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Research Paper



Psychological Understanding of Bite Mark Behavior as Clarifying Tool for Criminal Investigation

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ABSTRACT

Human chew marks have historically provided forensic dentists with both physical and organic proof, according to traditional crook investigation knowledge. However, there have been examples in recent years when, in addition to addressing physical and scientific data, expert witnesses have testified in courtrooms about the psychological aspect of biting behavior. When it comes to those highly nuanced needs, the modern attacker begins to operate out mostly due to societal prejudices combined with acute psychological urges that have pushed for manifestation. The criminal will frequently leave key intellectual evidence on the crime scene due to a sample of mentally expressed ritualism. The manner in which the victim was assaulted, the manner in which the victim died, and so on. —these additives display information related to the sort of mental objectives that the offender is attempting to achieve. In the era of chunk markings linked to violent crime, it's crucial for an "investigation" to understand what kind of personality qualities are welded together just to produce this type of need complex. Following a review of cases reported in the literature and conducting intellectual interviews with criminals, three main kinds of perpetrators tend to emerge. The first organization is sparked by an angry song, the second by masochistic biting, and the third by a more traditional "cannibal complex" motif. The authors looked at the study's literature to see if biting behavior could be explained. They were engaged in the creation of innovative mental attributes of biting behavior. Using numerous psychological models to provide a foundation for similarly analyzing and provisionally giving a motivation for biting behavior, the writer provides a framework for analogous analysis and provisionally providing a motive for biting conduct. The research concludes with a comprehensive assessment of human mental traits related to biting behavior and an attempt to create their character traits by evaluating their behavioral pattern. Misleading behavioral notions should not be used for bite mark on repeated instances.

Keywords: Bite marks, Buss & Perry Scale, cannibalism, impulsive behavior, Psychological evidence, Sadism, violent crime.

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To investigate and examine a bite mark left on human pores and skin with a suspect's dentition is a hard manner. The idea that human dentition is unique plays a vital position in this manner. However, it's miles near not possible to show that a specific bite mark was produced via a selected dentition. Key factors to research a chunk mark are the quantity of detail to be had inside the information approximately the chew mark and the suspected biter's dentition. Tooth Marks can and do play a decisive role in the detection of the crook. They can be inflicted by means of the assassin or the rapist by the sadist or with the aid of the lunatic. They may be left at the assailant by means of his victim in a determined attempt at self-defense. Each bite tells its personal tale to the forensic odontology, then comes into the photograph the paintings of forensic psychologists as a way to recognize the cause behind the chunk. Both are of crucial importance to the investigating forensic odontologist. Correlated to the general crime scene evidence the bite mark is a particularly personalized psychological indicator of the offender's motivational intent, crime style, and method of operation. Vexed by way of a complicated collection of signs and symptoms and emblems, the investigating employees ask appointed (but unanswered) questions concerning the reason and which means of the bite marks. If well educated in the crook investigation, a mental evaluation of the crime scene and bite mark evidence can and have to display an index to the crime pathognomonic improvement of symbolic ritualism and manifested behavioral indicants. Although biters will regularly appoint a fantasy. Enriched behavioral tract in performing out the crimes, an undercurrent of internal dynamics often displays the wrongdoer's personality and character organization by way of examining the fashion of approach, area of wound sites, and theme of sample improvement. For further clarification of the chunk mark evidence in relation to the general crime photo, a scale of relevance ought to be established to measure the centrality, integration, and corroborative fee of the proof. Infliction of chunk mark wounds represents the highly complex mind and emotions expressed through a screen of fable, the mortal country of the sufferer, region of wounds sites, and stigmatic destructiveness (device marks). Primarily based upon the physiological and mental substances there emerges three fundamental motivational classes in which bite mark evidence can be categorized, those predominant divisional areas are anger impulsive biting, sadistic biting and ego cannibalistic biting.

REVIEW OF LITERATURE

Human bite marks are frequently seen on victims of violent and intimate acts, such as serial killing, rape, and child abuse. [Pretty, I. A. and Sweet, D. (2000)] In such circumstances, it's far more than likely that the bite mark will provide forensic odontologists with all physical and organic evidence. The former is represented by patterned harm, which usually occurs on the victim's epidermis, and the latter is represented by saliva, which can be used to screen the perpetrator's DNA. [Sweet, D., Lorente, J. A., Valenzuela, A., Lorente, M., & Villanueva, E. (1997).]

The primary goal of this research is to suggest that, in addition to physical and biological proofs, behavioral evidence should be presumed and researched within the context of bite mark appraisal. To support this claim, the authors will: (a) discuss the reasons how it is that bite mark evaluation necessitates a behavioral analysis; (b) demonstrate that there are few, if any, empirical explanations for biting habits in criminal investigations; and (c) highlight areas of the inquest that the authors believe should aid in a more comprehensive understanding of why people chew in the commission of their crimes. The decision to gain a better understanding of biting behavior stemmed primarily from a desire to help make jail proceedings clearer and more transparent.

"The Vampire Rapist," Wayne Boden (1968-1972), was a 26-year-old captivating young man from Montreal who only ever left bite marks on the breast tissue of his five female victims. All of the victims were found naked and bludgeoned to death in their homes, but there were no signs of warfare. The designation "invoice" started popping up when investigators looked into whoever the girls were courting. The guy was even photographed by police. He was stranded while cops scouted all blue Benz, which became his mode of transportation. Using forensic odontology, he was found guilty of numerous life sentences. The dentist was able to find 29 areas of agreement between the chunk marks on victim's breasts and the chunk marks on his tooth. As a result, the kingdom presented information purporting to establish a behavioral relationship between biting behavior displayed during sexual relations and biting behavior displayed during the fee of a claimed rape. It's possible that such a notion has no scientific basis.

In the case of United States v. Martin, the prosecution established a link between the appellant's propensity of biting items (such as pens, pencils, and toothbrushes) under stressful situations and a bite scar on his deceased spouse's neck. Their position was that throughout the process of choking his wife, Martin was under duress and so subject to biting. [U.S. v. Martin, United States Court of Military Appeal, 1982] In any other legal case, a forensic dentist gave testimony that he learned to differentiate maniac and constantly battling teeth marks from offensive or sadistic bite marks, as well as bite marks with sexual connotations. "Combat bite marks often are accurately defined due to the fact that they are implemented carelessly and quickly," according to the witness, "while attempting to attack or masochistic chew marks are made gradually and deliver a clearer pattern." [Commonwealth v. Henry, (Feb. 8, 1990)] According to the dentist, sadistic bites are welldefined, whereas sexual bite marks frequently have a crimson center as a result of slurping actions. In this case, the conclusion reached would be that the bite had been sadistic in existence. It would need to be asserted that there is very little assistance within the literary works for those views. Indeed, a lot has been thrown out, especially when it comes to the "suck mark." [Sweet, D. (1995)] those examples serve to illustrate that biting behavior has obvious forensic implications and as such warrants interest in the narrative of suitable disciplines.

Forensic psychology, for example, is defined as "that branch of applied psychology concerned with the collection, examination, and presenting of evidence for court purposes." [Gudjonsson, G. H., & Haward, L. R. (2016)] It becomes easier to assess the forensic implications of one such discipline by locating biting conduct within its discourse. For example, we can see first from four or more times above that biting sort of behaviour is being used to start serving a jurisdictional purpose, and as such, we may assume that this was done so collected in the form, investigation, and demonstration of proof. This, even so, doesn't really appear to be happening.

Despite a thorough review of the literature, only two papers regarding the causes of crime-related biting behavior were found. [Walter, R. A. (1984)]

The original research attempted to analyze the psychological aspects of bite marks, revealing three motivational aspects: anger-impulsive biting, sadistic biting, and ego-cannibalistic biting. The anger-impulsive segment is said to be "controlled by time, proximity, condition of circumstances, and form of anger," and it is "frequently caused by frustration and ineptitude in coping effectively with conflict situations on the side of the perpetrator." The masochistic bite down is asserted to fulfill this need for energy, supremacy, control, and

omniscience. By annihilating, consuming, and sucking up life essentials from the victim, the ego-cannibalistic biter tries to satisfy ego needs. [Walter, R. A. (1984)]

The fact that we are coping with a single investigation necessitates that the results be regarded with caution. Despite this, the research is useful in as much as it provides a frame of comparison from which to begin a modern assessment of biting behavior 1977, a pilot project at the Federal Bureau of Study Academy in Quantico, Virginia, inspired the creation of crook behavioral profiling via empirical studies on violent crimes. Subjects who were jailed for serial sexual killings were identified and questioned by special marketers assigned to the FBI's Behavioral Science Unit. This research was unique in that it was the first time serial and violent perpetrators were researched from a law enforcement perspective rather than a scientific or instructional one. [Cook, P. E., & Hinman, D. L. (1999).]

In 1978, the study was expanded to also include serial rapists. The genuine research cemented the status in the police departments network and enriched the expertise of all professionals who deal with those offences, offenders, and victims. By conveying additional insight into the motives and behaviors of offenders, and by supplying inferential base-rate official statistics offending party characteristics and their behaviors within the commission of the crime by identifying commonalities, profilers were able to expand categorizations, understand the link between scene of the crime and the attributes of offenders. [Cook, P. E., & Hinman, D. L. (1999)] The FBI describes stereotyping as an investigative method for learning about a suspect's principal persona and behavioral qualities based only on an assessment of the alleged crime, he or she has perpetrated. [Douglas, J. E., & Burgess, A. E. (1986)] It's not the same as the clinical character profile of patients carried out by mental health professionals in the area of clinical and forensic practice [Cook, P. E., & Hinman, D. L. (1999)].

Profiling is an investigative tool that is now more commonly referred to as criminal investigative assessment. The profilers work as a team with the detectives to figure out what happened, why it happened, and how they can explain who (what sort of person) committed it. The profile process is similar to what physicians use to create an analysis and treatment plan. Statistics are gathered and analyzed, the scenario is rebuilt, theories are made, a profile is developed and evaluated and the ramifications are discussed. [Douglas, J. E., & Burgess, A. E. (1986)] Investigators are frequently given hints about prospective reasons and investigating tactics. One goal of oversimplifying the profile procedure for the public at large is to deprive offenders of unique profiling methods information. [Ressler, R. K., & Shachtman, T. (1997)]

When evaluating homicide cases involving human bite marks, profilers consider the number and location of the bite marks, as well as the timeframe the bites were delivered prior to the victim's death. The willpower with which the bites were inflicted premortem, antemortem, or post-mortem might be seen in a different light. Bites to the breasts, private parts, necks, and face might be viewed differently from bites to the palms and forearms.

In the forensic profiling literature, the issue of signature behavior provides an obvious link to a larger conceptual under-appreciation of biting behavior. Distinctive behavior refers to aspects of a criminal's criminal repertory that appear to go beyond his standard operating procedure. "The wrongdoer's MO is what he does to influence the offense; the signature is, in a way, why he does it." [Douglas, J. E., & Olshaker, M. (1998)]

Following in the footsteps of Keppel and Birnes [Keppel, R. D., & Birnes, W. J. (1998)] a killer's signature is a one-of-a-kind psychological rallying call that he feels obligated to leave behind. "Hidden part of the proof, usually derived from the markings and scars on the sufferer's frame... these hallmarks are the best techniques by which the killer undoubtedly expresses himself," they said. With this in view, a low-cost hypothesis would be that beneficial biting behaviour might be entirely dependent on signatures. Keppel and Birnes assert that a given signature or signatures may be classed as "one or more of the basic phases of sexualized violence, progression, posturing, agony, overkill, necrophilia, and cannibalism" when articulating their belief in signature behavior. [Keppel, R. D., & Birnes, W. J. (1998)]

Several of these changes appear to correspond to the motivational elements of biting behavior mentioned previously, namely, anger-impulsive biting, sadistic biting, and ego-cannibalistic biting. If these notions are accepted as legitimate, it may be claimed that the anger-impulsive bite does not want to be recognized as a signature behavior, because its reactive character appears to be at variance with the belief in a substantial personality marker. Furthermore, it may appear reasonable to assume that trademark behavior arises from any sadistic or cannibalistic motive, despite the fact that chew marks may be seen throughout a succession of heinous murder scenes. In serial offences when chunk marks do not appear on a regular basis, the biting behavior is more likely to have been motivated by an impulsive outburst of rage or irritation. The idea that a particular biting activity may be found within signature and trait categories is speculative. Although, if such a method is to be considered, we would suggest that biting behaviour should be researched one at a time, despite the fact that it may be part of a chain of behaviours that is most likely described, aggressive or violent collectively.

From an investigative standpoint, the idea that the whole is more important than the sum of its parts must be rejected, since this way of thinking will increase the likelihood that some of the variables (e.g., biting behaviour) will be incorrectly contained under a universal definition. For instance, a behavioural examination of a criminal offence scene would conclude—based on the existence of a bite wound the perpetrator became sadistically precipitated. However, if the chunk is discovered to be inflicted after death, the sadistic description no longer applies to the biting practice. This final point, albeit hypothetical, emphasizes the need to objectively examine biting behaviour in and of itself.

Biting is considered an everyday developmental segment in a paper issued by the national association for the Education of Young Children, in as much as one out of ten children and two-year old's demonstrate biting behavior. According to the paper, you can identify the sort of biter you're dealing with and separate those biting varieties as follows. The exploratory biter is motivated by a desire to touch, smell, and taste other people in order to discover more about their environment. The irritated biter is propelled by a lack of the skills required to deal with social dignity, which includes the ability to observe. The threatened biter has a proclivity for becoming upset and regaining control by biting its neighbors. The power-biter is pushed by a strong desire for independence and may resort to nipping in order to feel a surge of personal energy.

According to Campbell, most biters eventually outgrew the behavior as their new capacities for dealing with stress and emotions of rage develop. This might help explain why the developmental criticism of biting leads to adolescence. What happens if the youngster isn't always capable of completely expanding those negating abilities? Has biting behavior from

adolescents shown in adulthood? Directed toward such concerns, it is possible that helpful intellectual leads will emerge in the search for cogent reasons for biting behavior throughout one's lifetime.

Given that nipping behavior is often displayed inside a sexual context (e.g., rape and infant abuse), it is regarded as a logical step to study whether mounted theories of paraphilic behavior ought to support an elucidation for malfunctional biting. Arguably the maximum influential theory of paraphilic behavioral conduct is that recommend by means of Freud who maintained that everyone's sexually deviant behaviors result from a single type of psychopathology. Interestingly, given in suspicion as to whether or not the point gnawing conduct may want to go beyond early life, Freud defined the causes of paraphilic behavior as the continuation into adult existence of childish sexual desires and practices.

Unfortunately, Freud's traditional explanatory processes, such as oedipal disputes and castration fear, have resulted in what many regards as cyclical debates that might be at odds with actual research when applied to specific behaviors, such as psychopathy. [Hare, R. D. (1999)] Similarly, contrary to popular assumption, the majority of intercourse wrongdoers are not clinically abnormal. Alternatively, the source of this inappropriate behavior is considered to reside in more "ordinary" reasons, such as masculine strength training or the display of rage. [Hollin, C. R., & Howells, K. E. (1991)] This might explain why contemporary research on sexually deviant behavior is increasingly focusing on the perpetrator's cognitive techniques, attitudes, and distortions. We may argue that study into biting behavior benefits from taking a similar theoretical approach across the spectrum of biting behaviors, from physical child maltreatment to rape and assault and homicide, if we are persuaded by this more reasonable technique.

Personal constructions are an idea that has been around for a long time [Kelly, G. A. (1955) 1991] arguably provides the methodological foundation for such an investigation. "If we need to recognize other individuals, their ideas, feelings, or behavior, we need comprehend how those humans assign which signifies to the things that happen," the theory goes. [Fromm, M. (1992)] The focus may concentrate heavily on character views of the industry. such as how we as individuals impose our private structures on events in an attempt to make sense of them. As a result, if we can elicit, examine, and find what influences the private assembling patterns of perpetrators who've bitten, they should be able to teach us something fresh and extremely useful about the scale of the behavior we wish to catch. Some methodologies have been developed to elicit individuals' own constructions. The repertory grid, for example, is a depth interview approach that allows the researcher to tap into the respondent's construct system. [Winter, D. (2013)]

Bite Mark Personality

Correlated to the general crime scene proof, the bite mark is a notably customized mental indicator of the offender's motivational purpose, crime fashion, and method of operation. Vexed by means of a complicated series of symptoms and symbols, the investigating personnel asks nicely appointed (but unanswered) questions regarding the reason and meaning of the chew marks. If properly educated in criminal investigation, a mental evaluation of the crime scene and bite mark evidence can and need to display an index to the crime pathognomonic development of symbolic ritualism and manifested behavioural indicants.

Even though biters will often appoint a delusion-enriched behavioural tract in performing out the crimes, an undercurrent of internal dynamics often reveals the offender's personality and man or woman organization via examining the fashion of technique, location of wound websites, and subject matter of sample development. Considering this kind of information is often complexly abbreviated, a systematic psychological evaluation needs to do not forget the descriptive, interpretive, diagnostic, symbolic, and elaborative levels. (' For further rationalization of the bite mark proof in relation to the overall crime photo, a scale of relevance must be hooked up to measure the centrality, integration, and corroborative fee of the evidence.

Infliction of bite mark wounds represents enormously complicated thoughts and feelings expressed via a display screen of delusion, the mortal nation of the victim, vicinity of wounds websites, and stigmatic destructiveness (device marks). Suckling marks, tearing, and abrasion sample All critical factors in figuring out the mental dynamics and behavioural tracts of the biterare primarily based upon the physiological and mental substances, there emerge three important motivational categories wherein chew mark proof can be classified. these important divisional areas are 1) anger-impulsive biting, 2) sadistic biting, and, 3) egocannibalistic biting.

Anger Impulsive Behaviour

Regular with the overaggressive and beneath-controlled displays of impulsive anger, this type of biter is frequently nettled by way of frustration and incompetence in dealing successfully with war conditions. mainly, whilst the biter reaches an apex of emotional excitation, the situational loss of self-restraint permits for an impulsive act of revenge by means of causing a tool mark chunk at the sufferer. The administration of brief and "sniper" biting is governed by means of time, vicinity, scenario, and shape of anger. even though the impulsive dynamics of the incentive imply (in element) an awesome immediate response, the factors of intensity, justification, and anger fashion should be tested. looking under the umbrella of anger motivations, the notions of revenge, punishment, wrath, rage, and righteous indignation need to be examined. dependent upon the complexity of shared motivations, the assailant will often summarize the emotional explosions by means of attacking the web sites of inflammation and vulnerability on the victim. As an example, the biter can also accomplice the screaming infant with the mouth and head and inflict a device mark wound on it. In classifying the handiest styles of anger-impulsive biting, the kid biter makes use of the simple feelings of love, hate, worry, and rage to shape a simplistic complicated of crude and unrestrained need for delight. Similarly, the undercurrents of growing psychosexual wishes supply colourable influence to these feelings; rudimentary types of jealousy, ownership, and independence affect the intentions of the child. Based on the effects of emotional maturation, the biting toddler can leave a zonal dispersion pattern that displays prepubescent sexuality. But it is mentioned often, that the biting child will abruptly inflict a tool mark wound to explicit rage, harm, and the incapacitation to the bitten accomplice.

Considering the kid-abusing discern, the bite mark inflicted on the kid can stem from a multiplicity of inner conflicts and emotional reactions to the parenting duty. whether emotionally overloaded by inner demands, competitiveness, jealousy, frustration, or ineptitude, the assaulting determine suspends the caring and nurturing touch with the child and reactively victimizes it with the aid of painful biting. by way of permitting the disappointment of a "cause the incident" to hyperlink up with a want to specific assertive energy, the abusing discern often inflicts chew marks to areas that are associated with

cuddling and nurturance. As indicated within the literature, "the battering infant's victims most customarily have chew marks at the cheeks, lower back, and side, even though chew marks have been observed at the stomach, scrotum, and buttocks." ('zero therefore, the web sites most at risk of pain by way of biting are, in reality, the locations wherein the kid pleasant responds to reassuring tenderness.

In addressing the adult biter and sufferer, the problems of motivation cluster around the dynamics of anger and electricity, regular with the warfare for power, stability, and balance, the enraged biter will often assault frame locations that represent and represents points of dominance. In attacking the symbolic points of energy, the biter is venting rage and anger at the victim to be worn as an image of rejection and hatred in the direction of the victim. in view that the issue of electricity may be taken into consideration a part of gender identification, the style and approach of biting should have an undercurrent of masculine/female strength polarization. In acting out, the adult anger-impulsive biter feels electricity emasculated and bites, thereby, saving face and cautioning the other combatant. often, the impulsive tool mark bite is the proverbial warning shot that alerts a "trade-in guidelines" and is supposed to thwart or forestall similar aggression in the direction of him. As applied in the energy-assertive types of crimes, the assailant uses biting as a demonstrable impact of his energy to dominate, subjugate, and terrorize. consistent with this kind of crime, the biter's self-belief that he is robust, able, and superior is energized by his capability to hurt and inflict ache on the sufferer. Despite the fact that he may not derive specialized pride from causing the device mark wound, his pleasure is derived from the capacity to efficaciously hurt and humiliate the victim with the aid of his "wolf-like" ferocity.

Sadistic Behaviour

Inside the continuum of sexual sadistic biting, the issues of blood, flesh, and object symbolization become essential to the cultivated sensualisation of the power of ripping, tearing, and utilising the capacity to render the sufferer helpless and incapacitated. by way of an extended and ritualistic biting of the sufferer, the aggressor can satisfy no longer most effective the cultivated power symbols, however satiate his increasing lust for domination, control, and omniscience. Schematically getting to know via enjoy and myth, the sadistic biter capitalizes upon a complex of eroticized strength and anger to satiate sexual needs inside the pain continuum instead of the orgasm inside the coital climax continuum. feature to the overall improvement of the sadist, the rising sociopathic (psychopathic) assailant will use a schizophrenic type of selected mentality to rationalize the stimulation for fable forays into ache, even though the assailant regularly abbreviates and condenses earlier level ranges, the growing sadist works through the following levels of development:

l) fetishism, 2) voyeurism, 3) frotteurism, 4) dominance/submission, 5) bondage/field, 6) picquerism, and 7) sadism. Ancillary to these stage traits, the sadists will often increase thru the following character sorts: 1) insufficient character, 2) obsessive-compulsive persona, three) antisocial character, 4) passive-aggressive persona, and five) sociopathic (psychopathic), sadism. based upon experience in mastering, the growing sadist may have many variant forms of performing out the character indicants and crime patterns for every degree, therefore, while a sadistic chew mark is located, it should be intently examined for courting the collateral evidence to establish its meaning and importance, primarily based upon the depth and momentum of amassing degree trends, chew marks found in the earlier ranges tend to suggest an experimental and exploratory form of primary ritualism.

In the majority of sadistic sex murders that have chew mark proof, the onset of biting turns into most prominent in the developmental degree of picquerism. since picquerism is defined as a sexual pride of penetrating with the aid of stabbing, reducing, and some sorts of sniper hobby, it isn't sudden that the biting behaviours would grow to be occur at this stage. frequently, this level of sexual sadism is ruled via a tract of fable-enriched acts which simulate the procedure of sexual orgasm. for the reason that assailant desires to build momentum in the direction of the climax, the usage of a sadistic myth in performing out the mock sexuality leaves the proof regular with the fantasy and ridicule assault. This form of sexual relationship is illustrated by way of the sufferer who is pummelled, stabbed, strangled, bitten on the inner thigh and breast, and with an impaled broomstick up the vagina. In these sorts of cases, it's far evident that the assailant has attempted to have some shape of sexual relationship with the sufferer. As illustrated, if the assailant has fantasized about an aberrant shape of cunnilingus, a bite mark to the thigh and pubic area might not be un-usual. due to the fact that a wealthy delusion system of pain infliction interweaves via the higher stage degrees, the variation forms of sexual appearing-out produce similarly version varieties of crime and chew mark evidence. Because of the sexual motif which overlays a lot of the ache-inflicting violence at the victim, the chew mark vicinity websites grow to be highly widespread when analysing crime scene evidence. in addition, areas denoting musculature and energy need to be taken into consideration in addition to regions indicating fetishism and the correlated behaviours. Primarily based upon the assailant's potential to more and more weigh his orgasm within the pain continuum, the embroidery of administering that ache will become considerably elaborative and refined.

Chunk marks discovered within the maximum superior kinds of sadism can variety from an early fetishism for blood to the bite marks determined on the internal organs from an eviscerated frame. here, it's far truly vital that the collateral proof of the crime scene be integrated to understand the motive and satisfaction of the assailant's ritualistic pattern and symbolic needs.

Ego-Cannibalistic Behaviour

Surely, the most vicious and detrimental type of biting is within this complicated. The ego-cannibalistic biter emerges from major assets of development, within the first, the sadistic biter develops beyond the choice to inflict pain and transcends right into an international ego maniacal preference for absorbing life essences, inside the second developmental tract, the assailant bypasses direct expressions of sexuality and eroticizes the unwell-fashioned and hypertrophic ego structure, when the insatiable appetite for satisfying the libido needs via the ego structure will become insufficient, the acting out behaviour to meet needs becomes just like that of the overdeveloped sadist, even though the sadist is normally extra demonstrable in improvement, the egomaniacal assailant develops via the equal varieties of stage tiers, within the case of the latter, the overt recognition of his acting out is manifested at a later stage.

In this category of biting, the assailant's predominant thrust is to satiate ego needs with the aid of annihilating, consuming, and absorbing existence essences from their victims. assembly challenges to every perceived threat of their virility, mastery, and dominance, the biter's purpose is to obliterate the frame, soak up the soul, and put on the enemy's power.

Despite the fact that the bite marks in this form of case may also will be predisposed to cluster around secondary sexual traits, it's miles possibly that at the start glance, the chunk marks will appear like in a polymorphic and ritualized sample. In those instances, wounds to

the pinnacle, chest, and scrotum are often directed toward destroying the sufferer's thoughts, heart, and life-producing forces. In destroying the symbolic facilities of pastime, the assailant can assert his ego efficiency via surmounting the victim's strength, efficiency, and nature. based on these dynamics of the ego cannibalistic biter, the crime scene will often display a sufferer's body that has been fairly mutilated with accompanying bite marks which might be viciously implemented with ferocity. The chew marks in this type of case would maximum likely display a giant amount of tearing, sucking, and tissue strains constantly with extracting the flesh from the body. Symbolically, this type of chew mark is steady with the cannibalistic urge to devour, absorb, and annihilate the sufferer. although the usage of the cannibal complex can be pretty stylized (in part substituted via different trauma to the body), the symbolization of the cannibalistic urge is regularly confirmed through the symbolic and specialised nature of the bite marks.

An instance of the ego-cannibalistic type of wondering is illustrated by the subsequent case. As a person skilled at killing women for threatening his sexuality and ego, the prisoner became murderously vengeful toward a lady jail psychologist who mistakenly diagnosed his celibate ego sadism as a hallmark of homosexuality, even though this mistake in analysis was later corrected, this did now not dissuade him from reacting to the ego threat. In a long and persistent plan for annihilating the sufferer, his twice-failed attempts handiest increased his rage. After identifying to attend a year till his release from jail, he wrote the subsequent excerpts to the in- tended victim: "because you are a lady, I tried to discover it in my heart to will let you stay but there's no manner! you are a shameless, unscrupulous element of evil! someone has been given to stand up to your type and prove to you that you are not a god; you are trying to show which you are, you agree with you are, and that I'm going to show that you aren't!!! ... you have got forfeited the proper to live, you are not fit to live!!! There are those the arena can thoroughly do without. I'm going to torture you to demise; I can (take) a long term to kill you. I can no longer pay attention to your screams and moans, I'm able to now not listen to you begging me to kill you, I will do the entirety in my electricity to maintain you alive as long as I can while I'm torturing you. I will cut parts of your frame off and prepare dinner it and you and I'm able to consume it! to your closing hours of life, I'm able to take a crimson warm instrument and burn out your eyeballs, when I end with you, I'm able to unload your trunk anyplace your machine will discover it ..."

Objectives

The objectives of this empirical research study were,

- To elicit the evidence for determining the gender while doing the analysis of bitemark.
- Psychological understanding of the impulsive behavior as well as sadistic behavior of an individual through bitemark pattern along with the ego cannibalistic characteristics.

Hypothesis

- **Null Hypothesis:** The purpose of this study is to test the notion that different personality trait such as impulsive behavior, sadistic behavior imposes psychological relationship with biting behavior.
- **Alternate Hypothesis**: The purpose of this study is to test the notion that different personality trait such as impulsive behavior, sadistic behavior does not impose any psychological relationship with biting behavior.

METHODS AND METHODOLOGY

As a field of implemented statistics targeting human-studies surveys, survey method studies the sampling of person gadgets from a populace and associated strategies of survey records series, including questionnaire creation and techniques for enhancing the quantity and accuracy of responses to surveys. The entire questionnaire is formed using two scales: Buss & Perry Aggression Scale and Varieties of Sadistic tendencies (VAST) by professor Paulhus.

The questionnaire contained 22 different questions which were framed using above mentioned scales that covered different traits of biters in order to understand the psychology behind biting. The subjects are voluntarily made to answer this questionnaire through an online survey form. The data collected was in qualitative form and hence was given a statistical form using the chi-square test and values were drawn out for analysing the result.

Scales

Buss–Perry Aggression Questionnaire: Arnold H. Buss and Mark Perry, professors at the University of Texas at Austin, developed the Buss–Perry Aggression Questionnaire (also known as the Aggression Questionnaire and also referred to as the AGQ or AQ) in a 1992 article for the Journal of Personality and Social Psychology. The AQ was designed to be an enhancement over the Buss-Durkee Hostility Inventory, a prior scale developed by Arnold H. Buss and Ann Durkee in 1957 that examined several kinds of interpersonal hostility. The Hostility Inventory's scales and devices were developed based on observations made in clinical psychology settings with limited statistical analysis. As a result, while component analysis was carried out to corroborate the seven scales proposed in the assessment, no study data backed up such conclusions. Furthermore, the Hostility inventory had issues with dependability. Within the AQ, the difficulties were resolved. Several items from the Hostility checklist were taken into the AQ, and item analysis on the items, which were tested on over 1,000 university students, yielded four variables.

In the year 2000, the AQ experienced a similar transformation, expanding its elements to five, with acts of aggression as a new inclusion. The number of goods available increased dramatically from the original 18 items. This updated edition has been tested on over 2,000 people, including children and the elderly. Despite the existence of the 2000 edition of the AQ, which was developed with the help of Arnold H. Buss and W. L. Warren, the 1992 version is still commonly utilized. The AQ is a 29-item survey that asks participants to rate certain propositions on a five-factor scale ranging from "extraordinarily atypical of me" to "astoundingly indicative of me." The scores are standardized on a scale from 0 to 1, with 1 representing the most aggressive level. It assesses four aspects of aggressiveness: physical aggression, verbal aggression, rage, and hostility [Buss-Perry Aggression Questionnaire (1992)]. The AQ 2000 model has 34 items that measure five different types of aggressiveness: physical aggressiveness, verbal aggression, rage, resentment, and oblique aggression. It employs a 5-point Likert - type scale, similar to the 1992 version, but the response scales are renamed "under no conditions like me" and "totally like me," respectively [Buss-Warren Aggression Questionnaire (2000)]. The AQ's final model is intended for use in typical populations ranging in age from 9 to 88 years old. Adults with mental problems have also benefited from it.

Varieties of Sadistic Tendencies: Sadism (Buckels, Jones, & Paulhus, 2013; O'Meara, Davies, & Hammond, 2011) is a concept most commonly defined as a desire to intentionally harm others, physically, sexually, or psychologically, in order to maintain dominance or

simply for glory (Buckels, Jones, & Paulhus, 2013; O'Meara, Davies, & Hammond, 2011). Sadistic inclinations have been the subject of more investigation in the last decade. Simultaneously, the concept of sadism moved from important in clinical contexts to being researched as a subclinical occurrence in the general population. The seminal works of Chabrol, Van Leeuwen, Rodgers, and Séjourné (2009), who advocated the creation of sadism as the fourth darkish feature within the darkish Tetrad of personality, alongside Machiavellianism, narcissism, and psychopathy, ushered in this trend (previously called the darkish Triad of personality, see Paulhus, 2014). In that regard, evidence is growing that sadism is a relatively overlapping, but incredible assemblage in comparison to other darker Tetrad persons (e.g., book et al., 2016).

Sadism also has the same "core" as the darker Triad traits, which include poor Honesty-Humility and low Emotionality, according to the HEXACO character model (e.g., e-book et al., 2016). Paulhus, Curtis, and Jones (2017) offer a unique perspective on the shared characteristics of darkish inclinations, highlighting the role of aggression while also acknowledging the multidimensional nature of this trait, taking into account the fact that different triggers for aggression exist for different dark developments. As a consequence, while all gloomy features may be linked to violent behavior, the most successful sadism is associated with unprovoked violence while personal costs have been incurred, and the most effective sadists are ready to expend additional time and energy to injure an innocent man (Buckels et al., 2013). Those findings indicated that people with exorbitant sadism would instead patiently wait for the right moment to harm someone else or exact genuine revenge, rather than acting immediately, as is a characteristic of egocentric or psychopathic aggression.

Several anti-sadism initiatives have been proposed thus far. The Sadistic Attitudes and Behaviors Scale was used to create the short Sadistic Impulses Index (SSIS: O'Meara et al., 2011). Sadism was linked to interpersonal control in social relationships, poor families to empathy (usually to the element of personal insensitivity), and bad relationships to the experienced warmth of parental care, according to O'Meara et al. (2011). This metric is also linked to criminality (Chabrol et al., 2009), skepticism and competitiveness humor, and heightened negative views toward derogated businesses, notably immigrants (Meedovi & Bulut, 2017). The SSIS found the most powerful negative connections with Honesty-Humility among the basic character characteristics (Meere & Egan, 2017). Another often used scale is the Sadistic Tendencies Scale (extensive: Paulhus & Jones, 2015). The massive measures analyse direct sadism by evaluating relaxation in psychobiological harm, as well as vicarious sadism by concentrating on the enjoyment obtained from the passive remarks on others being injured.

Furthermore, it's linked to hurtful acts (Buckels et al., 2013) and tasty in delinquent punishment (Pfattheicher & Schindler, 2015). vast demonstrates strong links with other dark trends, with the worst awful with Honesty-Humility and Emotionality (ebook et al., 2016). The evaluation of Sadistic personality is the most recent addition to the existing sadistic measures (ASP: Plouffe, Saklofske, & Smith, 2017). The authors' motivation for creating a new scale originated from the limitations of current ones, such as their limited reach or lack of awareness of the sadistic demeanor's subjugating aspects. The ASP has a positive correlation with many gloomy developments and sadism measures and a negative correlation with emotional intelligence, emotionality, honesty-humility, agreeableness, and locus of control (Plouffe et al., 2017; Plouffe, Smith, & Saklofske, 2018).

The ASP also has a strained relationship with key principles like benevolence and universalism, which symbolize expertise and concern for others' well-being (Balakrishnan, Plouffe, & Saklofske, 2017). In addition, the ASP predicts right-wing political orientation (Duspara & Greitemeyer, 2017), which is linked to a positive assessment of harmful social agencies (Duckitt & Sibley, 2007). To date, there has been a steady improvement in sadism measures. The architects of sizable alluded to the necessity to separate certain objects containing aroused animosity and causing injury for the sake of controlling others, without implying that they were proud of it. They claim that these are primarily psychopathic reasons (e.g., Buckels et al., 2013). The researchers of the ASP, on the other hand, focused on the previously mentioned O'Meara et al. (2011) concept of sadism, which encompasses seeking pride in injuring others, empathy impairments, and dominance proclamation.

Sampling

Subjects for the study were selected through the Purposive Sampling Technique from different parts of India. The age group was 15-30 years. The total sample size was 108 i.e., 60 females and 48 males.

- Inclusion Criteria: Subjects for the study were selected through the Purposive Sampling Technique from different parts of India. The participants ranged in age between 15 to 30 years old to be observed for this research study.
- Exclusion Criteria: The participants above the age of 15 and below the age of 30 were not included as a part of this research study.

RESULT AND ANALYSIS

The empirical research is carried out in order to understand the psychological trait of humans behind biting. The entire data collected was in qualitative form and hence in order to give it a quantitative form the chi-square test was performed. On using chi-square test to carry out the statistical parameter of the research survey carried out, in total there were 22 questions and every questionnaire acquired a certain "p-Value" which ranged close to 1. Majority of questions had significant values close to 1 which denoted the reliability of the studied factors. The analysis carried out resulted in significant dissimilarity between the tendencies of female and male biting behaviour.



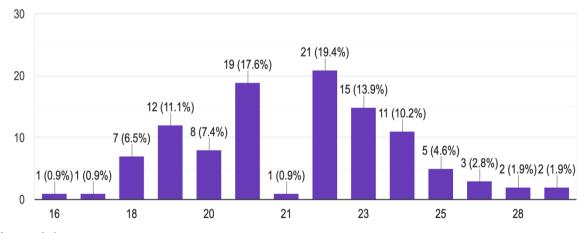


Figure 1.1

Figure 1.1 illustrates that 22-year-olds were the age range that had the highest prevalence of these biting behaviour categories. The analysis clearly results to understand the impulsive behaviour, sadistic behaviour and cannibalistic behaviour of an individual by studying their responses to the questionnaire.

CONCLUSION

Primarily based upon the decision-to-palms for extra beneath-status of chew mark proof, it becomes the cause of this paper to lay the groundwork for better underneath-status of a number of the psychological threads in these types of cases. Contingent upon the physiological and mental substances related to chunk marks, the three primary motivational classes in which the evidence changed into classified had been: 1) anger- impulsive biting, 2) sadistic biting, and 3) ego-cannibalistic biting. This research study tries to give the significant differences present between the tendencies of various age groups' biting behaviour and also results in defining who has a higher tendency regarding biting. As mentioned in the location of signature implicants, it's miles identified that psychology cannot "remedy" instances, but it could yield treasured records approximately the crime through examining the underlying structures and topics of signs and logos. The psychological underpinnings of chew mark testimony may and therefore must be included as a clarification tool to achieve this purpose.

DISCUSSION

When forensic intervention is required in cases involving biting, the question of why people bite is frequently raised. Despite the fact that examples of biting behavior being penalized on a behavioral level exist within the criminal justice system, there does not mean it is a good answer at this time. The simple goal of this paper was to concentrate on the fact that biting behavior is conceptually undeveloped, and to evaluate areas that may help to remedy this problem. The paper was created as a means of encouraging debate and positively moving the subject matter forward, rather than as a platform for any particular thought in and of itself. The writers no longer claim to have any special knowledge about why people chew. We are genuinely interested in the issue and feel that it merits further investigation. Bite marks on older children are usually classified into two groups: assaults, in which bite is administered quickly, haphazardly, and enragedly; and sexual abuse, wherein a well-defined biting mark is visible and typically linked with a "suck" mark. Defense bite marks on either the sufferer or the offender are included in the sexual category. Bite marks can be observed in common places of the human body, such as the genitals and breasts, in situations of sexual assault, hence understanding the psychology of the perpetrator in such sexual assault cases gives a picture of clearer investigation. It goes without saying that a persistent research programme is essential if we are to incorporate a valid and reliable behavioural element into the current framework of bitemark evaluation, while the signature topics of the numerous types of crimes are identified, it could facilitate more know-how of the criminal acts and their significance in the back of them. In chunk mark instances, when the wound indicant is related with the overall crime scene proof, the signature subject of biting motivations may be examined for signs and symptoms and symbols revealing stylized intents, since the assailants frequently use vital subject matters of aggression with customized adaptions, a psychological sifting of the bite mark and correlate proof can often provide varying levels of clarification to the crime. even though psychology cannot make a "fingerprint" of the crime, it may give signature importance to the issue of the crime, bite mark evidence. We have supplied a pure speculation necessary patches ability agenda objects in the course of this paper, with the hope that it will be analysed, updated, and modified by those who have both

the necessary knowledge base and operating environment to initiate an ongoing investigation into relevant aspects of biting behaviour.

Limitations

- The limitations of this empirical research study were the scales that were used in order to study the behavioral pattern.
- The approach of the scale was clinically based hence can give an idea of behavioral pattern of an individual only.
- The research was carried out among the age group of adults hence when researched into age group of children may draw out different results.

REFERENCES

- Akasofu, S. I., & Kamide, Y. (1980). Recent Progress in Studies of Magnetospheric Storms and Substormst. Journal of geomagnetism and geoelectricity, 32(10), 585-615.
- BARSLEY, R. E., DAVID, T. J., & METCALF, R. D. (2013). Jurisprudence and Expert Witness Testimony. Manual of Forensic Odontology, 377.
- Bellak, L. (1947). A Guide to the Interpretation of the Thematic Apperception Test: To be Used with the Bellak TAT Blank. Psychological Corporation.
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. Journal of personality and social psychology, 63(3), 452.
- Chafe, W. H., & Chafe, W. H. (1981). Civilities and civil rights: Greensboro, North Carolina, and the black struggle for freedom. Oxford University Press, USA.
- Commonwealth v. Henry, 524 Pa, 135, 569 A.2d9 929 (Feb. 8, 1990).
- Cook, P. E., & Hinman, D. L. (1999). Criminal profiling: Science and art. Journal of Contemporary Criminal Justice, 15(3), 230-241.
- Dinić, B. M., Allred, T. B., Petrović, B., & Wertag, A. (2020). A test of three sadism measures. Journal of Individual Differences.
- Douglas, J. E., & Burgess, A. E. (1986). Criminal profiling: A viable investigative tool against violent crime. FBI L. Enforcement Bull., 55, 9.
- Douglas, J. E., & Olshaker, M. (1998). Mindhunter: Inside the FBI's elite serial crime unit. Simon and Schuster.
- Eisler, R. (1969). Man into Wolf. [Introduction by DK Henderson.]
- Epstein, A. W. (1969). Fetishism: A comprehensive view. Dynamics of deviant sexuality, 15.
- Estlund, C. L. (2002). The ossification of American labor law. Colum. L. Rev., 102, 1527.
- Faggiano, V., McNall, V., Gillespie, T. T., & Fisher, D. R. (2003). Techniques of crime scene investigation. crc Press.
- Fromm, M. (1992). Difficulties of asking people what their constructs are. In Selected papers from the inaugural conference of the EPCA, York: England.
- Furness, J. (1981). A general review of bite-mark evidence. The American Journal of Forensic Medicine and Pathology, 2(1), 49-52.
- Giannelli, P. C. (1996). The abuse of scientific evidence in criminal cases: The need for independent crime laboratories. Va. J. Soc. Pol'y & L., 4, 439.
- Goodall, J. (1983). Population dynamics during a 15 year period in one community of free-living chimpanzees in the Gombe National Park, Tanzania. Zeitschrift fuer tierpsychologie, 61(1), 1-60.
- Gudjonsson, G. H., & Haward, L. R. (2016). Forensic psychology: A guide to practice. Routledge.

- Hare, R. D. (1999). Without conscience: The disturbing world of the psychopaths among us. Guilford Press.
- Hatibovic-Kofman, S., Wright, G. Z., & Braverman, I. (1998). Microleakage of sealants after conventional, bur, and air-abrasion preparation of pits and fissures. *Pediatric dentistry*, 20, 173-176.
- Hollin, C. R., & Howells, K. E. (1991). Clinical approaches to sex offenders and their victims. John Wiley & Sons.
- Houston, J. (1998). *Making sense with offenders: Personal constructs, therapy and change.* J. Wiley.
- Howells, K. (1983). Social construing and violent behaviour in mentally abnormal offenders. *Dangerousness: Problems of assessment and prediction*, 114-129.
- Kelly, G. A. (1955). 1991. The psychology of personal constructs.
- Keppel, R. D., & Birnes, W. J. (1998). Signature killers. Random House.
- Levine, L. J. (1973). The solution of a battered-child homicide by dental evidence: report of case. *The Journal of the American Dental Association*, 87(6), 1234-1236.
- Levine, L. J. (1999). Defendant's Exhibit 705: Lowell Levine CV.
- Li, C. K. (1992). Ethics, politics and pedophilia. The relevance of George Kelly.
- Mittleman, R. E., Stuver, W. C., & Souviron, R. (1980). Obtaining saliva samples from bitemark evidence. *FBI L. Enforcement Bull.*, 49, 16.
- Mittleman, R. E., Stuver, W. C., & Souviron, R. (1980). Obtaining saliva samples from bitemark evidence. *FBI L. Enforcement Bull.*, 49, 16.
- Moctezuma, E. M. (1987). Symbolism of the Templo Mayor. *The Aztec Templo Mayor*, 185-209.
- Morneau, R. H., & Rockwell, R. R. (1980). Sex, motivation, and the criminal offender. Thomas.
- Papa, J. (2003). Recent Developments in Indiana Evidence Law. *Ind. L. Rev.*, 36, 1081.
- Pretty, I. A., & Sweet, D. (2000). Anatomical location of bitemarks and associated findings in 101 cases from the United States. *Journal of Forensic Science*, 45(4), 812-814.
- Rada R. Clinical aspects of the rapist. New York, NY: Grune and Stratton, 1997.
- Ressler, R. K., & Shachtman, T. (1997). I have lived in the monster. New York: St. *Martin's P*.
- STEIN, R. S. (1977). A dentist and dental technologist analyze current ceramo metal procedures. *Dent Clin North Am*, *21*, 729-749.
- Sweet, D. (1995). Human bite marks—examination, recovery and analysis. *Manual of Forensic Odontology. Ontario: Manticore*.
- Sweet, D., Lorente, J. A., Valenzuela, A., Lorente, M., & Villanueva, E. (1997). PCR-based DNA typing of saliva stains recovered from human skin. *Journal of Forensic Science*, 42(3), 447-451.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American sociological review*, 22(6), 664-670.
- Van Lines, A., & Fireproof, I. P. E. A & M Constr. Co. v. Lansden, 547 P. 2d 961 (Okla. 1976). (s) 2: 440 Abbott v. National Bank of Commerce, 176 Okla. 629, 56.
- Walter RD. Anger biting: The hidden impulse. Am J Forensic Med Pathol 1985; 6:219–21.
- Walter, R. A. (1984). An examination of the psychological aspects of bite marks. *The American Journal of Forensic Medicine and Pathology*, 5(1), 25-29.
- Wansell, G. (1996). An evil love: the life of Frederick West. Headline.
- Webb, D. A., Sweet, D., Hinman, D. L., & Pretty, I. A. (2002). Forensic implications of biting behavior: a conceptually underdeveloped area of investigation. *Journal of Forensic Science*, 47(1), 103-106.

- Webb, D. A., Sweet, D., Hinman, D. L., & Pretty, I. A. (2002). Forensic implications of biting behavior: a conceptually underdeveloped area of investigation. Journal of Forensic Science, 47(1), 103-106.
- Weigler, S. (1992). Bite mark evidence: Forensic odontology and the law. Health Matrix, 2, 303.
- West, F. (2003). Fred West.
- Winter, D. (2013). Personal construct psychology in clinical practice: Theory, research and applications. Routledge.
- Winter, J. P. (2007). Lies the media tell us. Black Rose Books Ltd.
- Yochelson, S., & Samenow, S. (1976). The criminal personality (Vol. 1). New York: Jason Aronson.

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Conflict of Interest

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