THE ASIAN EDUCATIONAL THERAPIST
ISSN: 2972-4104, Volume 4, Issue 2, Page 63 - 73

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REVIEW ARTICLE

Disruptive Behavior Disorders and Juvenile Delinquency: The Dilemma of Disability-Mediated Offending

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Article DOI: https://doi.org/10.64663/aet.90

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Cite as: *SINGH, H., and CHIA, K.H. (2026). Disruptive Behavior Disorders and Juvenile Delinquency: The Dilemma of Disability-Mediated Offending. The Asian Educational Therapist, 4(2), 63-73.*

Editorial Note: *One of the authors of this article serves as the Editor-in-Chief of the current journal. To avoid any conflict of interest, the peer review and editorial decision were managed independently by other members of the editorial team.*

ABSTRACT

Disruptive Behavior Disorders (DBDs), which include Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) of either childhood-onset or adolescence-onset or both, are associated with persistent patterns of *C*hildhood and adolescence *A*ggression, *R*ule-breaking and *D*efiance (CAR-D). These behavioral patterns may increase the risk of juvenile delinquency, especially when combined with adverse environmental factors, especially family instability, academic disengagement, and trauma. This article examines the concept of disability-mediated offending (DMO), which suggests that some forms of juvenile offending may be influenced by underlying neurodevelopmental or psychological conditions rather than purely intentional criminal conduct. Drawing on contemporary developmental and criminological literature, the authors explore the pathways linking DBDs to delinquent behavior, the contextual realities of juvenile delinquency in Singapore, and evidence-based rehabilitation approaches. They also highlight the role of educational therapy and interdisciplinary intervention in addressing the developmental and psychosocial needs of at-risk youths. Understanding juvenile offending through both clinical and developmental perspectives may support more balanced responses that combine accountability with rehabilitation and social reintegration.

Keywords*: disability-mediated offending, disruptive behavior disorder, intervention, juvenile delinquency, juvenile justice system, psychoeducational therapy, rehabilitation*

1. INTRODUCTION

Juvenile delinquency (JD) remains one of the important issues of concern within the fields of psychology, criminology, education, and social policy. Adolescence is a developmental stage characterized by rapid cognitive, emotional, and social changes [1]. The challenging problems during this stage of growth can sometimes lead to the manifestation of antisocial or delinquent behavior. Increasingly, researchers [2-4] have highlighted the role of underlying behavioral and neurodevelopmental conditions in shaping juvenile delinquent trajectories.

Among these conditions, Disruptive Behavior Disorders (DBDs), e.g., Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) of either childhood-onset or adolescence-onset or both, have received significant attention due to their persistent patterns of what is known as *C*hildhood and adolescence *A*ggression, *R*ule-breaking and *D*efiance (CAR-D for short) [5]. In other words, these disorders involve persistent patterns of hostility, defiance, aggression, and violation of social rules, placing these children and adolescents at risk for later antisocial outcomes [6].

An emerging concept relevant to this discussion is Disability-Mediated Offending (DMO) [3,7], referring to situations in which criminal tendency or antisocial behaviors are partly influenced by developmental, psychological, or neurobehavioral difficulties rather than solely deliberate criminal intent. The concept of DMO has its important implications for how professionals ought to interpret youth offending and for the types of interventions that should be implemented [7]. In other words, rather than focusing exclusively on punishment, a developmental perspective should be taken to encourage therapeutic and rehabilitative responses [3] in addressing the underlying psychosocial vulnerabilities, which, in turn, are linked to mental health and wellness.

2. RESEARCH METHODOLOGY

The authors of this article have adopted a qualitative conceptual and narrative review approach to examine the relationship between DBDs, JD, and the concept of DMO. Conceptual research is appropriate for examining the emerging theoretical constructs because it allows the knowledge across multiple disciplines to be synthesized and to develop integrative explanatory frameworks [8]. Narrative and conceptual literature reviews are also commonly used to organize and interpret existing research to develop new theoretical insights and research directions [9]. In this review study, literature from developmental psychology, criminology, psychiatry, and educational therapy was reviewed to better understand how varied behavioral disorders as well as neurodevelopmental vulnerabilities, and environmental factors interact with each other in shaping delinquent trajectories among youths.

Through searches of academic databases such as Scopus-indexed journals, EBSCOhost databases, and Google Scholar, relevant literature as well as policy documents and institutional reports related to juvenile justice and youth rehabilitation was identified. Key search terms included DBD, ODD, CD, JD, adverse childhood experiences (ACEs), neurodevelopmental disorders (NDD), and youth rehabilitation. Priority was given to peer-reviewed studies published between January 2016 and April 2026, together with foundational works in developmental criminology and behavioral psychology. In addition, official statistical reports and policy documents from Singapore were reviewed to contextualize national trends in youth offending and rehabilitation programs.

The selected literature was carefully analyzed, relying on the thematic synthesis, and focusing on three major domains: developmental risk factors associated with DBDs, environmental influences contributing to JD, and psychoeducational therapeutic or rehabilitative interventions. Through comparative analysis across these domains, the study develops a conceptual framework illustrating how neurodevelopmental conditions, psychosocial stressors, and environmental influences interact in

shaping DMO, while highlighting the potential role of psychoeducational and rehabilitative interventions in promoting positive developmental outcomes.

3. DISRUPTIVE BEHAVIOR DISORDERS AS DEVELOPMENTAL RISK FACTORS

DBDs are characterized by persistent patterns of behavioral dysregulation that interfere with social, academic, and family functioning [5]. They include both ODD and CD. While ODD typically involves irritability, argumentative behavior, and defiance toward authority figures, CD involves more severe behaviors, e.g., aggression toward people and/or animals, destruction of public or private property, theft or shoplifting, and serious rule violations [6].

Children and adolescents with these behavior disorders often experience significant difficulties in emotional regulation, impulse control, and social interaction [10]. These challenges can manifest in negative externalizing behaviors, which include bullying, lying, frequent temper outbursts, and aggression toward peers. When such explicit behaviors occur persistently across multiple contexts (e.g., home, school, and community), they may contribute to broader patterns of antisocial behavior [11].

A longitudinal research study done by Olson and Ip [4] indicates that early disruptive behaviors may form part of a developmental pathway toward delinquency, particularly when combined with environmental stressors, such as family conflict, exposure to violence, or socioeconomic disadvantage. However, it is also important to note that not all children and adolescents with DBDs become delinquent [12]. With strong protective factors (e.g., supportive family relationships, positive school engagement, and early intervention), such behavioral risks can be significantly reduced.

4. DEVELOPMENTAL PATHWAYS TO JUVENILE DELINQUENCY

Behavioral deterioration, which progresses from disruptive behavior as seen in those with DBDs to the emergence of JD, is rarely the result of a single factor [7]. In fact, it typically emerges from the interaction between individual vulnerabilities and environmental influences. Youths who often experience conflicts or encounter clashes with authority figures may develop strong negative attitudes toward institutions (e.g., schools, families and police) [13]. Over time, such repeated disciplinary actions or academic failures can reduce or weaken their connection with these prosocial structures [14].

At the same time, children and adolescents who feel marginalized within their communities or mainstream environments may seek acceptance among peers who share similar behavioral tendencies. Dishion and Tipsord [44] have identified this subculture of deviant peer affiliation as a major predictor of JD because such non-conforming groups often reinforce antisocial behaviors and normalize rule-breaking activities.

ACEs further increase the risk of delinquent behavior [15]. According to Baglivio and Wolff [2], extensive exposure to abuse, neglect, family instability, or chronic stress can disrupt emotional development and contribute to behavioral dysregulation. If these developmental risks remain unaddressed, there is a high likelihood of significant increase in antisocial or delinquent behavior during adolescence [16].

The relationship between JD, DBDs, and neurodevelopmental vulnerabilities can be best understood within a developmental and ecosystemic framework [7]. Behavioral disorders, such as ODD and CD-childhood onset or adolescence onset, often emerge in the context of emotional dysregulation, impulsivity, and difficulties in social cognition [5]. This, in turn, may increase the risk of antisocial behavior if left unaddressed [6,11]. In addition, neurodevelopmental conditions, including attention-

deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), and trauma-related experiences, may also further complicate emotional-behavioral regulation, contributing to patterns of DMO among vulnerable youths [17,18].

Moreover, studies [2,4,19] have shown that environmental factors also play a critical role in shaping behavioral outcomes. Family conflict, academic disengagement, exposure to ACEs, and association with delinquent peer groups have been consistently identified as significant predictors of juvenile offending. When developmental vulnerabilities interact with these environmental stressors, the risk of escalation from disruptive behaviors to more serious delinquent conduct increases. However, early intervention and rehabilitative approaches, including psychological therapy, educational support, and community-based rehabilitation programs, can redirect these developmental trajectories and reduce recidivism among young offenders [20,21]. Figure 1 presents a conceptual framework illustrating how these developmental, environmental, and neurobehavioral factors interact to influence disability-mediated offending and how educational and rehabilitative interventions may promote positive developmental outcomes.

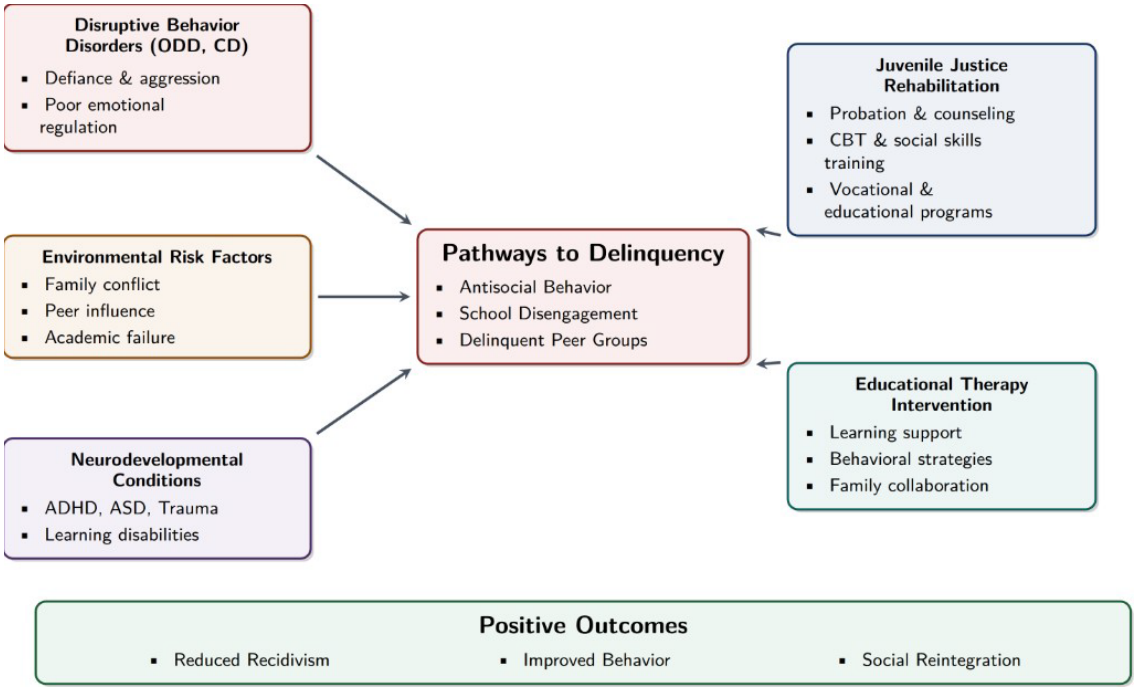


Figure 1. Conceptual Framework of Disability-Mediated Offending in Juvenile Delinquency

The framework as shown above illustrates the interaction between disruptive behavior disorders, neurodevelopmental conditions, and environmental risk factors in shaping pathways to juvenile delinquency, as well as the role of educational therapy and rehabilitation interventions in promoting behavioral change and social reintegration.

In Singapore, recent policy developments have placed the emphasis on rehabilitation and early intervention for juvenile delinquents. For instance, according to the Singapore Statutes Online [22], the *Children and Young Persons Act (CYPA) 1993* (2020 Rev. Ed., informal consolidation, version in force from 30 December 2025) provides the legal framework for the protection and rehabilitation of youths, allowing the local Youth Courts to focus on corrective and developmental approaches instead of purely punitive measures. Moreover, the National Committee on Prevention, Rehabilitation and Recidivism (NCPRR) [24], which coordinates multi-agency strategies, also plays its role to reduce youth offending and to support reintegration through community and family-based programs [23-25]. These initiatives reflect a broader policy orientation adopted by the Singapore authorities toward

preventive intervention, structured rehabilitation, and long-term social reintegration of youths at risk of delinquency.

5. JUVENILE DELINQUENCY IN SINGAPORE

Singapore has reported relatively low levels of JD compared with many developed countries [23]. According to the Ministry of Social and Family (MSF) [23], its *Supporting Youth Rehabilitation Trend Report November 2024*, the youth offending rate averaged 5.2 per 1,000 youths between 2019 and 2023, reflecting relatively stable and low levels of youth crime nationally [25,26]. In 2023, the youth offending rate was 4.9 per 1,000 youths, a figure comparable to the rate of 4.6 per 1,000 youths recorded in 2022 [27]. Generally, youth offenders in Singapore are those aged 10 to below 21 years, reflecting the developmental focus of the juvenile justice system here (see Table 1 for a summary of data).

Despite the overall low offending rate, certain categories of youth crime remain as serious issues of concern. Recent national statistics indicate that the most common offences committed by youths include shop theft (shoplifting), cheating and related offences, and sexual offences. In 2023, 509 youth offenders were reported to be involved in shop theft/shoplifting; 422 involved in cheating-related offences; and 250 involved in sexual offences including penetration [26]. The rise in cheating-related offences has been associated with the increasing prevalence of cyber-related crimes and online scams among youths [27].

During the period between 2019 and 2023 (see Table 1), several notable offence categories saw an increase in youth involvement: e.g., cheating and related offences increased from 260 to 422 cases, and offences under the Computer Misuse Act increased from 53 to 195 cases [26,27]. These current trends indicate that digital environments have increasingly become the contexts where youth offending occurs. This has highlighted the importance of raising the public cyber-awareness and increasing preventive education nationwide, especially targeting children and youths.

Table 1. Summary of Youth Offending Trends, Offence Types & Rehabilitation Outcomes in Singapore (2019–2023) [26,27]

Area	Category	Year / Period	Youth Offending Rate	Notes
Rate of juvenile offences	Youth offending rate	2019 - 2023 average	5.2 per 1,000 youths	Stable and relatively low overall
		2022	4.6 per 1,000 youths	Slightly lower than 2023
		2023	4.9 per 1,000 youths	Comparable to 2022
Definition of youth offenders	Youth offenders in Singapore	—	10 to below 21 years	Age range used for youth-offender classification
Most common offences	Shop theft / shoplifting	2023	509 youth offenders	Most common offence among those listed
	Cheating-related offences		422 youth offenders	Second-highest among those listed
	Sexual offences, including penetration		250 youth offenders	Significant category among those listed
Selected offence trends	Cheating & related offences	2019 - 2023	260 - 422 cases	Increased; +162 cases
	Computer Misuse Act offences		53 - 195 cases	Increased; +142 cases
Rehabilitation outcomes	Rehabilitation completion rate	2023	~90%	High completion/compliance
	Recidivism rate	2019 - 2021 cohort	<10% within 2 years	Low reoffending
Key insight	Overall youth crime level	2019 - 2023	Low and stable	Overall offending rate remained relatively low
	Emerging concern		Cyber-related and cheating offences	Selected offence categories increased
	Rehabilitation effectiveness	2023 / 2019 - 2021 cohort	~90% completion; <10% 2-year recidivism	Outcomes indicate strong programme completion and relatively low subsequent offending

Despite an increase in youth-related offences, Singapore's rehabilitation outcomes appear relatively positive. Data from MSF [27] indicates that about 90% of youths completed rehabilitation programs in 2023, showing a strong compliance with structured intervention initiatives. Furthermore, among youths who completed rehabilitation programs between 2019 and 2021, less than 10% reoffended within two years, reflecting comparatively low recidivism rates internationally [23,26,27]. This is a good sign indicating that Singapore has taken the right approach in managing JD.

6. SINGAPORE'S JUVENILE JUSTICE POLICIES, REHABILITATION, AND THERAPEUTIC INTERVENTIONS

The juvenile justice system in Singapore adopts a strongly rehabilitative and preventive orientation, which is grounded in the understanding that children and adolescents remain developmentally malleable and capable of behavioral change [23]. This philosophy is reflected in national policies, institutional frameworks, and evidence-based intervention practices that collectively aim to reduce recidivism and support long-term reintegration [28].

A key coordinating body in Singapore is the NCPRR [24]. Its key role is to help promote interagency collaboration among government agencies, community organizations, and social service providers. The main focus of the national committee is on early prevention, structured rehabilitation programs, and community reintegration initiatives in its concerted effort to address both behavioral risk factors and broader social determinants of JD [24].

Another central legal framework is the CYPA, which governs the protection, rehabilitation, and judicial handling of young offenders [22]. With amendments made in the CYPA, this legal act has expanded the jurisdiction of the Youth Courts to include adolescents aged 16 to below 18. In other words, it enables more youths to receive age-appropriate rehabilitative interventions rather than being processed through the adult criminal justice system, reflecting growing recognition of adolescents' ongoing cognitive and psychosocial development [22].

The Youth Courts in Singapore have also increasingly adopted therapeutic and problem-solving approaches to juvenile justice, emphasizing the identification and treatment of underlying issues, e.g., mental health challenges, family conflict, or school disengagement, which contribute to youth-related offending behavior [29]. According to the Singapore Courts [29], the rise in Youth Court caseloads to over 1,300 cases annually reflects both expanded jurisdiction and, certainly, a greater reliance on rehabilitative justice processes.

During the process of rehabilitation for juvenile delinquents, it typically begins with a comprehensive assessment to establish their psychological profile, educational background, and family dynamics [30]. It may also include a psychiatric evaluation of their neurodevelopmental conditions. Based on the findings of this comprehensive assessment administration, individualized rehabilitation plans (IRPs), adapted from disability rehabilitation plans [31], are designed to target specific needs and to identify potential risk factors. Evidence-based IRPs commonly include cognitive-behavioral therapy, behavioral modification strategies, social skills training, and family-centered therapy. These approaches aim to enhance emotional regulation, empathy, problem-solving abilities, and pro-social decision-making [21].

In addition, these IRPs are complemented by structured supervision and support programs. In Singapore, rehabilitation is implemented through probation supervision, residential programs in facilities, such as the gazetted Singapore Boys' Home and Singapore Girls' Home, and other community-based initiatives, which include mentoring, educational support, and vocational training. Together, the rehabilitative programs help these youths to develop practical life skills, rebuild positive

social connections, and re-engage with education or suitable employment pathways, thereby reducing the risk of reoffending [21,28].

Overall, the juvenile justice framework in Singapore integrates policy, therapeutic rehabilitation, and community-based support into a cohesive system [32]. By combining legal reforms, interagency collaboration, and individualized rehabilitation strategies, the system seeks not only to address offending behavior but also to promote sustainable desistance and successful reintegration into society.

7. IMPLICATIONS FOR PSYCHOEDUCATIONAL THERAPY

Psychoeducational therapy (including educational therapy, psychosocial treatments and psychotherapy) can play a significant role in addressing the developmental needs of youths with disruptive behavioral patterns [33-35]. Many children and adolescents with DBDs also experience learning difficulties, executive functioning deficits, bullying victimization, or emotional regulation challenges that interfere with their academic engagement. Educational therapists are, therefore, well-positioned to provide necessary support for both cognitive and socio-emotional development.

Intervention approaches within the field of psychoeducational therapy may include individualized learning strategies, executive functioning support, social-emotional skill development, and behavioral self-regulation training [36,37]. By addressing underlying learning or developmental difficulties, educational therapy can help reduce frustration, improve academic self-efficacy, and strengthen these individuals' engagement with their school as well as home environments [38,39].

Furthermore, educational therapists do not work alone. They often collaborate with psychologists, teachers, counselors, and families in multidisciplinary teams. Such collaboration allows interventions conducted within the domain of educational therapy to address the broader ecosystemic context of the child's development. Therefore, early intervention within educational settings may play a preventive role by reducing the likelihood that disruptive behaviors escalate into more serious antisocial or delinquent patterns.

The Singapore rehabilitation framework as discussed in this section has also highlighted the importance of including educational and developmental interventions for youth offenders. Consequently, psychoeducational support programs, supervised vocational training, and structured learning opportunities are incorporated into residential rehabilitation programs and probation supervision. These psychoeducational interventions align with principles of educational therapy and applied psychology by addressing both cognitive and socio-emotional development, thereby supporting long-term behavioral change and social reintegration.

8. GUIDING PRINCIPLES FOR JUVENILE REHABILITATION

Effective rehabilitation programs for juvenile offenders are guided by several core principles. The authors of this article have identified five guiding principles: First, the best interests of the youth must remain central, recognizing that children and adolescents are still undergoing significant lifespan developmental changes [1]. Second, juvenile justice systems should maintain a rehabilitative orientation, focusing on behavioral correction and developmental support rather than relying on the punitive approach alone [40]. Third, interventions within the domain of psychoeducational therapy should be individualized, as each youth presents unique psychological, educational and environmental circumstances [36,37]. Fourth, family and community involvement through psychoeducation [41,42] is essential because supportive social environments reinforce behavioral change. Finally, many rehabilitation programs apply the Risk-Need-Responsivity (RNR) model [43], which matches intervention intensity to the youth's risk level and targets the most relevant criminogenic needs [20].

9. CONCLUSION

DBDs represent significant developmental risk factors that may contribute to the emergence of JD, especially when combined with adverse environmental conditions. Persistent patterns of CAR-D, coupled with emotional dysregulation, can gradually escalate into antisocial behavior if early interventions are not implemented. In this context, the concept of DMO underscores the importance of interpreting juvenile offending through both clinical and developmental perspectives. Recognizing the role of psychological and neurodevelopmental factors encourages more balanced responses that integrate accountability with therapeutic support. Accordingly, early identification, comprehensive assessment, and interdisciplinary interventions, including varied appropriate psychoeducational therapies, can significantly alter developmental trajectories and reduce the risk of persistent delinquency. By combining psychological, educational, and social support systems, societies can more effectively promote the rehabilitation and reintegration of youths at risk.

10. ACKNOWLEDGEMENT

None.

11. COMPETING INTERESTS

The authors have declared that no competing interests exist.

12. FINANCIAL DISCLOSURE

No funds obtained.

13. ARTIFICIAL INTELLIGENCE DISCLOSURE

No AI writing or generative tools were used in the preparation of this manuscript.

14. DATA AVAILABILITY STATEMENT

Not applicable. No primary data were generated or analyzed in this study.

15. ETHICS APPROVAL

Not applicable. This study did not require ethics approval.

REFERENCES

1. Woolfolk, A., & Perry, N. E. (2022). *Child and adolescent development (2nd ed.)*. Hoboken, NJ: Pearson. Available from: https://www.amazon.com/Child-Adolescent-Development-Anita-Woolfolk/dp/0137023111
2. Baglivio, M. T., & Wolff, K. T. (2021). Positive childhood experiences (PCE): Cumulative resiliency in the face of adverse childhood experiences. *Youth Violence and Juvenile Justice, 19*(2), 139-162. https://doi.org/10.1177/1541204020972487
3. Chia, K. H. (2026). From juvenile delinquency (JD) to disability-mediated offending (DMO): A developmental and legal reframing of youth crime. *World Journal of Law*, *2*(1), 12-16. https://doi.org/10.5281/zenodo.18480174

4. Olson, S.L. and Ip, K.I. (2017). Developmental pathways to aggression and violence. In P. Sturmey (Ed.), *The Wiley Handbook of Violence and Aggression* (pp. 1-12). Hoboken, NJ: John Wiley & Sons. https://doi.org/10.1002/9781119057574.whbva023
5. Milone, A., & Sesso, G. (2022). Disruptive behavior disorders: Symptoms, evaluation and treatment. *Brain Sciences*, *12*(2). Article No. 225. https://doi.org/10.3390/brainsci12020225
6. American Psychiatric Association (2022). *Diagnostic and statistical manual of mental disorders (5th ed., text rev.)*. Washington, DC: American Psychiatric Publishing. https://doi/book/10.1176/appi.books.9780890425787
7. Chia, K. H. (2026b). Disruptive behavior disorders, juvenile delinquency, and disability-mediated offending: A multidisciplinary examination with clinical illustrations. *International Journal of Law, Policy, and Social Research*, *8*(2), 6-9. https://doi.org/10.5281/zenodo.19416522
8. Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*, 333-339. https://doi.org/10.1016/j.jbusres.2019.07.039
9. Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS quarterly*, *26*(2), xiii-xxiii. Available from: https://www.jstor.org/stable/4132319
10. Reichert, R. A., Andrade, F. R. T., Reichert, N. C. M., Fidalgo, T. M., De Micheli, D., da Silveira, D. X. (2025). Disruptive, impulse control and conduct disorders. In R. A. Reichert, A. L. M. Andrade, & D. De Micheli (eds), *Neuropsychology and substance use disorders* (pp. 475-505). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-031-82614-6_23
11. Frick, P. J., & Ray, J. V. (2015). Evaluating callous-unemotional traits as a personality construct. *Journal of Personality, 83*(6), 710-722. https://doi.org/10.1111/jopy.12114
12. Xie, Q., Bi, T., Luo, W., Li, X., Yang, B., & Kou, H. (2024). The prevalence and risk factors of conduct disorder among juvenile delinquents in China. *Humanities and Social Sciences Communications, 11***.** Article No. 278. https://doi.org/10.1057/s41599-024-02775-2
13. Del Toro, J., Jackson, D. B., Testa, A., & Wang, M.-T. (2023). The spillover effects of classmates' police intrusion on adolescents' school-based defiant behaviors: The mediating role of institutional trust. *American Psychologist, 78*(8), 941-954. https://doi.org/10.1037/amp0001148
14. Moffitt, T. E. (2018). Male antisocial behavior in adolescence and beyond. *Nature Human Behavior, 2*, 177-186. https://doi.org/10.1038/s41562-018-0309-4
15. Cinini, S. F, & Mkhize, S. M. (2023). Criminal behavior and youth crime: A juvenile delinquency perspective on adverse childhood experience. In S. Güney (Ed.), *Criminal behavior: The underlyings, and Contemporary Applications* (pp. 1-15). London, UK: IntechOpen. https://doi.org/10.5772/intechopen.1001888
16. Basto-Pereira, M., Farrington, D.P. & Maciel, L. (2024). Unraveling the sequences of risk factors underlying the development of criminal behavior. *Journal of Developmental and Life-Course Criminology*, *10*, 242-264. https://doi.org/10.1007/s40865-024-00254-5
17. Fazel, S., Doll, H., & Långström, N. (2008). Mental disorders among adolescents in juvenile detention and correctional facilities: a systematic review and metaregression analysis of 25 surveys. *Journal of the American Academy of Child & Adolescent Psychiatry*, *47*(9), 1010-1019. https://doi.org/10.1097/CHI.ObO13e31817eecf3
18. Loeber, R., & Burke, J. D. (2011). Developmental pathways in juvenile externalizing and internalizing problems. *Journal of Research on Adolescence*, *21*(1), 34-46. https://doi.org/10.1111/j.1532-7795.2010.00713.x
19. Ilahy, A. D., Kaaffah, M. S., Latipah, E., Har, A. A. A., & Bestari, D. (2025). Developmental psychology of learners: Environmental factors influencing child development. *Linguanusa: Social Humanities, Education and Linguistic*, *3*(2), 98-114. https://doi.org/10.63605/ln.v3i2.92
20. Andrews, D. A., & Bonta, J. (2016). *The psychology of criminal conduct (6th ed.).* New York, NY: Routledge. https://doi.org/10.4324/9781315677187
21. Lipsey, M. W., Howell, J. C., Kelly, M. R., Chapman, G., & Carver, D. (2020). *Improving the effectiveness of juvenile justice programs: A new perspective on evidence-based practice.* NCJ

Number: 233424. Washington, CD: Center for Juvenile Justice Reform, Georgetown University. Available from: https://www.ojp.gov/ncjrs/virtual-library/abstracts/improving-effectiveness-juvenile-justice-programs-new-perspective
22. Singapore Statutes Online (2026). *Children and Young Persons Act 1993* (2020 Rev. Ed., informal consolidation, version in force from 30 December 2025). Singapore: Attorney-General's Chambers of Singapore. Available from: https://sso.agc.gov.sg/Act/CYPA1993
23. Ministry of Social and Family Development (2024a). *Supporting youth rehabilitation trend report November 2024*. Singapore: The Author. Available form: https://www.msf.gov.sg/docs/default-source/research-data/supporting_youth_rehabilitation_trends_report_2024.pdf?sfvrsn=af6cde56_3
24. National Committee on Prevention, Rehabilitation and Recidivism (NCPR) (2021). Overview of the National Committee on Prevention, Rehabilitation and Recidivism (NCPR) [Presentation slides]. Available from: https://www.msf.gov.sg/docs/default-source/msf-event/ncpr-cygo-overview-of-ncpr.pdf?sfvrsn=aee0fb5a_3
25. Nathen, C., Singh, M., & Ruby, K. (2024). Singapore's multi-pronged approach in the rehabilitation of persons who have offended. In M. C. Chu & M. Daffern (Eds.), *Approaches to offender rehabilitation in Asian jurisdictions* (pp. 163-178). New York, NY: Routledge. https://doi.org/10.4324/9781003360919
26. Ministry of Social and Family Development (n.d.). *Factsheet on youth delinquency*. Available from: https://www.msf.gov.sg/docs/default-source/ncpr/factsheet-on-youth-delinquency2fa97cee-baa3-401c-a986-71eb8871bb0b.pdf?sfvrsn=f3f45658_5
27. Ministry of Social and Family Development (2024b). Recidivism rates. In *Supporting Youth Rehabilitation Trend Report November 2024* [Dataset]. data.gov.sg. Retrieved April 8, 2026 from https://data.gov.sg/datasets/d_9af2a750c50bcfe8ae5f99b3022ac22d/view
28. Neo, D., Lee, J. H., Chew, M. X. H., Sarfoji, M., & Prakash, T. (2021). Community-based rehabilitation's effectiveness in reducing Singapore juvenile recidivism. *Scholarly Commons*: *Introduction to Research Methods RSCH 202*. Available form: https://commons.erau.edu/ww-research-methods-rsch202/24/
29. Singapore Courts (2024 [Upated: 2026, March 13]). *Family justice courts practice directions 2024: Youth courts*. Available from: https://epd2024-familyjusticecourts.judiciary.gov.sg/part-26-youth-courts
30. Dattagupta, J., Banerjee, A., Maji, B. & Chattopadhyay, P. (2024). A multifaceted approach to identifying and managing juvenile delinquency by integrating psycho-physiological indicators. *International Journal of Adolescent Medicine and Health*, *36*(4), 321-333. https://doi.org/10.1515/ijamh-2024-0052
31. Kim, Y.-J., & Kwon, R.-H. (2023). A study on the operational model for individualized rehabilitation planning (IRP) through the linkage between supported employment and customized employment based on lifelong education for persons with developmental disabilities. *The Research Institute for Special Education & Rehabilitation Science*, *62*(2), 185-234. Available from: https://www.dbpia.co.kr/Journal/articleDetail?nodeId=NODE11589782
32. Singapore Courts. (2026, March 13). Media release: Launch of the youth courts therapeutic justice model. https://www.judiciary.gov.sg/news-and-resources/news/news-details/media-release-launch-of-the-youth-courts-therapeutic-justice-model
33. Ding, Z. (2025). A Holistic Educational Therapy Approach for Autism and Comorbid Emotional-Behavioral Disorders. *The Asian Educational Therapist*, *3*(3), 3-16. https://doi.org/10.64663/aet.7
34. McCart, M. R., Sheidow, A. J., & Jaramillo, J. (2023). Evidence Base Update of Psychosocial Treatments for Adolescents with Disruptive Behavior. *Journal of Clinical Child & Adolescent Psychology*, *52*(4), 447-474. https://doi.org/10.1080/15374416.2022.2145566
35. Park, J. S., & Yoo, J. H. (2026). Evidence-Based Psychotherapy for Disruptive Behavior Disorders. *Journal of the Korean Academy of Child and Adolescent Psychiatry*, *37*(1), 22-32. https://doi.org/10.5765/jkacap.250060

36. Chia, K. H. (2024). A short review of psychoeducational therapy (PsyEdTx). *The Asian Educational Therapist*, *2*(1), 3–11. https://doi.org/10.64663/aet.27
37. Saleh, Z., Abdullah, S. M. S., Ling, K. G., & Ab Rahman, S. N. (2025). Identifying the psycho-educational strategies in dealing with aggressive behavior from the counselor's perspective. *Environment-Behavior Proceedings Journal*, *10*(SI24), 191-196. https://doi.org/10.21834/e-bpj.v10iSI24.6386
38. Hassani, S., & Schwab, S. (2021). Social-emotional learning interventions for students with special educational needs: A systematic literature review. *Frontiers on Education*, *6*. Article ID: 808566. https://doi.org/10.3389/feduc.2021.808566
39. Perez, B. R., & Bahamon Muneton, M. J. (2023). The socio-emotional dimension in education: A systematic review. *Issues in Educational Research*, *33*(1), 307-326. https://search.informit.org/doi/10.3316/informit.173573406487575
40. Trpevska, E.M., Lažetić, G. (2023). Restorative vs punitive approach. Eight fundamental principles of juvenile delinquency prevention. In: Czarnecki, I. (ed.) *Human Rights Protection and Ius Puniendi. European Union and its Neighbours in a Globalized World*, vol 11. Springer. https://doi.org/10.1007/978-3-031-41253-0_5
41. Thorpe, D. H., Smith, D., Green, C. J., & Paley, J. H. (2024). *Out of care: The community support of juvenile offenders*. London, UK: Routledge. https://doi.org/10.4324/9781003501831
42. Trifan, M. (2015). Adolescence, violence and psychoeducation. In L.-I. Vîșcu, I.-E. Cădariu, D. Rad, & C. E. Watkins Jr. (Eds.). *Psychoeducational challenges in the 21st century* (pp. 185-193). Cluj-Napoca, Romania: Presa Universitară Clujeană. https://editura.ubbcluj.ro/index.php/puc/catalog/download/3578/24342/6143?inline=1
43. Chua, J. R., Chu, C. M., Yim, G., Chong, D., & Teoh, J. (2014). Implementation of the risk-need-responsivity framework across the juvenile justice agencies in Singapore. *Psychiatry, Psychology, and Law: An Interdisciplinary Journal of the Australian and New Zealand Association of Psychiatry, Psychology and Law*, *21*(6), 877-889. https://doi.org/10.1080/13218719.2014.918076
44. Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology, 62,* 189-214. https://doi.org/10.1146/annurev.psych.093008.100412