



Effect of Internal-External Locus of Control on Murders: A Comparative Study of Murderers and Non-criminals

Dr. Ranjay Kumar

Consultant Psychologist and Post Doctoral Researcher, New Delhi, India

Abstract

Murder, the most severe form of unlawful homicide, involves deliberate killings with malice aforethought. Understanding the motives behind murder is a critical focus in forensic psychology and criminology. Human motives, influenced by perceptions and beliefs about reinforcement, shape behaviours and determine actions towards others. This study explores the role of internal-external control of reinforcement in murders by comparing murderers with non-criminals. A total of 100 Hindu male subjects aged 20–60 years with at least a primary-level education were purposively sampled, including 50 convicted murderers from Central Jail, Beur, Patna, Bihar, and 50 non-criminals from various districts in Bihar. Participants were assessed using a self-prepared Personal Data Schedule (PDS) and Rotter's Locus of Control (LOC) Scale, which assesses beliefs about whether reinforcement is under personal control or influenced by external factors like fate or luck. The data were analysed using the t-tests and Chi-square tests. Significant differences were observed between two groups. Murderers scored higher on the LOC Scale, indicating a belief in external control, where outcomes are perceived as influenced by external forces rather than personal actions. Non-criminals scored lower, reflecting internal control, characterized by a belief in personal responsibility for outcomes. In conclusion, the findings suggest that individuals with higher scores on Rotter's LOC Scale may be more prone to engaging in antisocial behaviours or criminal activities, such as murder. These results emphasize the need to promote ethical and value-based education and socialisation among new generations, alongside interventions aimed at addressing correctional shortcomings and rehabilitate individuals inclined towards criminal activities.

Keywords: Murder, Internal-External Locus of Control, Murderers, Non-Criminals.

I. INTRODUCTION

Murder is an unlawful killing of human being with malice aforethought, a most heinous act disrupting societal order and instilling fear [1, 2]. It distinguishes itself from other homicides by the elements of malice and lack of lawful justification. Historically, the term "murder" originates from the Germanic word *mortna*, meaning "secret killing." Early Germanic laws penalised secret killings, but by the 12th century, all homicides were deemed punishable [3]. Legally, murder involves three elements: unlawfulness, the killing of another human being, and "malice aforethought," encompassing mental states such as intent to kill, inflict serious harm, reckless indifference, or committing a dangerous felony [4]. The felony-murder doctrine extends to deaths caused during felonies like arson or kidnapping but excludes lesser offenses like assault [4]. In India, murder is defined under Bhartiya Nyay Sanhita (BNS Section 101, formerly IPC Section 300). Murder occurs when death results from any of the four clauses mentioned in the section. One who commits murder is called murderer, punishment is prescribed under BNS Section 103 (formerly IPC Section 302) [5]. Other unlawful homicides fall under BNS Section 102 (formerly IPC Section 300, exceptions), covering acts like sudden provocation, self-defence, or sudden fights. Punishment for these cases varies based on mitigating factors and is addressed under BNS Section 105 (formerly IPC Section 304) [6]. Deaths from rash or negligent acts are addressed under BNS Section 106 (formerly IPC Section 304 A) [7]. Thus, punishment for unlawful homicides varies based on the offender's intent, knowledge, or negligence. Murder or other violent behaviours often stem from motives such as property disputes, personal vendettas, financial gain, dowry issues, and socio-political conflicts.

Internal - External Locus of Control: Understanding the motives behind murder is a critical focus in forensic psychology and criminology. Human motives, shaped by beliefs about reinforcement, influence behaviours and actions towards others. Rotter [8], proposed locus of control as a psychological construct to measure an individual's beliefs about whether outcomes are determined by their own actions or external forces. This continuum ranges from internal locus of control, where outcomes are attributed to personal actions and characteristics, whereas an external locus of control indicates reliance on external forces like fate, luck, or powerful others [8, 9]. Locus of control develops through interactions with others and the environment, influenced by cognitive development, feelings of alienation, powerlessness, autonomy, and the need for achievement [8]. It is reinforced through experiences and is considered an aspect of personality [10]. According to Heider [11], individuals with an internal locus of control take responsibility for their actions and challenges, while those with an external locus attribute outcomes to factors beyond their control. Externally oriented individuals believe events and rewards occur due to fate or external forces [12]. In contrast, those with internal control view outcomes as controllable and resulting from their own efforts. Rotter [8] emphasized that attitudes and expectancies associated with locus of control are strengthened through reinforcement, shaping future outcome expectancies. Rotter's [13] social learning theory explains the development of locus of control, linking individual experiences and reinforcement history to the degree to

which outcomes are attributed to personal actions (internalized) or external factors (externalized). This framework provides valuable insight into the psychological factors influencing behaviour and motivation, including those that lead to criminal tendencies.

Literature Review on Locus of Control and Crime: Existing literature provides evidence of an association between locus of control orientation and crime. Individuals who commit crimes tend to report having a more externally oriented locus of control than non-criminals, a finding replicated across adult and adolescent samples and various behaviours, including sexual offending [14, 15, 16]. Additionally, individuals with an external locus of control are more likely to reoffend than those with an internal locus of control [17, 18, 19, 20]. An external locus of control has also been associated with risk factors for offending, such as offense-supportive attitudes [21, 22], and substance misuse [23]. Some researchers hypothesize that an external locus of control may be linked to increased impulsivity, such as a lack of consequential thinking [24], and may act as a defensive response to feelings of shame [25].

While no study has specifically examined the mechanisms by which locus of control influences psychological processes and physical behaviours in relation to murder. However, Wallace et al. [26] explored the relationship between self-esteem, locus of control, and self-reported aggression in adolescents. They found that higher self-esteem was significantly associated with an internally oriented locus of control, and locus of control moderated the relationship between self-esteem and aggression. Low self-esteem combined with an external locus of control correlated with higher levels of proactive aggression, aligning with Gottfredson and Hirschi's [27] general theory of crime, which emphasizes low self-control as central to deviant behaviour.

Other studies highlight socio-environmental factors influencing violent tendencies. Sampson and Groves [28] discussed the role of social disorganization in fostering crime, while Wilkinson and Pickett [29] linked income inequality to elevated violence rates. Eamon and Mulder [30] found that poverty, poor neighbourhood quality, and deviant peer pressure significantly predicted antisocial behaviour, with negative parenting practices exacerbating these tendencies. Bronfenbrenner's [31] ecological model emphasizes the role of environmental systems, including family, peers, and society, in shaping behaviour. Anderson [32] highlighted cultural norms in disadvantaged neighbourhoods, such as the "code of the street," which perpetuates violence. Exposure to adverse childhood experiences [33] and mental health disorders are known contributors to antisocial behaviour.

Conceptual Framework

While significant studies have assessed internal-external control of reinforcement in clinical and criminal populations, limited attention has been paid to its effects on murders. This gap highlights the need for study exploring violent behaviour, particularly murder, by integrating locus of control with socio-environmental and psychological factors. Such an approach can provide valuable insights to guide judicial systems and correctional institutions in rehabilitating homicidal offenders and those prone to criminal activities. By comparing murderers with non-criminals, this study aims to address this gap, offering findings that could enhance rehabilitation strategies and inform policies for reducing violent behaviours.

II. STATEMENT OF THE PROBLEM

Aim: To assess the effect of internal-external locus of control on murders by comparing murderers with non-criminals.

Objective: To examine and compare the performance of murderers and non-criminals on Rotter's Locus of Control (LOC) Scale.

III. RESERCH METHODOLOGY

Study Design: The study employs a comparative research design to explore the relationship between age, education, marital status, internal - external locus of control and murders, by comparing murderers and non-criminal groups.

Study Sample and Location: A total of 100 male subjects, aged between 20 and 60 years, were selected for the study. The subjects were divided into two groups: 50 convicted murderers from Central Jail, Beur, Patna, Bihar, and 50 non-criminals from various districts in Bihar. Both groups were matched based on age, religion, education, physical and mental health, and cooperativeness.

Inclusion and Exclusion Criteria: The selection of subjects for the experimental and control groups was based on specific inclusion and exclusion criteria. Subjects who met the following criteria were selected for the study:

Experimental Group (Murderers): Sanatan (Hindu) males, aged 20-60 years, convicted for murder (under Section 302 IPC), with at least primary-level education, in good physical health, and who are cooperative.

Control Group (Non-Criminals): Sanatan (Hindu) healthy males, aged 20-60 years, with at least primary-level education and no history of criminal activity, mental illness, substance abuse, and who are cooperative.

Research Tool: The following tools were used to collect data from murderers and non-criminals:

Personal Data Schedule (PDS): A semi-structured proforma was used to record relevant socio-demographic details such as age, education, marital status etc. from the subjects in the two groups.

Rotter's Locus of Control (LOC): Rotter's Locus of Control scale is a self-administered test that can be applied individually or in groups to assess internal-external control of reinforcement. Internal control refers to individuals who believe that reinforcement is contingent upon their own behaviour, capacities, or attributes. In contrast, external controls refer to individuals who believe that reinforcement is not under their personal control but is influenced by powerful others, luck, chance, or fate. Developed by J. B. Rotter [8], the scale consists of 29 forced-choice questions, 23 of which determine locus of control, while six are filler questions designed to assess general beliefs about the world. The filler items (item No. - 1, 8, 14, 19, 24, 27) are not scored. This scale is a standardised and widely used measure of locus of control [34]. A higher score indicates a belief in external control (e.g. luck, Chance, other etc.) The maximum possible scores on Rotter's Locus of control scale are 23 and minimum is 0.

Statistical Analysis: The collected data from the sample subjects were statistically analysed using the t-test to compare means and the Chi-square test for categorical variables to compare percentages.

Procedure: To examine the differences between the murderers and non-criminal groups, written approval was obtained from the Inspector General of Police (Prison) of Bihar state to conduct the study on the murderer's population imprisoned in central jails of Bihar, India. Prior written consent was obtained from all participants. Relevant data were collected from subjects using the Personal Data Schedule (PDS) and the Locus of Control Scale.

IV. RESULTS AND DISCUSSIONS

Age and Murder: Age brings physical and psychological maturity to individuals, influencing their social behaviours. To examine the effect of internal-external locus of control on murders, this study included only participants aged between 20 and 60 years. This age range represents a productive phase of life during which individuals play significant roles in their family and society. However, it is also a period during which some individuals may pose a threat to society and commit murders, adversely affecting the lives of both the victim's and offenders' family.

Table 1: Comparison of Age between Non-Criminals and Murderers

Variable	Non-Criminals Group (N=50)	Murderers Group (N=50)	t -Value	df	p
Age (Mean \pm SD)	31.56 \pm 6.65	37.60 \pm 8.09	4.07*	98	0.00

*($p < 0.01$)

Table 1 shows a significant difference in the age between non-criminals and murderers. The mean age of non-criminals was 31.56 ± 6.65 , whereas murderers had a mean age of 37.60 ± 8.09 (t value = 4.07, $p < 0.01$). The difference between the two mean age scores was 6.04 years. The results suggest that the murderer group is significantly older than the non-criminal group, indicating that age may play a role in the commission of murders. Additionally, during case investigations, court trials, and life imprisonment, murderers tend to exhibit greater age-related maturity compared to non-criminals. The higher age of murderers could reflect the maturity of offenders at the time of their crimes and suggests a relationship between age and criminal behaviour. Furthermore, these findings align with previous research. For instance, Moffitt [35] argued that age-related maturity reduces impulsivity and risk-taking, factors linked to criminal behaviour. A study conducted by Sampson & Laub [36] also supports these findings, indicating that violent crimes are often committed by individuals in adulthood.

Education and Murder

To examine the effect of internal-external locus of control on murders, this study included only participants with at least primary-level education. Literacy was a prerequisite since the consent forms and assessment materials were presented in written format. Participants' educational levels were categorized into four predetermined groups: up to primary level, middle to intermediate level, graduation level, and postgraduate level.

Table 2: Comparison of the level of Education between Non-criminals and Murderers

Education Level	Non-Criminals Group (N=50)	Murderers Group (N=50)	χ^2	df	p
Up to Primary	0	04 (08%)	11.42	3	0.10
Intermediate	22 (44%)	31 (62%)			
Graduate	21 (42%)	14 (28%)			
Postgraduate	07 (14%)	01 (02%)			

Non-Significant

Table 2 shows no significant difference between non-criminals and murderers regarding the level of education (chi square value=11.42). The results reveal that 44% of non-criminals were educated up to the intermediate level, 42% were graduates, and 14% held postgraduate qualifications. In contrast, among murderers, 8% were educated up to the primary level, 62% up to the intermediate level, 28% were graduates, and only 2% held postgraduate qualifications. Although the chi-square value (11.42) indicates no statistically significant difference, an observable pattern emerges between the two groups in terms of education levels. Non-criminals generally possessed higher educational qualifications, which may have equipped them with better coping mechanisms and reduced their likelihood of engaging in criminal activities. Conversely, the higher proportion of murderers with intermediate-level education suggests that many had not internalized social norms or developed strong moral values toward others. In summary, lower levels of education can contribute to violent crimes and murders. As noted by Lochner and Moretti [37], education plays a critical role in shaping behaviour and reducing criminal tendencies, highlighting the potential of improved educational outcomes as a preventive measure against criminal activity.

Marital Status and Murder

Societal norms often regard marriage as a factor contributing to a responsible and healthy life through family and social interactions. To examine the effect of internal-external locus of control on murders, this study included subjects with three types of marital statuses: married, unmarried, and widowed. The following table compares the marital statuses of non-criminals and murderers.

Table 3: Comparison of Marital Status between Non-criminals and Murderers

Marital Status	Non-Criminals Group (N=50)	Murderers Group (N=50)	χ^2	df	p
Married	33 (66%)	38 (76%)	02.63	2	0.26
Unmarried	17 (34%)	11 (22%)			
Widower	-	01(2%)			

Non-Significant

Table 3 shows a non-significant difference in the marital status of the two groups. Among non-criminals, 66% were married and 34% were unmarried, compared to 76% married, 22% unmarried and 2% widowers among murderers. The Chi-square value ($\chi^2 = 2.63$) indicates that a higher percentage of murderers were married compare to non-criminals. It is suggested that the responsibilities associated with married life may have led murderers to face hardship related to economic, security, and prestige issues.

Locus of Control (LOC) and Murder: To assess the effect of internal and external locus of control on murders, murderers and non-criminals were compared on Rotter's Locus of Control Scale (LOC). The results and discussions are presented below: -

Table 4: Comparison of Locus of Control between Non-criminals and Murderers

Group	Mean \pm SD	t	df	p-value
Non- Criminals (N = 50)	6.30 \pm 3.18	6.30*	98	0.00
Convicted Murderers (N = 50)	10.44 \pm 3.37			

* $P < 0.01$

Table 4 shows a statistically significant difference in the Locus of Control (LOC) scores between non-criminals and murderers (t value = 6.30, $p < 0.01$). Non-criminals had a mean score of 6.30 ± 3.18 , while murderers scored 10.44 ± 3.37 , with a mean difference of 4.14. The results indicate that murderers scored higher on the LOC scale compared to non-criminals. The higher scores among murderers suggest a strong

influence of external reinforcement, characteristics of an external locus of control. This external orientation may have predisposed them to engage in criminal behaviours, ultimately leading to acts of murder. These findings imply that higher LOC scores reflect external reinforcement tendencies, which may promote violent actions, whereas lower LOC scores indicate internal reinforcement, which helps in controlling direct involvement in murders. Directly related studies on locus of control in murderers are not available, however, partially related studies corroborate with the findings. Hollin and Wheeler [38] and Marsa et al. [16] confirm that individuals involved in interpersonal violence (e.g., violence, sexual offending) tend to have a more externalized locus of control compared to non-violent offenders. Kliewer and Sandler [39] found that an internal locus of control act as a buffer against the effects of negative life events on psychological well-being. Additionally, the combination of an external locus of control and low self-esteem was associated with higher levels of psychological maladjustment.

V. CONCLUSIONS

The study reveals that murderers score significantly higher on Rotter's Locus of Control Scale (LOC) compared to non-criminals. This indicates that individuals with higher LOC scores are more prone to antisocial behaviours or criminal activities, such as murder.

VI. SUGGESTIONS AND RECOMMENDATIONS

The findings emphasize the importance of promoting ethical and value-based education and fostering positive socialisation among the younger generations. Targeted interventions addressing correctional shortcomings are important for rehabilitating individuals inclined towards criminal behaviour. Strengthening family and community support system, along with counselling and skill development programs, can reduce the likelihood of criminal tendencies.

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