



## The effect of bipolar effective disorder and low socio-economic status on juvenile delinquents in Pakistan

Farwa Shafique<sup>1</sup>, Aamir Zada<sup>2</sup>, Maira Ramzan<sup>3</sup>, Naveed Ahmad<sup>4</sup>, Varqa Faraid<sup>5</sup>, Abdullah Khalil<sup>6</sup>, Qurat ul Ain Ali<sup>7</sup>

### Abstract

Bipolar disorder remains a significant taboo in Pakistan, particularly among juvenile delinquents, leading to their social segregation. The prevalence of this mood disorder in Pakistani youth is concerning, largely due to limited awareness and inadequate mental health resources for children and adolescents. Economic instability, family conflict, and lack of access to care contribute to chronic stress, delaying the diagnosis and treatment of bipolar disorder. This study aimed to explore the relationship between socio-economic status and bipolar disorder in juvenile offenders, focusing on the role of social support. We included 220 children, aged 12 to 18, diagnosed with severe bipolar disorder. Most lived with both biological parents, while some were in single-parent households due to separation or loss. Our findings indicated that low socio-economic status significantly impacts mental health and personality development. Factors such as financial instability, inadequate housing, and lack of access to quality healthcare increase feelings of inferiority, leading to higher rates of bipolar disorder. Notably, 88.4% of participants exhibited extreme symptoms, with a higher prevalence in males (55%) than females (29%). The delinquency rate was significant, with 56% of boys and 32% of girls involved in criminal activities. These results suggest a strong correlation between low socio-economic status and the severity of bipolar disorder in juvenile delinquents. Many young individuals resort to crime due to unmet basic needs,

<sup>1</sup>Clinical & Educational Psychologist, International Islamic University Islamabad, farwa.msep309@gmail.com.

<sup>2</sup>Healthcare Management, Riphah International University, Islamabad, aamirzada222@gmail.com.

<sup>3</sup>MBBS, Federal Medical & Dental College, Islamabad, drmr2700@gmail.com.

<sup>4</sup>MBBS, Federal Medical & Dental College, Islamabad, docnaveed999@gmail.com.

<sup>5</sup>Admin Officer, School of Dentistry, SZABMU, Islamabad, varqafaraid@hotmail.com.

<sup>6</sup>Officer, PCSIR Labs, Islamabad, abduallahese@gmail.com.

<sup>7</sup>Author, Int. Association of Professional Writers & Editors, [quratali22@gmail.com](mailto:quratali22@gmail.com).

reinforcing the idea that socio-economic challenges directly influence mental health outcomes. Overall, these findings underscore the urgent need for improved mental health care and support for vulnerable youth in Pakistan.

**Keywords:** *adolescent, bipolar effective, Juvenile delinquents, mental health, socio-economic status*

## Introduction

Bipolar disorder usually diagnosed with late youth or early. Sometimes the symptoms can appear for the child too. Bipolar disorder can also be shown during pregnancy or postpartum. Symptoms may be different overtime, but bipolar disorder usually requires lifetime treatment. After a prescribed treatment improve quality of life. Individual measurements can experience symptoms of bipolar disorders that do not correspond (Post et al., 2016). Emotional disturbance and rebellious behavior are normal in childhood and adolescence and in most cases do not indicate a mental illness requiring treatment. All children go through difficult times, its normal to feel anxious, irritable, angry, hyperactive or sometimes naughty. However children with bipolar disorder have episodes of symptoms return to their usual behavior and mood (Post et al., 2015). Children are mostly inclined to risky behaviors however that danger is expanded when the youngsters additionally has bipolar disorder, keep an eye out of substance abuse, such as consuming or taking as suicidal behavior (Sletved et al., 2023). Lower socio-economic status (LSES) is related with comorbidity, symptomatic severity and purposeful impairment in individual's sickness with bipolar. Socioeconomic status is related to multiple aspects that includes measures of education, occupational status, household income and psychosocial aspects and neighborhood (Bradley & Corwyn, 2002). However, socioeconomic status is relevant to extreme severe direction of bipolar disorder. The clinical studies correlates socioeconomic status in children with bipolar disorder is to glean insights related to socioeconomic specific needs with regard to screening and intervention (Lu et al., 2020). Poverty and intellectual health in low-income family samples ensures mental fitness issues. Individuals with bipolar disorder are thought to glide into poverty as an increased transport cost and lost productivity. The objectives and purpose of the study were to investigate bipolar affective disorder effectiveness and lower socioeconomic status on juvenile delinquents and to assess delinquent children's behavior with less social support.

According to the study, individuals diagnosed with bipolar disorder had reduced likelihoods of attaining the highest educational level. Socio-economic status is significantly diminished in individuals with bipolar disorder. It does not improve with long term treatment. This highlights a frequently overlooked treatment gap (Sletved et al., 2023). Another study revealed that, significant discrepancies have emerged in studies examining the relationship between bipolar disorder and socio-economic status, including variation across social classes and educational levels. This study reported that bipolar disorder is associated with lower family income, which is in many research literature. The determinants of bipolar disorder with severity are complex (Eid et al., 2013). Criminal behavior is major among individuals with bipolar disorder. They are more often to victims of violence than offenders. They engage in criminal acts, facing in difficulties and opposition, and committing offenses are adverse outcomes (Corrigan & Watson, 2005). Juvenile delinquency is viewed as typical misbehavior due various factors including mental health. Our criminal justice lacks with evidence-based and trauma information resources to for juvenile acts. There should be a greater emphasis on providing services for juvenile offenders to prevent future criminals. This can be done by diversion based programs (Schou, 1972).

It is extremely important to place a high priority on addressing mental health issues in young individuals, as well as implementing treatment programs and screening. These programs needs to be prevent delinquency and criminal behavior addressing mental health challenges and risk factors. In this way we can help young people to stay away from criminal act (Bartol & Bartol, 2017). A study revealed that, girls three times more depressed than boys. Therefore, they are more prone to have bipolar disorder. Another study was conducted in Rajasthan, there are various lower status challenges, to explore the impact of socioeconomic factor on delinquency. It needs to focus the keys as poverty, joblessness and least education which contributes the growth and development of criminals (Atrey & Singh). Children may show delinquent behavior by mirroring their parents (father and mother) who do criminal actions or behavior. Children are mostly/unlikely inclined to risky behaviors however that danger is expanded when the youngsters additionally has bipolar disorder, keep an eye out of substance abuse, such as consuming or taking as suicidal behavior. This study highlighted family dynamic involved in delinquency. Individuals who belongs to lower class families their parents will be definitely aggressive and again the reason of their aggression may be a lower socio economic status. It cause bipolar state in children also. If father has 8% criminal act than children will show 37% behavioral issues (Siegel & Welsh, 2010).

Many worthy criminology studies originally suggested that juvenile delinquency is linked lower socioeconomic status. A research by Shaw, McKay and Elliott, supported this idea by revealing that juvenile delinquency grows from families with lower skilled workers (Shaw & McKay, 1942). According to many studies, individuals diagnosed with this disease (bipolar disorder) had reduced likelihoods of attaining the highest educational level/grades. Socio-economic status is significantly diminished in individuals with bipolar disorder. It does not improve with long term treatment. Low income household tend to engage in delinquent behavior due to lack of education, least success etc. However this research highlighted that lower social classes driven the juvenile delinquency by poverty (Sharma, 1997).

Another study mentioned, it is crucial to consider connection between poverty and juvenile delinquency. The reason of this delinquency is linked with background. In which the children face restrictions for gaining authority or hostility. It cause to make them rebel towards society (Pagani et al., 1999). Another key aspect to examine in the link between poverty and juvenile delinquency is the diminished effectiveness of justice system. The judicial system seeks to prevent children from crimes through legal ways. It works well for those who are from wealthier environment. For children who raised in poverty may not be prevented by crimes (Cole et al., 1992).

This study defines the ways or solutions to understand that how low socio-economic status cause delinquency in children and how they start to show bipolar behaviors. This study also presented the association between low socio-economic status and bipolar affective disorder among juvenile delinquents.

### **Theories of Juvenile Delinquency**

(Juby & Farrington, 2001) presented three theories related to delinquency. These three Theories explain the causes and factors of delinquency such as Trauma theories, Life-course theories and Selection theories. According to the Trauma theory, the children get traumatic stress due to the death of their parent whether it may be the death of single parent or both According to the Life-course theory can be on high risks when the children get depression Stress as a result of the separation of their parents such as divorce. Due to this the children may be neglected by their parents. Consequently the children become juvenile delinquent. According to the Selection theory,

the children become juvenile delinquents if they belong to the disruptive, anti-social and non-traditional family. They get poor discipline from their parents.

### Literature Review

According to the study, individuals diagnosed with bipolar disorder had reduced likelihoods of attaining the highest educational level. Socio-economic status is significantly diminished in individuals with bipolar disorder. It does not improve with long term treatment. This highlights a frequently overlooked treatment gap (Sletved et al., 2023). Another study revealed that, significant discrepancies have emerged in studies examining the relationship between bipolar disorder and socio-economic status, including variation across social classes and educational levels. This study reported that lower family income associated with bipolar disorder. The determinants of bipolar disorder are complex (Eid et al., 2013). Criminal behavior is major among individuals with bipolar disorder. They are more often to victims of violence than offenders. They engage in criminal acts, facing in difficulties and opposition, and committing offenses are adverse outcomes (Corrigan & Watson, 2005). Juvenile delinquency is viewed as typical misbehavior due various factors including mental health. Our criminal justice lacks with evidence-based and trauma information resources to for juvenile acts. There should be a greater emphasis on providing services for juvenile offenders to prevent future criminals. This can be done by diversion based programs (Schou, 1972).

It is extremely important to place a high priority on addressing mental health issues in young individuals, as well as implementing treatment programs and screening. These programs needs to be prevent delinquency and criminal behavior addressing mental health challenges and risk factors. In this way we can help young people to stay away from criminal act (Atrey & Singh). A study revealed that, girls three times more depressed than boys. So they are more prone to have bipolar disorder. Another study was conducted in Rajasthan, there are various lower status challenges, to explore the impact of socioeconomic factor on delinquency. It needs to focus the keys as poverty, joblessness and least education which contributes the growth and development of criminals (Atrey & Singh). Children may display delinquent behavior by mirroring their parents who do criminal actions. This study highlighted family dynamic involved in delinquency. Individuals who belongs to lower class families their parents will be definitely aggressive and again the reason of their

aggression may be a lower socio economic status. It cause bipolar state in children also. If father has 8% criminal act than children will show 37% behavioral issues (Siegel & Welsh, 2010).

Moreover, (Shaw & McKay, 1942) , stressed that the juvenile delinquency can be caused by background of families and also can be caused by outside environment as well. While assessing the broad spectrum of delinquency, it was also observed that the violent and aggressive behavior of children may also cause by harsh discipline of parents, which also caused problems in adolescence. Previous literature suggested that (Marneros, 2009), that the cohesiveness of non-traditional families from lower socio-economic status as a factor for delinquency acts. Many worthy criminology studies originally suggested that juvenile delinquency is linked lower socioeconomic status. A research by Shaw, McKay and Elliott, supported this idea by revealing that juvenile delinquency grows from families with lower skilled workers (Shaw & McKay, 1942). Low income household tend to engage in delinquent behavior due to lack of education, least success etc. However this research highlighted that lower social classes driven the juvenile delinquency by poverty (Sharma, 1997). Another study mentioned, it is crucial to consider connection between poverty and juvenile delinquency. The reason of this delinquency is linked with background. In which the children face restrictions for gaining authority or hostility. It cause to make them rebel towards society (Pagani et al., 1999). Another key aspect to examine in the link between poverty and juvenile delinquency is the diminished effectiveness of justice system. The judicial system seeks to prevent children from crimes through legal ways. It works well for those who are from wealthier environment. For children who raised in poverty may not be prevented by crimes (Cole et al., 1992).

According to the research of (Lu et al., 2020), the children became victim of juvenile crimes who belongs to difficult social and economic conditions. This research revealed that the parents who are involved in criminal activities such substance abuse, sexual abuse, aggression and suicidal ideation. Their children also become victim of juvenile delinquency. When they ignored by their parents. This study defines the ways to understand that how low socio-economic status cause delinquency in children and how they start to show bipolar behaviors. This study also presented the association between low socio-economic status and bipolar affective disorder among juvenile delinquents.

## Objectives

- To identify the outcomes due to lower socio-economic status in juvenile offenders.
- To examine the social support for juvenile offenders with bipolar disorder.
- To identify the impact or effect of lower socio-economic (SE) status on bipolar disorder.

## Hypotheses

1. There will be a significant positive linkage/relationship between lower socio economic status and bipolar disorder.
2. There will be a significant/effective relationship between bipolar disorder and juvenile delinquency.
3. There will be a negative relationship between bipolar disorder and low socio economic status.
4. There will be a negative relative between bipolar disorder and juvenile delinquency.
5. Boys will prone more delinquent than girls in low socioeconomic status.
6. Due to low socio economic status Girls will prone more delinquent behavior.
7. Low socio-economic status will significantly predict juvenile delinquency.
8. Children of parents who involved in criminal activities are more prone to develop juvenile delinquency as compared to parents who are not involved.

## Methodology

### Sampling

This study was conducted on the sample of 100 children. A sample of 220 children was taken with convenient sampling technique from the different jails and areas of Wah Cantt, Hassan Abdal and Islamabad. Maximum children were educated .The age ranged was 7 to 12 years. For the sample the mean age was 15 years old. Majority of the children were living with their both biological parents. Some of the children were living with Separated parents (divorced or widowed). The sample consisted on 156 boys and 64 girls who were involved in delinquent acts and were convinced of different crimes. The boys and girls were randomly selected.

### Instruments

### ***Juvenile delinquency scale***

Juvenile delinquency scale was developed by Naqvi and Kamal in (2008). This scale has further two sub-scales (1) self-report juvenile delinquency (2) informant-report juvenile delinquency. This scale has separate male and female versions. Both sub-scales also has separate forms of male and female version.

Self-reported juvenile delinquency scale (SRJDS) and informant reported juvenile delinquency scale (IRJDS) (Male Version)

These are sub-scales of juvenile delinquency scale. It has 27 items. The self-reported juvenile delinquency scale helps and guide to measure the delinquent behaviour and hobbies from the individual and informant-reported juvenile delinquency scale measures the juvenile delinquency according the point of view of observant. This scale measure the juvenile delinquency according to the males as it measures theft, drug abuse, police encounter, lying, violence, cheating, gambling, sexual abuse etc. the possible range of scores for this sub-scale is 0-180. Higher score will indicate the higher delinquency among male children. The alpha reliabilities of this scale is 0.92 to 0.94.

Self-reported juvenile delinquency scale and informant reported juvenile delinquency scale (Female Version)

These are other sub-scales of juvenile delinquency. It has 28 items on both scales. These scales measure the juvenile delinquency among female children. These scales measure the theft, cheating, drug abuse, drug business, aggression, violence, and sex abuse. The possible range of scores for this scale is 0-180.

### ***Young mania rating scale***

This scale was developed to measure bipolar tendency.

It is 11 items scale. Best age range for this scale is 10-19 years. It follows the rating style of 0-8. It has .93 reliability and .96 validity (Mohammadi et al., 2018).

Kidscreen-27 socioeconomic status scale

This scale was designed for the measurement of socio-economic status for children. The age range is 8-10. It was 7 factor model scale. It has .74 reliability. It is 27 item scale (Shannon et al., 2017).

### Demographics

The demographic scale was used to record about the Age, Sex, Occupation, Education, Socio-Economic Status, Birth order, Parental Education, Parental Living Status, Religion, Family Income, Number of Siblings. At the end of the demographics variables few questions are also added, like Attachment with their Parents, Thinking about the juvenile delinquency, how much children are aware of Juvenile Delinquency from where children are serving juvenile delinquency

### Procedure

The sample compressed of N=156 boys and 64 girls. They were selected through different jails and slum areas of Wah-Cantt, Hassan Abdal and Islamabad. The subject's means participants were given forms and asked to fill the demographic segment of the forms means questioner that asked the Information and data about their age, sex, occupation, parental education, and socio-economic status, Number of siblings, religion and live status of their parents. The children were also asked about few questions related to Juvenile Delinquency at the end of demographic variables. They were assured and guaranteed in the information consent about the secret and confidentiality about the information and data that they gave about themselves means participants. They were also assured and guaranteed that the results would be utilized means used for the result and research purpose only. They were briefly and shortly informed about the purpose and aim of the research in informed consent. After that the participants or sample was asked to fill or provide the data required on the questionnaire that was used for the research and result purpose. After filling forms means data collection the data was used and utilized for the data analysis.

### Findings

**Table 1**

*Mean, Standard Deviation, Reliability Coefficient and psychometric properties of Scale.*

Scales	N	M	SD	No. of items	Alpha coefficient	Potential Range	Actual Range	Skewness	Kurtosis
--------	---	---	----	--------------------	----------------------	--------------------	-----------------	----------	----------

<b>SRDS-m</b>	220	46.0	29.9	27	.86	0-91	91	-.24	-1.48
<b>IRDS-m</b>	220	44.2	31.4	27	.96	0-93	93	-.05	-1.48
<b>SRDS-f</b>	220	20.7	26.8	28	.82	0-88	88	1.24	.005
<b>IRDS-f</b>	220	88.0	24.8	28	.93	0-97	97	1.54	1.33
<b>YMRS</b>	220	52.6	11.0	11	.90	31-89	60	-.17	-.12
<b>Kidscreen-27</b>	220	47.9	35.5	25	.84	19-78	78	1.25	-1.22

Table 1 contain Number of Samples (which is 220), Different Mean Values (46.0, 44.2, 20.7, 88.0, 52.6, 47.9), Different Standard Deviation Vales (29.9, 31.4, 26.8, 24.8, 11.0, 35.5), Number of items (27, 27, 28, 28, 11, 25), Alpha Coefficient (.86, .96, .82, .93, .90, .84), Potential range (0-91, 0-93, 0-88, 0-97, 31-89, 19-78), Actual range (91, 93, 88, 97, 60, 78), skewness (-.24, -.05, 1.24, 1.54, -.17, 1.25), Kurtosis (-1.48, -1.48, .005, 1.33, -.12, -1.22), Reliability of the Data, Coefficient and psychometric of scales for SRDS-m, IRDS-m, SRDS-f, IRDS-f, YMRs & Kidscreen-27.

**Table 2**

*ANOVA of Self-Reported Delinquency Scale (SRDS-f) and Informant Reported Delinquency Scale (IRDS-f) by Birth Order*

Source of variation	SS	df	MS	F	P
Between groups	2806.26	5	467.71	.617	.000
Within groups	32612.85	45	758.43		
Total	35419.12	20			
<b>SRDS-f</b>					
Between groups	3188.40	5	531.40	.841	.000
Within groups					
Total					
<b>IRDS-f</b>					
Between groups					
Within groups					
Total					

Within groups	27057.11	45	631.56
Total	30345.52	50	

**Table 3**

*ANOVA of Self-Reported Delinquency Scale (SRDS-m) and Informant Reported Delinquency Scale (IRDS-m) by Birth Order*

	Source of variation	SS	df	MS	F	P
	Between groups	2806.36	5	1434.68	.643	.000
<b>SRDS-m</b>						
	Within groups	41046.55	48	873.33		
	Total	43915.92	50			
<b>IRDS-m</b>						
	Between groups	1665.43	5	832.71	.835	.000
	Within groups	46887.14	48	997.59		
	Total	43552.58	50			

**Table 4**

*Percentage representation of boys and girls.*

	Total Sample	N	Delinquents	%	Bipolar Affective	%
<b>Boys</b>	220	146	82	56	123	55
<b>Girls</b>	220	74	24	32	64	29

Table shows there is 146 boys and 74 girls out of 220 in the study, from which 82 boys with 56% and 24 girls with 32% were delinquents.

### Discussion

The purpose of the study was to check the effect of lower socio economic status on children who have symptoms of bipolar with mood problems and in slums and lower colonies. In Pakistan, most of the area are underdeveloped and people are facing poverty. The children are forced to beg. These children may involve in delinquent activities. In early ages, children get inferiority complex and to fulfil their need and wishes they start snatching, stealing and other criminal acts. This behaviour makes them hyper and stubborn. They show rigid behaviour that is far from any diagnose of mental illness but now we can diagnose them accordingly. Bipolar disorder was rarely diagnosed for children but now it is shown increasingly in children (Marneros, 2009). Some studies suggested that the children with ADHD may comorbid with mania that they overlay with hyperactivity. Children with hyperactive behaviour, flight of ideas, less attention and concentration, mood swings and sometimes more talkative behaviour put them into bipolar affective disorder (Anthony & Scott, 1960). The children living in low socio-economic status are more prone to do criminal acts when they cannot fulfil their needs (Sampson et al., 1997). Another study indicated that the population of juvenile offenders showed high rates of mood disorders due to their delinquent, hyperactive and disruptive behaviours (Ryan & Redding, 2004). This study presented that children living belonged to lower socio-economic status are more delinquents and are diagnosed with bipolar affective disorder in early ages due to their disruptive, hyperactive, impulsive and less attentive behaviours. Boys are more delinquents than girls.

In a research exercise or practices of poor family management (self-care) that include poor supervision (management) and incoherent and aggressive discipline in homes was analysed to be greater or high predictor of future delinquency (FD) and substance abuse (Capaldi & Patterson, 1991). Socio-economic status was assessed using the Hollingshead approach, which revealed that higher socioeconomic status put more effects on individuals with bipolar disorder than lower socio economic status. On the other hand, there are number of differences and factors which showed that lower socio economic status has link with bipolar disorder (Schou, 1972).

## Conclusion

This study revealed that socio-economic status is the major factor which influence the survival status of individuals. The people living in lower economy have children with lack of facilities and lots of wishes which they cannot fulfil properly. They get inferiority complex. On extreme conditions they became delinquents and also suffers from mental illness bipolar affective disorder etc. The complexity and hardness of causality in juvenile delinquency is evident from this study. Juvenile delinquency is influenced by various criminal factors including socio economic status. Some justice system is essential to prevent these acts in children and teenagers (Dimovski & Dimovski, 2024).

Some environmental risk factors such as socio-economic status, social conditions and disparities encompasses many sub levels. The above mentioned discussion of results or data conclude that children who perceived low socio-economic status are more suitable to develop or bild the tendency of delinquent (disorder) behaviour than those children who high socio-economic status. Further findings and investigations suggest that the children with single (one) parents are also circumstance of delinquency. Results shows that These single parent fails to provide guidance, awareness and lack of supervision (management) about the activities of their kids means children in disadvantages neighbourhood hence increase their chance to deviate and were unable to fulfil needs of their children due lower socio-economic status. In addition to that, result and data depict that the middle and first born boys (male), while the girls (female) of all ordinal positions are prone to delinquent behaviours who had bipolar disorder also. Alike, both male and female genders equally perceive and carry their parents to be less unaffectionate, warm and aggressive. Negative and not supportive community environment along with hostility, allows boys (males) and girls (females) to be indulged in delinquent activities.

## Limitations and Suggestions

The sample was small and limited to children only. It can be done on vast variety of population. Other social factors can also be check.

## References

- Anthony, j., & scott, p. (1960). Manic–depressive psychosis in childhood. *Journal of child psychology and psychiatry*, 1(1), 53-72. <https://doi.org/10.1111/j.1469-7610.1960.tb01979.x>.
- Atrey, i., & singh, b.(2024). Impact of socio-economic factors on juvenile delinquency: an explorative study in rajasthan. *European Economic Letters*, 14, 2. 1449- 1455. <https://shorturl.at/pCwNh>
- Bartol, c. R., & bartol, a. M. (2017). *Criminal behavior: a psychological approach*. Pearson. <https://krimdok.uni-tuebingen.de/record/873585046/description>.
- Bradley, r. H., & corwyn, r. F. (2002). Socioeconomic status and child development. *Annual review of psychology*, 53(1), 371-399. <https://doi.org/10.1146/annurev.psych.53.100901.135233>.
- Capaldi, d. M., & patterson, g. R. (1991). Relation of parental transitions to boys' adjustment problems: i. A linear hypothesis: ii. Mothers at risk for transitions and unskilled parenting. *Developmental psychology*, 27(3), 489. <https://doi.org/10.1037/0012-1649.27.3.489>.
- Cole, g. F., smith, c. E., & dejong, c. (1992). *The American system of criminal justice*. Brooks/cole publishing company pacific grove, california. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/american-system-criminal-justice-2nd-ed>.
- Corrigan, p. W., & watson, a. C. (2005). Findings from the national comorbidity survey on the frequency of violent behavior in individuals with psychiatric disorders. *Psychiatry research*, 136(2-3), 153-162. <https://doi.org/10.1016/j.psychres.2005.06.005>.
- Dimovski, j., & dimovski, d. (2024). Socio-economic aspect and personality of juvenile as determinants of juvenile delinquency. *Zbornik radova centra za edukaciju sudija i tužilaca rs*, 15(15), 310-323. [www.doisrpska.nub.rs](http://www.doisrpska.nub.rs).
- Eid, l., heim, k., doucette, s., mccloskey, s., duffy, a., & grof, p. (2013). Bipolar disorder and socioeconomic status: what is the nature of this relationship? *International journal of bipolar disorders*, 1, 1-6. <https://link.springer.com/article/10.1186/2194-7511-1-9>.
- Juby, h., & farrington, d. P. (2001). Disentangling the link between disrupted families and delinquency: sociodemography, ethnicity and risk behaviours. *British journal of criminology*, 41(1), 22-40. <https://doi.org/10.1093/bjc/41.1.22>.
- Lu, w., dimick, m. K., fiksenbaum, l. M., timmins, v., mitchell, r. H., zou, y., & goldstein, b. I. (2020). Clinical correlates of socioeconomic status in adolescent bipolar disorder. *Comprehensive psychiatry*, 101, 152186. <https://doi.org/10.1016/j.comppsy.2020.152186>.
- Marneros, a. (2009). The history of bipolar disorders. In *bipolar depression: molecular neurobiology, clinical diagnosis and pharmacotherapy* (pp. 3-16). Springer. [https://link.springer.com/chapter/10.1007/978-3-7643-8567-5\\_1](https://link.springer.com/chapter/10.1007/978-3-7643-8567-5_1).
- Mohammadi, z., pourshahbaz, a., poshtmashhadi, m., dolatshahi, b., barati, f., & zarei, m. (2018). Psychometric properties of the young mania rating scale as a mania severity measure in patients with bipolar i disorder. *Practice in clinical psychology*, 6(3), 175-182. <https://jpcp.uswr.ac.ir/browse.php>.
- Pagani, l., boulerice, b., vitaro, f., & tremblay, r. E. (1999). Effects of poverty on academic failure and delinquency in boys: a change and process model approach. *The journal of*

child psychology and psychiatry and allied disciplines, 40(8), 1209-1219.

<https://www.cambridge.org/>.

- Post, r. M., altshuler, l. L., kupka, r., mcelroy, s. L., frye, m. A., rowe, m., grunze, h., suppes, t., keck jr, p. E., & leverich, g. S. (2016). Age of onset of bipolar disorder: combined effect of childhood adversity and familial loading of psychiatric disorders. *Journal of psychiatric research*, 81, 63-70. <https://doi.org/10.1016/j.jpsychires.2016.06.008> .
- Post, r. M., altshuler, l. L., kupka, r., mcelroy, s. L., frye, m. A., rowe, m., leverich, g. S., grunze, h., suppes, t., & keck jr, p. E. (2015). Verbal abuse, like physical and sexual abuse, in childhood is associated with an earlier onset and more difficult course of bipolar disorder. *Bipolar disorders*, 17(3), 323-330. <https://doi.org/10.1111/bdi.12268>.
- Ryan, e. P., & redding, r. E. (2004). A review of mood disorders among juvenile offenders. *Psychiatric services*, 55(12), 1397-1407. <https://doi.org/10.1176/appi.ps.55.12.1397>.
- Sampson, r. J., raudenbush, s. W., & earls, f. (1997). Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science*, 277(5328), 918-924. <https://doi.org/10.1126/science.277.5328.918>.
- Schou, m. (1972). Lithium prophylaxis in recurrent endogenous affective disorders. *Archivos de investigacion medica*, 3(3), 459-472. <https://pubmed.ncbi.nlm.nih.gov/4574228/>.
- Shannon, s., breslin, g., fitzpatrick, b., hanna, d., & brennan, d. (2017). Testing the psychometric properties of kidscreen-27 with irish children of low socio-economic status. *Quality of life research*, 26, 1081-1089. <https://link.springer.com/article/10.1007/s11136-016-1432-1>.
- Sharma, r. K. (1997). *Urban sociology*. Atlantic publishers & dist. <https://books.google.com.pk/books>.
- Shaw, c. R., & mckay, h. D. (1942). *Juvenile delinquency and urban areas*. <https://psycnet.apa.org/record/1943-00271-000>.
- Siegel, l., & welsh, b. (2010). *Juvenile delinquency: the core, the core*. In: cengage learning, usa. <https://www.cefracor.org/sites/>.
- Sletved, k. S. O., ziersen, s. C., andersen, p. K., vinberg, m., & kessing, l. V. (2023). Socio-economic functioning in patients with bipolar disorder and their unaffected siblings—results from a nation-wide population-based longitudinal study. *Psychological medicine*, 53(3), 706-713. <https://www.cambridge.org/core/journals/>.

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).