision making and other times emotions like greed or lust or anger can influence a person's motivation. Similarly, some people have more motivation value for different objects or activities and some for cost or benefit calculations.

Motivation becomes more effective factor if opportunity is available for a person to commit a crime. Opportunity can influence the motivation and lay people would consider the motivation if opportunity as an offer is provided to them. As a consequence, both motivation and opportunity enhance the tendency of person at a particular time to commit crime. Some people is motivated with criminal opportunities offering extremely small rewards while others exploit if provided relatively enormous criminal opportunities and few do not commit crime irrespective of rewards [2].

The work of Cohan and Machalek (1988) on evolution of crime and criminal strategies states that disadvantage as well as advantage can motivate people to commit crime. The past institutional scandals show that people take the advantage of prominent skills and status that can provide profitable criminal opportunities and motivate them to commit crime without fear of being caught and punished. Most of politicians and business people are less impulsive or thrill seeking but they are more motivated than street criminals by taking and offering enormous opportunities of bribes. On contrary, scientific scandals are infrequent with no motivation or opportunity and the main profit to obtain is status e.g. publishing papers. Data forging and plagiarism are included in criminal activity where the fake experiment is replicated and complain is placed by the victim of plagiarism if the idea of data is important. Publishing of faked paper is a criminal act that is highly public because the name attached on the paper is easily caught.

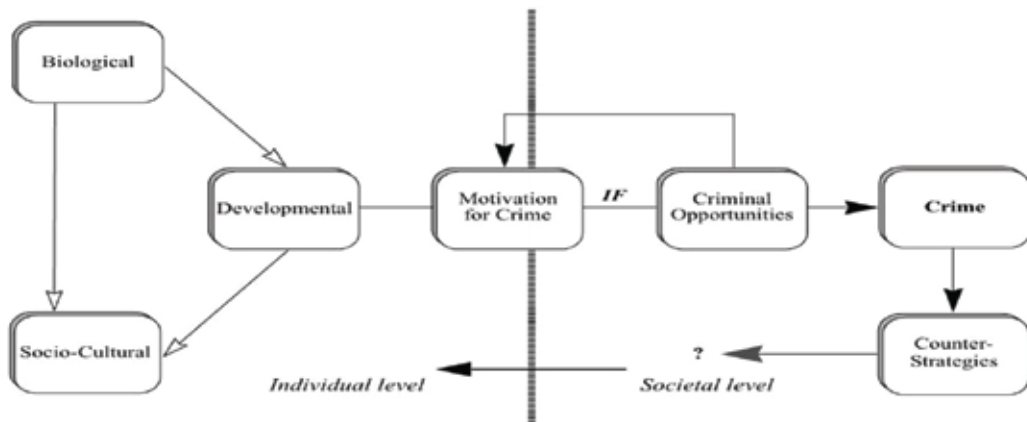


Figure 1: Systematic interactions between individual and societal factors that cause crime [2].

Individual factors are hypothesized to determine motivation behind the criminal act of a person. Motivation is the outcome of interactions between socio cultural, biological and developmental factors at a particular time over a course of person's life. Similarly, interactions between socio-cultural and biological factors result into psychological factors. However, some criminologists do not consider simple criminal behavior as reasonable description of motivational factors. Interactions between socio-cultural, biological and developmental factors can affect the motivation force that obtain resources by using fraud, force or secrecy in the presence of an opportunity. A crime can occur if the person has required tendency to commit it in the presence of sufficiently high motivation and an attractive opportunity. The interactions between three types of factors i.e. individual factors, motivational and opportunity associated with criminal act are illustrated in figure 1.

3. Correlates and Causes of Criminal Behavior and Crime

What influences an individual to commit a

crime and how an individual becomes a criminal who is grown up in a stable adoptive home. The answer of this question depends on various factors that are highly correlated with criminal behavior including early age involvement as projecting subsequent, youthfulness and gender [1,2]. Likewise, inequality, poverty, inadequate socialization and disrupted families all appear to be significant correlates of crime in the presence of criminal opportunities. Such generalized findings may support the primary correlates of crime but still the causative importance and relationship between different variables remain significant argue among several academic disciplines and criminologists. Issues regarding variable interactions and their level of analysis should be considered. As many variables are inter-correlated so it is not easy to solve this problem with better correlational studies. Such as African Americans who engage in extreme criminal behavior, are enormously affected by racial discrimination, family disruption and poverty. The correlation data alone is not sufficient to identify the most important variable or direct cause of crime. To understand the correlates of criminal behavior, generational analysis of key causes of crime is necessary as followings;

3.1. Importance of Early Life Practices

Early life experiences can strongly influence in the development of individual's criminality as these characteristics are obtained sequentially. The growing cognitive, emotional, physical

and social effects of sequential events begin from the time of development and result into characters or individualities at any juncture of life as described in detail in figure 2.

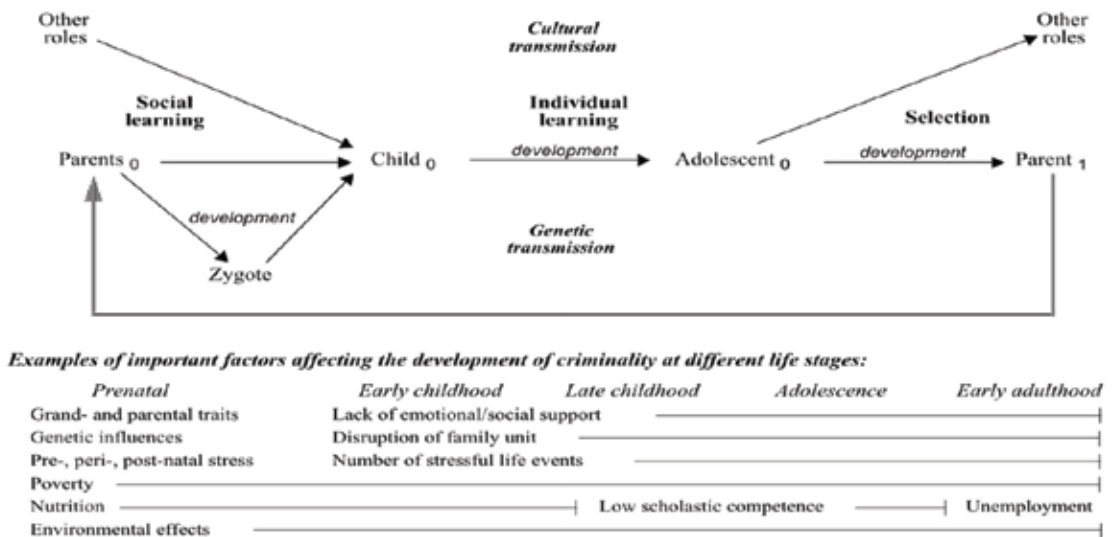


Figure 2: Human life cycle, acquiring traits that influence individual behavior over life time depends upon interactions between genes, social, environmental factors, and individual learning during development, examples of important factors correlated with development of criminality at each stage [2].

Some individuality is characterized by self-interest and careless towards the need and griefs of others to obtain resources by using force, fraud or deception [2]. tendencies and parent's ability to manage with the problematic behavior of a child. According to Werner and Smith (1992), economic hardships, serious caregiving shortfalls, family disruption, and neighborhood with high crime rates put the children at higher risk of crime [2].

Some basic and significant developmental factors associated are parenting, family supervision, education achievement, poor diet, maternal smoking in pregnancy, pre and postnatal stress, birth complications and low birth weight [1,2,8]. Environment as an important factor may increase or delay a child's effort to survive with irregular Parent child relationship and poor family management are strongly associated with antisocial behavior of a child e.g. crime. Children with low parental monitoring, larger family size or birth order, marital or family discord, drug and alcohol usage in family, and maltreatment, tend to have low parent child relationship and are more susceptible to poverty and crime [1,8,31]. For example, a child grown up in a disrupted family where alcohol and drug usage is common may have

more exposure to high alcohol, illegal drug use and sexual intercourse at early age. These correlated factors may put them into social isolation, gang membership or criminal groups and multiple sexual partner in their adolescence [1]. Similarly, children associated with factors such as school bullying and disciplinary problems, nightly enuresis, low grade, absenteeism school, and dropping out of school, are unlikely to succeed in school and exposed to poverty [1,8,9].

These factors are often transmitted from generation to generation and the associated risks can be shielded by other factors like educated mothers, presence of caregiving in the form of older siblings or grandparents, and easy temperaments. The associated risk and protective factors of these antisocial behavior fluctuates depending on life stage, social environment and gender [2].

3.2. Biological Factors

The second and third decades of life are most frequently involved to cause crime. Males as compared to females are more exposed to commit violent crime and reoffend. They are more involved in property crime excluding shoplifting as it is committed equally by both genders. Criminals have low arousal measures such as low skin conductance and heart rates. Particular criminality such as sexual crimes are positively correlated with muscular body type [1]. Genetic factors such as age and sex both strongly correlates with criminal behavior. Criminals found to have low 5-HIAA levels and low monoamine oxidase activity named as “warrior gene” which are strongly associated with violent crimes [1,4]. Additionally, gene CDH13 is earlier associated with increased risk of violent crime such as substance of abuse [4]. Apparently, all of these propensities are correlated as majority of the individuals in

Finland commit violent crime under the impact of alcohol or drugs. Though, genetic profile is unlikely formative but it can increase the possibility of crime in the presence of correlated factors. According to Ferguson statement, our genes, brain anatomy and biology can influence a large portion of our behavior in relation with violence or aggression. On the other hand, it would be a massive overstatement if to call these alleles as “violence genes”. However, it becomes harder to control violent urges when these genes are present in combination with other associated factors but they definitely do not encode a life of crime [5].

3.3. Religion

A negative correlation has been found between religiosity and criminality such as a meta-analysis in 2001 stated that criminal behavior of an individual can be moderately affected by religious beliefs and activities but the assessment of that studies of religion on crime impact varied because of differences in theoretical and practical approaches. This suggested that the religion practiced in different ways that may influence the results of findings [10]. In addition, it is stated by few researchers that influence of religion is not liable but most of them especially youth have supported the effects that change by quantity and type of offense, social or religious context, therefore, signifying complex correlation between religion and criminality. Participating in religious measures was found to be a determined and independent inhibitor of crime in adult when other factors including social ecology and secular constraints are monitored [11].

An individual is less likely to be associated or involved in criminal activities who has high religious saliency and attends or highly

involved in religious services [1,10]. Similarly, people are less likely to have criminal behavior than those who do not contribute to traditional religious beliefs [1,13]. Another 2012 study proposed that crime rate decreases with belief in hell and increases with belief in heaven, and suggested them stronger correlations than other factors identical to income inequity or national prosperity [12]. Different researches and studies concluded that no sufficient data has been found to indicate any negative correlations between religion and crime and drug use [13,14]. Similarly, any possible criminal factors may not be correlated entirely to relatively nonreligious groups or atheists who have been found with lower imprisonment rates than common public in the United States. Likewise, different types of low religious groups also have not been distinguished with criminal correlations [15].

3.4. Political Beliefs

According to a 2016 study, political beliefs have been found to be correlated with non-violent crime between white individuals e.g. white women. This suggested that non-violent criminal behavior can be positively associated with some groups as liberal self-classification as compared to conservative self-classification [16].

3.5. Psychological Behaviors

Basic psychological factors associated with criminal behavior are childhood conduct disorder and adult antisocial personality disorder [1, 17]. Other correlated factors include minor and clinical depression, family depression, attention deficit hyperactivity disorder, schizophrenia and suicidal tendencies [1,18]. According to 1995's American Psychological Association report, correlation between IQ and crime was regarded as small as -0.2 and appeared to be reduced when other

typical sociological correlates were controlled [19]. Arthur Jensen who cited data in his book "The g Factor: The Science of Mental Ability (1998)" and stated that IQ and crime was negatively associated among races between 80 – 90.

Learning disability such as slow reading development may be an associated factor with crime that shows a considerable difference between IQ and academic performance [1]. However, it has been noted that the IQ effect is proportional to socioeconomic status and is not easy to control it though many methodological considerations are being run [20]. It is evident that other prefunding factors including substance abuse and wellbeing that prohibit fundamental interpretation are applied to simplify this small relationship [21]. Based on recent meta-analysis, populations only with higher risk such as poverty are found to have this relationship without direct effect and fundamental explanation [22]. Similar longitudinal study represented that school performance can mediate this relationship [23]. A number of personality traits including impulsivity, sensation seeking, low self-control, psychoticism, low altruism and empathy, and childhood aggression [1].

3.6. Analysis of Biosocial Criminology and Environmental Factors

Biosocial criminology as an interdisciplinary field explore both biological and environmental factors in order to describe crime and antisocial behavior. Whereas, sociological theories have ruled modern criminology and potential assistance of genetics, evolutionary psychology and neuropsychology have been recognized by biosocial criminology [32]. Violent behavior persuaded either by severe, acute or chronic low-grade stress, has correlation with

abnormalities in three prime monitoring systems of body as follows;

- Serotonin systems
- Catecholamine systems
- Hypothalamic pituitary adrenocortical axis [33].

According to environmental theory that exposed the connection between crime rate and lead exposure, has been associated with increase in former and later causes of crime. United Nation News Center published a report in 2011 and stated that removing of the leaded petrol from the developing countries with the effort of United Nations resulted into annual benefits of \$2.4 trillion, fewer premature death of 1.2 million, developed intellect and fewer crimes of 58 million. The same study was done by the California State University and then the executive director Achim Steiner of U.N. Environment Program (UNEP) discussed that the elimination of leaded petrol is a great achievement and effort with similar removal of foremost deadly diseases which has often fluttered the attention of media and global leaders [34].

4. Conclusion

This review paper exploits the correlation between criminal behaviors and their associated factors. Different researches and studies argued that ecological approach should be considered to understand crime. It explained that how this approach can be useful to describe association between ecological, micro and macro-level factors and criminal behavior developed over the time. The interaction and evolution of these behavior can influence individual development across generation. Applying the conceptual and well established techniques of biological knowledge provide a general view of human behavior. This sequentially explains the crime as cultural trait that developed as a result of

dynamic interactions between individuals and physical environment. Evolutionary and ecological dynamics should be considered for crime control strategies analysis. Such dynamics including protection and prevention strategies are important for crime control but will have partial efficiency. To improve social assets of adult, preventive strategies seem to be promising with limited control for crime as it is difficult to change the major behavioral styles of individuals developed in early life. From a theoretical point of view, strategies developed to describe childhood origins of crime across many generations seem to be proficient. Considering the need and suffering of others, the culture of our society should be changed by becoming less impulsive and dependent on intimidation.

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