

A Study on Level of Aggression among Female Inmates in Tihar Central Jail: From the Lens of Forensic Penology

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Abstract

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This research tries to quantitatively assess the level of aggressiveness among female convicts by understanding their preference in multiple situations triggering aggressive responses from the lens of forensic penology. Aggression can be termed as any behaviour that is aimed at another person or object & is done with the immediate purpose to cause damage. On the other hand, Forensic Penology can be described as a study of punishment in a legal setting. Aggressiveness has a negative impact on all functioning areas of the individual, such as, it leads to strained interpersonal relationships, academic failure, social isolation, chronic unemployment, etc. & can also act as a contributing factor in recidivism. The purpose of this research is to measure the level of aggressiveness among female convicts from Tihar Central Jail No. 6, New Delhi using IIP Aggression Scale (2015). The sample size for this research is 44 & data analysis is done by correlation & chi-square statistical method through SPSS. The main objective behind conducting this research is to understand whether female convicts in Tihar Central Jail have high levels of aggression. Antisocial behaviour can be described as behaviour that affects people and violates fundamental standards and values. Aggressive behaviour is thus a subset of antisocial behaviour. The research showed that 73% of female convicts in Tihar Central Jail no. 6 have high levels of aggression, while the remaining 27% have average levels of aggression & none have low or severe levels of aggression.

Keywords: *Aggression, Tihar Jail, Female inmates, Convicts, IIP Aggression Scale.*

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1.1. Introduction:

Anger and aggressiveness have become major concerns in developed communities in recent years. (Karbasi M. 2015). It is critical to understand the distinction between the two. Anger is the reaction & the need to correct the perceived wrong (Lazarus, 2000). It is an emotional state that is built on hatred and aggressiveness. While aggression can be defined as “a response that delivers noxious stimuli to another organism,” (Buss, 1961) aggressiveness is a visible activity that is done with the intent of causing hurt or damage to others. Aggressiveness has three main elements, namely, physical aggression, verbal aggression, and hostility, and has a negative impact on all functioning areas of the individual, such as, it leads to strained interpersonal relationships, academic failure, social isolation, chronic unemployment, etc. If this powerful emotion is not effectively channelled, it may obstruct global achievement and jeopardize the normal functioning of people, organizations, and societies.

As a result, this study has the potential to guide decisions about policy, improve the overall well-being of incarcerated women, and raise the likelihood of their successful reintegration into society, therefore ending the cycle of aggressiveness and criminality.

Therefore, the main aim of this study is to quantitatively measure the level of aggression among female inmates in Tihar Central Jail number 6, New Delhi with the main objective focused on whether the female inmates in Tihar Central Jail no. 6 have high level of aggressiveness. This research uses Descriptive research design with Deductive approach. The primary data for this study is collected by Survey method using a standardised psychological scale. The sampling technique used for this research is Purposive sampling technique & the sample size for this research is 44 female convicted inmates from Tihar Central Jail no. 6. The primary data collected is analysed using Correlation & Chi-square statistical technique through SPSS.

This research includes six parts, namely literature review, research methodology, data analysis, conclusion & suggestions.

1.2. Literature Review:

Over the last decades, the matter of prisoner aggression and victimisation in adult male prisons has dominated the study of criminology & penology. Even though there is enough

evidence of violence and aggression in women prisons, empirical study on this subject is limited.

To study the relationship of aggression with other personality traits, **Kalemi G., Michopoulos I., Efstathiou V., Konstantopoulou F., Tsaklakidou D., Gournellis R., & Douzenis A., (2019)** conducted a comparative research study on 157 women from female prisoners in Attica's Korydallos Female Prison & 150 non-delinquent females from Greece using Aggression Questionnaire by Buss & Perry, Self-esteem Scale by Rosenberg, Narcissistic Personality Inventory-40 & Self-Perception Profile for Adults. The main exclusion criteria for the participants were being unable to understand Greek, having a mental history of psychosis, and usage of psychiatric medication before arrest or at the time of interview. Approximately 36% of the 157 female inmates included in this study were convicted for violent crimes, such as homicides; approximately 3% for serious physical harm; approximately 11.5% for non-violent crimes, such as thefts; approximately 17% for white collar crimes; approximately 23% for drug-related crimes; and approximately 10% for other non-violent crimes. This study looked at how self-esteem, self-perception, narcissism, and socio-demographic characteristics influenced aggressiveness in female convicts and women without a criminal record. The study found that aggressiveness linked adversely with self-esteem and self-perception and favourably with narcissistic personality characteristics in both groups of women, prisoners, and non-delinquents. When inmates were compared to non-delinquents, it was discovered that higher levels of narcissistic and sociable personality traits, as well as lower age, education, self-esteem, and levels of self-perception items, could lead to higher levels of aggression. The participants' group, that is, convicts vs. non-delinquents, had no effect on aggression. Only poorer work competence, more narcissistic personality characteristics, and a history of childhood abuse were found to predict increased aggressiveness in female offenders, regardless of the kind of offence, that are, convicted for violent vs. non-violent offences. Hence, it concluded that higher levels of narcissistic personality traits, lower education, self-esteem & self-perception levels among female inmates are significantly correlated with higher levels of aggressiveness. According to the study, education is inversely connected to aggressiveness in women, making it a protective factor against aggression. As a result, it may be argued that education promotion could be used as a preventive measure against aggressiveness.

Dr. Naik B. & Morkal S., Kolhapur, (2019) conducted research on 100 Indian students to deduce the relationship between mental depression & aggression in young populations. The sample universe included adolescents, ranging between ages 18 years to 21 years from Karad,

Kolhapur. Mental Depression Scale by Dubey & IIP Aggression Scale by Srivastava K. (2015) was used to measure mental depression & aggression respectively in the sample. The result showed that there was a significant positive correlation between mental depression & aggression in young adults. Also, a significant gender difference was also noticed for the symptoms of mental depression & aggression among male & female adolescents.

Kapoor R., (2017) conducted a study in Tihar Central Jail about the life of elderly convicts from the perspective of Erotological theories. The study's goal was to obtain an understanding of the lives of senior citizen convicts, including their perspectives on ageing, and to understand their lifestyle and experiences in the context of different theories of ageing in the context of the challenges that the jail environment provides. The study used qualitative methods, & respondents were selected using the purposive sampling technique. When examined in the context of life experiences of senior citizen inmates in Tihar, the theories of ageing emphasise the gaps that exist in the jail setting, leading to a bad experience of ageing for the senior citizen criminals. One primary example was the exchange theory, which strongly favours younger prisoners in jail over senior citizen criminals and raises concerns about the power relations that present in the prison setting. The activity theory that rules the lives of senior citizen convicts in imprisonment necessitates prison reforms for senior citizen convicts so that the component of physical exercise is tailored to them based on their knowledge while also being affordable. The prison setting forces senior citizen convicts to conform to a specific theory, such as the subculture theory, which is not a desirable deed for a good experience of ageing for the senior citizen convicts either. The study saw that the room in the jail for senior citizen convicts to disclose their personalities is lacking, depriving them of the chance to use their personality type to experience effective ageing. Hence, a more in-depth study of senior citizen criminals in Indian prisons is necessary to understand the lives of elderly convicts & formulate suggestive frameworks for better living conditions for them.

Further, a research study was conducted by **Hornsveld R., Zwets A., Leenaars E., Kraaimaat F., Bout R., Janssen T., & Kanters T., (2016)** in International Journal of Offender Therapy & Comparative Criminology in which the psychological predictors of aggressive conduct in 59 Dutch female prisoners, ranging between age of 14 years to 58 years, were compared to those in 170 male prisoners, ranging between age of 17 years to 59 years, all of whom had been convicted of a violent offences. The study included forensic psychiatric outpatients from Netherlands, out of which, approx. 39% were females ranging between age 18-26 years & approx. 42% were males ranging between ages 17-25 years. The Dutch versions

of NEO-FFI scale by Hoekstra et al. (1996), Hare Psychopathy Checklist- Revised by Vertommen et al. (2002), & The Aggression Questionnaire- short form by Hornsveld et al. (2009) were used to assess the personality traits & behavioural issues with focus on the neuroticism & agreeableness factors; psychopathic tendencies; & aggression & hostility of the sample respectively. In this research, a group of violent female criminals was compared to a group of violent male offenders. A subset of violent female forensic psychiatric outpatients was also compared to a subgroup of violent male forensic psychiatric outpatients, and a subgroup of violent female prisoners was compared to a subgroup of male prisoners. The violent female perpetrators reported significantly less emotional stability, that is, higher scores on neuroticism and hostility, but considerably higher trait anger than their male peers. However, only high trait anger scores appeared to be reliably linked to aggressive female offenders because less emotional stability and hostility were also observed in a sample of low-educated non-clinical women compared to low-educated non-clinical men. In terms of personality characteristics and problem behaviours, violent female outpatients did not vary substantially from violent male outpatients, though there was a tendency in neuroticism. This implies that the differences between violent female criminals and violent male offenders can be ascribed primarily to the violent female inmates, who reported significantly more rage and violence than violent male detainees, despite scoring considerably lower on hostility and all aspects of psychopathy. There was no substantial difference between groups in terms of social anxiety or social abilities. Hence, the study concluded that the male offenders had higher neuroticism & trait anger, but significantly lower hostility, on the other hand, female prisoners had higher anger and aggressiveness, but significantly lower hostility and psychopathy. These preliminary findings suggested that violent female prisoners vary little from violent male prisoners in terms of aggressive personality & behaviours.

Kaur M. & Dr. Kumar R. (2016) published a review paper in International Journal of Science Technology & Management & discussed about the effect of yoga & meditation on stress management of female prisoners in Delhi. The study focused on how inmates, particularly female convicts, benefit from meditation. The research findings established how yoga can reduce stress, improve mood, and control anti-social behaviour in humans when compared to those who do not have meditation sessions in their routine, especially in women in prison, because women & men prisoners require ongoing emotional and psychological therapies to protect their anti-social instincts in the future & not turn towards recidivism. This research examined the good and promising changes in the health of female convicts in Delhi

who practised meditation, yoga, and other stress-reduction practises. The study's scope was expanded to collect firsthand data from Delhi's convicts to assess the actual challenges they confront and what stress management measures are now available to lessen their stress levels.

Another similar study was conducted by **Mazaheri M. & Karbasi M., (2015)** entitled “Mental Health & Aggression in Female Prisoners in Isfahan, Iran” which used Buss-Perry Aggression Questionnaire on female prisoners in the Central Prison of Isfahan to measure the level of aggressiveness. It was a cross-sectional, descriptive analytical research conducted on a target demographic of female convicts in Isfahan's major jail. The total number of female convicts was 400, and 165 females were chosen as research participants who completed self-administered questionnaires based on inclusion and exclusion criteria. The capacity to read and write, at least one year left on one's sentence, and a willingness to participate in the study were all inclusion requirements. The youngest competitor was 16 years old, while the oldest was 54 years old. The data indicated that 87.9% of the subjects had suspected psychiatric problems. This finding is in line with a prior report from Iran. It concluded that younger & single female prisoners with no children showed more aggression as compared to other female prisoners. They further emphasised on the necessity of psychological assistance to reduce aggressiveness among female prisoners. Because this study was confined to Isfahan's major jail and a small number of female detainees, generalisation of the results is hindered.

Matsuura N., Hashimoto T., & Toichi M. (2009) conducted a study to examine correlation between aggression, self-esteem, adverse childhood experiences & depression in female juvenile inmates in Japan. The subjects were 91 female juveniles aged between 15 to 19 years of age, out of which, approx. 42% were involved in drug-related crimes, approx. 15% in larceny, 10% in violence, & approx. 32% in other offences. Japanese translated versions of Rosenberg self-esteem scale, Buss-Perry Aggression Questionnaire & Birlson Depression self-rating scale for children were used to measure self-esteem, aggression & depression respectively, along with Adverse Childhood Experiences questionnaire, which was primarily conducted by Health Insurance Union of the United States. The Adverse Childhood Experience questionnaire results indicated that approx. 27%, 24%, and 9% of the individuals had suffered physical, psychological, and sexual abuse, respectively. Inmates at the prison were asked about their domestic environment, where approx. 17% said there was alcohol abuse; approx. 22% said there was someone who was persistently unhappy, mentally ill, institutionalised, or suicidal; & more than 45% said one or both parents were gone. Approx. 12% of the detainees said a family member was imprisoned, and approx. 10% said they were ignored by their

parents, that is, not allowed to attend to school, not provided regular meals, etc. These findings imply that family functioning in their households has frequently deteriorated. As a result, self-esteem as measured by the Rosenberg Self-Esteem Scale exhibited substantial negative relationships with Buss Perry Aggression Questionnaire measured aggressiveness, the Adverse Childhood Experience score, & Birleson Depression Self-Rating Scale for children measured depression. Aggression, on the other hand, revealed substantial positive relationships with the Adverse Childhood Experience score and depression. The Adverse Childhood Experience score was also found to have a substantial positive relationship with depression. The primary drawback of this study was that all questionnaires were self-administered, which are subject to high chances of personal bias.

Archer J., (2007) conducted a study related to Physical Aggression in Male and Female Prisoners as a Function of Perceived Fighting Finesse. The study investigated Resource Holding Potential to aggression, among more than 1200 inmates from eleven closed, medium & medium high security prisons in United Kingdom, using 27-item Resource Holding Potential Questionnaire. The sample universe included approx. 58% male inmates & approx. 42% female inmates, ranging above 21 years of age, out of which, approx. 89% were European, approx. 4% were Afro-Caribbean, & approx. 3% were Asian subcontinent. The average sentence length of the inmates was approx. 44 months, and the average total length of time spent in prison by inmates was 50 months. The offences committed by the inmates included, approx. 33% violent offences, approx. 27% acquisitive offences, 18.5% for drug-related offences, approx. 10% sex offences & 12.5% for other offences, such as, motoring offences, etc. The study concluded that men indicted more response in the form of physical aggression to provocation, as compared to women; furthermore Bullying perpetrators reported a greater readiness to escalate to physical aggression.

Daoust S. & Loper A. of University of Virginia, U.S.A. & **Diamond P.** of University of Texas, Houston along with **Magaletta P.** of Federal Bureau of Prisons, **(2006)** conducted a study on 555 female convicts from two low-security federal facilities to evaluate the association between neuropsychological impairment and aggressiveness among female federal prisoners. The Buss-Perry Aggression Questionnaire was used to assess aggression, and the Neuropsychological Dysfunction scale of the Coolidge Axis II Inventory was used to assess neuropsychological dysfunction. The data utilised in this study were gathered as part of a wider investigation of the frequency of mental health issues undertaken by the Federal Bureau of Prisons' Psychological Services Division. Participants varied in age from 18 to 69 years. The

sample's racial features comprised about 34% Black Americans, approximately 29% Hispanic/Latino, approximately 28% Caucasians, approximately 2% American Indians, approximately 1.5% Asians, approximately 3.5% other minorities, & approximately 2.5% unreported. The study found a substantial association between the two components, that is, aggression & neurological impairment. Unlike prior published studies that have revealed a positive association between neuropsychological dysfunction and aggressiveness in males, the current study's findings imply that this relationship occurs in women as well, despite recognised gender differences in aggression. 17% of the sample reported a past head injury; 6% reported having had a seizure; about 35% reported headaches; approximately 16% reported concentration issues; approximately 15.5% reported dizziness; and approximately 12.5% showed memory problems.

Henelius G., Ilonen T., Viemer V., & Eronen M., (2006) conducted a comparative study on 45 violent female offenders & 30 female non-offenders with no significant age differences, using nine selected Rorschach cards to understand the personality differences between offending & non-offending females from Finland. One clinical psychologist collected data on offenders in eight different jails spread across the country. The interviews and psychological tests were undertaken as part of a post-trial inquiry for research reasons alone. Non-offenders were examined at a clinic. The Wechsler Adult Intelligence Scale-Revised scores were used to assess each subject's ability to grasp the task. Consequently, there were no significant differences in aggressive ratings between offenders whose violent behaviour had been validated and non-offenders. Neither was a history of violent conduct substantially connected to aggressive scores, while Baity & Hilsenroth discovered a link between aggressive content score & aggressive behaviour (2002). In the current study, however, childhood victimisation and suicide attempts were found to be connected to aggressive content ratings. These violently inclined women appear to have associated with the perpetrator, while their victimisation experiences may have increased their aggressive urges to inflict pain on others. Additionally, aggressive past score was shown to be negatively associated to emotional intensity of the violent act, which has been connected to victimisation (Mihura & Nathan-Montano, 2001). The absence of differences between groups in the current study might be attributed to the offender sample's heterogeneity; most offenders in the current study had an antisocial personality, and many of them also had borderline personality disorder. According to the findings, offenders exhibited a more avoidant and inconsistent coping style than non-offenders. In comparison to non-offenders, the offenders exhibited social immaturity and

reduced capacity to cope with stress. There were no significant variations in how the two groups handled extreme emotions. The outcomes of this study underline the importance of training in coping skills, such as conflict resolution and community living skills, for women who have a proclivity for violence.

Furthermore, **Archer J. & Haigh A., (1997)** conducted a study entitled “Beliefs about Aggression among Female & Male Prisoners” in closed prisons of North England using Buss-Perry Aggression Questionnaire. The female participants in ages 15 to 46 years old, while the male participants ranged in age from 22 to 49 years old. The age mismatch was caused by sample availability as well as the varying age ranges of the inmates involved. The female sample had 25 participants convicted of violent offences and 22 of non-violent offences, whereas the male sample included 40 participants convicted of violent offences and 22 of non-violent offences. Murder, robbery, and arson were examples of violent crimes, whereas non-violent offences included drug selling or possession, theft, and handling stolen items. The study observed that instrumental beliefs were highly associated to aggressiveness rather than expressive beliefs, where instrumental beliefs meant a way of controlling others & expressive beliefs meant loss of control. Females had considerably stronger expressive beliefs than males, however, age was shown to be strongly inversely associated to instrumental views, physical violence, rage, & hostility, while those convicted of violent crimes had much greater levels of physical aggressiveness & rage, but lower levels of expressive beliefs.

Researchers have focused on aggressiveness in recent years, although its impact is uncertain. Female aggressiveness is assumed to have deep origins and is currently understudied. Only a few studies have attempted to explore female aggressiveness, and none have included a comparison of delinquent and non-delinquent women.

1.2.1. Research Gaps

Aggression is a trait that has emerged to manage social hierarchies and safeguard key resources such as companions, nutrition, and habitat. There are several studies that investigate aggression as a factor, however while much research has been conducted on male aggression and violence, there has been little research on female aggression, especially in the context of the prison environment. Most of the study on prison populations has been done in foreign countries. The IIP Aggression Scale used in this study has been extensively used in studies on aggression in both male and female groups, but validation for female prisoners may be limited. Aggression is frequently associated with mental health problems such as depression, stress,

and psychological disorders. As a result, this study may aid in further investigation of the mental health requirements of female prisoners, which may assist in understanding the recidivism aspect among them. As a result, the available literature indicates that more focused and customised study on female aggression among Indian prison populations is required.

1.3. Research Methodology

This is a Quantitative study which uses Descriptive research design with Deductive approach. The primary data for this study is collected by Survey method using a standardised psychological scale known as IIP Aggression Scale (2015). The sampling technique used for this research is Purposive non-probability sampling technique, also known as Judgemental sampling technique. The sample size for this research is 44 female convicted inmates from Tihar Central Jail no. 6, Tihar Central Jail Complex, New Delhi. The primary data collected is analysed using Correlation & Chi-Square statistical technique through SPSS.

1.3.1. IIP Aggression Scale

Aggression is an action of attacking a person or a group with intent to harm them. Aggression that originates in childhood is firmly connected to delinquent and criminal behaviour later in life. The IIP Aggression Scale was developed by Dr. Kranti Srivastava in 2015. The items in IIP Aggression Scale have been selected based on literature review & judgement of experts from the field of psychology & measures the level of aggression in any age group above 14 years. The final scale has 30 items, each with 6 possible responses evaluated on a 5-point scale on the positive dimension & a 0-point scale on the negative dimension. It is a self-administering questionnaire with no fixed time limit to complete it. However, an individual usually takes 15-20 minutes to complete the test. There are no right or wrong answers.

The reliability coefficient of the scale was calculated by odd-even method & test-retest method. The split-half reliability correlation coefficient of this scale is 0.79 for males & 0.82 for females. The test-retest reliability coefficient of this scale is 0.78. Construct validity of this scale is 0.71 when compared with Aggression Scale by Mathur & Bhatnagar, 2012, which suggests that this scale also serves to a large extent to the same purpose.

The total score of the scale is the sum of all the marked responses. As a result, the highest score is 150 and the least score is 0. Higher scores indicate a higher degree of aggression, whereas lower numbers indicate a lower level of aggression.

1.4. Data Analysis

According to table 1, participants who committed crimes like Kidnapping, Grievous hurt, Blackmail, Murder, Rape, Hurt & under NDPS Act 1985 & POCSO Act 2012 showed High levels of aggression, while participants who had committed crimes like Fraud, Theft, Counter-feting, Robbery & under UAPA Act 1967 showed Average level of aggression.

Hence, according to table 2, participants who had committed crimes against body showed High levels of aggression, while participants who had committed crimes against property showed Average levels of aggression. One of the main reasons why participants who had committed crimes against body has High levels of aggression may be that crimes against the body include direct physical injury to another person & frequently need the use of force or violence & such crimes are frequently perpetrated in a highly emotional & charged environment, where anger, fear, or other extreme emotions may be present.

Table 1. Crime Committed wise Level of Aggression among participants

Crime	Average Level of Aggression
NDPS	High
POCSO	High
Kidnapping	High
Fraud	Average
Grievous Hurt	High
Theft	Average
UAPA	Average
Murder	High
Blackmail	High
Rape	High
Counter-feting	Average
Hurt	High
Robbery	Average

Table 2. Nature of Crime Committed wise Level of Aggression among participants

Nature of Crime	Average Level of Aggression
Crime Against Body	High
Crime Against Property	Average

1.4.1. Empirical Analysis

The IIP Aggression Scale consists of 30 statements which measures level of aggression of the participants in terms of frustration, irritation, anger behaviour, uncontrollable reactions, hostility, following social customs, preference for war, bullying, and verbal aggression. The below is the hypothesis testing for the correlation between level of aggression & factors through which aggression is measured.

Hypothesis Test 1

Null Hypothesis: There is no significance between the frustration & irritation & the level of aggression measured in participants.

Alternate Hypothesis: There is significance between the frustration & irritation & the level of aggression measured in participants.

Table 7. Crosstab for Level of Aggression calculated in Participants * Frustration & Irritation

Crosstab											
			Frustration & Irritation leading to Aggression								
			1.33	2.00	2.33	2.67	3.00	3.33	3.67	4.00	Total
Level of Aggressiveness of the Participants	Average	Count	1	2	2	3	2	1	1	0	12
		Expected Count	.3	.5	1.1	1.6	3.0	2.7	1.6	1.1	12.0
	High	Count	0	0	2	3	9	9	5	4	32
		Expected Count	.7	1.5	2.9	4.4	8.0	7.3	4.4	2.9	32.0
Total		Count	1	2	4	6	11	10	6	4	44
		Expected Count	1.0	2.0	4.0	6.0	11.0	10.0	6.0	4.0	44.0

Table 8. SPSS output for Chi-Square Test

Variables: Level of Aggression calculated in Participants * Frustration & Irritation			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.407 ^a	7	.044
Likelihood Ratio	15.361	7	.032
Linear-by-Linear Association	11.273	1	<.001

N of Valid Cases	44		
a. 14 cells (87.5%) have expected count less than 5. The minimum expected count is .27.			

According to table 7, that is the crosstab for level of aggression calculated in participants & frustration & irritation, calculated from the SPSS output, 12 participants scored average level of aggression & 32 participants scored high level of aggression in frustration & irritation leading to aggression theme.

Result: For 5 degrees of freedom at 1% level of significance, the critical p-value is 0.05 (referred from the statistical table of Kothari C.R.). From the SPSS output according to table 8, the obtained p-value is 0.044. Since the obtained p-value in this case (0.044) is lesser than the critical p-value, then the null hypothesis can be rejected & the **alternate hypothesis can be retained**. Hence, it shows that there is significance between the frustration & irritation & the level of aggression measured in participants.

Hypothesis Test 2

Null Hypothesis: There is no significance between the aggressive behaviour & the level of aggression measured in participants.

Alternate Hypothesis: There is significance between the aggressive behaviour & the level of aggression measured in participants.

Table 9. Crosstab for Level of Aggression calculated in Participants * Aggressive Behaviour

		Crosstab															
		Aggressive Behavior leading to Aggression															
		1.20	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	Total	
Level of Aggressiveness of the Participants	Average	Count	1	1	1	2	2	3	0	1	1	0	0	0	0	12	
		Expected Count	.3	.3	.3	.5	.5	1.1	1.6	1.9	1.6	1.4	.8	.8	.5	.3	12.0
	High	Count	0	0	0	0	0	1	6	6	5	5	3	3	2	1	32
		Expected Count	.7	.7	.7	1.5	1.5	2.9	4.4	5.1	4.4	3.6	2.2	2.2	1.5	.7	32.0
Total		Count	1	1	1	2	2	4	6	7	6	5	3	3	2	1	44
		Expected Count	1.0	1.0	1.0	2.0	2.0	4.0	6.0	7.0	6.0	5.0	3.0	3.0	2.0	1.0	44.0

According to table 9, that is the crosstab for level of aggression calculated in participants & aggressive behaviour, calculated from the SPSS output, 12 participants scored average level of aggression & 32 participants scored high level of aggression in aggressive behaviour leading to aggression theme.

Table 10. SPSS output for Chi-Square Test

Variables: Level of Aggression calculated in Participants * Aggressive Behaviour			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31.696 ^a	13	.003
Likelihood Ratio	35.917	13	<.001
Linear-by-Linear Association	20.201	1	<.001
N of Valid Cases	44		
a. 27 cells (96.4%) have expected count less than 5. The minimum expected count is .27.			

Result: For 5 degrees of freedom at 1% level of significance, the critical p-value is 0.05 (referred from the statistical table of Kothari C.R.). From the SPSS output according to table 10, the obtained p-value is 0.003. Since the obtained p-value in this case (0.003) is lesser than the critical p-value, then null hypothesis can be rejected & **alternate hypothesis can be retained**. Hence, it shows that there is significance between the aggressive behaviour & the level of aggression measured in participants.

Hypothesis Test 3

Null Hypothesis: There is no significance between the uncontrollable reactions & the level of aggression measured in participants.

Alternate Hypothesis: There is significance between the uncontrollable reactions & the level of aggression measured in participants.

Table 11. Crosstab for Level of Aggression calculated in participants * Uncontrollable Reactions

Crosstab																
			Uncontrollable Reactions leading to Aggression													
			1.80	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	Total
Level of Aggressiveness of the Participants	Average	Count	1	2	2	1	1	3	2	0	0	0	0	0	0	12
		Expected Count	.3	.5	.5	.3	1.1	1.6	1.4	1.9	1.1	.8	1.6	.5	.3	12.0
	High	Count	0	0	0	0	3	3	3	7	4	3	6	2	1	32
		Expected Count	.7	1.5	1.5	.7	2.9	4.4	3.6	5.1	2.9	2.2	4.4	1.5	.7	32.0
Total		Count	1	2	2	1	4	6	5	7	4	3	6	2	1	44
		Expected Count	1.0	2.0	2.0	1.0	4.0	6.0	5.0	7.0	4.0	3.0	6.0	2.0	1.0	44.0

According to table 11, that is the crosstab for level of aggression calculated in participants & uncontrollable reactions, calculated from the SPSS output, 12 participants

scored average level of aggression & 32 participants scored high level of aggression in bullying & verbal aggression leading to aggression theme.

Table 12. SPSS output for Chi-Square Test

Variables: Level of Aggression calculated in Participants * Uncontrollable Reactions			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.606 ^a	12	.009
Likelihood Ratio	32.017	12	.001
Linear-by-Linear Association	19.567	1	<.001
N of Valid Cases	44		
a. 25 cells (96.2%) have expected count less than 5. The minimum expected count is .27.			

Result: For 5 degrees of freedom at 1% level of significance, the critical p-value is 0.05 (referred from the statistical table of Kothari C.R.). From the SPSS output according to table 12, the obtained p-value is 0.009. Since the obtained value in this case (0.009) is lesser than the critical value, then null hypothesis can be rejected & **alternate hypothesis can be retained**. Hence, it shows that there is significance between the uncontrollable reactions & the level of aggression measured in participants.

1.5. Conclusion

Aggression is often perceived as a predominantly male behaviour, but research has shown that aggression in women is a complex and important issue to address. According to a study by Campbell and Muncer (2019), "there is now considerable evidence that women engage in a range of aggressive behaviours, both physical and verbal". In this context, the study also shows that women in prisons have high level of aggression. Despite this, aggression in women has often been overlooked or minimized in both research and practice.

In this context, the present study aims to measure the level of aggression among female inmates in Tihar Central Jail number 6 (Women Jail) using IIP Aggression Scale (2015) &

FIGURE 1. LEVEL OF AGGRESSION FOUND IN PARTICIPANTS



explore potential strategies for reducing it. As a result, according to figure 1, 73% of the participants demonstrated high levels of aggression & 27% of participants demonstrated average levels of aggression, while none of the convicted female inmates demonstrated low or severe levels of aggression. Some of the possible reasons for female convicted inmates to demonstrate high levels of aggression may include lack of proper intervention by the prison authorities, basic amenities & support in prison environment & stressful prison environment including overcrowding, lack of privacy, exposure to violent behaviours of other inmates, conflicts with the prison staff, religious biases, limited opportunities of rehabilitation, limited exposure to healthy coping strategies, etc.

In conclusion, the findings of this dissertation also suggest's the imminent need to take necessary actions to reduce such high levels of aggression among female inmates, which in turn would also help to minimize the issue of recidivism among female inmates & make society a better & safer place for all the individuals.

1.6. Suggestions

As this study concludes that 73% female inmates of Tihar Central jail, New Delhi show higher levels of aggression, reducing aggression among female inmates has become a critical aspect of rehabilitation for prison authorities. Although the causes of aggression are complex, there are several evidence-based approaches that have been effective in reducing violent behaviour, it is essential to develop a framework that can help female inmates in reducing their aggressiveness, which would not only benefit their mental and physical health but also reduce their likelihood of indulging in recidivist behaviour.

- i. **Anger Management Training-** Anger management training is a crucial aspect of reducing aggression in female inmates. Anger is a natural emotion, but if not managed properly, it can lead to violent behaviour. Through anger management training, female inmates can learn techniques to manage their emotions effectively. This training can help them identify the triggers that lead to their anger and develop strategies to respond appropriately. It can also teach them how to communicate effectively, how to practice relaxation techniques, and how to manage their stress levels. Anger management training can be conducted in group settings or one-on-one sessions. For example, at the Maryland Correctional Institution for Women, a program called "Aggression Replacement Training" was implemented to help inmates identify their triggers and develop coping strategies. One of the techniques used in this program is called "Thought-Stopping," where inmates are asked

to visualize a stop sign when they feel anger rising. This technique helps inmates interrupt negative thought patterns that can lead to aggressive behaviour.

- ii. **Cognitive Behavioural Therapy (CBT)**- Cognitive Behavioural Therapy (CBT) is another useful psychotherapy used for reducing aggression in female inmates. It focuses on changing negative thought patterns and behaviours and can help female inmates identify and challenge negative thoughts that may lead to aggressive behaviour. CBT can also help them develop new coping skills and strategies to manage their emotions effectively. This therapy can be conducted in individual or group settings, and it can be combined with other forms of therapy or rehabilitation programs. The Iowa Correctional Institution for Women implemented a program called "Thinking for a Change," (2008) which incorporates CBT techniques to help inmates develop problem-solving skills and cognitive restructuring. In one study, inmates who participated in this program had a lower rate of recidivism than those who did not.
- iii. **Trauma-Informed Care**- Many female inmates have experienced traumatic events in their lives, such as physical or sexual abuse, which can lead to aggressive behaviour. Trauma-Informed Care is an approach that recognizes the impact of trauma on a person's mental and physical health. This approach prioritizes safety, trust, and empowerment. It can help female inmates address the underlying causes of their aggression, such as post-traumatic stress disorder (PTSD). Trauma-Informed Care can include individual or group therapy sessions, educational programs, and other forms of support. The California Institution for Women implemented a program called "Seeking Safety," (2015) which addresses trauma and substance abuse simultaneously. This program has been effective in reducing aggression and improving mental health outcomes.
- iv. **Skill-Building Programs**- Skill-building programs can help female inmates develop new skills or pursue education, which can increase their self-esteem and reduce the likelihood of aggressive behaviour. These programs can include vocational training, educational courses, and life skills training. Vocational training can help female inmates acquire new job skills, which can increase their likelihood of finding employment after their release. Educational courses can help them improve their literacy and numeracy skills, which can improve their chances of success in the workforce. Providing training for life-skills can help female inmates develop essential skills such as effective communication, problem-solving, decision-making, amongst others. The Vermont Department of Corrections implemented a program called "The Horse Program," (2009) which pairs inmates with

horses to teach them responsibility, communication, and problem-solving skills. Inmates in this program have reported decreased levels of stress and aggression.

- v. **Positive Reinforcement**- Positive reinforcement is a crucial aspect of any rehabilitation program. Rewards for positive behaviour can help reinforce good behaviour and reduce the likelihood of aggressive behaviour. Rewards can include privileges such as phone calls, visitations, or access to educational programs. Positive reinforcement can also be used in conjunction with other forms of therapy or rehabilitation programs, such as anger management training or CBT. The Ohio Reformatory for Women implemented a program called "The TV Turnoff Challenge," which rewards inmates for positive behaviour by allowing them to watch television. Inmates who exhibit good behaviour are allowed to watch television for a certain amount of time each day. This program has been effective in reducing disciplinary infractions and improving overall behaviour.
- vi. **Restorative Justice Practices**- Restorative Justice Practices can help female inmates take responsibility for their actions and make amends for harm done, which can help reduce the likelihood of future aggressive behaviour. These practices can include victim-offender mediation, community service, and group meetings. Victim-offender mediation can help female inmates understand the impact of their behaviour on their victims and take steps to make amends. Community service can help them give back to their communities and develop a sense of responsibility. Group meetings can provide a supportive environment where female inmates can share their experiences and receive feedback from their peers. The Minnesota Correctional Facility for Women implemented a program called "The Bobo Doll Experiment," which teaches inmates about the impact of their behaviour on others. Inmates are shown a video of children playing with a bobo doll and are then asked to reflect on their own behaviour. This program has been effective in reducing aggressive behaviour and promoting empathy.
- vii. **Support Systems**- Support systems are critical to reducing aggression among female inmates. Female inmates need access to support systems such as family, friends, and mental health professionals. Support systems can help reduce feelings of isolation, which can contribute to aggressive behaviour. Mental health professionals can provide individual or group therapy sessions, which can help female inmates address underlying mental health issues that may contribute to their aggression. The Women's Huron Valley Correctional Facility, Michigan, USA implemented a program called "Moms and Kids," (1991) which

provides parenting classes and allows mothers to live with their children in a separate unit. This program has been effective in reducing disciplinary infractions and promoting positive relationships between mothers and their children.

In conclusion, reducing aggression in female inmates requires a comprehensive framework that includes several aspects of rehabilitation. These approaches can help female inmates learn new coping skills, address underlying mental health issues, and develop a sense of responsibility. These strategies have been implemented in various prison settings, and many have been effective in reducing aggression and promoting positive outcomes. Therefore, by implementing this framework, we can help reduce the likelihood of female inmates returning to prison and provide them with the tools they need to lead successful and fulfilling lives after their release.

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