

REVIEW ARTICLE

Examining factors contributing to criminal behavior: A literature review and case report of a Malaysian ex-convict

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ABSTRACT

Background of the study: To enhance crime prevention strategies and advance forensic psychology research in Malaysia, it is crucial to investigate the multifaceted factors contributing to criminal behaviour. Durrant's Level of Analysis and Explanation of Crime provides a robust framework for this purpose, categorizing these factors into six distinct perspectives: evolutionary, sociological, genetic, developmental, psychological, and situational. However, despite the alarmingly high crime rate in Malaysia, forensic psychology research here remains significantly understudied. To the best of the author's knowledge, no existing research has investigated the factors contributing to crime within Malaysia. Thus, the study's objective is to explore the factors contributing to criminal behaviour in Malaysia by applying Durrant's framework.

Methods: A single-case research design was employed, focusing on a Malaysian ex-convict. Analysis of the case study demonstrated the relevance of all six factors within Durrant's framework, supported by existing research.

Case Presentation: The present study recruited a young adult male ex-convict from a drug rehabilitation centre in Malaysia. He has a history of drug addiction and dealing, resulting in a charge under Section 39B of the Dangerous Drugs Act 1952. The participant served a two-year prison sentence.

Discussion: The current findings validate Durrant's Level of Analysis and Explanation of Crime as a valuable theoretical framework for understanding criminal behaviour. All factors considered—evolutionary, sociological, genetic, developmental, psychological, and situational—were relevant to the case study and supported by the results.

Conclusion: This study contributes to the literature by being among the first to utilize a case study approach to examine criminal behaviour in Malaysia. By applying Durrant's framework, the study demonstrates its potential for understanding criminal behaviour.

Keywords: case report; forensic psychology; ex-criminal; Malaysia

1. Introduction

1.1. Crime in Malaysia

Crime, as defined by Yao^[1], is a societal transgression that violates social norms and is punishable by

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law. It encompasses both acts and omissions prohibited by statute, resulting in penalties such as imprisonment or fines^[2]. Often characterized by aggression, manipulation, dominance, and violence, crime poses a significant threat to public and personal safety. Consequently, it has profound implications for individuals, impacting their physiological and psychological well-being^[3].

According to the Royal Malaysian Police (PDRM), the 2023 crime rate in Malaysia reached 25,482 cases, a figure deemed alarmingly high^[4]. In 2022, statistics revealed a surge in fraud cases, accounting for a substantial 91.6% of all reported crimes^[5]. While overall drug-related offenses decreased, drug trafficking arrests increased within Malaysia. In 2024, PDRM reported a consistent decline in the overall crime rate, particularly crimes such as theft and burglary. This reduction is attributed to advanced crime prevention techniques, community engagement, and police reforms^[6]. While general crime, such as violent crimes, has fallen, for example, homicides and aggravated assaults remain a challenge. These crimes are linked to socio-economic pressures and the aftermath of the COVID-19 pandemic, which impacted mental health and economic stability nationwide^[7]. Despite the alarmingly high crime rate, forensic psychology research in Malaysia and Asia remains significantly understudied. To the best of the author's knowledge, no existing research has investigated the factors contributing to crime within Malaysia. The scarcity of forensic psychology academic programs in the country has further marginalized the field, potentially limiting the number of researchers actively working in this area.

1.2. Level of analysis and explanation of crime theory

To effectively address the issue of crime prevention in Malaysia, it is imperative to conduct rigorous studies on the factors that contribute to criminal behaviour. A valuable theoretical framework, known as the Level of Analysis and Explanation of Crime by Durrant (2018)^[8], can be employed to comprehensively understand and analyze these contributing factors. **Figure 1** provides an overview of this framework, which categorizes theories into six distinct factors, ranging from distal factors rooted in the macro-system to proximate factors that are more individual in nature.

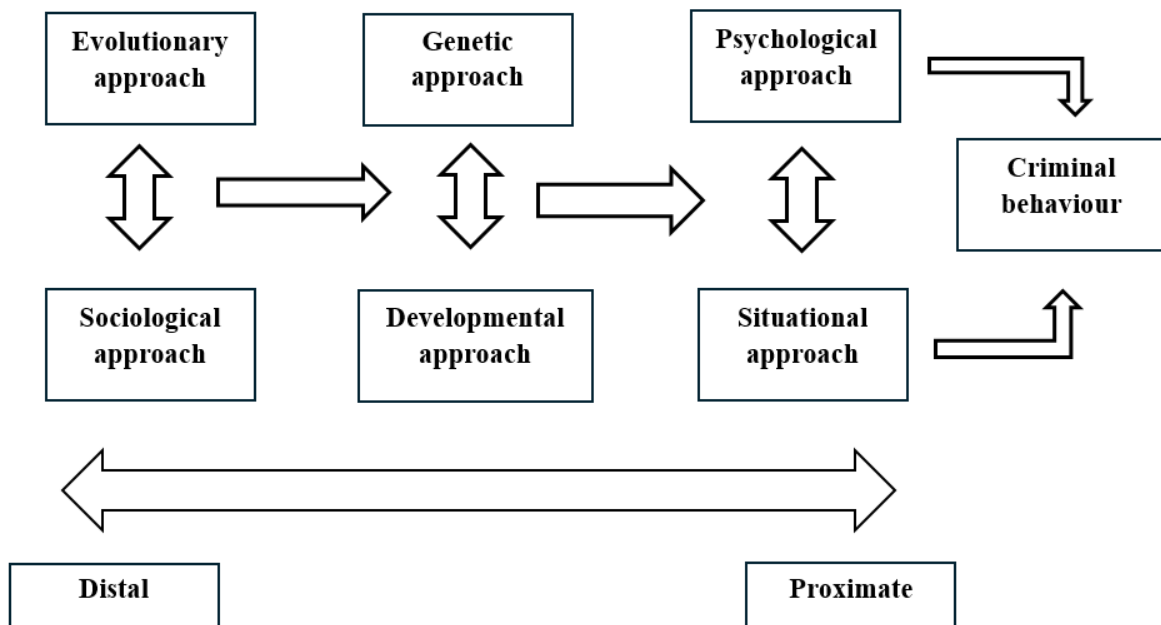


Figure 1. Levels of analysis and explanation of crime.

1.3. Evolutionary approach

Evolutionary psychology explains some sex differences through sexual selection, the process where individuals compete for mates. This competition can lead to the development of traits that increase mating success^[8]. For instance, males may engage in more risk-taking behaviours to attract mates, as male reproductive success often depends on securing a partner^[9,10]. Due to competition for females, males may develop traits such as risk-taking, dominance, and resource acquisition to improve their chances of reproduction^[10,9]. In contrast, females typically exhibit greater selectivity in mate choice, driven by their higher parental investment. They often prefer males who display signs of status, wealth, and ability to provide resources^[12]. Research indicates that females may be attracted to males with facial symmetry, lower voices, and strong jawlines, which are perceived as indicators of good genes and high testosterone levels^[12].

1.4. Sociological approach

Social structures and cultural factors play a significant role in understanding crime and criminal behaviour. Social learning, Strain and Control theories are prominent sociological frameworks that offer insights into these complex phenomena^[8]. Social learning theory, as proposed by Ronald Akers^[13], suggested that human behaviour is largely shaped by learning experiences, both through personal experiences and observations. This is known as vicarious learning^[14]. With this, criminal behaviours can be acquired through direct experiences or by observing others engage in such behaviour. For instance, a child who experiences traumatic abuse may learn violent behaviours as a coping mechanism^[14]. Additionally, social learning theory can be observed through peer influence. It was reported that peer influence is one of the prominent and consistent risk factors for juvenile delinquency^[15]. The influence of delinquent peers exerts a particularly potent impact when the group exhibits high levels of cohesion and all members actively participate in delinquent activities, significantly amplifying both the likelihood and severity of offending behaviour^[15].

Strain theories propose that individuals may turn to crime out of frustration resulting from unmet societal needs, such as economic deprivation (physical needs), goal failure (psychological needs), and experiences of loss or victimization (safety needs). Fergusson et al.^[16] highlight that children growing up in poverty face a greater risk of criminal behaviour due to financial constraints, poor parenting, exposure to violence, academic struggles, and difficulties with attention and behaviour. These challenges can all increase the likelihood of getting involved in crime^[16].

Control theories, on the other hand, suggest that individuals possess an inherent tendency toward self-interest, which can lead to criminal behaviour if not adequately controlled by good social bonds and community cohesion, which could serve as motivating factors for self-control^[8]. Both theories highlight the crucial role of social structures and relationships in shaping individual behaviour.

1.5. Genetic and biological approach

Behavioural genetics investigates the interplay between genetic and environmental factors in influencing traits such as criminal behaviour^[17]. Twin and adoption studies are commonly employed to assess the relative contributions of these factors. Both genetic and environmental influences impact the propensity for criminal behaviour, with genetics accounting for approximately 40-50% of the variation^[18]. Gene-environment interactions can manifest in three ways: passive, evocative, and active^[19,20]. Passive gene-environment correlation occurs when parents transmit both genetic predispositions and environmental influences on their offspring^[8]. For example, a child born to parents involved in criminal activities may inherit genetic tendencies toward criminality and be raised in a family environment that promotes antisocial attitudes and behaviours. Evocative gene-environment correlation arises from genetic influences on behaviour that, in turn, evoke specific responses from the environment. For instance, an individual with a

genetic predisposition toward aggression may exhibit aggressive behaviour, prompting others to respond aggressively, thereby creating an environment that reinforces and exacerbates their aggressive tendencies^[8]. Active gene-environment correlation involves individuals actively seeking out environments that align with their genetic predispositions. A person with a rebellious nature may actively join rebellious groups, creating an environment that supports and reinforces their rebellious behaviour^[8].

Hormones, particularly testosterone, also influence risk-taking behaviour related to mate attraction. Testosterone can motivate individuals to engage in behaviours that impress potential partners. Higher testosterone levels are often linked to increased competitiveness and a greater tendency for risk-taking, especially in romantic contexts. However, the dual-hormone hypothesis, which considers cortisol's role, helps explain variations in research findings. This model suggests that high testosterone combined with low cortisol significantly increases the likelihood of status-seeking and dominance-related behaviours, including aggression and risk-taking ^[21]. Research supports this interaction, showing that cortisol levels affect the relationship between testosterone and aggression^[22]. Furthermore, genetic factors can influence testosterone levels. Some men naturally produce more testosterone than others due to their genetic makeup^[23]. Therefore, understanding family history can be important for considering individual testosterone levels.

1.6. Developmental approaches

Developmental approaches to understanding crime focus on the development of criminal behaviours throughout an individual's lifespan^[8]. Young adults are involved in a larger share of crime than other age groups with crime rates usually hitting their highest point during adolescence. This phenomenon, known as the age crime curve, was first identified by Quelelet^[24] and Loeber^[25]. The curve illustrates a distinct pattern of criminal behaviour throughout the lifespan. Offending usually begins between ages 8 and 14, reaches its peak in late adolescence (ages 15 to 19) and subsequently declines^[26,27]. The relationship between age and crime remains consistent across various studies. Longitudinal studies tracking individuals over extended periods confirm that adolescence consistently represents the peak phase of offending behaviour, underscoring the robust nature of the age-crime curve^[27].

Farrington^[28] outlines several key risk factors related to crime throughout one's developmental lifespan. One significant risk factor is the family environment. Crime often runs in families; individuals from criminal backgrounds are more likely to become offenders themselves^[29,30]. The Federal Bureau of Investigation's Uniform Crime Report indicates that divorce is associated with an approximate 9% increase in the violent crime rate^[31]. Furthermore, research from Florida State University suggests that divorce may contribute to a temporary increase in criminal behaviour and delinquency among children^[32].

Child abuse and neglect also have a profound and lasting impact. These experiences are strongly linked to a range of negative outcomes, including violence^[33,34]. Research consistently shows that abused or neglected children are more likely to become offenders later in life^[35]. This highlights the "intergenerational cycle of violence," where exposure to violence in childhood increases the risk of perpetrating violence in adulthood^[36]. While not all abused children become violent, several factors explain this link. These include the potential for brain damage from abuse, learning violent behaviour from parents, and difficulty forming healthy attachments, which can lead to problems with self-control and relationships^[30]. A study conducted by Ray^[37] reported that exposure to childhood abuse not only desensitizes individuals to violence but can also precipitate emotional instability.

1.7. Psychological approaches

Psychological approaches understand criminal behaviours through understanding the individuals' personality, cognitions, feelings and behaviours^[8]. Dark personality describes a cluster of traits like

manipulation, selfishness, and a lack of empathy. It's often explored through the 'Dark Triad': Machiavellianism is being cunning and manipulative; narcissism is having an inflated ego and needing constant admiration, and psychopathy is characterised by sadism and the lacking of empathy, which often engages in antisocial behaviour^[38,39]. These traits are considered "dark" because they can be harmful to others and society. People with these traits might be more likely to engage in unethical behaviours or cause problems in their relationships.

Another psychological approach to understanding criminal behaviour focuses on cognitive factors, which emphasize the role of beliefs and values in shaping individual behaviour. Early Maladaptive Schemas (EMS) are deeply ingrained negative beliefs or themes about oneself, others, and the world^[40]. They often develop because of early traumatic experiences. While often unconscious, EMS can distort an individual's perception of events, leading to negative thoughts, feelings, and behaviours^[40]. For example, an individual who has experienced violence in their early life may develop an EMS related to violence, forming beliefs that violence is an effective means of resolving conflict. Currently, there are 18 types of EMS and were grouped into five schema domains^[40]. The five schema domains were:

- Disconnection/Rejection: This schema involves the expectation that fundamental emotional needs, such as love, care, security, safety, empathy, acceptance, and respect, will not be met.
- Impaired Autonomy/Performance: This schema reflects the belief that one is incapable of separating, surviving, functioning independently, or achieving success.
- Impaired Limits: This schema is characterized by difficulties in impulse control, goal-directed behaviour, responsibility, rule-following, collaboration, and consideration of others' needs and rights.
- Other-Directedness: This schema involves an excessive focus on the needs, feelings, and responses of others, often at the expense of one's own well-being.
- Over-vigilance/Inhibition: This schema entails an excessive focus on suppressing spontaneous emotions, impulses, and choices.

Gilbert and Daffern^[41] reported that the EMS domain of Disconnection/Rejection and Impaired Limits is significantly associated with criminal behaviours.

Research across psychology and criminology also indicates a strong relationship between attachment styles, unmet emotional needs, and the likelihood of violence and criminal behaviour. Attachment theory, developed by John Bowlby, emphasizes the impact of early caregiver relationships on emotional regulation and social development^[42]. Studies consistently show that insecure attachment styles are associated with an increased risk of violent or criminal activity^[36]. For example, avoidant attachment, marked by emotional suppression and low empathy, is often linked to antisocial tendencies. Anxious attachment may lead to aggressive or impulsive behaviours stemming from fear of rejection. Notably, disorganized attachment, often resulting from childhood trauma or neglect, displays the strongest association with violent behaviour, creating conflicting patterns of fear and aggression in relationships^[43]. The experience of unmet emotional needs further compounds the risk of violence and crime. Research indicates that individuals deprived of emotional validation or stability during childhood frequently develop diminished self-esteem and may resort to criminal activity as a means of asserting control or seeking a sense of belonging^[44]. Gang affiliation, for example, can serve to fulfil emotional needs for acceptance and identity among individuals who experience social rejection^[45].

1.8. Situational approach

The situational approach emphasises how criminal behaviours are influenced by the specific environmental factors or contexts. For instance, while some criminal behaviour is predatory and planned, much of it is unplanned or spontaneous. Opportunity theory, a significant criminological perspective, posits that criminal behaviour is contingent upon the confluence of individual motivation and the presence of conducive opportunities^[46]. This theory asserts that even individuals predisposed to criminal activity will refrain from such behaviour in the absence of a perceived advantageous opportunity. Offenders are conceptualized as rational actors who engage in a cost-benefit analysis, evaluating the potential risks and rewards associated with a criminal act prior to its commission. Felson and Clarke^[47] stated opportunities are integral to all forms of crime, exhibiting characteristics such as specificity, concentration in time and space, dependence on routine activities, the potential to generate further opportunities, varying degrees of temptation, and susceptibility to influence by social and technological advancements.

1.9. Research objectives

With this, the current study aims to investigate the factors contributing to criminal behaviours in Malaysia, utilizing Durrant^[8] Level of Analysis and Explanation of Crime as a theoretical framework. A single-case research design was conducted with a Malaysian ex-convict. The case was analysed through Durrant's^[8] theory, incorporating Evolutionary, Sociological, Genetic, Developmental, Psychological, and Situational perspectives.

2. Methods

2.1. Research design

The present study recruited a young adult male ex-convict from a drug rehabilitation centre. He has a history of drug addiction and dealing, resulting in a charge under Section 39B of the Dangerous Drugs Act 1952. The participant served a two-year prison sentence. A detailed case study, employing a psychobiographical approach, was conducted to qualitatively explore the participant's past experiences and lifespan development. This approach, as outlined by Carlson^[48], examines an individual's personality development over time, providing valuable insights into human behaviour. Similarly, the current study aims to analyse the development of the participant's criminal tendencies throughout their lifespan. An unstructured interview was conducted with the participant, the director of the rehabilitation centre, and their counsellor. The interview questions were focused on the development of the participant's criminal tendencies.

2.2. Ethical considerations

The research reported in this paper adheres to general ethical guidelines in psychology and has been approved by the relevant Human Research Ethics Committee in Malaysia. The participant, the director of the rehabilitation centre, and the counsellor have provided informed consent for the publication of the research, and their identities remain protected and confidential. Following the interview, the participant received a debriefing sheet containing various mental health resources.

2.3. Data analysis

After data collection, the case study was analyzed using a three-stage deductive thematic analysis method adapted from Schutz^[49]. Firstly, the Describing Experience stage involved compiling data from various sources, including the participant, the director of the rehabilitation centre, and the counsellor. Important content was coded and marked.

Secondly, the Describing Meaning stage entailed delving into existing literature to conduct the analysis and derive meaning from the case study. Durrant^[8] Level of Analysis and Explanation of Crime was employed as the theoretical framework. The six factors within this framework were used as 'main themes' to identify potential factors contributing to the participant's criminal behaviours.

Finally, the Focusing on Analysis stage involved rigorous validation of the findings to ensure methodological validity^[49]. After the study author coded and analysed the case study, a second reviewer independently coded and analysed the case study as well. Any disagreement was resolved by discussion between the two reviewers or by consulting a third reviewer.

3. Results

3.1. Background

David, a 25-year-old Indian male from Johor, Malaysia, was raised in a family with established professional backgrounds. His father, a former law enforcement officer, and his mother, a successful business owner, are both occupied by their demanding occupations. Due to his father's unique occupation, David grew up with a direct awareness of criminal activity, specifically substance use. David had a close bond with his family, including an older brother and a sister.

3.2. Education and early drug use

From an early age, David displayed substantial academic skills and intelligence, leading him to pursue a degree in Germany. However, the independence of living in a foreign country resulted in a decrease in his connection with his family and an increase in peer influence. Influenced by the culture, he developed an interest in nightlife and social events, which introduced him to the appeal of recreational substance use, particularly ketamine. Initially, he experimented with the substance as a social facilitator, seeking acceptance and integration among his peers. The substance's strong effects, including hallucinations and ecstasy, provided an exciting escape from reality. As David's tolerance for ketamine increased, he sought more intense experiences and travelled to the Netherlands, known for its permissive drug regulations. There, he engaged in excessive substance use and began acquiring large amounts of ketamine to distribute to his university peers, beginning his involvement in drug distribution. After several years, due to the financial limitations of his family, David returned to Malaysia and continued his studies in Kuala Lumpur. He also obtained employment at a vehicle company, but the income was insufficient to maintain his desired lifestyle. While not impoverished, David was motivated by a desire for luxury, personal gratification, influence, and social standing, which drove his ambition to increase his earnings. Identifying a profitable opportunity, he and a friend began a drug-dealing operation in the Kuala Lumpur area. At the age of 18, they established a covert operation, attracting a diverse clientele including professionals such as physicians, engineers, and university students.

3.3. Crime issues

One of David's associates was detained by law enforcement and subsequently charged under a specific legal statute related to dangerous substances. Fearing potential legal consequences, David relocated to Thailand for three months. Despite his relocation, the attraction of the drug trade remained, as he had a significant network of clients. Soon, David decided to re-establish his drug operation, which generated substantial revenue. However, his involvement with this criminal activity ultimately led to his apprehension. Law enforcement requested a large payment to avoid legal action. In addition to his involvement in the drug trade, David's financial problems led him to commit armed robbery. Under the influence of alcohol and peer influence, he and his associates robbed a commercial establishment, using a bladed weapon. Although they

initially avoided capture, their identifying information eventually led to their arrest two years later. David and his accomplices were charged under specific legal statutes related to robbery and drug dealing and sentenced to a prison term of two years.

3.4. Social relationship

At the beginning of his addiction, David's relationships with his family and partner were relatively stable. However, as his involvement in drug dealing increased, these connections began to weaken. His increasing self-centredness and neglect of his family led to a gradual separation. Despite their continued support, David's substance-induced paranoia and unpredictable behaviour further strained these relationships. His fear of arrest and the hallucinations caused by substance use isolated him from others, increasing the distance between him and his family. Later, his imprisonment and subsequent struggles with addiction further damaged these bonds.

3.5. Recovery process

After completing his prison sentence, David recognised the increased responsibility he owed to his family. Understanding that his substance addiction had significantly harmed his relationships, he made a firm decision to change his life. Acknowledging the substantial harm he had caused himself and his family, he dedicated himself to regaining their trust. To facilitate this change, David expressed a strong desire to enrol in a rehabilitation program, understanding the important role professional support would play in his recovery. The rehabilitation program provided a structured environment conducive to addressing his problems and developing the necessary skills for sustained recovery.

3.6. Thematic analysis

This study explores six main themes and ten sub-themes. The main themes are Evolutionary Approaches, Sociological Approaches, Situational Approaches, Developmental Approaches, Biological Approaches, and Psychological Approaches. The sub-themes are sex differences and hormones, strain theory and control theory, social learning, opportunity theory, the age-crime curve, family environment, hormones, dark triad personality traits, early maladaptive schemas, and disorganized attachment and unmet emotional needs. **Table 1** illustrates the summary and narrative of the main themes and sub-themes.

Table 1. Summary of the main themes and sub-themes.

MAIN THEME	SUB-THEME	NARRATIVE
Evolutionary approach	Sex differences and hormones	David, as a male, has the evolutionary tendency to attract mates through competition and resources. This is evidenced by David's desire for luxury, personal satisfaction, influence, and social status, which reflects evolutionary tendencies where males compete for resources and status to increase their attractiveness to potential partners.
Sociological approach	Strain theory and Control theory	David, as he became more socially isolated, has strain on his social needs, and thus reduces his ability to control. This is evidenced by his self-centeredness, neglect of family, and paranoia from substance use caused him to become more isolated, which in turn increased the distance between him and his loved ones.
	Social Learning	David has encountered influential peers that affected his behaviours. This is evidenced by how David's peers influenced his decision to experiment with ketamine and engage in drug use as part of a desire for social acceptance.
Biological approach	Hormone	David as a male, might have a higher testosterone level. The dual hormone hypothesis might be relevant with David.
Developmental approach	Age-crime curve	David was at the highest point in the age-crime curve, where when he began his drug-trafficking activities, he was a young adult. This is evidenced by that David at the age of 18, he started his involvement in

MAIN THEME	SUB-THEME	NARRATIVE
Psychological approach		drug trafficking.
	Family environment	David's parents are busy with their careers, which might provide a neglectful family environment. This is evidenced that David's parents were focused on their careers, which may have limited attention and connection with him during his early years.
	Dark triad personality	David shows some level of dark triad personality. This is evidenced by his manipulation of the drug trade, engagement in armed robbery and attempt to avoid legal problems through bribery. It matches with Machiavellianism, Narcissism and Psychopathy.
	Early Maladaptive Schemas	David shows the EMS domain of Impaired Limits, where he demonstrates difficulties in impulse control, responsibility, rule-following, collaboration, and consideration of others' needs and rights.
	Disorganised attachment and unmet emotional needs	David might be in the category of disorganised attachment due to the lack of support received from his parents, which might induce unmet emotional needs. This is evidenced by David's fear of arrest, hallucinations due to drug and isolation by loved ones may have contributed to disorganised attachment where his unmet needs and lack of support from his parents strained their relationships.
Situational approach	Opportunity theory	David has great opportunities in drug-dealing activities due to the resources he has received, and the poor legal legislation that allows these drug-dealing activities to become active. This is evidenced by that David recognized the potential of the drug trade and network to capitalize on the opportunity. That was further facilitated by the relatively permissive environment in which he operated.

Table 1. (Continued)

4. Discussions

4.1. Summarise the results

The objective of the study is to explore the factors contributing to David's criminal behaviour by applying Durrant's framework. David's criminal behaviour can be analyzed through six key theoretical frameworks. From an evolutionary perspective, his male sex may predispose him to competitive behaviours and resource acquisition as strategies for mate attraction. This aligns with research suggesting these behaviours enhance reproductive success^[10,11]. Sociologically, social isolation led to strain and reduced self-regulation, influenced by peer interactions. This aligns with social learning, control, and strain theories. Social learning theory highlights peer influence as a risk factor for delinquency^[15]. Control theory suggests that weak social bonds can lead to criminal behaviour^[8], and strain theory posits that individuals in impoverished environments are at increased risk due to factors like financial deprivation^[16]. Biologically, his male sex suggests potentially elevated testosterone levels, correlating with increased competitiveness and risk-taking^[21]. Developmentally, his young adulthood coincides with a period of heightened criminal activity, as shown by the age-crime curve^[24,25]. Potential familial neglect due to parental career focus is also a factor, with criminogenic backgrounds increasing the likelihood of offending^[29,30], and divorce is shown to increase violent crime rates^[31]. Psychologically, he may exhibit Dark Triad personality traits, EMS domain of impaired limits, and disorganized attachment due to insufficient parental support. Dark Triad traits like manipulation and lack of empathy are linked to criminal behaviour^[38,29], as are EMS domain of impaired limit. Disorganised attachment is strongly associated with violent behaviour^[43]. Situationally, opportunities for drug trafficking arose due to resource availability and lenient law enforcement, aligning with opportunity theory^[47,46].

4.2. Implications

This case study examined the factors contributing to criminal behaviour in Malaysia, using Durrant's^[8] Levels of Analysis and Explanation of Crime as a framework. Results indicate that Durrant's theory can be effectively applied to understanding criminal behaviour, providing a comprehensive perspective for clinical and research work in forensic psychology by integrating evolutionary, sociological, genetic, developmental, psychological, and situational factors. Research with rare and challenging populations, like forensic samples, is often hampered by ethical concerns and limited availability. This case study offers a valuable methodological approach for investigating such unique groups where large sample sizes are difficult to obtain. Furthermore, given the relative novelty of Durrant's^[8] framework, the detailed data from this case study can contribute to its refinement and development.

4.3. Limitations and future recommendations

While the case study design was appropriate for this research, it has limitations. Findings may lack generalizability due to the small, unique sample^[50]. Additionally, the naturalistic setting makes it difficult to control extraneous variables^[50]. Researcher bias in data interpretation is another potential limitation^[50]. To mitigate this, the study employed triangulation, using two additional reviewers to evaluate the findings.

For future research, larger studies with more diverse samples are needed to determine the generalizability of these findings to other populations within Malaysia. Comparative studies across different regions or demographics could also shed light on the influence of cultural and societal factors on criminal behaviour. Furthermore, while this study provided valuable insights into the complex interplay of factors contributing to crime, future research could explore specific interactions between these factors in more detail. For example, longitudinal studies could examine how developmental factors interact with situational triggers to influence criminal behaviour over time.

4.4. Conclusion

Forensic psychology research in Malaysia and Asia is significantly underdeveloped. This study is among the first to explore the factors contributing to crime in Malaysia using a case study approach. By applying Durrant's framework, the study demonstrates its potential for understanding criminal behaviour. All factors considered—evolutionary, sociological, genetic, developmental, psychological, and situational—were relevant to the case study and supported by existing research.

Conflict of interest

The authors declare no conflict of interest.

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