The International Journal of INDIAN PSYCHOLOGY

Research Paper

Understanding Psychology & Phenotypic Traits of Serial Killers

Ms. Devangi Nathani[1]*, Pravesh Charan Isai[2]

ABSTRACT

The viewpoint that portrays a serial killer very much like a white male, a deceptive monster with astounding appearance, having broken associations partaking in animal torture or being genuine or real mauled in pre-adulthood. Besides, every serial killer's drive to kill different casualties might be different, contingent upon his/her set of experiences and encounters. Why would an individual kill multiple victims without a certain motive? Researchers are still struggling with determining the cause of the behaviour to know more about them. The current study set out to analysis of psychological and phenotypic traits of serial killers and surveys about psychological traits of normal human beings having traits of serial killers, to identify possible life events and factors. The majority of the data has been collected from the survey using two scales i.e., the Buss Perry scale and Barrett's aggression scale, and information have likewise been taken from the books expounded on every serial killer. The accompanying factors have been found: Sociological factors, environmental factors, genetics, and neurodevelopmental complication. There are different genes that regulate mood, sleep, feelings, appetite, etc. It is more similar to hereditary qualities that load the weapon and the environment pulls the trigger. Hence, if we can link such factors and serial killers together, we might be able to find out the common connection that makes them a killer. Explanation of factors and interrelation and interpretation between them are discussed.

P robably the most established inquiry in criminal science – and, besides, theory, regulation, philosophy – is whether crooks are conceived or made. Are serial killers a result of nature (hereditary qualities) or support (ecological elements)? Peter Vronsky is the essayist of Sons of Cain: A History of Serial Killers from Stone Age to the Present, a book that researches why certain people become killers and others don't. The book examines how our understandings of persistent killers – called "monsters" before the approaching of present-day mind research – have changed over the long run, and thinks about replies to a troublesome inquiry: what, precisely, "makes" a serial killer? Various serial killers are defeats of youth injury or something to that effect – physical or sexual abuse, family brokenness, truly far away from guardians. Injury is the single repeating subject in the records of most killers. As a result of this injury, t, they stifle their enthusiastic reaction. They

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[1]Post Graduate Student, Department of Forensic Science, Parul Institute of Applied Science, Parul University
[2]Assistant Professor Department of Forensic Science, Parul Institute of Applied Science, Parul University
*Corresponding Author

never gain proficiency with the proper reactions to injury, and never foster different feelings, which is the reason they find it hard to understand others. TV programs like The Fall, motion pictures like The Perfume, and tunes like The Ripper by Judas Priest, furnish proof of a boundless interest with serial killers. Serial killers have worked from the beginning of time and all over the planet. Despite the fact that the Majority of individuals don't kill, the overall population appears to have an interest with Serial killing. Newton distinguished Locusta, an expert assassin from Rome, most popular for harming Emperor Claudius, his child Britannicus, and 6 other anonymous casualties in the First century CE, as the principal reported serial killer. Newton additionally portrayed the instance of Gilles de Rays, an innovator in the French armed force, a sidekick in-arms of Joan of Arc, and an admitted serial killer, best IQ1own for killing an enormous number of casualties (100 youngsters) in the fourteenth and fifteenth hundreds of years.

Nature and Nurture both assume a critical part in the childhood of a youngster and all through their formative stage. Research shows that specific qualities incline individuals toward savagery. Numerous serial killers experience youth injury or early division from their mom. As an outcome of that injury or detachment, researchers accept, they figured out how to smother sympathy or endure harm to the region of the mind that controls enthusiastic motivations. Serial killers regularly are recluses who dread all relationships and look to control, to annihilate others and take out the chance of another embarrassing dismissal. The current concentrate chiefly resolves two inquiries concerning serial killers: What leads these killers to submit multiple homicides and what are basic inspirations of them?

Serial killing has been defined as "the unlawful killing of 2 or more persons" at the Serial Murder Symposium conducted by the Behavioural Analysis Unit-2 of the U. S. Federal Bureau of Investigation in 2005. In separate incidents, by the same offender(s)" (p. 9). Two other categories of serial killings should be distinguished from serial killing. (Fox & Levin, 1998). Mass killing is defined as the killing of four or more individuals in a specific incident by one or more offenders so over span of a few minutes or hours (Levin & Fox, 1998; see also Dietz, 1986). For example, George Hennard opened fire in October 1991. A mass murder happened at the Luby's cafeteria in Killeen, Texas, where the attacker shot 23 people before committing suicide.

1. Bus-Perry Aggression Questionnaire

The Hostility Inventory's scales and items were developed observations obtained in clinical psychology situations with limited statistical analysis. As a conclusion, no research findings corroborated such findings when factor analysis was being used to confirm the seven scales proposed in the test. In addition, the reliability of the Hostility inventory was an issue. In the AQ, these problems are resolved. The Hostility Inventory produced several items for the AQ, and factor analysis of the items, which have been tested with over 1,000 college students, offered four factors.

The AQ was further modified in 2000, with the addition of indirect aggression, bringing the number of factors to five. The availability of products has also increased significantly from the first 18 items. More than 2,000 people, including children and the elderly, have examined this new version. The Buss–Perry Aggression Questionnaire (BP-AQ) is a 29-item, four-factor instrument that assesses physical, verbal, and psychological aggression. In the literature, there are many competing versions of the original BP-AQ, but testing with aggressive offenders is rare.

2. The Barratt's Impulsiveness Scale

(BIS) is a widely used inhibition measure. It consists of 30 items that are scored to generate six first-order factors (attention, motor, self-control, cognitive complexity, perseverance, and cognitive instability impulsiveness) and three second-order factors (attention, motor, self-control, cognitive complexity, perseverance, and cognitive instability impulsiveness) (attentional, motor, and no planning impulsiveness). The BIS is the most widely used self-report measure of excitability. The 1995 publication that specified the segmented of the 11th edition of the Barratt Impulsiveness Scale had 457 journal citations as of June 2008, as per Web of Knowledge (an academic citation indexing and search service). Antisocial personality disorder, asserting power, torturing animals, manipulation, predatory behaviour are some sociological factors affecting serial killers while anger, lack of reality, addiction, thrill-seeking, financial gain, attention-seeking are some psychological factors. It is also affected by neurodevelopmental and environmental factors.

Phases of Serial Killers

* **Aura phase** - This is where the serial killer begins to lose the grip of reality or we can say withdrawal from reality itself. Because reality spoils their fantasy world, they would have sunk deeper and deeper into their own situation.
* **Trolling phase** - When the serial killer starts to search for a victim, this is a phase where they follow the fantasy through because they start to search for a spot to dump the casualty's body. This stage can keep going for the months or only days until the serial killer has tracked down the ideal casualty.
* **Wooing Phase** - It's where the serial killer lures the victim and also when the executioner embarks to acquire the casualty's stuff. They might introduce themselves as enchanting, needing to help innocuous or needing assistance themselves.
* **Catch Phase** - This stage alludes to the captured stage where victim somewhere gets into his idea of committing crime. Ex. Dahmer asked Hicks to get with him to his house and then he killed her. It is more like; the victim helps them to get themselves killed.
* **Murder Phase** - Main phase, where we see victims as a dead body. This phase is "the result of everything". There are two types of serial murder 1) recognized and 2) unrecognized. They accordingly commit crimes as per their nature. In this phase serial killers reveal their true seductive self. The victim becomes incapacitated whether knocked unconscious or trapped somewhere and many victims move terrified how they distinctly remember the exact moment they switch in into a serial killer. The more of superficial charm and they have on many occasions said that there was a distinct change in the eyes. So, within a sec, their true colour shows their intentions.
* **Totem Phase** - This phase refers to "high emotional phase" for the killers. The thrill of the killer begins to lose its power; keeping a portion of the fervour they will regularly keep a keepsake from the casualties like garments.
* **Depression Phase** - This is an anti-climax that causes depression. They come to feel that the fantasy wasn't properly fulfilled; some have even committed suicides in this phase. Those who don't will soon begin and once again experience those violent fantasies in that beginning or phase and then the cycle begins (again).

Materials and Scales

Here are several tools and techniques to perform particular analyses, and these sources were particularly valuable. MS word was used for data interpretation and for chart making, calculator and particularly chi-square Weinberg theory was used for data analysis. Although, primary and basic analysis was done on paper and on laptop only. As mentioned earlier about

the scales, there were two main scales including, the Buss-Perry questionnaire and Barratt's impulsivity scale, it was used as a secondary source for the analysis. There were 30 questions for candidates to answer. 15 questions from both scales were chosen. As Buss-Perry's questionnaire is divided into various kinds. Questions were chosen according to psychological and phenotypic parameters. Data is then statistically analysed for standard deviation by calculating the chi-square value from expected and observed frequency.

Hypothesis
- **Null Hypothesis** – Participants will show a high impulsive and aggressive behaviour pattern.
- **Alternate Hypothesis** – Participants will show a low impulsive and aggressive behaviour pattern.

Participants
The approval was obtained before conducting the experiment from Parul University. Hundred people Participants were enlisted. Participants were found through a variety of methods, different regions, ages and gender. This was totally voluntary for participants. They ultimately got a google form having questionnaires using BPAQ and BIS. Out of 100 participants recruited, which consists of 56 females and 44 males.

Sampling
Search phrases such as "serial killers" were typed into Google to perform a thorough search. "Psychology of serial murderers", "nature vs. nurture" theories. And other search was conducted via Google forms by using two scales:
1. BPAQ (Buss Perry Aggression)
2. BIS (Barratt's Impulsivity Test)

From this list, I got 100 participants who have voluntarily participated in the survey.

Criteria and General Sampling
1. Sampling was done on the basis of truthful information given by the candidates when needed.
2. Age limit: 15 to 55
3. Completely voluntarily
4. Answer of every question is a must
5. One should understand the meaning of the questions
6. One should understand the importance and seriousness of the work

METHODOLOGY
Information was gathered and analysed utilizing techniques for the grounded hypothesis. This strategy investigated information obtained from the start of the information assortment process. Coding classifications were produced in a continuous interaction while information was analysed, hence, permitting the information to drive the examination. This underlying coding worked with the consistent examination of information to track down similitude. Furthermore, contrasts in the data gathered for every serial killer, and furthermore murderers and serial killers. This course of consistent examination was achieved by focusing to and coding significant portions of it from each source that was perused. This distinguished, record and detail significant parts (comparable and divergent) of information connecting with the lifestyles of serial killers as a result of this, I stayed open to the information, regard for the subtleties, investigated leads, distinguished certain worries, and took apart and analysed each

unequivocal line or proclamation inside a serial killer's life as well as between other killers. Lines of information were contrasted with my conceptualization of recently lines coded from different sources. Consequently, coding on a line-by-line basis assisted me with deliberate reflection, poses inquiries regarding the information and recognized critically shared characteristics, contrasts, or potentially inconsistencies inside the information on a specific serial killer or between chronic executioners. By utilizing this underlying strategy, and because of coding information, I found similarities. These classes of similarities and their between relations enveloped potential speculations in regards to the aetiology or reasons for these killers' practices. The underlying coding stage was transitory, near and grounded in the information, which assisted me with seeing the world through the guilty peoples' eyes, and worked with ground-breaking thoughts with regards to the aetiology and mental cosmetics of serial killers. All along, while contrasting and auditing data and data, data with code, code with code, codes of data with different codes, codes with classifications and ideas with classifications, the course of notice composing was set out upon. Reminders were my notes on creating applied connections and thoughts. After the fonnation of hypothetical classifications, more information was gathered to fill in the holes and make them even better classifications. This laid out contrasts and connections between classifications, connecting with information inside as well as serial killers. More fitting furthermore important the data was acquired to expand and sharpen the classes in arising hypotheses, furthermore when no new properties were found to foster a hypothetical class, or no Connections were laid out between classes, hypothetical immersion was accomplished. Here, presenting some of the responses with questions using scales.

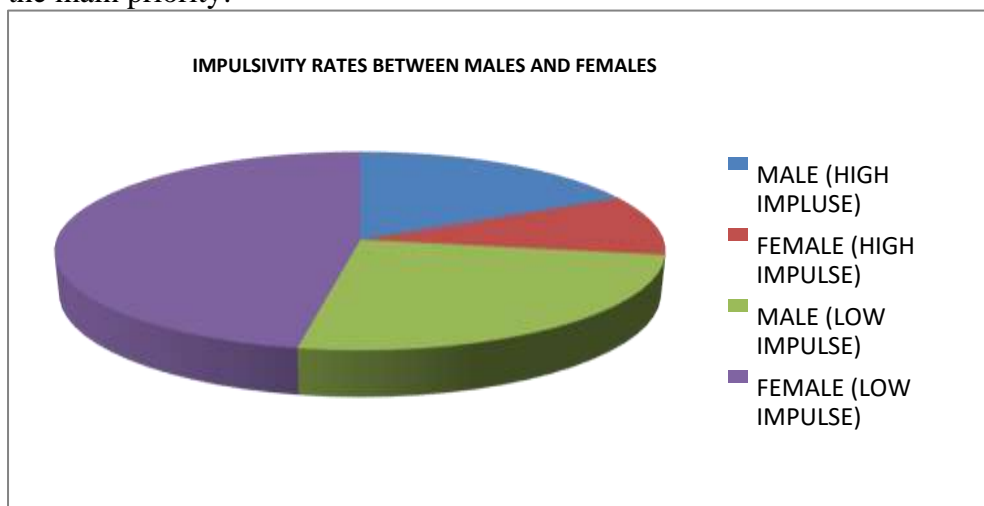|	D	E	F	G	H
1	AGE	GENDER	I concentrate easily	I am a careful and steady thinker	I plan task carefully
2	23	Male	Almost	Almost	Always
3	22	Female	Almost	Occasionally	Almost
4	23	Male	Occasionally	Never	Often
5	31	Male	Almost	Almost	Almost
6	24	Male	Almost	Almost	Almost
7	19	Male	Occasionally	Almost	Always
8	21	Male	Almost	Always	Almost
9	17	Female	Always	Almost	Almost
10	23	Male	Almost	Almost	Often
11	24	Male	Almost	Always	Almost
12	23	Male	Often	Almost	Almost
13	23	Male	Always	Often	Always
14	18	Female	Often	Often	Almost
15	18	Female	Almost	Always	Almost
16	19	Female	Almost	Always	Always
17	17	Female	Occasionally	Almost	Always
18	18	Male	Often	Often	Occasionally
19	20	Male	Always	Almost	Always
20	18	Male	Almost	Almost	Always
21	18	Female	Often	Almost	Almost
22	18	Male	Often	Occasionally	Occasionally
23	18	Female	Often	Almost	Often
24	18	Female	Often	Almost	Almost
25	18	Female	Often	Always	Almost
26	18	Female	Often	Often	Occasionally
27	19	Female	Occasionally	Always	Always
28	18	Female	Often	Occasionally	Almost

Then the distribution of Google forms was started to get the practical data of research, which is survey-based information. Candidates received Google forms which were voluntary. I got 100 responses having different age groups, from 15-55. I divided them into two kinds, below 18 and above 18. BIS and BPAQ, these two scales were used to design the questions, and on the basis of their answer, I started my analysis part. Involving this interaction without
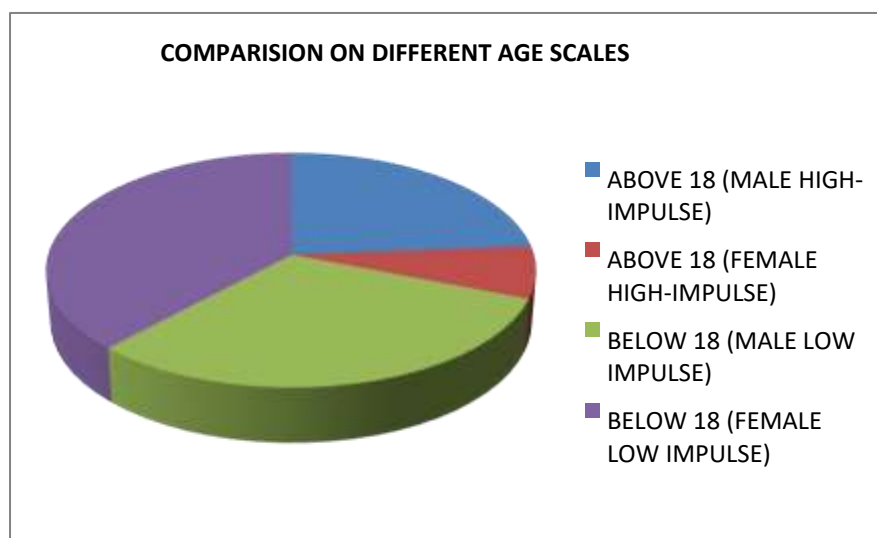
remembering suppositions and speculations empowered me to assemble data with a receptive outlook. Beginning without any preparation permitted the definite what's more enlightening information to represent itself with no issue.

RESULTS, ANALYSIS AND CONCLUSION

Without theories or suppositions, gathering of specific information with just one question as the main priority:

IMPULSIVITY RATES BETWEEN MALES AND FEMALES

- MALE (HIGH IMPLUSE)
- FEMALE (HIGH IMPULSE)
- MALE (LOW IMPULSE)
- FEMALE (LOW IMPULSE)

What has driven these serial killers to carry out such violations? Examinations started from the beginning in the information assortment process. In contrast to processes in quantitative information which lay out I created codes and categories by describing and giving implications. Beginning line the name was incorporated in the line coding of each line. Taking the smallest explanations/lines divided and taking into account their implied, enables me to more easily comprehend what's more shape arising insightful classifications. Beginning the coding process line by line was followed by centred coding which consolidated critical beginning codes, at that point, formed into classes to plan factors. For instance, one of the classifications -is trauma or anti-social personality. There total of 14 people showed high impulses including 64% males and 35% females and a total of 37 people showed low impulse, including 35% males and 64% females.

COMPARISION ON DIFFERENT AGE SCALES

- ABOVE 18 (MALE HIGH-IMPULSE)
- ABOVE 18 (FEMALE HIGH-IMPULSE)
- BELOW 18 (MALE LOW IMPULSE)
- BELOW 18 (FEMALE LOW IMPULSE)

Another aspect is age, groups were divided into two: Above 18 and below 18. Out of 57 candidates of the above 18 ranges, 17% of people showed high impulse in males and 5% of females appeared in high impulse. Then out of 43 candidates of below 18 ranges, 30% as male low impulsive behaviour and 37% females as low impulsive behaviour. It can be concluded that people who show high impulsive behaviour leads to violence more than others. As two domains work hand in hand for this kind of behaviour in an individual.

Statistical Analysis
In order to cross-check the efficiency expected and observed gene frequencies, here Hardy-Weinberg theory of genetic equilibrium is used. And values are calculated and compared with each other, It was seen that deviation is statistically significant. However, sample size should be more in order to gain more accuracy. As we have taken highly impulsive subjects in the analysis part (N=51), they can be divided into three sets of alleles:
- Homozygous (II) = 8
- Heterozygous (Ii) =7
- Homozygous (ii) =36

1. P = 8+3.5/51   2. 1 – p = 1 – 0.225   = 11.5/51
   = 0.225   = 0.775

Now for
1. II   2. Ii= 2p (1-p) N   3. ii= (1-p)2N
II = p2 N   =2   = 30
   = (0.225)2 51
   =2.58

Now if we compare observed and expected frequencies,

Frequency	II	Ii	ii
Observed Value	8	7	36
Expected Value	2.5	2	30

If we put these values in
X2 = Σ (observed – expected) 2/expected
    = 1.2

By considering the above value, it can be stated that if the sample size increased, a significant statistical deviation can be observed in the expected and observed frequencies of the population. So that we can co-relate the genetic and psychological data with the help of statistics to understand criminal mindset more precisely and to predict the crime before it is taking place.

Limitations and Further Studies
- Primary impediment is that even though word for word discussion for the serial killers was difficult to circle back to the questions or to request more subtleties.
- Possessing the opportunity to start a better set of questions investigations.
- A subsequent impediment originates from the way that the sources utilized were altered and set up supposed to be available for the public by creators other than the killers.

- Even though I was aware of not taking on different creators' predispositions about the genesis of sequential sources of homicide utilized for information assortment appear to hold their creators' inclinations. There might be a few occasions and hypotheses that a creator could have zeroed in on more than others, and some that might not have been consolidated in the books, in light of these predispositions. An endeavour was made to defeat this issue by zeroing in on the word-for-word expressions of the killers.
- The little size and restricted elements of the example fill in as the limit.
- I emphatically recommend future examination to feature juvenile and adulthood encounters of a serial killers to distinguish hazard factors from these times of improvement. This implies moving toward various hypotheses encompassing the sequential killing peculiarity as continuity vs. discontinuity conclusive replies. The elements - their event, recurrence, power, and impacts prompting sequential Killing may be a continuous process. This will be beneficial. Assist us with learning on the off chance that specific variables.

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