



**RESEARCH PAPER**

**A Quantitative Analysis of Gender Differences among Psychosocial Correlates of Juvenile Delinquency**

**<sup>1</sup>Dr. Sadia Haq\*, <sup>2</sup>Dr. Sarah Shahed and <sup>3</sup>Dr. Uzma Quraishi**

1. PhD, Department of Applied Psychology, Lahore College for Women University, Lahore, Punjab, Pakistan
2. Professor of Psychology, Forman Christian College (A Chartered University), Lahore, Punjab, Pakistan
3. Vice Chancellor, Lahore College for Women University, Lahore, Punjab, Pakistan

**Corresponding Author**

haqsadia56@yahoo.com

**ABSTRACT**

The present study aims to find out the gender differences among psychosocial correlates of delinquency. Through a cross-sectional survey research design, data on 200 juvenile delinquents and runaway adolescents was taken from institutes working for the well-being of abused and neglected children in Rawalpindi, Lahore, Gujranwala, and Multan. Urdu translated versions of The Big Five Inventory (John et al., 1991), the Barratt Impulsiveness Scale (Patton et al., 1995), the Kessler Psychological Distress Scale (Kessler & Morczek, 1992), the Reactive-Proactive Aggression Questionnaire (Raine et al., 2006), the Psychological Well-Being Scale (Ryff, 1989), the Subtype of Antisocial Behavior Questionnaire (Burt & Donnellan, 2009), the Self-Reported Delinquency Scale (Naqvi & Kamal, 2008), and the How I Think Questionnaire (Barriga et al., 2001) were used to collect data. T-test results reported significant mean differences along gender on delinquency, antisocial behavior, impulsivity, aggression, and psychological distress, where male adolescents reported a higher mean value compared to female participants. On personality traits and psychological well-being, female adolescents reported a high mean. On cognitive distortions, females reported higher mean values on self-centeredness, while males reported higher means on blaming others. The study recommends the counseling programs for parents to master the effective parenting techniques and counterstrategies to deal with problematic behaviors on delinquent's behalf in the form of intervention plans.

**Keywords:** Delinquency, Adolescence, Impulsivity, Aggression, Psychological Distress, Antisocial Behavior

**Introduction**

The Delinquency is defined as disobedience to follow laws imposed by the government and antisocial behavior. Hence, Juvenile delinquency is termed as the violation of laws before reaching the age of 18, which would have been labeled as a crime if committed by an adult (Naqvi & Kamal, 2008; Khuda, 2019). These days, violence by young people is the most common form of violence in society. On a daily basis, media reports news about gang violence and crimes happening in the streets. Youth violence not only victimizes the sufferers but also becomes the cause of the destruction of family structures and roots of society by imposing a threat to the quality of life of members living in affected neighborhoods (Herrenkohl et al., 2000).

Literature defined JD as a global problem and dilemma for any society (Barberet et al., 2004; Hoge, 2001; Ladokun, 2010; Du & Luyt, 2011). Adolescence is marked by a variety of developmental challenges, e.g., dealing with abrupt changes happening in the body, relationship building, planning of academic and professional pursuits, and sexual

interests (Bonnie et al., 2019). Collins and Steinberg (2006) specify that girls achieve puberty earlier than boys and experience less pressure for gender conformity than boys.

According to Dodge et al. (1986), the reaction to contextual cues and social experiences differs gender-wise because of the difference in patterns to evaluate social information. Findings of research on achievement motivation (Wigfield et al., 2015) and aggression (Dodge, 1986) revealed a significant difference along gender in social cognitive processing. By keeping in mind the gender differences among adolescents while information processing, the present study aims to evaluate gender differences along psychosocial correlates of delinquency among juvenile delinquents and runaway adolescents residing in shelter homes in Punjab, Pakistan. An intense literature review highlighted aggression, impulsivity, antisocial behavior, psychological distress, psychological well-being, personality traits, and cognitive distortions as prospective psychosocial correlates of delinquency.

### **Literature Review**

Chapple & Johnson (2007) highlight that males lack self-control, although males and females acquire self-control through the same process, i.e., parental monitoring, attachment with parents, and punishment. However, some familial factors affect the process, which helps in the acquisition of self-control. The level of socialization among girls and boys is badly affected by patriarchal and gender-stratified societies. An unpleasant family environment significantly impacts a boy's impulsivity levels, causes high frustration, and impacts him with poor self-control (Bagheri et al., 2022).

According to Vadivel et al. (2023), antisocial individuals exhibit antisocial behaviors in different settings, e.g., home, neighborhood, and academic settings, yet the root causes originate in childhood with aggressive tendencies towards family members and friends and are further expressed in repetitive stealing, bullying, fighting, and destruction of private or public property. Studies suggest that male delinquents exhibit more antisocial behavior and are involved in sensation-seeking activities (Maneiro et al., 2017; Wachserman, 2003), engaging in alcohol consumption, physical aggression, and vandalism (Windle, 1990), than female delinquents.

Psychological distress serves as a hallmark of depressive symptoms, e.g., apathy, depression, hopelessness, and anxiety, e.g., tension, restlessness, etc. (Mirowsky & Ross, 1989), resulting in somatic complaints such as lethargy and sleeplessness (Kirmayer, 1989). Results of a follow-up study by Jaggers et al. (2021) suggested parental monitoring, being in the company of delinquent friends, and experiences of community violence as important factors of PD.

Deci and Ryan (2008) defined psychological well-being with two basic approaches, e.g., the hedonistic approach and the eudemonic approach. The hedonistic approach stresses the subjective aspects and is connected with life experiences based on positive emotions. While the eudemonic approach is concerned with psychological aspects of well-being and is based on six components for possible functioning—autonomy, relationship building, self-acceptance, purpose in life, personal growth, and environmental mastery (Ryff & Keyes, 1995). Literature suggests life satisfaction (LS) as a defensive aspect in disastrous and unfavorable life experiences and is significantly correlated with less reporting of behavioral problems in youth (Shek & Lin, 2016).

With reference to personality traits, researchers reported a higher delinquency rate in males because of their nonconforming attitudes towards authorities and impulsive nature (Azevedo et al., 2020). Barriga et al. (2001) defined cognitive distortions as subjective inaccurate perceptions about daily situations and divided them into "four categories of self-serving cognitive distortion: self-centeredness, blaming others,

minimizing or mislabeling (depiction of antisocial behaviour as unharmful), and assuming the worst." (as cited in Ara, 2015, p. 50). Studies reported cognitive distortions more common in boys, and dysfunctional families, poverty, poor relationships among family members, illiteracy, and exposure to terrorism as significant contributory factors. (Begum, 2019; Larden et al., 2006).

### **Hypotheses**

There is a significant mean difference along gender on aggression, impulsivity, antisocial behavior, psychological distress, psychological well-being, personality traits, cognitive distortions, and delinquency.

### **Material and Methods**

#### **Research Design**

Crossectional survey research design was used to evaluate the gender differences among juvenile delinquents and runaway adolescents.

#### **Sampling**

The non-probability purposive sampling technique was used to identify the cases from the population. The sample was taken from institutes working for the well-being of juveniles and abused children in Lahore, Rawalpindi, Multan, and Gujranwala. The sample age was kept between 11 and 17 years.

#### **Scales**

##### **The Reactive-Proactive Aggression Questionnaire**

The RPQ developed by Raine et al. (2006) consists of 23 items ( $\alpha = 0.82$ ), where 12 items assess reactive aggression and the rest of the 11 items assess proactive aggression. As a 3-point rating scale, responses range from 0 to 2, where 0, 1, and 2 indicate never, sometimes, and often, respectively. Total scores are obtained by summing up both subscales. Higher scores indicate higher levels of aggression among respondents.

##### **Barratt Impulsiveness Scale**

The BIS-11 is a self-report measure (15 items,  $\alpha = .83$ ) for evaluating multiple impulsive personality traits (Patton et al., 1995). It's a 4-point rating scale based on three subscales, e.g., attentional, motor, and non-planning impulsivity, where responses range from rarely/never to almost always/always.

##### **The Subtype of Antisocial Behavior Questionnaire**

The STAB ( $\alpha = .89$ ; Burt & Donnellan, 2009) consists of 32 items that assess three constructs related to antisocial behavior e.g., physical and social aggression and rule breaking. Among 32 items, 10 items explain physical aggression, whereas 11 items are based on social aggression, and the rest of the 11 items measure the rule-breaking construct. Among the four-point rating scale, 1 means never, and 4 means always. Total scores are calculated by adding up all the items.

##### **Kessler Psychological Distress Scale (K10)**

The K10 (Kessler & Mroczek, 1992) consists of 10 questions ( $\alpha > 0.88$ ) on a 5-point Likert scale where responses range from 1 to 5, where 1 highlights none of the time and 5

indicates all of the time. Its scores range from 10 to 50. Higher scores mean higher levels of psychological distress.

### **Ryff's Scales of Psychological Well-Being 84-item version (PWB)**

RPWBS, developed by Ryff (1989), is a multifaceted, 84-item self-report measure that is based on six subscales: self-acceptance ( $\alpha = .91$ ), positive relations with others ( $\alpha = .88$ ), autonomy ( $\alpha = .83$ ), environmental mastery ( $\alpha = .86$ ), purpose in life ( $\alpha = .88$ ), and personal growth ( $\alpha = .85$ ) (Ryff, 1989). Each subscale consists of 14 items where responses range from 1 to 7 (1 means strongly agree and 7 means strongly disagree). The total score is calculated by summing up scores from each subscale. Negatively worded items are reverse-scored items. Higher scores indicate higher levels of PWB.

### **The Big Five Inventory**

The Big Five Inventory (John et al., 1991;  $\alpha = .73$ ) is the commonly used, self-reported 5-point rating scale to measure different dimensions of personality traits. A short Urdu version of this scale developed by Rammstedt and John (2007) and translated by Kausar and Yousaf (2014) was used for data collection. It is based on five subscales, e.g., agreeableness, extraversion, openness, conscientiousness, and neuroticism. Participants answer from '1' to '5,' where '1' means 'strongly disagree' and '5' means 'strongly agree.'

### **How I Think Questionnaire**

The HIT (Barriga et al., 2001) is a self-administered measure (HIT-Q;  $\alpha = .63$  to  $.96$ ) that was originally developed to evaluate self-serving cognitive distortions among adolescents. It consists of four subscales comprising 54 items. These subscales are named as self-centered, blaming others, minimizing/mislabeling, and assuming the worst'. The fifth subscale is named anomalous responses (AR) and positive fillers (PF). It is a 6-point scale ranging from '1' (strongly agree) to '6' (strongly disagree). For the present study, HIT was translated into Urdu through the forward and backward translation method.

### **Self-Reported Delinquency Scale**

The SRDS (Naqvi & Kamal, 2008) is a self-administered measure (27 items,  $\alpha = .92$  to  $.94$ ) that assesses the eight constructs related to delinquent behaviour: Theft Measurement, Lying, Noncompliance to Adults, Drug Abuse, Police Encounter and Escape, Violence-Related Delinquency, Cheating and Gambling, and Sex-Related Delinquency. Respondents rate their frequency of committing crimes on a 5-point rating scale that ranges from '0' to '4,' where 0 indicates never, 1 indicates once, 2 indicates 2–5 times, 3 indicates 5–10 times, and 4 indicates more than 10 times, respectively. The total scale score ranges from 0 to 108, where high scores exhibit a high level of delinquency.

### **Procedure**

200 juvenile delinquents and runaway adolescents were approached from the institutes working for the well-being of juveniles and abused children in Rawalpindi (N = 76), Lahore (N = 69), Gujranwala (N = 25), and Multan (N = 30), after meeting the proper permission protocols. Participants were properly debriefed about the purpose of the research. Their questions related to any statement were answered carefully.

## Results and Discussion

**Table 1**  
**Demographic Characteristics of Participants**

Characteristics	N	%
Case Type		
Juvenile Delinquent	96	48
Runaway	81	40
Co morbid	23	11
Gender		
Male	103	51.5
Female	97	48.5
Age		
11-13	63	31
14-16	107	53
17-19	30	15

Table 1 shows that 48% of cases fall under the category of juvenile delinquency, 51.5% were male juveniles, and 53% belonged to the 14–16 year old group category.

**Table 2**  
**Mean Difference along Gender on Delinquency, Psychological Distress, and Antisocial Behavior**

Variables	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Delinquency scale	71.78	19.33	62.80	17.37	3.41	.001	0.49
Kessler psychological distress scale	38.37	6.42	32.47	9.31	5.24	.000	0.74
Subtype of antisocial behavior scale	102.69	24.83	89.25	22.10	3.97	.000	0.57

It was hypothesized that there is a significant mean difference along gender on delinquency, psychological distress and antisocial behavior. Table 2 reveals significant mean difference along gender on delinquency with  $t(198) = 3.41, p < .001$ . Findings showed that male participants revealed higher scores on delinquency ( $M = 71.78, SD = 19.33$ ) compared to female participants ( $M = 62.80, SD = 17.37$ ). The value of Cohen's  $d$  is 0.49 ( $< 0.50$ ) which indicates medium effect size. Results further revealed significant mean difference along gender on psychological distress with  $t(198) = 5.24$  and antisocial behavior with  $t(198) = 3.97$  respectively. Male participants revealed higher scores on psychological distress ( $M = 38.37, SD = 6.42$ ) compared to female participants ( $M = 32.47, SD = 9.31$ ). On antisocial behavior male participant again showed higher scores ( $M = 102.69, SD = 24.83$ ) compared to female participants ( $M = 89.25, SD = 22.10$ ). The Cohen's  $d$  values of psychological distress and antisocial behavior are 0.74 and 0.57 ( $< 0.50$ ) which indicate moderate effect size for both.

**Table 3**  
**Mean Difference along Gender on Aggression**

Variables	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Reactive aggression subscale	17.15	3.23	15.23	3.15	4.25	0.000	0.60
Reactive-Proactive aggression scale total score	33.83	6.08	31.09	4.85	3.50	0.001	0.50

It was hypothesized that there is a significant mean difference along gender on aggression. Table 3 revealed significant mean difference along gender on reactive aggression with  $t(198) = 4.25, p < .001$ . Findings showed that male participants revealed higher scores on reactive aggression ( $M = 17.15, SD = 3.23$ ) compared to female

participants ( $M = 15.23$ ,  $SD = 3.15$ ). The value of Cohen's  $d$  is 0.60 which indicates moderate effect size. Results further revealed significant mean difference along gender on aggression (as total) with  $t(198) = 3.50$ ,  $p < .001$ . Male participants revealed higher scores on aggression as total ( $M = 33.83$ ,  $SD = 6.08$ ) compared to female participants ( $M = 31.09$ ,  $SD = 4.85$ ). The value of Cohen's  $d$  is 0.50 which indicates moderate effect size.

**Table 4**  
**Mean Difference along Gender on impulsivity**

Variables	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Motor impulsiveness subscale	15.05	4.59	9.76	4.51	8.21	.000	1.16
Barratt impulsivity scale total score	46.38	8.09	40.29	8.56	5.17	.000	0.73

It was hypothesized that there is a significant mean difference along gender on impulsivity. Table 4 revealed significant mean difference along gender on motor impulsiveness with  $t(198) = 8.21$ ,  $p < .001$ . Findings showed that male participants revealed higher scores on motor impulsiveness ( $M = 15.05$ ,  $SD = 4.59$ ) compared to female participants ( $M = 9.76$ ,  $SD = 4.51$ ). The value of Cohen's  $d$  is 1.16 ( $> 0.50$ ) which indicates large effect size. Results also revealed significant mean difference along gender on impulsivity as total score with  $t(198) = 5.17$ ,  $p < .001$ . Findings showed that male participants revealed higher scores on impulsivity as total ( $M = 46.38$ ,  $SD = 8.09$ ) compared to female participants ( $M = 40.29$ ,  $SD = 8.56$ ). The value of Cohen's  $d$  is 0.73 which indicates moderate effect size.

**Table 5**  
**Mean Difference along Gender on Psychological Well-being**

Variables	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Purpose in life subscale	42.03	7.74	46.34	6.35	-4.29	.000	0.61
Self acceptance subscale	41.39	13.16	47.77	7.77	-4.15	.000	0.59
Psychological wellbeing total score	273.45	47.70	291.13	17.36	-3.44	.001	0.49

It was hypothesized that there is a significant mean difference along gender on psychological wellbeing. Table 5 revealed significant mean difference along gender on purpose in life with  $t(198) = -4.29$ ,  $p < .001$ . Findings showed that female participants revealed higher scores on purpose in life ( $M = 46.34$ ,  $SD = 6.35$ ) compared to male participants ( $M = 42.03$ ,  $SD = 7.74$ ). The value of Cohen's  $d$  is 0.61 which indicates moderate effect size. Results further revealed significant mean difference along gender on self acceptance with  $t(198) = -4.15$ ,  $p < .001$ . Female participants revealed higher scores on self acceptance ( $M = 47.77$ ,  $SD = 7.77$ ) compared to male participants ( $M = 41.39$ ,  $SD = 13.16$ ). The value of Cohen's  $d$  is 0.59 which indicates moderate effect size. On psychological wellbeing total core with  $t(198) = -3.44$ ,  $p < .001$ , female participants reported higher scores ( $M = 291.13$ ,  $SD = 17.36$ ) compared to female participants ( $M = 273.45$ ,  $SD = 47.70$ ). The value of Cohen's  $d$  is 0.49 which indicates moderate effect size.

**Table 6**  
**Mean Difference along Gender on Personality Traits**

Variables	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Agreeableness	2.95	1.50	4.33	1.82	-5.87	0.00	0.82
Conscientiousness	4.73	1.95	5.32	2.20	-2.02	0.04	0.28
Neuroticism	6.62	1.52	5.69	2.36	3.33	0.00	0.47
Openness to experience	4.60	1.68	5.38	1.73	-3.23	0.00	0.46

It was hypothesized that there is a significant mean difference along gender on personality traits. Table 6 revealed significant mean difference along gender on agreeableness with  $t(198) = -5.87, p < .001$ . Findings showed that female participants revealed higher scores on agreeableness ( $M = 4.33, SD = 1.82$ ) compared to male participants ( $M = 2.95, SD = 1.50$ ). The value of Cohen's  $d$  is 0.82 ( $>0.50$ ) which indicates strong effect size. Results further revealed significant mean difference along gender on conscientiousness with  $t(198) = -2.02, p < .05$  and openness to experience with  $t(198) = -3.23, p < .001$ . Findings showed that female participants revealed higher scores on conscientiousness ( $M = 5.32, SD = 2.20$ ) compared to male participants ( $M = 4.73, SD = 1.95$ ) and openness to experience ( $M = 5.38, SD = 1.73$ ) compared to male participants ( $M = 4.60, SD = 1.68$ ) respectively. The values of Cohen's  $d$  are 0.28 ( $<0.50$ ) and 0.46 ( $<0.50$ ) which indicate small effect size respectively. On neuroticism with  $t(198) = 3.33, p < .001$ , male participants reported higher scores ( $M = 6.62, SD = 1.52$ ) compared to female participants ( $M = 5.69, SD = 2.36$ ). The value of Cohen's  $d$  is 0.47 ( $<0.50$ ) which indicates small effect size.

**Table 7**  
**Mean Difference along Gender on Cognitive Distortions**

Variable	Male		Female		t(198)	P	Cohen's d
	M	SD	M	SD			
Self-centered subscale	3.25	1.02	4.74	1.05	-3.25	.001	0.46
Blaming others subscale	5.04	5.44	3.80	1.56	2.17	.03	0.31
How I think questionnaire total score	21.34	3.03	19.09	4.91	3.94	.000	0.55

It was hypothesized that there is a significant mean difference along gender on cognitive distortions. Table 7 revealed significant mean difference along gender on self-centered with  $t(198) = -3.25, p < .001$ . Findings showed that female participants revealed higher scores on self-centered ( $M = 4.74, SD = 1.05$ ) compared to male participants ( $M = 3.25, SD = 1.02$ ). The value of Cohen's  $d$  is 0.46 ( $<0.05$ ) which indicates small effect size. On blaming others results revealed significant mean difference along gender with  $t(198) = 2.17, p < .05$ . Findings showed that male participants revealed higher scores on blaming others ( $M = 5.04, SD = 5.44$ ) compared to female participants ( $M = 3.80, SD = 1.56$ ). The value of Cohen's  $d$  is 0.31 ( $<0.05$ ) which indicates small effect size. Cognitive distortions as total revealed significant mean difference along gender with  $t(198) = 3.94, p < .001$ . Findings showed that male participants revealed higher scores ( $M = 21.34, SD = 3.03$ ) compared to female participants ( $M = 19.09, SD = 4.91$ ). The value of Cohen's  $d$  is 0.55 which indicates moderate effect size.

## Discussion

The t-test analysis revealed significant mean differences between genders in psychological distress, psychological well-being, personality traits, antisocial behavior, impulsivity, aggression, cognitive distortions, and impulsivity, with males reporting higher scores than females on several variables.

On delinquency, male participants reported high mean values, which indicated that male participants are more attracted towards delinquent activities and commit crimes more often. Previous research yielded the similar results (Kurd & Ambreen, 2019; Rebellon et al., 2016; Kalb & Williams, 2014; Rowe et al., 1995; Shek & Lin, 2016). Ozen et al. (2005) gave equal importance to the contribution of biological factors and gender-specific roles. Hadjar et al. (2017) highlight that conventional society imposes social restrictions on females under the tag of social norms and values that tries to hold them under strict supervision of parents and caregivers with fewer opportunities to socialize. However, boys

lack parental (especially on the father's behalf) control and get involved in unlawful activities. (Steketee et al., 2013).

T-test results on psychological distress revealed that levels of PD are higher in male delinquents. The findings are similar to previous research (Wasserman, 2003; Maneiro et al., 2017), highlighting the greater incidence of male delinquents indulgence in antisocial sensation-seeking activities. Research confirmed that early display of antisocial behavior in boys (Bagheri et al., 2022) served as a risk factor for the delinquency's early onset (Wasserman, 2003). However, studies also support the higher levels of PD among females as well (Chamberlain & Moore, 2002; Urben et al., 2016; Maurya&Asthana, 2019; McCabe et al., 2002; Jagers et al., 2021). Previous studies suggested rejection by family members and friends (Bagheri et al., 2022), lack of social/moral support by caregivers, and life traumas as important factors for the increased levels of antisocial behavior and PD among females.

On antisocial behavior, t-test results revealed a significant mean difference between male and female participants. Male participants show a high level of antisocial behavior compared to female participants. Former research has yielded similar results (Spieker et al., 1999; Crick, 1997; Miner et al., 2008). Windle (1990) highlights that boys have a propensity to indulge in physical aggression, vandalism, and alcohol consumption more frequently than girls.

On impulsivity, t-test results revealed higher mean values of males' motor impulsivity and impulsivity as a total score than females. Existing literature suggests mixed findings. Some researchers reported a stronger relationship between motor skills and impulsivity among males than females (Srinivasan et al., 2022). Literature suggests poor self-control among males, although both males and females acquire self-control through the same process, i.e., parental monitoring, parent-child attachment, and punishment. This process of attaining self-control may be affected by some familial factors (Chapple & Johnson, 2007).

On aggression, t-test results revealed a significant mean difference along gender, where male participants reported a higher mean value on reactive aggression and aggression as a total score. Previous research yielded similar results (Archer, 2004; Björkqvist, 2018; Olweus et al., 1988; Card et al., 2008; Lenssen et al., 2000). Studies suggest that male juveniles commit more severe offenses in contrast to their female counterparts (Snyder & Sickmimd, 2006; Lenssen et al., 2000; Kakar et al., 2002).

On psychological well-being t-test results revealed that female participants scored higher on self-acceptance, purpose in life, and PWB total score. Result of previous research suggests that juvenile delinquents residing in prison centers show poor self-esteem and exhibit higher levels of depressive symptoms, especially females (Lanctot et al., 2007). Lack of love, support, and affection on parents behalf; constant exposure to violence; belonging to a low socioeconomic status; and low self-esteem were among the few factors that negatively affected functioning among female juvenile delinquents (Shek& Lin, 2016).

On cognitive distortions, t-test results revealed that female juvenile delinquents scored higher on the self-centered, while male juvenile delinquents scored higher on the blaming others and cognitive distortions (total score). Literature suggests higher levels of CD among adolescent offenders than non-offenders. Larden et al. (2006) reported a higher prevalence of cognitive distortion among males than females. Researchers found a positive relationship between cognitive and affective empathy and antisocial behavior (Langen et al., 2014; Yoo et al., 2013). Research by Schmits and Glowacz (2019) highlighted poor parent-child relations, dysfunctional family dynamics, low socioeconomic status, insufficient education, and violence exposure as significant contributory factors to cognitive distortions and antisocial behavior in juvenile delinquents.



On personality traits, t-test results showed that female participants scored high scores on agreeableness, conscientiousness, and openness to experience. While male participants showed higher scores on neuroticism. Existing studies support the findings that females scored higher on five personality dimensions, particularly extraversion, agreeableness, neuroticism, and openness to experience, than males (Costa & McCrae, 1985; Heaven, 1996). Research evidence suggests the higher rates of delinquency among males are because of their impulsive nature and negative attitude towards authority (Rigby et al., 1989; Azevedo et al., 2020).

## **Conclusion**

Overall result reported significant mean differences along gender on delinquency, antisocial behavior, impulsivity, aggression, and psychological distress, where male adolescents reported a higher mean value compared to female participants on number of variables. The study involved participants rehabilitating in protected environments of rehabilitation institutes and consequently lacks the interaction with juvenile delinquents imprisoned in different jails of Punjab. Therefore a separate study may be conducted to examine and compare the same variables among juvenile delinquents imprisoned in juvenile jails of Punjab.

## **Recommendations**

The results of the study highlighted the role of psychosocial factors as contributory factors to understand the nature and patterns of delinquent behavior. The study recommends

- the proper counseling programs for parents to make them access their problematic parenting patterns and to master the effective parenting techniques.
- defining counterstrategies to deal with problematic behaviors on delinquent's behalf in the form of intervention plans.

## References

- Ara, E. (2015). Measuring Self-Serving Cognitive Distortions: An analysis of the Psychometric Properties of the How I think Questionnaire (HIT-16-Q). *The International Journal of Indian Psychology*, 3(1), 49-56.
- Archer, J. (2004). Sex differences in aggression in real-world settings: A meta-analytic review. *Review of general Psychology*, 8(4), 291-322.
- Azevedo, J., Vieira-Coelho, M., Castelo-Branco, M., Coelho, R., & Figueiredo-Braga, M. (2020). Impulsive and premeditated aggression in male offenders with antisocial personality disorder. *Plos one*, 15(3), e0229876.
- Bagheri, M., Moazami, S., Nejad, A. A., & Mansouri, S. M. (2022). Examining Social And Psychological Factors That Affect Juvenile Delinquency. *Journal of Positive School Psychology*, 6(7). 292-300
- Barriga, A. Q., Gibbs, J. C., Potter, G. B., & Liau, A. (2001). *How I Think (HIT) questionnaire manual*. Research Press.
- Begum, T. (2019). Prevalence of Cognitive Distortion and Antisocial Behavior among Bangladeshi Adolescent in Higher Secondary School. *Universal Journal of Psychology*, 7(3), 49-65.
- Björkqvist, K. (2018). Gender differences in aggression. *Current opinion in psychology*, 19, 39-42.
- Bonnie, R. J., Backes, E. P., Alegria, M., Diaz, A., & Brindis, C. D. (2019). Fulfilling the promise of adolescence: realizing opportunity for all youth. *Journal of Adolescent Health*, 65(4), 440-442.
- Burt, S. A., & Donnellan, M. B. (2009). Development and validation of the Subtypes of Antisocial Behavior Questionnaire. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, 35(5), 376-398.
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child development*, 79(5), 1185-1229.
- Chamberlain, P., & Moore, K. J. (2002). Chaos and trauma in the lives of adolescent females with antisocial behavior and delinquency. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 79-108.
- Chapple, C. L., & Johnson, K. A. (2007). Gender differences in impulsivity. *Youth violence and juvenile justice*, 5(3), 221-234.
- Collins, W. A., & Steinberg, L. (2006). Adolescent Development in Interpersonal Context. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (6th ed., pp. 1003-1067). John Wiley & Sons, Inc..
- Costa, P. T., & McCrae, R. R. (1989). *NEO PI/FFI manual supplement for use with the NEO Personality Inventory and the NEO Five-Factor Inventory*. Psychological Assessment Resources.

- Crick, N. R. (1997). Engagement in gender normative versus nonnormative forms of aggression: Links to social-psychological adjustment. *Developmental psychology*, 33(4), 610.
- Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of happiness studies*, 9(1), 1-11.
- Dodge, K. A., Pettit, G. S., McClaskey, C. L., Brown, M. M., & Gottman, J. M. (1986). Social competence in children. *Monographs of the society for research in child development*, 1-85.
- Du Preez, N., & Luyt, W. F. M. (Eds.). (2011). *Fundamentals and Developmental Psychology in Youth Correction*. University of South Africa.
- Hadjar, A., Baier, D., Boehnke, K., & Hagan, J. (2017). Juvenile delinquency and gender revisited: The family and power-control theory reconceived. *European Journal of Criminology*, 4(1), 33-58.
- Heaven, P. C. (1996). Personality and self-reported delinquency: Analysis of the "Big Five" personality dimensions. *Personality and individual differences*, 20(1), 47-54.
- Herrenkohl, T. I., Maguin, E., Hill, K. G., Hawkins, J. D., Abbott, R. D., & Catalano, R. F. (2000). Developmental risk factors for youth violence. *Journal of adolescent health*, 26(3), 176-186.
- Hoge, R. D. (2001). *The juvenile offender: Theory, research and applications* (Vol. 5). Springer Science & Business Media.
- Jagers, J. W., Sonsteng-Person, M., Griffiths, A., Gabbard, W. J., & Turner, M. M. (2021). Behavioral problems and psychological distress among seriously delinquent youth: Assessing a mediational pathway of parental monitoring, peer delinquency, and violence exposure. *Youth & Society*, 53(2), 230-251.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory – versions 4a and 5*. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
- Kausar, R., & Yousaf, M. (2014). Psychological Correlates of Self-care, Distress and Quality of Life of Patients With Diabetes: Preliminary Findings. *European Health Psychologist*, 16, 346-346.
- Kakar, S., Friedemann, M. L., & Peck, L. (2002). Girls in detention: The results of focus group discussion interviews and official records review. *Journal of Contemporary Criminal Justice*, 18(1), 57-73.
- Kalb, G., & Williams, J. (2014). Delinquency and gender. *Applied economics letters*, 10(7), 425-429.
- Kessler, R. C. M. D., & Mroczek, D. (1992). An update of the development of mental health screening scales for the US National Health Interview Study. *Ann Arbor: University of Michigan, Survey Research Center of the Institute for Social Research*, 16 (2), 31118-5.
- Khuda, K. E. (2019). Juvenile delinquency, Its causes and justice system in Bangladesh: A Critical Analysis. *Journal of South Asian Studies*, 7(3), 111-120.

- Kirmayer, L. J. (1989). Cultural variations in the response to psychiatric disorders and emotional distress. *Social Science & Medicine*, 29(3), 327-339.
- Kurd, S., & Ambreen, S. (2019). Gender Difference in Delinquent Tendency among Adolescents. *Balochistan Review*, 1, 216-223.
- LADOKUN, A. O. (2010). CRIME IN SELECTED HIGH SCHOOLS IN EAST LONDON, SOUTH AFRICA.
- Lanctôt, N., Cernkovich, S. A., & Giordano, P. C. (2007). Delinquent behavior, official delinquency, and gender: Consequences for adulthood functioning and well-being. *Criminology*, 45(1), 131-157.
- Langen, M. A., Wissink, I. B., van Vugt, E. S., Van der Stouwe, T., & Stams, G. J. J. (2014). The relation between empathy and offending: A meta-analysis. *Aggression and violent behavior*, 19(2), 179-189.
- Lardén, M., Melin, L., Holst, U., & Långström, N. (2006). Moral judgement, cognitive distortions and empathy in incarcerated delinquent and community control adolescents. *Psychology, Crime & Law*, 12(5), 453-462.
- Lenssen, S. A., Doreleijers, T. A., Van Dijk, M. E., & Hartman, C. A. (2000). Girls in detention: What are their characteristics? A project to explore and document the character of this target group and the significant ways in which it differs from one consisting of boys. *Journal of Adolescence*, 23(3), 287-303.
- Maneiro, L., Gómez-Fraguela, J. A., Cutrín, O., & Romero, E. (2017). Impulsivity traits as correlates of antisocial behaviour in adolescents. *Personality and individual differences*, 104, 417-422.
- Maurya, A. K., & Asthana, H. (2019). Understanding gender differences in psychological distress among juvenile delinquents. *Int J Res SocSci*, 9, 652-8.
- McCabe, K. M., Lansing, A. E., Garland, A. N. N., & Hough, R. (2002). Gender differences in psychopathology, functional impairment, and familial risk factors among adjudicated delinquents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(7), 860-867.
- Miner, J. L., & Clarke-Stewart, K. A. (2008). Trajectories of externalizing behavior from age 2 to age 9: relations with gender, temperament, ethnicity, parenting, and rater. *Developmental psychology*, 44(3), 771.
- Mirowsky, J., & Ross, C. (1989). Social Causes of Psychological Distress. Moe, K. (2012). *Factors influencing women's psychological well-being within a positive functioning framework*. University of Kentucky.
- Naqvi, I., & Kamal, A. (2008). Development of self reported and informant reported delinquency scales for laborer adolescents. *FWU Journal of Social Sciences*. 7(1), 15-26.
- Olweus, D., Mattsson, A., Schalling, D., & Loew, H. (1988). Circulating testosterone levels and aggression in adolescent males: a causal analysis. *Biopsychosocial Science and Medicine*, 50(3), 261-272.
- Ozen, S., Ece, A., Oto, R., Tirasci, Y., & Goren, S. (2005). Juvenile delinquency in a developing country: A province example in Turkey. *International journal of law and psychiatry*, 28(4), 430-441.

- Patton, J. H., Stanford, M. S., & Barratt, E. S. (1995). Factor structure of the Barratt impulsiveness scale. *Journal of clinical psychology*, 51(6), 768-774.
- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., ...& Liu, J. (2006). The reactive-proactive aggression questionnaire: Differential correlates of reactive and proactive aggression in adolescent boys. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, 32(2), 159-171.
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of research in Personality*, 41(1), 203-212.
- Rebellon, C. J., Manasse, M. E., Agnew, R., Van Gundy, K. T., & Cohn, E. S. (2016). The relationship between gender and delinquency: Assessing the mediating role of anticipated guilt. *Journal of Criminal Justice*, 44, 77-88.
- Rigby, K., Mak, A. S., & Slee, P. T. (1989). Impulsiveness, orientation to institutional authority, and gender as factors in self-reported delinquency among Australian adolescents. *Personality and individual differences*, 10(6), 689-692.
- Rowe, D. C., Vazsonyi, A. T., & Flannery, D. J. (1995). Sex differences in crime: Do means and within-sex variation have similar causes?. *Journal of research in Crime and Delinquency*, 32(1), 84-100.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.
- Schmits, E., & Glowacz, F. (2019). Delinquency and drug use among adolescents and emerging adults: The role of aggression, impulsivity, empathy, and cognitive distortions. *Journal of Substance Use*, 24(2), 162-169.
- Shek, D. T., & Lin, L. (2016). Delinquent behavior in high school students in Hong Kong: Sociodemographic, personal, and family determinants. *Journal of pediatric and adolescent gynecology*, 29(1), 61-71.
- Snyder, H. N., & Sickmund, M. (2006). Juvenile offenders and victims: 2006 national report. *Office of juvenile justice and delinquency prevention*.
- Spieker, S. J., Larson, N. C., Lewis, S. M., Keller, T. E., & Gilchrist, L. (1999). Developmental trajectories of disruptive behavior problems in preschool children of adolescent mothers. *Child development*, 70(2), 443-458.
- Srinivasan, P., Rentala, S., & Kumar, P. (2022). Impulsivity and aggression among male delinquent adolescents residing in observation homes—A descriptive correlation study from east India. *Journal of Indian Association for Child and Adolescent Mental Health*, 18(4), 327-336.
- Steketee, M., Junger, M., & Junger-Tas, J. (2013). Sex differences in the predictors of juvenile delinquency: Females are more susceptible to poor environments; males are influenced more by low self-control. *Journal of contemporary criminal justice*, 29(1), 88-105.

- Urban, S., Habersaat, S., Suter, M., Pihet, S., De Ridder, J., &Stéphan, P. (2016). Gender differences in at risk versus offender adolescents: A dimensional approach of antisocial behavior. *Psychiatric quarterly*, 87(4), 619-631.
- Vadivel, B., Alam, S., Anwar, C., &Teferi, H. (2023). Examining the relationship between antisocial behavior and the academic performance of teenagers: The role of schools and causes of the antisocial behavior. *Education Research International*, 2023 (1), 1–11.
- Wasserman, G. A. (2003). *Risk and protective factors of child delinquency*. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Wigfield, A., Muenks, K., &Rosenzweig, E. Q. (2015). Children's achievement motivation in school. In *Routledge international handbook of social psychology of the classroom* (pp. 9-20). Routledge.
- Windle, M. (1990). A longitudinal study of antisocial behaviors in early adolescence as predictors of late adolescent substance use: gender and ethnic group differences. *Journal of abnormal psychology*, 99(1), 86.
- Yoo, H., Feng, X., & Day, R. D. (2013). Adolescents' empathy and prosocial behavior in the family context: A longitudinal study. *Journal of youth and adolescence*, 42(12), 1858-1872.