



ORIGINAL ARTICLE

**Five-Factor Personality Profiles of Violent and Non-Violent Offenders in a South Indian Prison Setting**

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**Abstract**

**Background:** Violent crime presents a significant global public health challenge, underscoring the importance of understanding associated personality traits to improve risk assessment, prevention strategies, and rehabilitation efforts for prisoners. **Objective:** To explore personality profiles in the South Indian prison population, aiding in the development of culturally sensitive risk assessment tools to understand personality traits linked with criminal behaviour. **Methods:** An observational cross-sectional study was conducted among 60 convicted prisoners at Central Prison, Cuddalore, Tamil Nadu, from January to March 2025. Data were collected using a semi-structured proforma and the NEO-FFI-3 personality inventory. **Results:** An analysis of 60 inmates revealed a psychological profile of extremely low agreeableness (83.3%) and conscientiousness (91.7%), with high neuroticism. This was pronounced among the 53 violent offenders, yet paradoxically, 92.5% had no prior incarcerations. These offenders typically came from a low socioeconomic background (54.7%) and were unskilled (49.1%). A stark educational contrast existed: 34% of violent offenders held a university degree, an achievement absent in the non-violent group, 57.1% of whom were skilled workers with zero unemployment. **Conclusion:** The study identifies key sociodemographic patterns, offence profiles, and personality traits among convicted prisoners in South India, guiding tailored rehabilitation and minimize recidivism.

**Keywords:** Prison, Personality, NEO-FFI-3, Criminal behaviour, South India, Convicts

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### Graphical Abstract

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**Methods**  
An observational cross-sectional study was conducted among 60 convicted prisoners at Central Prison, Cuddalore, Tamil Nadu, from January to March 2025. Data were collected using a semi-structured proforma and the NEO-FFI-3 personality inventory.

**Distribution of Conviction Details (N = 60)**

Reason of imprisonment (in IPC)	Frequency (N = 60)	
	(n)	Percentage (%)
302	33	55.0
304A	1	1.7
307	1	1.7
323	1	1.7
375	2	3.3
378	1	1.7
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409 (Vigilance & Anticorruption)	2	3.3
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#### Introduction

Violent crime continues to be a major public health issue globally. Comprehending the personality characteristics linked to violent behaviour might enhance risk evaluation, preventive measures, and rehabilitation initiatives for jailed individuals [1]. Nevertheless, current studies in this domain have predominantly concentrated on Western populations, while research from India indicates a correlation between personality problems and violence in males referred for medico-legal assessment [2]. Nevertheless, these research derive from particular sample populations. Personality traits may exhibit variation between countries, and cultural influences might affect their expression and interpretation [3].

This study examines personality profiles among the general prison population in South India, seeking to offer culturally pertinent insights. It elucidates the disparity in personality traits between violent and non-violent offenders, aiding in

the creation of culturally relevant risk assessment instruments for violent behaviour. Many current research emphasize sociodemographic tendencies while overlooking psychological aspects in criminal profiling. The aim is to analyze the sociodemographic attributes, categories of offences, and personality profiles of incarcerated individuals in South India.

#### Materials and Methods

The observational, cross-sectional study was performed at the Central Prison, Caper Hills, Cuddalore, Tamil Nadu, India, between January and March 2025. The study commenced following the acquisition of authorization from the IRC and the Administrative Officer at the Office of the Additional Director General of Police/Inspector General of Prisons, Whannels Road, Egmore, Chennai, as well as ethical clearance from the Institutional Human Ethics Committee (IHEC) under reference number AV/IHEC/02/2024/008 dated 18/12/2024. Each participant

received a Participant Information Sheet (PIS) in their native language to guarantee understanding. Informed consent in writing was acquired before participation. The study population consisted of male offenders aged 18 to 60 who were convicted in the year prior to the study. Individuals convicted of either violent or non-violent offences qualified for inclusion. Violent crime is on the basis of definition given by National Crime Records Bureau i.e., Violent crime means violation of criminal law that involve the intentional use of violence by one person against another including intentionally threaten, attempt, or inflict physical harm on others such as homicide, assault, robbery, rape, etc. Non-violent crime is on the basis of definition given by National Crime Records Bureau ie Non-violent crimes are called when a crime with no injury or force is used on another person such as bribery, prostitution, theft, cheque bounce, and gambling.' Individuals presently undergoing trial or possessing a recorded history of current or prior psychiatric disorders were excluded.

A comprehensive enumeration sampling method was utilized, enrolling all eligible subjects who satisfied the inclusion and exclusion criteria during the study period.

$$n \geq \frac{(Z_{1-\alpha/2} + Z_{1-\beta})^2 (\sigma_1^2 + \sigma_2^2/r)}{(\mu_1 - \mu_2)^2}$$

The sample size of 60 (30 in each group) was calculated based on comparison of two mean based on Singh et al in 2022 [4]. The disparity in the number of violent and non-violent participants reflects the actual inmate composition of the prison during the study period, with fewer non-violent offenders available for inclusion. Sociodemographic information,

encompassing age, education, marital status, was gathered by a semi-structured proforma. Personality traits were evaluated by the NEO-FFI-3, a validated 60-item psychometric instrument based on the NEO-PI-3. It assesses five fundamental domains: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). Each question is evaluated using a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree'. The NEO-FFI-3 demonstrates robust psychometric qualities, with Cronbach's alpha values between 0.68 and 0.86 and test-retest reliability ranging from 0.75 to 0.83 over a six-month period. The scale was administered in the participants' primary language.

All gathered data were collected, coded, and analyzed utilizing the Statistical Package for the Social Sciences (SPSS) v26.0 (IBM Corp., Armonk, NY, USA). Categorical variables were represented as frequencies and percentages, whereas continuous variables were provided as means accompanied by standard deviations.

## Results

This analysis of 60 incarcerated individuals, comprising 7 non-violent and 53 violent offenders, uncovers significant disparities in sociodemographic and criminal histories. Among violent offenders, 9.4% possessed a primary or middle school education, 50.9% had a secondary or upper secondary education, and 34.0% attained a bachelor's or master's degree. In contrast, 57.1% of non-violent offenders have an primary or middle school education, and 28.6% held a bachelor's or master's degree. Concerning occupation, 49.1% of violent offenders were unskilled,

3.8% were skilled, and 1.9% were jobless. Among non-violent criminals, 57.1% were semi-skilled, and none were unemployed. The majority of violent offenders identified as Hindu (96.2%), whilst non-violent offenders were Hindus (71.4%), Christians (14.3%), and Muslims (14.3%). Socioeconomically, 54.7% of violent offenders originated from a low status, while 41.5% came from a middle class. Non-violent offenders exhibited a more even distribution, with 42.9% originating from low status and 57.1% from middle status (Table 1).

The majority of offenders were incarcerated for murder (55%) under IPC 302, with 26.7% imprisoned under the POCSO Act (Table 2). Concerning criminal records, 92.5% of violent offenders and 85.7% of non-violent offenders had no previous incarceration. Criminal history within families was nonexistent in 94.3% of violent offenders and 85.3% of non-violent offenders. Although no non-violent offenders indicated a familial history of psychiatric disorders, 9.4% of violent criminals did (Table 3).

The personality evaluation of 60 incarcerated individuals with the NEO-FFI-3 yielded some significant findings. Neuroticism scores were high, with 58.3% of participants showing elevated levels and 23.3% falling in the extremely high range. Extraversion was predominantly low, with 60% classified as very low and 28.3% as low. Openness to Experience showed a mixed distribution, with most participants scoring in the low to normal range. Agreeableness was markedly low, with 83.3% classified as extremely low and 13.3% as low. Conscientiousness was the lowest-scoring trait, with 91.7% of individuals falling into the extremely low category (Table 4). Of the 60 inmates, 88.3% were sentenced for violent crimes. Neuroticism was elevated or markedly elevated in 83.3% of violent offenders and 71.5% of non-violent offenders. Extremely low levels of agreeableness and conscientiousness were noted in over 80% and 90% of both groups, respectively, whereas extraversion scores were primarily very low, particularly among violent offenders (58.5%) (Table 5).

Table 1. Sociodemographic Characteristics of convicted prisoners (N=60)

		Type of conviction	
		Non-violent N = 7	Violent N = 53
		n (%)	n (%)
Age (in years), Mean (SD)		50.4 (22.1)	41.3 (11.3)
Age (in years)	≤40	2 (28.6)	27 (50.9)
	40 to 60	3 (42.9)	23 (43.4)
	>60	2 (28.6)	3 (5.7)

Religion	Christian	1 (14.3)	1 (1.9)
	Hindu	5 (71.4)	51 (96.2)
	Islam	1 (14.3)	1 (1.9)
Education	Uneducated	0 (0.0)	3 (5.7)
	Primary/Middle	4 (57.1)	5 (9.4)
	Secondary/Higher secondary	1 (14.3)	27 (50.9)
	Bachelor/Masters	2 (28.6)	18 (34.0)
Occupation	Unemployed	0 (0.0)	1 (1.9)
	Unskilled	2 (28.6)	26 (49.1)
	Semiskilled	4 (57.1)	24 (45.3)
	Skilled	1 (14.3)	2 (3.8)
Socioeconomic status	Low	3 (42.9)	29 (54.7)
	Middle	4 (57.1)	22 (41.5)
	High	0 (0.0)	2 (3.8)
Marital status	No	1 (14.3)	14 (26.4)
	Yes	6 (85.7)	39 (73.6)
SD, Standard deviation			

Table 2. Distribution of Conviction Details (N = 60)

		Frequency (N = 60)	Percentage
		(n)	(%)
Reason of imprisonment (in IPC)	302	33	55.0
	304A	1	1.7
	307	1	1.7
	323	1	1.7
	375	2	3.3
	378	1	1.7

	390	2	3.3
	409 (Vigilance & Anticorruption)	2	3.3
	420	1	1.7
	POCSO	16	26.7

Table 3. Distribution of Prior Criminal History, and Family Background (N = 60)

		Type of conviction	
		Non-violent N = 7	Violent N = 53
		n (%)	n (%)
History of previous imprisonment	No	6 (85.7)	49 (92.5)
	Yes	1 (14.3)	4 (7.5)
Criminal history in the family	No	6 (85.7)	50 (94.3)
	Yes	1 (14.3)	3 (5.7)
Family history of psychiatric illness	No	7 (100)	48 (90.6)
	Yes	0 (0.0)	5 (9.4)

Table 4. Personality Trait Distribution Among Convicted Prisoners Based on NEO-FFI-3 Scores (N = 60)

		Frequency (N = 60)	Percentage
		(n)	(%)
Neuroticism, Mean (SD)		60.6 (6.7)	
Neuroticism	Average	11	18.3
	High	35	58.3
	Very high	14	23.3
Extraversion, Mean (SD)		34.9 (8.6)	
Extraversion	Very low	36	60.0
	Low	17	28.3

	Average	6	10.0
	High	1	1.7
Openness to Experience, Mean (SD)		41.5 (8.7)	
Openness to Experience	Very low	18	30.0
	Low	18	30.0
	Average	20	33.3
	High	4	6.7
Agreeableness, Mean (SD)		28.9 (6.1)	
Agreeableness	Very low	50	83.3
	Low	8	13.3
	Average	2	3.3
Conscientiousness, Mean (SD)		26.4 (3.8)	
Conscientiousness	Very low	55	91.7
	Low	5	8.3
SD, Standard deviation			

Table 5: Personality Trait Distribution Based on NEO-FFI-3 Scores, by non-violent and violent conviction (N = 60)

		Type of conviction	
		Non-violent N = 7	Violent N = 53
		n (%)	n (%)
Neuroticism, Mean (SD)		62.6 (8.5)	60.3 (6.5)
Neuroticism	Average	2 (28.6)	9 (17.0)
	High	3 (42.9)	32 (60.4)
	Very high	2 (28.6)	12 (22.6)
Extraversion, Mean (SD)		36.3 (10.6)	34.7 (8.4)
Extraversion	Very low	5 (71.4)	31 (58.5)

	Low	0 (0.0)	17 (32.1)
	Average	2 (28.6)	4 (7.5)
	High	0 (0.0)	1 (1.9)
Openness to Experience, Mean (SD)		44.0 (9.6)	41.1 (8.6)
Openness to Experience	Very low	1 (14.3)	17 (32.1)
	Low	2 (28.6)	16 (30.2)
	Average	3 (42.9)	17 (32.1)
	High	1 (14.3)	3 (5.7)
Agreeableness, Mean (SD)		29.4 (6.0)	28.8 (6.2)
Agreeableness	Very low	6 (85.7)	44 (83.0)
	Low	1 (14.3)	7 (13.2)
	Average	0 (0.0)	2 (3.8)
Conscientiousness, Mean (SD)		25.7 (1.9)	26.4 (4.0)
Conscientiousness	Very low	7 (100)	48 (90.6)
	Low	0 (0.0)	5 (9.4)
SD, Standard deviation			

## Discussion

This study examines the sociodemographic characteristics, conviction trends, and personality evaluations of incarcerated male offenders in a central jail in South India. The average age of the participants was 42.4 years. This age distribution is noteworthy, as it underscores the cultural and economic ramifications of criminal behaviour within a demographic that represents the principal workforce. A predominant 93.3% of participants in this survey identified as Hindu, mirroring the religious demographic pattern in Tamil Nadu according to the national census [5]. The educational levels of detainees varied, with the majority having completed at least secondary

education; significantly, 33.3% possessed bachelor's or master's degrees. This conclusion diverges from previous work that frequently indicated elevated illiteracy rates among convicts, implying a transformation in the educational demographics of criminals, potentially attributable to increased access to education in recent decades [6].

Occupational statistics indicated that 93.4% of participants were employed in unskilled or semiskilled labor, with a minimal number engaged in skilled employment. These findings align with research demonstrating a significant link between poor socioeconomic position and criminal behaviour. The prevalence of inmates from low (53.3%) and middle

(43.3%) socioeconomic backgrounds reinforces this correlation, highlighting that economic marginalization may contribute to criminal behaviour, likely due to restricted access to legitimate income opportunities and social services.<sup>7</sup> Findings regarding marital status indicated that 75% of inmates were married. Although marital status is frequently seen as a protective factor against criminal behaviour due to heightened social duties and emotional support, its influence within this demographic is more intricate. Prior research indicates that although marriage may provide certain protective benefits, these may be eclipsed by several detrimental socioeconomic and psychological variables common among jailed individuals [8]. Concerning the nature of offences, more than half of the detainees (55%) were convicted under IPC Section 302 (murder), while a notable percentage (26.7%) were sentenced under the POCSO Act for sexual offences against children. The prevalence of violent crimes in this group indicates the seriousness of offences resulting in imprisonment in central penitentiaries.

Similarly, research conducted throughout India has indicated that murder is the predominant offence among inmates in high-security facilities [9]. The residual offences, such as robbery, rape, and fraud, occurred with diminished frequency. Significantly, 91.7% of participants indicated no previous incarceration, suggesting that a substantial majority may be first-time offenders. This finding diverges from Western data, which indicates significantly elevated recidivism rates, implying variations in crime patterns or criminal justice procedures [10]. A mere 8.3% had prior incarceration, attributed to a spectrum of violent and non-violent

offences, as well as unspecified reasons. Family criminal history was documented in 6.7% of the participants, a figure that, although modest, carries significant consequences. Criminological theories, including the intergenerational transmission of criminal behaviour, propose that persons with criminal relatives may experience heightened exposure to antisocial conduct and diminished deterrents to offending [11]. 8.3% of the group indicated a family history of psychiatric disorder. This self-reported finding is pertinent due to the established correlation between mental health vulnerability and criminal behaviour. The lack of psychiatric history in most cases may indicate under diagnosis or the social stigma surrounding mental disease, especially within the Indian context.

The high scores in Neuroticism indicate a notable incidence of emotional instability, anxiety, and susceptibility to stress. Prior work indicates that elevated neuroticism is a substantial predictor of maladaptive coping strategies and impulsivity, characteristics often associated with criminal behaviour [12].

Heightened neuroticism in incarcerated individuals is correlated with inadequate adaptation to imprisonment and a greater likelihood of violent outbursts. Conversely, Extraversion was significantly diminished among the study participants. Low extraversion, indicative of introversion, social retreat, and decreased assertiveness, may correlate with inadequate social skills and a lessened capacity for pro-social behaviour [13]. The introverted temperament, though not intrinsically maladaptive, may combine with qualities like high neuroticism, heightening vulnerability to interpersonal conflicts and isolation. Openness to

Experience, characterised by intellectual curiosity, imagination, and adaptability, exhibited limited expression, as 60% of inmates scored in the very low or low category. A mean score of 41.5 indicates restricted cognitive flexibility and creativity. Individuals with low openness may demonstrate rigidity in their cognition and exhibit a diminished propensity for reflective decision-making. This may lead to impulsive and risk-seeking behaviour, thus elucidating the vulnerability to criminal activity in a certain group of offenders. The domain of Agreeableness, characterized by qualities such as empathy, trust, and cooperation, was significantly lacking in this community. Low agreeableness is a prominent personality correlate of antisocial and criminal behaviour, particularly in relation to violent offences [14]. Individuals with poor scores in this domain frequently display distrust, manipulateness, and a disregard for others—characteristics integral to numerous criminogenic profiles, such as psychopathy and antisocial personality disorder. The outcome in Conscientiousness is maybe the most notable. It is correlated with self-discipline, organization, and goal-oriented behaviour, and its deficiency has been significantly associated with externalizing behaviour and criminality [15]. Minimal conscientiousness may present as irresponsibility, impulsivity, and a deficiency in future orientation, obstructing compliance with social standards and legal regulations. The findings collectively depict a profile of inmates characterized by increased emotional reactivity, social disengagement, cognitive rigidity, diminished empathy, and inadequate self-regulation—traits that not only predispose individuals to criminal behaviour but may

also hinder rehabilitation attempts. This study underscores the correlation between personality traits and criminal behaviour, revealing that the majority of convicts (88.3%) are guilty of violent offences. Both violent (83%) and non-violent offenders (71.4%) exhibited elevated levels of neuroticism, indicating emotional instability as a shared characteristic. A significant number of offenders exhibited low levels of agreeableness and conscientiousness, suggesting qualities such as violence and irresponsibility that may facilitate criminal behaviour. Among violent criminals, the low extraversion rate (58.5%) indicates a propensity for social isolation. These findings highlight the impact of emotional and social obstacles on criminal behaviour, underlining the necessity for rehabilitation programs that target these personality qualities.

The current study was constrained by its modest sample size and single-centre methodology, which impede generalizability. The utilization of self-reported data about mental and criminal background may have introduced reporting bias. The cross-sectional approach prohibits causal inferences between personality variables and criminal behaviour.

## **Conclusion**

The research highlights significant sociodemographic trends, offence characteristics, and personality attributes among incarcerated male offenders in South India. High neuroticism and low levels of extraversion, agreeableness, and conscientiousness signify psychological vulnerabilities that affect criminal behaviour. These findings can assist prison officials in customizing rehabilitation programs, aid mental health experts in

formulating culturally sensitive interventions for offenders, and empower legislators to devise evidence-based solutions that diminish recidivism and improve community safety.

### Conflict of interest

The authors declare no conflicts of interest.

### Ethics Approval

The study was approved by the Institutional Human Ethics Committee, Aarupadai Veedu Medical College, Vinayaka Mission's Research Foundation (VMRF-DU), Puducherry, India. The approval number was IHECNo: AV/IHEC/02/2024/008.

### Author contribution

All three contributors (ACV, SV, DK) were equally involved in the development and execution of the study. They collaboratively contributed to the conceptualization, design, and definition of intellectual content. Each contributor actively participated in the literature search, data acquisition, statistical analysis, and manuscript preparation, editing, and review. All three contributors also served as guarantors for the integrity of the work.

### References

1. Costa P and McCrae R. Neo PI-R professional manual. Psychological Assessment Resources 1992; 396.
2. Jones SE, Miller JD and Lynam DR. Personality, antisocial behavior, and aggression: A meta-analytic review. Journal of Criminal Justice 2011; 39: 329-337. DOI: <https://doi.org/10.1016/j.jcrimjus.2011.03.004>.
3. Kumar S, Kumar S, Pattankar J, et al. Socio-Demographic Characteristics of Life Term Prisoners in a Central Jail and its Association with Reasons for Crime. Indian Journal of Public Health Research and Development 2014; 5. DOI: 10.5958/j.0976-5506.5.1.001.
4. Sharma N, Prakash O, Sengar KS, et al. The relation between emotional intelligence and criminal behavior: A study among convicted criminals. Industrial Psychiatry Journal 2015; 24.
5. Farrington DP, Jolliffe D, Loeber R, et al. The concentration of offenders in families, and family criminality in the prediction of boys' delinquency. J Adolesc 2001; 24: 579-596. DOI: 10.1006/jado.2001.0424.
6. Dam C, Janssens J and Bruyn E. PEN, Big Five, juvenile delinquency and criminal recidivism. Personality and Individual Differences - PERS INDIV DIFFER 2005; 39: 7-19. DOI: 10.1016/j.paid.2004.06.016.
7. Singh HD. Numbering others: Religious demography, identity, and fertility management experiences in contemporary India. Soc Sci Med 2020; 254: 112534. 20190910. DOI: 10.1016/j.socscimed.2019.112534.
8. Shah N, Soomro BA and Mirjat AJ. An Investigation of the Impact of Poverty and Unemployment on Criminal Behaviour among Youths: An Empirical Approach. Pakistan Journal of Criminology 2019; 11.
9. Pare PP and Felson R. Income inequality, poverty and crime across nations. The British journal of sociology 2014; 65: 434-458.
10. Bather JR, McSorley AM, Rhodes-Bratton B, et al. Love after lockup: examining the role of marriage, social status, and financial stress among

- formerly incarcerated individuals. *Health Justice* 2024; 12: 7. 20240224. DOI: 10.1186/s40352-024-00264-x.
11. Kancharla SR, Karthikeyan SK and Kumar P. A study of criminality and psychiatric morbidity among prison inmates. *International Journal of Indian Psychology* 2020;8.
  12. Langan PA and Levin DJ. Recidivism of prisoners released in 1994. US Department of Justice, Office of Justice Programs, Bureau of Justice 2002.
  13. Fazel S and Baillargeon J. The health of prisoners. *Lancet* 2011; 377: 956-965. 20101118. DOI: 10.1016/s0140-6736(10)61053-7.
  14. DeYoung CG, Peterson JB and Higgins DM. Sources of openness/intellect: cognitive and neuropsychological correlates of the fifth factor of personality. *J Pers* 2005; 73: 825-858. DOI: 10.1111/j.1467-6494.2005.00330.x.
  15. Roberts BW, Jackson JJ, Fayard JV, et al. Conscientiousness. *Handbook of individual differences in social behavior*. New York, NY, US: The Guilford Press, 2009, pp.369-381.