Personality Traits predicting the Delinquency among Laborer Adolescents

Irum Naqvi and Anila Kamal

Quaid-i-Azam University, Islamabad, Pakistan

The present study was intended to know whether personality traits predicting the delinquency among laborer adolescents. The research also aimed to see laborer adolescents with different demographic variables (i.e., age, education, labor type, and duration of labor) are differing on the self-reported delinquency (SRD) and Informant-reported delinquency (IRD) scales (Naqvi & Kamal, 2008) and Eysenck Personality Questionnaire (EPQ-Junior) (Naqvi & Kamal, 2010). The study was carried out on a sample of 250 laborer adolescents working in workshops, general stores, restaurants, beggars, and trash collectors. Findings revealed self-reported delinquency and informant-reported delinquency, and personality traits i.e., extraversion, psychoticism, and neuroticism are positively related with each other. Multiple Linear Regression analysis results revealed high predictability of personality traits i.e., extraversion, psychoticism, and neuroticism traits with self-reported delinquency. The adolescents with less education have more delinquent tendencies. More delinquency is reported with increase in age and duration of labor among laborer adolescents. Labor type has nonsignificant effect on delinquency among laborer adolescents.

Keywords: self reported delinquency, informant reported delinquency, extraversion, neuroticism, psychoticism, lie, child labor

Child labor is a increasing in all over the world and especially the under developed countries like Pakistan. UNICEF (as cited in Dottridge & Stuart, 2005) estimated all around the world, approximately 350 million children are child laborers. Child labor is, generally speaking, work for children that harms them or exploits them in some way (physically, mentally, morally, or by blocking access to education and normal healthy growth). Child labor is work which impairs the health and development of the children (Mukherjee, Coondoo, Khasnabis, & Banerjee, 2005).

The last available data about child labor in Pakistan is of 1996 (as cited in Mirza, 2010) and it revealed that there were 3.3 million child laborers in Pakistan, out of which 2.4 million (73 per cent) were boys and 0.9 million (27 per cent) were girls. Male child laborers outnumbered female child laborers in both urban and rural areas. In Punjab, there were about 1.9 million child laborers, which was about 60 per cent of total child labor in the country. The Khyber-Pakhtunkhwa had about one million child laborers while the lowest figure was for Balochistan. Children were mostly employed in unskilled occupations like farms, sales and services, and craft related trades. The most common reasons given by parents or guardians for letting their child work were to supplement household income, pay outstanding debt, and assist or help in household enterprise (Mirza, 2010).

As per law in Pakistan, a child under age 15 years can not be employed (Employment of Children Act, 1999). There are many factors that are considered to be responsible for child labor like low productivity and prevalence of poverty (Tahir, 2011). Although, child labor law is present but due to its poor implementation serious problems are there in Pakistan (Darakhshan, 2011).

Tahir (2011) stated that in Pakistan one-third of the working children are literate, which shows that mere completion of primary education is not an successful prevention to child labor. Pakistan has recently passed laws regarding child labor, but those laws are universally ignored, and some 11 million children, aged four to fourteen, keep that country's factories operating, often working in atrocious and squalid conditions. People prefer young children labors because they can be easily manipulated, and demand fewer amounts as their salary and have no bargaining power (Tahir, 2011).

Mortimer (2003) suggested that drug and alcohol use, lower grades, and poor mental health are the worst outcomes of labor work by adolescents. Employment and hard physical work by young adolescents cause negative behavior consequences like anger, aggression, and delinquency (Gould, Weinberg, & Mustard, 2002; Huiras, Uggen, & McMorris, 2000; Lustig &Liem , 2010; Wadsworth, 2006).

It is the state responsibility to provide security and ensure education to children as their fundamental right. Some efforts are made on Governmental and Non-Governmental level to eradicate child labor but still much more is required (Darakhshan, 2011).

Tahir et al. (2011) mentioned the total recorded crime in 2008 and 2009 was 374,076 and 383,383 respectively, with an increase of 2.487%, as against 380,737 and 419,690 in 2010 and 2011 respectively. The comparison of yearly crime statistics of Punjab exposed 47.34% rise in reported theft cases and 69.62% increase in burglary incidents, as 24,704 theft cases were reported in 2007 as compared to 36,400 in 2011, while 8,704 incidents of burglary were lodged in 2007 and 14,764 in 2011 (Ahmad, 2012). Unfortunately, no record is available for unreported crime (Tahir et al., 2010)

In literature, there are evidences of positive relation between poor/no schooling and education and

Tahi
can crime in
pg). respectiv
be 380,737
and comparis
bor 47.34% ri

Correspondence concerning this article should be addressed to Irum Naqvi, National Institute of Psychology, Quaid-i-Azam University, Islamabad. Email: irumnaqvi2006@gmail.com

delinquency (Eklund, Liljeberg, & Klinteberg, 2011; Haydon, 2010; Siennick & Staff, 2008). The causal link between education and juvenile delinquency is relatively complex. Aggressive behavior in children may cause difficulties in the classroom. Such difficulties, in turn, may result in unfavorable evaluations from teachers or peers that might result in delinquency among adolescents (Basch, 2010).

According to Kratcoski and Kratcoski (as cited in Zenzile, 2008) delinquent act is a distinct form of crime in a sense that crime is considered an act that breaks criminal code, that is created by society through written law, whereas, delinquency and deviance are acts that merely break 'cultural law' (norms). Shields and Clark (1995) states that "The legal concept of delinquency simply states which type of behavior is forbidden by law, in which state, for which age group of children dominant culture within which a given child moves" (p. 96).

Self-report measures are more helpful to show a more representative picture of the occurrence and distribution of delinquent behavior (Cornell & Farrington, 1996). Moreover, to overcome the problem of natural reluctance to admit more serious offences, with the self-report measures the Informant-reported measures were used in many studies (See for example Elliot & Ageton, 1980; Hindelang, Hirschi, & Weis as cited in Terman, 1995; Giordano, 1992; Kulik, Stein, & Sarbin as cited in Rowe, 1985). Informant reported delinquency provides valid and reliable check over self-reported delinquency (Connell & Farrington, 1997; Giordano, 1992; Hart & Peterson, 1977; Huizinga & Elliott, 1986; Naqvi & Kamal, 2008).

Personality factors have been an area of interest in research on delinquent and antisocial behavior. There are number of researches provide the link between personality traits like extraversion, psychoticism and neuroticism with criminal behavior or delinquency (Brathwaite & Warren, 2008; Chabrol, Leeuwen, Rodgers, & Séjourné, 2009; Holsinger & Holsinger, 2005; Revelle & Oehlberg, 2008; Sampson & Lamb, 1993).

According to Eysenck's theory (1975) three personality dimensions are associated with delinquent behavior: Extraversion (E), neuroticism (N), and psychoticism (P). Subjects with more extraversion trait of personality are more difficult to condition and consequently have more difficulties in inhibiting their antisocial tendencies (Egan, 2009; Fonseca & Yule, 1995). Subjects with high scores on neuroticism tend to repeat antisocial behavior because of anxiety that is believed to act as a drive which leads to the antisocial and criminal behavior (Fonseca & Yule, 1995; Séguin, 2004). Subjects having more psychoticism trait in personality are more prone to delinquency because of their absence of guilt and insensitive toward people's feelings (Fonseca & Yule, 1995; Heaven, Newbury, & Wilson, 2004).

A review of the literature by General Arousal Theory of Criminality (as cited in Siegel & Walsh, 2008) explained

the relationship between temperament, delinquency, sociopathy, and criminal behavior. Crime rapidly increases in the early teens, reaches a peak, and then declines throughout life. Hirschi and Gottfredson (1983) published a provocative paper maintaining that the age effect is invariant across social and cultural conditions. It is by now common wisdom that delinquency escalates rapidly as individuals enter their teen years (Burfeind, Burfeind, & Bartusch, 2011; Mersky, Topitzes, & Reynolds, 2011).

A large number of researches provide evidences that attitudinal and individual difference variables like personality are concerned with antisocial and delinquent behavior (e.g., Camilla, Francesco, & Frank, 2010; Fontaine, 2007; Haan. Prinzie & Dekovic, 2009; Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006; Henry, 2004; Murray & Farrington, 2005). Numerous studies on the relationship between personality and delinquency have adopted the Eysenckian model (Boeree, 1998; Center & Dawn, 2002; Heaven, 1993, 1996, 2006; Roberts & Jackson, 2008) is implicated in antisocial and criminal behavior.

In the countries like Pakistan which is on the way of development and progress and where the social problems are not properly dealt with the observable solution. These social ailments need to be studied and worked over scientifically. Unfortunately in the search of literature review with limited technological capacity no single study has been found out conducted on the child labor with reference to delinquency in all over the world and exclusively in Pakistan. Few research evidences on delinquency with reference to multiple psychological context (Altaf, 1988; Kanwal, 2006; Kurshid, 2003; Malik, 2005; Naqvi & Kamal, 2008; Rafail & Haque, 1999; Rafai and Tariq, 1999; Saeed, 2001; Sheikh, 2003; Tariq, 1991; Zaeema, 2003) exist in Pakistan. There are ever increasing incidents related with delinquent behavior either it is firing in the school or shoplifting or the run away from school, and etc. Statistics compiled by intelligence agencies reveal the high incidence of crime over the years in Pakistan and the failure of the police and law agencies to curtail crime in the all over country. The figures showed that murders, car snatchings, robberies and burglaries increased during the last years (Ahmed, 2011).

Child labor is an overwhelmingly issue in Pakistan as all over the world. In Pakistan, a large number of children are involved in different labor work as mentioned earlier, not getting education properly but no scientific study to evidate the behavioral issues like crimes or delinquency of these children. Older boys are more likely to work than girls and as compared to younger siblings (Child labor in Pakistan, 1996). Children, who are the victims of labor, lived a life of deprivation, neglect and exploitation. Their basic right to education, health, recreation, parental love, happy environment, and a childhood are violated and compromised (Gulrez, 2003). The present study will be an attempt to explore the patterns of delinquency with certain personality traits of adolescents involved in child labor.

There are number of reasons for conducting this study. Adolescents of child labor were selected as a sample most important one, psychologically there has not been conducted much work on child labor. According to Dottridge and Stuart (2005) UNICEF estimated figure of 350 million working children in the world. This large population size demands to work on this sample and to determine the psychological attributes of these children. The necessity of child labor to poor families and the role of poverty as a determinant have been examined in different studies (Amin, Quayes, & Rives, 2004; Andersen, 2000; Priyambada, Suryahadi, & Sumarto, 2005). Pagani, Boulerice, Vitaro, and Tremblay (1999) examined the impact of poverty (and its correlate, family configuration status) and self-reported delinquency in boys at age 16 years. Results revealed that with other correlates poverty had a strong effect on extreme delinquency. This shows that poverty is one of the important predictor of delinquency. Poverty is the major hallmark of laborer children's lives as well and its impact needs to be studied scientifically.

As there is no research that examined the relationship between patterns of delinquency and personality traits of laborer adolescents in Pakistan, so the present research would contribute to improve our understanding to the behavioral problems of these adolescents. It is expected that it would be a useful contribution in the field of psychology especially with reference to social issues in Pakistani culture. The study was aimed at finding the relationship between patterns of delinquency and personality traits of adolescents involved in child labor. To meet this major goal, certain objectives are needed to be accomplished the study. These objectives are as follows.

- To find out relationship between personality traits and delinquency (self-reported and informant reported) of adolescents in child labor.
- 2. To determine the predictive relationship of personality traits i.e., extraversion, neuroticism, psychoticism, and lie and self-reported delinquency.
- To find out the differences on demographic variables such as age, labor type, labor duration, education and delinquency.

Method

Participants

A sample of 250 male adolescents with the age ranging from 13- 17.11 years (M=16.21, SD=2.1) and their 220 Informants (in some cases informants provide information for more than one adolescent so the number of informant is less than informants) with the age ranging from 25-55 years (M=48.37, SD=1.89) from different areas of Rawalpindi/ Islamabad was selected. Participants (laborer adolescents and informants) were selected by using snow ball sampling technique. At first researcher

approached some laborer adolescents at motor workshop Pir Wadhai Rawalpindi. The researcher has been guided for some other workshops and restaurant for laborer adolescents by child labor workers. Whole data was collected from Rawalpindi/ Islamabad through the same process. Those adolescents helped the researcher for About 56% of sample of the laborer adolescents had an education level up to primary (n=140) and rest of 44% was primary to matric (n=110). The sample of laborer adolescents were from following labor type categories: workshops (n=80), general stores (n=49), restaurants (n=60), beggars (n=28) and trash collectors (n=29). Similarly about 30% of the laborer adolescents had 2-3 years labor duration (n=75), 32% had 4-5 years labor duration (n=80), and rest of the 38% of the participants had 6-7 years of labor duration (n=95).

Sampling Inclusion Criteria. Only those adolescents were selected who have been involved in different labor work for at least two years and their informants were easily available. The selection criterion for informants was that they must be older than adolescent at least 10 years and spending at least 5-7 hours daily with laborer adolescents. It was carefully checked by the researcher that these informants should not have any blood relation with the laborer adolescent. So that informant can report about the targeted person freely without any bias. They were those people with whom laborer adolescents were working. The subjects were approached at their work places i.e., workshops, general stores, restaurants, and trash collectors.

Measures

Eysenck Personality Questionnaire Junior (EPQ-J) was developed by Eysenck and Eysenck (1970). In the present study Urdu translated version of EPQ-J was used (Naqvi & Kamal, 2010). It is 81 items scale which assesses the three dimensions of personality i.e., Extraversion, Neuroticism, and Psychoticism. This scale has one added dimension of Lie which is the indicator of dissimulation among adolescents. It is a dichotomous scale on which respondent has to express his/her agreement or disagreement with the statement in the form of "yes" or "no". Item were scored like 0 standing for "no" and 1 standing for "yes". The higher the score of respondent on each sub scale means having more that type of personality traits.

Self Reported Delinquency Scale (SRDS) and Informant Reported Delinquency Scales (IRDS). To measure the delinquent behavior among laborer adolescents SRDS and IRDS (Naqvi & Kamal, 2008) were used in present study. Both the scales are meant for the measurement of delinquency of individual. Self report helps to measure the delinquent behavior from the individual while informant reported scale helps to measure the delinquent behavior from the observant point of view. Both scales together provide better opportunity to measure the delinquent behavior. Each scale consists of 27 item and items were same in both scales. All items were positively stated. The under lying patterns or dimensions of delinquency in the

unifactor scales with their items no are as follows but these factors are not measured as separate subscales:

Theft measured by the item no 1, 19, 29 and 32; Drug abuse measured by item no. 3, 11, 17; Lying measured by item no 33; Non compliance to adults by item no 35; Police encounter and escape by item no 23,38; Violence related delinquency (extortion, vandalism and aggression) by item no 4, 10, 21, 34, 39, 40; Cheating and gambling by item no 5, 8, 20, 36, and 37, and Sex related delinquency by item no 6, 22, 25, 28, 30.

Instructions of the scales were as follows: In the given scale, some questions regarding the daily routine activities have been asked. You are requested to think properly how much time you performed the stated acts in the last year. The instructions were same for informant reported delinquency scale except it was stated in instructions that information is required regarding the concerned person. Similarly the response categories of these scales were "never" =0, "one time" = 1, "2-5 times" = 2 "5-10 times" = 3 and "10 or more times" = 4. The possible score range on this scale is from 0 – 108. Higher the score on both the scales mean higher the delinquency among laborer adolescents.

Procedure

Participants were approached at their work places. After having their consent the scales were handed over to the respondents. The two scales, SRDS and EPQ-(junior) Urdu version were administered at laborer adolescents while the IRDS was administered on the informants of these laborer adolescents. They were instructed to read each statement carefully and respond honestly to all items of the scales. As most of the subjects were having difficulty to read, therefore, they were assisted by the researcher to answer on the items of each scale. Few subjects have problems in understanding of statements so they were explained by the researcher till a real answer was obtained. They were assured that data will be kept confidential and will be used only for research.

Results

Table 1

Mean Standard deviation and Intercorrelations between SRDS, IRDS and subscales

Variables	1	2	3	4	5	6	М	SD
5RDS	-	.93**	.71**	.64**	.42**	39**	67.41	7.21
IRDS	-	-	.77**	.52**	.46**	59**	75.20	9.14
Extraversion	-	-	-	.45**	48**	.16*	18.26	2.03
Psychoticism	-	-	-	-	.37**	.17*	11.13	1.48
Neuroticism	-	-	-	-	-	.15	10.45	1.27
Lie	-	-	-	-	-	-	15.73	3.94

^{*}p≤0.05, **p≤0.01

First of all the split half reliabilities were calculated to check the internal consistency of the responses. It was found .89for SRDS and .88 for IRDS. For EPQ (junior) Urdu version it was .69, .67, .68, and .45 for extraversion, psychoticism, neuroticism, and lie subscales, respectively.

The correlation between SRDS, IRDS, Extraversion, Psychoticism, Neuroticism, and Lie is clear from the result

in Table 1 that in all the four subscales, extraversion is negatively related with neuroticism while all other scales are positively correlated with each other. It is observed neuroticism and lie show low non significant correlation, may suggest that there was little disposition to dissimulate among laborer adolescents (Eysenck & Eysenck, 1975). The Table 1 also indicated the mean and standard deviation values on each scale. Mean values indicated higher scores on SRDS and IRDS by adolescents.

Table 2
Mean Standard deviation and one way ANOVA of scores on the Type of labor and SRD Scale.

	Type of Labor				
Scale		n	М	SD	F
SRD Scale	Work shop	84	78.67	18.94	.30
	Restaurant	60	77.06	19.1	
	Stores	49	78.20	18.55	
	Trash collectors	29	81.34	16.61	
	Beggary	28	75.96	20.21	

*p < .05. between groups df= 4; within groups df=245; groups total df= 249

For the determination of the effect of type of labor on self-reported delinquency, informant-reported delinquency and personality traits, the whole sample was divided into five categories of labor type i.e., Workshop (n=84), Restaurant (n=60), Stores (n=49), Trash Collectors (n=29), and Beggary (n=28). Table 2 indicates the results of One Way Analysis of Variance for Self-reported delinquency and type of labor scores of laborer adolescents with five different categories of type of labor. The mean score for category of trash collectors is highest among all. The data show a non significant effect of the self-reported delinquency for labor type of adolescents (p<.05).

Table 3

Mean Standard deviation and one way ANOVA of scores on the Type of labor and IRDS

	Type of Labor				
Scale		n	М	SD	F
IRD	Work shop	84	85.29	19.65	.21
Scale	Restaurant	60	81.68	22.1	
	Stores	49	86.34	19.35	
	Trash collectors	29	91.52	18.71	
	Beggary	28	78.47	21.92	

*p < .05. between groups df= 4; within groups df=245; groups total df= 249

Table 3 indicates the results of One Way Analysis of Variance for Informant-reported delinquency and type of labor scores of laborer adolescents with five different categories of type of labor. The mean score for category of trash collectors is highest among all. The data show a non significant effect of the Informant-reported delinquency for labor type of adolescents (p<.05).

Table 4
Difference between Less Educated and High Educated Group on SRDS and IRDS

	Education								
Scales	Less than primary n= 140		Primary to secondary n= 110				<u>99% Cl</u>		
	М	SD	М	SD	t(248)	P	LL	UL	Cohen's d
SRDS	92.71	8.85	65.24	6.32	4.18	.01	-2.06	1.08	3.57
IRDS	96.24	10.52	73.61	8.74	8.26	.02	-4.51	0.32	2.34

Table 4 indicates that there is a significant difference of education on the self-reported delinquency scores of laborer adolescents. The mean score for the group of less than primary education is higher than more primary to metric education group.

This result indicated that adolescents less on education have more self-reported delinquency score as compared to more educated laborer adolescents and this difference is significant at p<.01.

Table 5
Multiple Linear Regression Modeling for Personality Traits
and Self-Reported Delinquency

of Multicollinearity, White Heteroskedasticity Test was applied which provide F value of 2.549, significant at $p \le 0.05$ provides evidence that predictor variable have no perfect linear relationship and do not correlate highly.

It is the evident from Table 5 that these regressors strengthen the juvenile delinquency in the laborer adolescents. The maximum prediction reached with three regressors. More over the result specified the adjusted value of squared R to be 0.313. This means that about 31.3 % of Self-reported delinquency is explained by these personality types. It is observed from the results that all the variables included in the regression model have beta values with relatively less difference. be values indicate the direction of regression, as the beta coefficient is positive so these variables are positively related with self-reported

Vari	iables	R²	ΔR²	В	SE	в	t	Р
1	Constant	.502	.257	-3.28	8.984		366	.72
	Extraversion			4.171	.457	.502	9.130	.00
2	Constant	.542	.299	-13.728	9.156		-1.499	.14
	Extraversion			3.288	.501	.395	6.569	.00
	Psychoticism			2.149	.559	.231	3.846	.00
3	Constant	.567	.389	-24.134	9.574		-2.521	.01
	Extraversion			2.655	.531	.319	5.004	.00
	Psychoticism			1.810	.559	.195	3.236	.00
	Neuroticism			1.711	.540	.193	3.170	.00

Table 5 indicates coefficients of the sample. The overall sample data could generate 3 models i.e., Extraversion, Psychoticism, and Neuroticism could qualify the entry criterion. The forward method of variable entry was selected with the entry criterion of probability of F as less than or equal to 0.05. For the verification of the model following assumptions were satisfied; To check the heteroscedasticity of sample the Durbin Watson test was applied which revealed the F value 1.87 significant at $p \le 0.05$. The value closer to 2 is the evidence that no auto correlation exists among predictors and is good for regression model (Durbin & Watson as cited in Field, 2005). Similarly for the identification

delinquency. It is seen from the result that t-test with the b-values is significant for all three predictors at $\alpha \leq 0.05$, is the sign that all predictors are significantly contributing in the model. More over it could be interpreted from the results that smaller the value of p (and larger the value of p) the grater the contribution of predictor, so extraversion is significantly contributing in the prediction as compared to other two predictors.

Discussion

In order to discover the relationship between selfreported delinquency and personality traits, it was hypothesized that extraversion, psychoticism, neuroticism is positively related with self-reported delinquency and findings reveal positive relationship between personality traits and self-reported delinquency. Eysenck and Eysenck (1985) suggested that, compared to non delinquents, delinquents are more extroverted, neurotic, and tough-minded (psychoticism). These findings (See Table 1) are also in accord with the earlier researches (Chabrol et al., 2009; Eklund et al., 2011; Eysenck & Gudjonsson, 1989; Farrington, 1992; Koposov & Ruchkin, 2011) Moreover, to analyze the predictive power of these personality traits, multiple linear regression model was applied, outcomes evidate the assumption that Eysenck's model is strongly implicated to predict the antisocial and criminal behavior (Heaven, 1996).

The Lie scale of EPQ-(junior) measures the tendency on the part of participants to "fake good" and this scale provides a good estimate of dissimulation. As the delinquency is more sensitive construct to measure with the help of self-reported delinquency scale, because there is strong social desirability element on the responses and it may suggest there can be faking in data. The main difficulty seems to be that in addition to measuring dissimulation, the lie scale also measures some stable personality factors which may be possibly denote some degree of social naiveté. However, if dissimulate were the only factor affecting the variance of this score, then the reliability of the score should be a function of the size of score. when scores are low, thus indicating that subjects are not dissimulating, then the scale should have low reliability. Hence the scale measures some stable personality function; unfortunately little is known about the precise nature of this function The findings of the present study regarding lie and self-reported delinquency reveal that there is negative relationship is found between self-reported delinquency and lie. The results evidate the idea that individual with high score on self-reported delinquency is minimum lying in reporting his actions. This finding is same with the previous literature (Furnham & Thompson, 1991; Hindelang, 1971; Huizinga & Elliott, 1986).

Results show that among the three repressors the extraversion is significantly contributing in predicting the self-reported delinquency. Farrington (1992) although there is considerable evidence to support the role of the personality traits or individual difference factors in selfreported delinquency. It has been found in previous researches that those score high on neuroticism (but not extraversion) tended to be official offenders, whilst those high on extraversion (but not neuroticism) tended to score high on self-reported delinquency measure (Furnham & Thompson, 1991). The finding of the present research is consistent with this as laborer adolescents reported more on extraversion personality traits with reference to selfreported delinquency. High psychoticism scores were found to be related to both forms of delinquency. The present research findings revealed the predicibility of delinquency among laborer adolescents.

In the present study it was made an attempt to testify the Eysenck's assumption that criminality and antisocial behavior are both positively and causally related to high levels of psychoticism, extroversion, and neuroticism. The theory provide the biological reason that in extroverts, and possibly also in people high on the psychoticism scale, biologically determined low degrees of arousal and arousability lead to impulsive, risk-taking, and sensation-seeking behavior that increase the level of cortical (brain) arousal to a more acceptable and enjoyable amount (Holman & Quinn, 1992). Eysenck tried to explain that extroverts experience cortical under-arousal, prefer higher levels of stimulation, and are less responsive to punishment - they therefore do not learn behavioral alternatives with the use of disciplinary action (Darley, Glucksberg, & Kinchla, 1991).

In Pakistan the convention, Employment of children Act (1999) was adopted from International labor organization (ILO) in 1973. It states that minimum age for employment may not be set lower than the age of completion of compulsory schooling and, in any event not less than 15 years (initially 14 years in the case of developing countries). With this it is emphasized that all type of labor work is strongly prohibited under the age of 18 years. Although spirit of this Convention is reflected in several Pakistani laws, it has yet to be formally ratified by the Government of Pakistan (Shujaat, 2003). On the basis of this act's description, in the present study sample range between 13 to 17.11 years was selected to cover the full range of adolescents' age category in the light of child labor law.

To study the age differences on delinquency, it was assumed that there will be increase in delinquency with age of adolescents in child labor. Present research findings confirm this hypothesis that adolescents with the age range of 13-17.11 years dividing in three groups obtained high score on self-reported and Informant-reported delinquency scale as compared to younger groups and shown significant difference on the different age groups. High score on delinquent measures reveal that criminal behavior depends on age of children (Burfeind et al., 2011; Mersky et al., 2011).

One very interesting finding of the present research was difference regarding the type of labor on delinquency. In the present research to judge and analyze the effect of labor on delinquency five labor categories were included i.e., workshop, restaurant, stores, trash collectors, and beggary. The result indicated that there is nonsignificant difference on the delinquency scores for different type of labor work i.e. Workshop, Restaurant, Stores, Trash Collectors, and Beggary. The reason may be that nature of these different labor work and the environmental conditions are more or less same and did not affect delinquency of laborer adolescents. There is large number of children involved in domestic labor such as home servants and they have not been the part of present research. The present research sample did not constitute on all kinds of labor existed in Pakistan.

In order to see the difference between education and delinquency among laborer adolescents, the findings revealed that participants showed a significant difference on education. It is obvious from the results that people with the education up to primary and primary and above are different

on delinquency scores. Despite the ongoing discussion of the direction of causality, the evidence is clear that poor school performance, truancy, and leaving school at a young age are connected to juvenile delinquency (Basch, 2010; Bailey & Ross, 2001; Campell, Shaw, & Gillrom, 2000; Eklund et al., 2011).

Some studies have shown reductions in delinquent behavior when a teenager drops out of school decreases (Campell et al., 2000). Others have shown increasing rates of delinquency following school dropout rate (Hagan & McCarthy, 1997: Magium & Leober, 1997). Research on poor school performance-with emphasis on the school, the school process, and consequences of poor school performance. Individual factors related to poor achievement are noted to include membership in a disadvantaged minority groups. The present research findings may be explained on the basis of these children's adherence to a minority group like involvement in child labor. So the present research findings are accord with the already existing literature (See for example, Campell et al., 2000).

The more one stay in a particular environment more it left its impact on one's behavior. It is natural desire of the individual to be approved by the people in the environment in which one is operating. For this purpose, individual usually acquire those characteristics and behavioral patterns that make his survival possible. Keeping in mind this assumption it was decided to judge the effect of labor duration on delinquency. The present research findings for the determination of effect of duration of labor on delinquency indicated that delinquency increases with the duration of labor work. Over all sample showed significant difference from 2 to 7 years of labor work. The more duration of labor lead to high score on self-reported and informant-reported delinquency. The reason may be of the present research finding is, that psycho social environment in which the adolescents are spending most of their time. The early exposure to the adult's environment badly effect their personality and contribute in faulty learning.

As an initial effort to examine the patterns of delinquency and personality traits of adolescents in child labor the findings of this study have important implications for future research and for policy development. The data utilized in this project has a number of strengths. First, the study is one of the first to ensure that the juvenile delinquency measure with the help of self-reported method and informant-reported method to ensure the reliability of construct measured. Further, the study achieved good response rates for participation in the research, includes approximately equal numbers of laborer adolescents and their informants and has achieved a good size sample across the both cities of Rawalpindi and Islamabad of Pakistan, spanning 13-17.11 years of age. In doing so, the study can add to the growing literature on antisocial and delinquent behavior in adolescents involved in child labor.

In summary, it can be said that child labor work force and Juvenile delinquency arrests are increasing in every year statistics. So the present research findings are important to provide an estimate that how the issue of child labor is linked with delinquency. Although the findings require replication, it seems that early exposure to punitive consequences such as involvement in labor work increases the risk of delinquent behavior. Individual characteristics of the laborer adolescents were important predictors of subsequent delinquent behavior.

Conclusion

There is a higher tendency of delinquency among laborer adolescents is the most salient finding of the present research. Moreover it was found that personality traits play an important role in predicting the delinquency among laborer adolescents in Pakistan. Lack of education, economic deprivation, poverty, and such other factors are responsible to force these children to labor work. The environmental conditions where these children work are very bad for their physical and psychological growth. There are number of chances to convert these tendencies into the conduct disorder and antisocial personality disorder if uncheck and unaddressed that may lead to the increase in crime rate in Pakistan. The findings of the present research can be best utilized by the social scientists to design the intervention plan to help and reduce the negativistic behavioral patterns among laborer adolescents in Pakistan.

Limitations

- The foremost limitation of the present research is the objectivity of the data. As the delinquency is more sensitive construct to measure with the help of self-reported delinquency scale, because there is strong social desirability element on the responses and it may suggest there can be faking in data.
- The sample size used in the present research is not large enough. The representativeness of the finding for further research a national sample may be included in the study. Such a sample is important before the results can be confidently generalized.
- There is large number of children involved in domestic labor such as home servants and they have not been the part of present research. The present research sample did not constitute on all kinds of labor.
- 4. The direction of the present research findings are more concentrated on individual factor like personality traits and ignoring some other important sociological factors like peer pressure, parenting style, and etc.
- 5. Another important factor that is being controlled is the gender. The scale developed in the present research and hypotheses were verified only on boys and did not provide any comparison with adolescents girls. This is particularly important in studies of males and females because there may be differences in the sorts of antisocial behavior in which each gender engage.

- 6. Further research is warranted to investigate the long-term impact of early experiences with societal responses such as school suspensions and arrests on the development of delinquent behavior. Moreover, the credibility of data can be increased if data can be matched with actual arrest record.
- 7. Another important limitation of the present research is the sample is only taken from urban areas and rural areas are totally avoided, where the large part of this sample works and present research is unable to provide any comparison of regarding urban and rural areas
- Punitive approaches to antisocial behavior with youth may be counter-productive emphasizing the importance of developing societal responses that can keep antisocial students connected to school and minimizing early contact with law enforcement authorities.

Suggestions

On the basis of above mentioned limitations of present research, some suggestions have been anticipated for further researchers who are interested to do research in similar areas.

- With boys, adolescents' girls can be included in sample to present the gender differences on juvenile delinquency and personality traits.
- 2. Adolescents involved in domestic labor can be taken to present difference
- 3. Sample can be taken from rural areas to see the noticeable differences in juvenile delinquency from urban areas
- Another important future research question is to explore more social factors as risk for the negative impact of societal responses to make this group more vulnerable.

References

- Ahmed, Z. (2011). Punjab Crime Statistics (upto June 2011).

 Pakistan Criminal Records. Retrieved from http://pakistancriminalrecords.com/2011/06/30 /punjab-crime-stati stics-u pto-june-2011/
- Ahmad, Z. (2012). Islamabad: Punjab witnesses 10.2% increase in crime ratio. Pakistan Criminal Record. Retrieved from http://pakistancriminalrecords.com/2012/02/23/ isla mabad-punjab-witnesses-10-2-increase-in-crime-ratio/
- Altaf, W. (1988). A profile of delinquent and non delinquent on the CPI. (Unpublished M.Phil dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

- Amin, S., Quayes, M. S., Rives, J. M. (2004). Poverty and Other determinants of Child Labor in Bangladesh. *Southern Economic Journal*, 70(4), 876-892. Retrieved http://www.jstor.org/pss/4135277
- Andersen, L. (2000). Social mobility in Latin America. La Paz:
 Instituto de Investigaciónes Socio-Economicas,
 Universidad Católica Boliviana.
- Bailey, K., & Ross, C.J. (2001). School safety and youth violence: A legal primer. Washington, DC: The GeorgeWashington University, Hamilton Fish Institute on School and Community Violence.
- Basch, C. E. (2010). Healthier students are better learners: A missing link in school reforms to close the achievement gap (Research Review). Teachers College, Columbia University. Retrieved from www.edu.gov.on.ca/eng/research/hymel.pd
- Bass, S., Shields, M. K., & Behrman, R. E. (2004). Children and Welfare Reform: **Analysis** and Recommendations. Children, Families, and Foster Care, 14(1), 1-7. Retrieved http://www.princeton.edu/futureofchildren/pub lications/journals/article/l ndex.xml ?journalid=43&articleid=175§ionid=1134
- Boeree, G. C. (1998). Personality theories. In E. Tailor., & D. Goerge (Eds.), *The biological basis of personality* (pp. 25-36). NY: John Wiley & Sons, Inc.
- Brathwaite, N. S. & Warren, C. S. (2008, May). Personality
 Traits in Juvenile Prostitution: Aren't All
 Delinquents the Same?. Paper presented at the
 annual meeting of the American Psychology Law Society, Hyatt Regency Jacksonville
 Riverfront, Jacksonville. Retrieved from
 http://www.allacademic.com/meta/p2289
 98_index.html
- Broidy, L. M. (2001). A test of general strain theory. *Criminology* 39, 9–36. doi: 10.1111/j.1745-9125.2001.tb00915.x
- Burfeind, J., Burfeind, J. W., & Bartusch, D. J. (2011). *Juvenile Delinquency: An Integrated Approach* (2nd Ed). NY: Jones & Bartlett Learning. ISSN No. 0763758108, 9780763758103
- Bynum, J. E., & Thompson, W. E. (2002). *Juvenile Delinquency*. Boston: A Pearson Education Company.
- Camilla, P., Francesco, R., & Frank, A. R. (2010). Investigating Animal Abuse: Some Theoretical and Methodological Issues. *Anthrozoos: A Multidisciplinary Journal of The Interactions of People & Animals, 23*(3), 259-276. doi:10.2752/1753037 10X12750451259011

- Campell, S. B., Shaw, D. S., & Gillrom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. Development and Psychopathology, 12, 467-488.
- Center, D. B., & Dawn, E. K. (2002). Antisocial behavior in Children and Eysenck's theory of personality: An evaluation. *International Journal of Disability, Development & Education, 49*, 353-366. doi: 10.1080/1034912022000028330
- Chabrol, H., Leeuwen, N.V., Rodgers, R., & Séjourné, N. (2009). Contributions of psychopathic, narcissistic, Machiavellian, and sadistic personality traits to juvenile delinquency. Personality and Individual Differences, 47(1), 734-739. doi:10.1 016/j.paid.2009.06.020
- Child labor in Pakistan. (1996, August 12). Retrieved http://librarythinkquest.org /03oct/01908/1024/childlaborinpakistan.htm
- Connor, D. F. (2004). Aggression and antisocial behavior in children and adolescents: Research and treatment (4th Ed.). NY: The Guilford Press.
- Connell, A., & Farrington, D. P. (1996). Bullying among incarcerated young offenders: Developing an interview schedule and some preliminary results. *Journal of Adolescence*, 19(6), 75-93.
- Connell, A., & Farrington, D. P. (1997). The reliability and validity of resident, staff and peer reports of bullying in young offender institutions. *Psychology, Crime, and Law, 3*, 287-300.
- Darakhshan, M. (2011, June). Hazardous child labor. *Paki Tea House*. Retrieved from http://pakteahouse.net/2011/06/28/hazardous-child-labor/
- Darley, J. M., Glucksberg, S., & Kinchla, R. A. (1991). *The deviant behavior and psychology* (7th Ed.). NY: Prentice Hall.
- Eklund, J. M., Liljeberg, J. F., & Klinteberg, B. (2011).

 Delinquent behaviour patterns in adolescence:

 Development and associated personality traits.

 Personality and Mental *Health*, 5(3), 169–185.

 doi: 10.1002/pmh.137
- Elliott, D. S., & Ageton, S. S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. *American Sociological Review*, 26(4), 733-743.
- Employment of children act. (1999). Retrieved from http://www.legislation.gov.uk/ ukpga/1999/26/contents

- Endler, N. S. (2006). The Temperamental Nature of personality. *European journal of Personality,* 3(3), 151-165. doi: 10.1002/per.2410030302
- Eysenck, H., & Eysenck, G. (1985). Personality and individual differences: A natural science approach (3rd ed.).

 NY: Plenum Press.
- Eysenck, H., & Eysenck, S. (1975). Manual of the Eysenck Personality Questionnaire. London: Hodder and Stoughton.
- Eysenck, H., & Gudjonsson, G. (1989). The causes and cures of criminality (2nd ed.). NY: Plenum Press.
- Eysenck, S. (1964). The measurement of psychoticism: A study of factor stability and reliability. Educational and Psychological Measurement, 20, 47-54.
- Eysenck, S., & Eysenck, B. (1970). A factor-analytic study of the lie scale of the junior Eysenck personality inventory. *British Journal of Psychology*, 1, 3-10.
- Egan, V. (2009). In McMurran, M., & Howard, R. (Eds.),
 Personality, Personality Disorder, and risk of
 Violence: An Evidence-based Approach. The Big
 Five: Neuroticism, Extroversion, Openness, and
 Conscientiousness as an organizational scheme
 for thinking about aggression and violence (6972). John Wiley & Sons, Ltd., Chichester, UK.
- Farrington, D. P. (1992). Juvenile delinquency. In J. Colemen (Ed.), *The school years: Current issues in the socialization of young people* (2nd ed., pp. 34-45). London: Routledge.
- Fonseca, A. C., & Yule, W (1995). Personality and antisocial behavior in children and adolescents: An enquiry into Eysenck's and Gray's theories. *Journal of Abnormal Child Psychology*, 23(6), 767-781, doi: 10.1007/BF01447476
- Fontaine , R. G. (2007). Toward a conceptual framework of instrumental antisocial decision-making and behavior in youth. *Clinical Psychology Review 27*, 655–675. Retrieved from http://www.sciencedirect.com
- Furnham, A., & Thompson, J. (1991). Personality and selfreported delinquency. Personality and Individual Differences, 12, 585-593.
- Gould, E. D., Weinberg, B. A., & Mustard, D. B. (2002). Crime rates and local labor market opportunities in the United States: 1979-1997. *The Review of Economics and Statistics*, 84(1), 45-61.
- Gulrez, E. (2003, December 23). The UN Resolution to meet the issue of child labor [Letter to the editor]. The Pakistan News, p.12. Retrieved

- http://www.thepa kistannews .com.org/default.asp?storypage12.
- Giordano, T. (1992). Childhood problems and societal impacts [Electronic version]. Journal of the American Academy of Child and Adolescents Psychiatry, 34, 121-137.
- Hart, P., & Peterson, T. (1997). Personality differences and behavioral problems. *Journal of Personality and Individual Differences*, 25, 352-375.
- Huizinga, D., & Elliott, D. S. (1986). Reassessing the reliability and validity of self-report delinquency measures. Journal of Qualitative Criminology, 2, 293-327.
- Haan, A. D., Prinzie, P., & Dekovic, M. (2009). How and why children change in aggression and delinquency from childhood to adolescence: moderation of overreactive parenting by child personality. *Journal of child Psychology and Psychiatry*, 51(6), 725-733. doi: 10.1111/j.1469-7610.2009.02192.x
- Hagan, T., & Mccarthy, R. (1997). Extraversion, arousal theory and performance: A study of individual differences. *Personality and Individual Differences*, 14, 347-363.
- Haydon, E. M. (2010). Re-education and Delinquency. *Journal of Social Issues*, 1(3) 23–32. doi: 10.1111/j.1540-4560.1945.tb02690.x
- Heaven, P. (1993). Personality predictors of self-reported delinquency. *Personality and Individual Differences*, 14, 67-76.
- Heaven, P. C. (1996). Personality and self-reported delinquency: A longitudinal analysis. *Journal of Child Psychology*, 37(6), 747-751.
- Heaven, P. C., & Newbury, K., & Wilson, V. (2004). The eysenck psychoticism dimension and delinquent behaviors among non-criminals: changes across the lifespan? *Personality and Individual Differences*, 36(I8), 1817-1825. doi:10.10 16/j.paid.2003.07.003
- Hemphill, S. A., Toumbourou, J. W., Herrenkohl, T. I., McMorris, B. J., & Catalano, R. F. (2006). The Effect of School Suspensions and Arrests on Subsequent Adolescent Antisocial Behavior in Australia and the United States. *Journal of Adolescents health*, 39(5), 736-744. doi:10.1016/j.jadohealth.2006.05.010
- Henry, B. C. (2004). The Relationship between Animal Cruelty, Delinquency, and Attitudes toward the Treatment of Animals. *Society and Animals*, 12(3), 185-207. doi: 10.1163/1568530042880677

- Hindelang, T. (1971). Personality and determining factors. In D. Shultz., & S. Coleman (Eds.). *Personality trait approaches* (pp.121-1127). London, England: Peter Owen.
- Hirschi, T., & Gottfredson, M. (1983). The distinction between crime and criminality. In T. Hartnagel, & R. Silverman (Eds.), *Critique and Explanation:*Essays in Honor of Gwynne Nettler (pp. 44-69).

 New Jersy: Transaction.
- Hollin, C. R. (1992). Criminal behavior: A psychological approach to explanation and prevention. London, England: The Falmer Press.
- Holman, J. E., & Quinn, J. F. (1992). Criminology: Applying theory (4th ed.). St Paul, USA: West Publishing Company.
- Holsinger, k., & Holsinger, A. M. (2005). Differential pathways to violence and self-injurious behavior: African American and white girls in the juvenile justice system. *Journal of Research in Crime and Delinquency*, 42, 211- 213. doi: 10.1177/0022 427804271938
- Huiras, J., Uggen, C., & McMorris, B. (2000). Career jobs, survival jobs, and employee deviance: A social investment model of workplace misconduct. *The* Sociological Quarterly, 41, 245–263.
- Huizinga, D., & Elliott, D. S. (1986). Reassessing the reliability and validity of self-report delinquency measures. *Journal of Qualitative Criminology*, 2, 293-327.
- Kanwal, N. (2006). Procrastination and depression in delinquent adolescents. (Unpublished master's thesis). National Institute of Psychology, Quaidi-Azam University, Islamabad, Pakistan
- Koposov, R., & Ruchkin, V. (2011). Exposure to Community Violence, Psychopathology, and Personality Traits in Russian Youth. *Depression Research and Treatment*, 11, 10. doi:10.1155/2011/909076
- Kurshid, M. (2003). Role of family and peer relations on the self-esteem of juvenile. (Unpublished M.Phil dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan
- Lustig, K., & Liem , J. H. (2010). Quality of Employment and Delinquency During the Adolescent to Young Adult Transition. *The New School Psychology Bulletin 8*(1), 1-11. Retrieved from www.nspb.net/index.php/nspb/article/view/120 /177
- Magium, T., & Leober, T. (1997). The relationships among on a prototype indicator of perceptual defense vigilance, personality and psychosocial skills. Journal of Abnormal Psychology, 88, 635-648.

- Malik, H. (2005). A study of resiliency in deviant adolescents.

 (Unpublished master's thesis). National Institute
 of Psychology, Quaid-i-Azam University,
 Islamabad, Pakistan
- Mersky, J. P., Topitzes , J., & Reynolds, A. J. (2011). Unsafe at any age: Linking childhood and adolescent maltreatment to delinquency and crime. *Journal of Research in Crime and Delinquency, 48*(4). doi: 10.1177/0022427811415284
- Michaelis, D., & Eysenck, J. (1971). Preference for delayed reward as a function of age, intelligence, and length of delayed interval. *Journal of Abnormal and Social Psychology*, 64, 425-431.
- Mirza, K. (2010). No updated statistics on child labor. *Tribune, The Express.* Retrieved from http://tribune.com.pk/story/10340/no-updated-statistics-on-child-labour/
- Mortimer, J. (2003). Working and growing up in America. Cambridge, MA: Harvard University Press.
- Mukherjee, S.P., Coondoo, D., Khasnabis, R., Banerjee, S. (2005). Estimating child labor: Some conceptual and methodological issues. Centre for Studies in Economic Appraisal, Kolkata, India. Retrieved from http://www.childlabour.net/documents/.../Kolkattafinal.pdf —
- Murray, J., & Farrington, D. P. (2005). Parental imprisonment: effects on boys'antisocial behaviour and delinquency through the lifecourse. *Journal of Child Psychology and Psychiatry*, 46(12), 1269–1278. doi: 10.1111/j.1469-7610.2005.01433.x
- Naqvi, I., & Kamal, A. (2010). Translation and adaptation of Eysenck Personality Questionnaire (Junior) and its Validation with Laborer Adolescents. *Pakistan Journal of Psychology*, 41, 23-48.
- Naqvi, I., & Kamal, A. (2008). Development of self reported and informant reported delinquency scales for laborer adolescents. FWU Journal of Social Sciences, 2(1), 51-71.
- Pagani L, Boulerice B, Vitaro F, & Tremblay RE. (1999). Effects of poverty on academic failure and delinquency in boys: A change and process model approach.

 Journal of Child Psychology and Psychiatry, 40(8),
 1209-19. Retrieved from http://www.nc bi.nlm.nih.gov/pubmed/10604399
- Priyambada, A., Suryahadi, A., & Sumarto, S. (2005). What Happened to Child Labor in Indonesia during the Economic Crisis: The Trade-off between School and Work SMERU Research Institute, Jakarta.

 Retrieved from http://www.e aber.org/intra

- net/do cuments/42/16 24/SMERU_Priyambada_2005.pdf
- Rafai, F., & Tariq, N. (1999). Development and validation of self esteem scale. (Unpublished M.Phil dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan
- Rafail, E., & Haque, A. (1999). Relationship between perceived parental acceptance- rejection and juvenile delinquency scores: A study of criminal and non-criminal adolescents. *Pakistan Journal of Psychological Research*, 14(2), 9-16.
- Revelle, W., & Oehlberg, K. (2008). Integrating experimental and observational personality research—the Contributions of Hans Eysenck. *Journal of Personality*, 76 (6), 1387-1414. doi: 10.1111/j.1467-6494.2008.00526.x
- Roberts, B. W., & Jackson, J. J. (2008). Sociogenomic Personality Psychology. *Journal of Personality,* 76(6), 1523-1544. doi: 10.1111/j.1467-6494.2008.00530.x.
- Robinson, D. L. (2001). How brain arousal systems determine different temperament types and the major dimensions of personality. *Personality and Individual Differences, 31*(8), 1233-1259. doi:10.1016/S0191-8869(00)00211-7
- Rowe, D. (1985). Sibling interaction and self-reported delinquent behavior: A study of 265 twin pairs. Criminology, 24, 513-532.
- Saeed, B. (2001). Relation of perceived domestic violence with delinquency among boy adolescents. (Unpublished master's thesis). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan
- Sampson, R., & Lamb, T. (1993). The structure of mood variability and personality. *Current Psychology,* 14, 329-338.
- Séguin, J. R. (2004). Neurocognitive elements of antisocial behavior: Relevance of an orbitofrontal cortex account. *Brain and Cognition*, *55*(1), 185-197. doi:10.1016/S 0278-2626(03)00273-2
- Sheikh, R. (2003, November 14). Activating media combating child labor. *The Nations*, p.8. Retrieved http://www.nations.com.pk.laborp8.html.
- Shields, G., & Clark, R. D. (1995). Family correlates of delinquency: Cohesion and adaptability. *Journal* of Sociology and Social Welfare, 22(2), 93 – 106.
- Shujaat, C. (2003, May 11). Reflection. *The Daily News*, p.2.
 Retrieved from http://www.dailynews.com.org/childlabor2.html

- Siegel, L J., & Welsh, B. C. (2008). *Juvenile delinquency: Theory, practice and law.* Retrieved from http://www.amazon.com/Juvenile-Delinquency-Theory-Practice-Law/dp/0495503649
- Siegel, T., Welsh, E., Senna, G. (2003). Juvenile delinquency and the family. *Youth and Society*, *9*, 299-313.
- Siennick, S. N., & Staff, J. (2008). Explaining the educational deficits of delinquent youths. Criminology, 46(3), 609–635. doi: 10.1111/j.1745-9125.2008.00118.x
- Tahir. M. W., Kauser, R., Tousif, S., Nazir, M. A., Arshad, A., & Butt, A. (2011). Crime trends among youth (15-29) in Gujrat, Pakistan. African Journal of Law and Criminology, 1 (2), 39-49. Retrieved from www.sachajournals.com/documents/GUJAJLC002.pdf
- Tahir, K. (2011, Feb). Child labour in Pakistan. Pakistan Today.

 Retrieved from http://www.pakistantoday.com.pk/2011/02/chil d-labour-in-pakistan/
- Tariq, P. N. (1991). A comparative psychological profile of professional and non-professional criminals in Pakistan. (Unpublished doctoral thesis). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Terman, L. (1995). Juvenile delinquency and ethnicity [Electronic version]. Journal of Research and Criminology, 5, 98-112.

- Vaughan, G. M., & Hogg, M. A. (2002). *Introduction to social* psychology. Sydney, Australia: Prentice Hall.
- Wadsworth, T. (2006). The meaning of work: Conceptualizing the deterrent effect of employment on crime among young adults. *Sociological Perspectives*, 49(3), 343-368.
- Zaeema, S. (2003). Family functioning and psychological problems as risk factors in the development of juvenile delinquency. (Unpublished doctoral dissertation). University of Karachi, Karachi. Retrieved http://www.channel4.com/history/Index .Htm l?hpos=globalnav: HISTORY.
- Zenzile, E. (2008). Juvenile delinquency among secondary school pupils in the mthatha district of education: A self-report survey. (Unpublished master's thesis). Department of Criminal Justice, University of Zululand, South Africa. Retrieved from http://196.21.83.35/bitstream/handle/10530/19 6/zenzile-enoch.pdf?sequence=1

Received: December 8, 2012 Revision Received: May 13, 2013