ASSESSMENT OF THE EXTENT TO WHICH GENERAL STRAIN AND SELF CONTROL THEORIES ACCOUNT FOR SEX AND GENDER CRIMINOLOGICAL CORRELATES

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Abstract

Sex and gender are central topics in criminology and criminal justice jurisprudence and have become part of the strongest and enduring areas in criminology. This is made practical by the error of non-inclusion or omission of girls and women, who engaged in crime, at the onset of the discipline, maybe because official statistics showed they had much lower involvement and considered of no consequence. Rather than include them, they were demonized, masculinised, and sexualised prompting feminist criminologists to argue that the problem with mainstream criminology was its failure to appreciate the consequence of sex and gender roles in society and how they have become key forces in shaping crime and social control. However, Agnew's general strain theory, Michael Gottfredson and Travis Hirschi's self-control theory as well as biosocial perspective, among others have differently explained why males engage in crime more than females. This paper reviews general strain theory, selfcontrol theory, and the biosocial perspective with a view to exploring how convincing they have independently been in explaining the gender gap fully. Finally, it proposes that integrating the nuanced research findings of the innovative and interdisciplinary biosocial perspective into mainstream criminological theories will help produce convincing and enduring explanations of sex and gender criminological correlates. In reviewing these theories, the risk factors such as low self-control, anger, aggressiveness, impulsivity, anxiety, and harsh socialisation will be highlighted. General strain and Self-control theories have been chosen because both strive to discover the role of gender-neutral mechanisms in driving offending.

Keywords: General Strain Theory, Self-Control Theory, Biosocial Perspectives, Sex, Gender.

Introduction

Sex and gender are established and central topics in criminology and criminal justice jurisprudence and have become part of the strongest and enduring areas in criminology. This is made practical by the error of non-inclusion or omission of girls and women, who engaged in crime, at the onset of the discipline, maybe because official statistics showed they had a much lower involvement and were considered of no consequence (Curran and Renzetti, 2001). Rather than include them, they were demonized, masculinised, and sexualised (Porter, 2017), prompting feminist criminologists to argue that the problem with mainstream criminology was its failure to appreciate the deep consequence of sex and gender roles in society and how they have become key forces in shaping crime and social control (Rocqueet al., 2021).

Consequently, feminist criminologists accused the discipline of being rocentric (Chesney-Lind and Chagnon, 2016), while observing that gender specific variables explain and predict gender differences in crime. They contend that for criminology to play any measurable role in the alteration of existing criminal justice practices, it must endeavour to become more than the study of men and crime (Naffine, 2018). These controversies constrained Daly and Chesney-Lind (1988), to raise the issues of "generalisability" and "gender ratio" (can theories formulated to study and account for the crimes of boys and men be applied to girls and women?) and (can extant theories of crime explain the obvious gender difference in crime?).

Although it is agreed that males more than females engage in crime, in the mid1970s, Freda Adler and Rita Simons, observed that there was an increase in female crime, and that females were becoming very aggressive and violent

in their attacks and, argue that it was a result of the gains of the women emancipation crusade, which brought about changes in female routine activities and exposed them to criminal motivators (Chesney-Lind, 2017). Nonetheless, studies have shown that the patterns and relationships between male and female crime did not change much, and that there is no relationship between female crimes and the work of feminist activists (Chesney-Lind and Shelden, 2004). The slight rise in female crime preceded the emancipation movement activities, and crime remained predominantly a preserve of males (Ingrascì 2021). Nonetheless, the rise in female crime reported in official statistics was not corroborated by other sources and reflected the hard-line response to trivial offending behaviour of females by criminal justice system (Faith, 2011). Only about 6.5 percent of all prisoners in the world are females, whereas about 93.5 percent are males (Walmsley, 2017). The rates vary per country from about 2 to 9 percent of the total prison population and female prison population in African countries ranges from 1 to 6 percent (cited in Sarkin, 2019). In Britain 80 percent of convicts of serious crimes were males, while only 3 percent were females (Burke, 2014). America's prison population in 2017, consists of 1,378,003 males representing 92.5percent and 111,360 females amounting to 7.5 percent (Bronson and Carson, 2019). No doubt, that boys and men account for most of criminal behaviour, remain an incontestable feature in criminology (Choyet al., 2017), hence criminal jurisprudence and criminological theories and debates have been occupied with efforts to identify the reason for this gender gap.

However, few of the extant theories can be applied in studying and explaining female crimes and special theories for women's crime have not been very successful (Cullen *et al.*, 2017). While Agnew's (1992)general strain

theory contends that crime results from responses to strain, and that differences in types of strain as well as emotional response to frustration arising from strain accounts for the gender gap in crime, Gottfredson and Travis Hirschi's (1990), self-control theory argues that crime is caused by lack of self-control arising from ineffective socialisation and that the gap in male and female engagements in crime can be understood by the different types of socialisation which is based on sex and gender. On the other hand, biosocial criminologists such as Boccio *et al.*, (2021); Lenz *et al* (2018); Armstrong and Boutwell, (2012); and others consider the differences in physiology and genetic makeup which bring about differences in the cognitive ability of the different sexes as the cause of the gender gap in crime.

Therefore, this paper critically looks at general strain theory, self-control theory, and biosocial perspectives with a view to assessing how far they have accounted for sex and gender criminological correlates and how incorporating the nuanced research findings of the interdisciplinary and integrative biosocial perspective into mainstream criminological theories can help to produce enduring explanations of sex and gender criminological correlates. Sex refers to characteristics that are physiologically related to being male or female for example genitalia, while gender refers to socially and culturally accepted behaviour patterns and expectations which are attributed to different sexes (Tripp and Munson, 2021). Gender is socially constructed on a flexible continuum of social interactions, with varying degrees of masculinity and femininity and relates to social role performances, for example feminine identity include such things as empathy, dependence, and gentleness, while masculine identity includes independence, assertiveness, and toughness (Dolliver and Rocker, 2018).

General Strain theory

Agnew (1992), in his general strain theory of crime argues that the cause of crime and delinquency is strain, in other words crime and delinquency are responses to strains and defines strain as "events and conditions disliked by individuals". According to him, there are three major causes of strain; inability to achieve positive goals, loss of positive stimuli and presence of negative stimuli. Strain can promote the prospect of negative emotions, such as frustration and anger, which may in turn trigger the individual to seek redress, and consequently, lead to crime. This redress could be to diminish the strain, to seek reprisal or to assuage the negative emotion (Agnew 1992). Broidy and Agnew (1997) argue that general strain theory provides explanation for group differences on the extent of strain, types of strain and the factors that condition responses to strains, and that differences in types of strain as well as emotional response to anger/frustration arising from strain, rather than differences in the amount of anger account for the gender gap in crime, observing that the nexus between strain/anger and crime is mediated by coping resources and skills, social support, constraints to delinquent coping and disposition to delinquency, noting that all these depend on individual temperaments, criminal reinforcement and exposure. They argue that whereas males react to strain with anger, impulsivity and aggression towards others, females react with sadness, depression and self-directed illegitimate behaviour and that males as well as females consider some responses inconsistent with their gender roles and identities. Males more than females react through criminal conduct due to gender differences in variables, such as self-control, empathy, levels of supervision and association with delinquent peers, arising from gender-based socialisation.

Although females experience different types of strain from those experienced by males, which include the accomplishment and sustenance of interpersonal relationships, as well as the pursuit of the meaning and purpose of life, as against material success and extrinsic achievements that males border themselves with, the strains have the same effect and although there are gender differences in emotional response to strain, some females considered to be "high in masculinity" respond to strain with the same type of unmitigated anger as their male counterparts, resulting in female crime. Nonetheless, most females do not respond like males because of the individual differences in factors which mediate strain, such as disposition to crime, social support, and opportunity for crime. (Broidy and Agnew, 1997). Scott and Mikell (2019), observe that internalised gender norms "condition experiences and responses to strain in distinct ways", and that "different types of strains are associated with different negative emotions, and different strains and negative emotions are associated with different criminal outcomes". Coster and Zito (2010) argue "that emotions are relevant not only for understanding juvenile delinquency but also for understanding the gender gap in delinquency" and "that the gender gap in delinquency appears to result less from gendered experiences of emotions than from gendered expressions of emotions". Observing that the "key to understanding links between gender, emotions, and delinquency resides in gendered expressions of emotional responses to stress rather than in gendered experiences of emotions". Lee and Song, (2021) contend that "different negative affective states may be associated with different types of deviance outcomes, and that typically "female" or self-directed types of deviance may result from the interaction of anger and depression".

Daniels and Holtfreter, (2019), in a study of the role of self-control in mediating the relationship between strain and delinquency found that selfcontrol is a gender-specific conditioning factor of strain. Self-control mitigates the effects of certain strains on delinquency for females only. Yet, unexpectedly, coercive parenting decreases male delinquency and moderates the impact of low selfcontrol in males". Robbers (2004) studied the claim that social support aids individuals' responses to strain and "suggest that there are gender differences in the types and levels of strain experienced during the late teens. Further, there is evidence to support the hypothesis that social support does moderate females' responses to certain types of strain". However, Nicole and Sealock (2004), indicate that there is "the need for clarification and continued study of the potentially important qualitative differences in types of strain, negative affect, and coping styles and how they relate across gender", because the role of coping is not clear in the general strain theory, and the process by which males and females cope with strain and their ensuing emotions remains one of the least understood aspects of the general strain theory. Moon and Morash, (2017) indicate that the relationship between different types of strain, negative emotions, and coping behaviour have more potential to account for the general strain theory's description of gender differences in crime and deviance than the concept of conditioning factors.

Females tend to build up and retain feelings of anger while males let these feelings go after a day (Laws, 2019). Criminal tendencies aggravate the influence of strain on delinquency particularly for males (Barbieri *et al.*,2019), while Morash and Moon (2007), reveal that "none of these emotional support and supervision variables acted to reduce the effects of negative strains for

females or males" and opine that the "effect of strain or anger on delinquency was not moderated more for females than males by coping resources such as emotional support and supervision in females than males. There are few important sex differences; stressful life events have a similar short-term impact on delinquency and drug use among females and males. Furthermore, negative changes in life events are associated with greater delinquency and drug use" (Morash and Moon, 2007).

Self-control theory.

Gottfredson and Hirschi (1990) postulate that crime and delinquency are caused by ineffective childrearing or socialisation and, because crime is easy, yields minimal gains and is associated with great risk, offenders are considered as having relatively little self-control. Although they disagree with the notion that some people are born with genes which dispose them to indulge in crime and delinquency (Kicheet al., 2019), they agree that there are differences in the personality of individuals which impact negatively on the prospects of effective socialisation, but contend that whatever such traits are, they are surmountable by the intricate socialisation process. Those who are low in self-control are characterized by impulsivity, unable to defer immediate gratification, risk taking, physical, self-centred, quick tempered and lack capacity to make appropriate decisions. (Gottfredson and Hirschi, 1990). The differences in selfcontrol which are determined by variations in socialisation practices should account for disparities in offending across race, ethnicity, and gender. With reference to the gender gap, they argue that females have greater self-control than males because of the gender-based socialisation and intensive parental control which they are subjected to from infancy, and almost throughout their life course, consequently they are less prone to engage in criminal and deviant behaviour (Gottfredson and Hirschi, 1990).

"Overall findings suggest that the relationship between low self-control indicators and types of delinquency differs across gender" confirming results in support of previous gender-based self-control tests conducted across national boundaries (Chui and Chan, 2016). Green, (2016), tested self-control theory as an explanation for the gender gap, applying different psychological factors, including impulsivity, temper, present oriented, preference for risk seeking and carelessness revealed that the relationships between measures of self-control and delinquency vary by magnitude across gender and for different offence types. Ivert et al., (2018), in an empirical test of self-control gender theory observe that when males and females were studied independently self-control became significant, although differentially between males and females. Choi and Kruis, (2020), applying various measures of selfcontrol found a nexus between drunk driving and low selfcontrol for both males and females and consequently, support for self-control theory. Shekarkhar and Gibson (2011) found "males to have lower self-control and greater involvement in self-reported violent and property offending compared to females ...however, the gender gap observed for property and violent offending was not accounted for by low self-control or parenting... In fact, none of the parenting measures (warmth, hostility, monitoring) differed for males and females and they were not found to influence involvement in offending for males or females... Low self-control predicted violent offending for males and females separately, but it predicted property offending only for males".

Moon, et al., (2012) tested the applicability of the self-control theory in explaining the gender gap in computer crime and assesses the theory's utility in explaining computer crime across gender and contend "that self-control theory performs well in predicting illegal use of others' resident registration number (RRN) online for both boys and girls, as predicted by the theory. However, low self-control, a dominant criminogenic factor in the theory, fails to mediate the relationship between gender and computer crime and is inadequate in explaining illegal downloading of software in both boy and girl models. Self-control may be a more important moderator of strain in females than males (Boccio et al., 2021). Inadequate parenting as described in selfcontrol theory are cultural normative practices for raising males (Hayslett-McCall and Bernard, 2002). The insistence that gender gap exists because of gendered socialisation subtly implies that masculine socialisation encourages delinquency, while feminine socialisation discourages it (Connell, 2020), nonetheless, this is contrary to the observation of a recent study which postulates that feminine identities are related to self-control and delinquency while masculine identities are not (Nofziger, 2010). There is need for this theory to reconsideration the nexus between parenting, and self-control in producing the gender gap in delinquency (Chapple, et al., 2010).

Biosocial perspective:

On the average, biogenetic studies show that some differences in human behaviour are accounted for by genetics while others are determined by environment (Polderman *et al.*,2015), and meta-analytical studies of how several human qualities such as disposition, belligerent behaviour, depression, nervousness, and substance use are transmissible from one generation to another reveal that personalities and behaviours can be

inherited through genes. Aggressive antisocial behaviour was highly heritable, whereas nonaggressive antisocial behaviour was significantly influenced by shared environment, especially in boys and both aggressive and non-aggressive antisocial behaviour by males and females is caused by different factors (Burt and Neiderhiser, 2009). These genes do not cause individuals to commit crime or conform to norms of society but influence the way and manner individuals react to the shared and unshared environment. (Akers, et al., 2017).

There are differences in the structure and functioning of the brain, hormone regulation, and neurotransmitters between males and females which play roles in accounting for differences in their respective cognitive orientations, abilities, emotional dynamics, and adaptations (Pletzer, 2019). Self-control is partly heritable and is initiated in the prefrontal cortex; the prefrontal cortex is responsible for apart from self-control, empathy, and intuition, is known to be larger and develops faster in women, enabling them to have superior impulse regulation and better control of aggression centres in the brain than males (Cupaioli et al., 2021). This gender difference is present even before birth, and the female brain is absorbed in utero with oestrogen, while the male brain is immersed in testosterone; oestrogen which is the predominant hormone in the female brain is known to strongly stimulate faster development and maintenance of the prefrontal cortex(Lenz et al., 2018). The differential levels of testosterone; a sex hormone secreted by both males and females but mainly by males is the biggest difference in the hormones of males and females, and at the beginning of their teenage, males produce 20 to 25 folds more than during their pre-adolescence (Handelsman et al., 2018). Abnormal levels of testosterone have been known to have a stronger correlation with aggression

towards others and violent crime (Curran and Renzetti, 2001). However, apart from increased sexual activity, the association between testosterone levels and aggressive behaviour as well as violent crime appears weak (Geniole *et al.*, 2020). Although, there may be a stronger relationship between the two, probably resulting from presence of environmental factors related to criminality, such as joining "subculture of violence" which would bring about heightened levels of testosterone (Segal, 2020).

Abnormal levels of serotonin in males which is an inhibiting neurotransmitter usually related to amplified anger, despair, thoughtlessness nervousness(Fuller, 2021), low resting heart rate which is usually associated with fearlessness and sensation seeking, perception of a lower likelihood of sanction and inability to think about a sense of shame (Armstrong and Boutwell, 2012) is mostly found among males and have been associated with both frequency and types of crime committed by males and females. The difference in resting heart rate manifests from about 17 months after birth and exists in all human societies and in all criminal data sources available (Choy, 2017). The dorsal pre-mammillary nucleus which is a neurotransmitter in the brain that operates as the alarm system for threats, fear and danger, and the amygdala which contains special circuits to detect territorial intrusion by others are larger in male brain, and are known to facilitate aggression, impulsivity, and anger, which are criminological risk factors (Lischinsky and Lin, 2020).

Though, general strain theory and self-control theory's explanation of sex and gender crime correlates, have had mixed results from empirical studies, they enjoy a lot of empirical support, but they reflect one side of the explanation of the phenomenon of crime, rather than portraying the complete view (Rocque

and Posick, 2017). While these two theories have tried to emphasise genderbased socialisation, have also made attempt to address the gender gap in crime and have shown determination to discover the role of gender-neutral mechanisms in driving offending (Kruttschnitt, 2013), they remain unable to completely explain sex and gender criminological correlates (Wright and Boisvert, 2009), because the wide range of gender disparity in both prevalence and types of predictors of crime can only be fully understood by integrating the biosocial approach (Durrant, 2019).

Understanding the origins of individual and group differences is central to biosocial approach, and this presents criminologists with many research opportunities, that can enable them propound theories that are able to explain the gender gap fully and clearly (Schwartz et. al., 2019). The study of the structure and functions of the brain, genetics, as well as their interaction with the socio-psychological environment, and how they operate to produce distinct human behaviour patterns by biosocial criminologists, if integrated with these theories could help specify them better (Wajzer, 2020). For instance, self-control and responsivity to stress and strain can then be linked to their obvious substrates (Holz et al., 2020). The biosocial perspective has altered the previous bio-deterministic tendency and integrated the role of the social environment towards identifying the nexus between biology and human behaviour, which has in turn aided research to "focus on identifying new sources of individual and group differences, modelling intra-individual change, and exploring interactive and reciprocal effects" (Beckmannet al., 2020).

Although, self-control theory argues that self-control is not acquired through heredity, rather by early childhood socialisation through intricate parental management techniques (Gottfredson and Hirschi, 1990), recent behavioural, genetic as well as neuroscientific research reveal that biogenic factors account for the development of self-control (Burt,2020). Durrant, (2019) contends that neurological and cognitive deficits such as deficient responsive autonomic nervous system can impair avoidance learning and socialisation process, and that for any individual to be able to engage in avoidance learning such a person must possess pituitary-adrenal system hormones, such as lipotropin and its derivations, and a strong behavioural inhibition system that can enable such learning, consequently, the risk of manifesting delinquent behaviour is higher among those who lack these traits and therefore are unable to learn avoidance behaviour.

Conclusion:

In conclusion, this paper submits that the integration of the nuanced research findings of the innovative and interdisciplinary biosocial perspective into mainstream criminological theories such as general strain theory and selfcontrol theory will help criminologists to develop convincing and enduring explanations of sex and gender criminological correlates. Nevertheless, it does not make a case for adoption of old or development of new biological theories based on biological determinism. Rather it proposes the inclusion into mainstream criminological theories, some of the germane findings of recent cognitive, behavioural, genetic, and neuroscientific research findings to explore, understand and explain the root causes of the gender gap and their underlying scientific foundation. Evidence from biogenic and neuroscientific research so far have revealed that biogenic and neuroscientific criminologists in propounding assist authentic comprehensive explanations of the gender gap in crime which exists in all

societies. For instance, self-control as a causation factor can be explained better when linked to the prefrontal cortex and the possession of pituitary-adrenal system hormones, such as lipotropin and its derivations as well as early childhood socialisation through intricate parental management techniques. This will also facilitate treatment and ultimately reduce the gender gap and criminality generally.

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