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## **Critical Review of the Risk-Need-Responsivity (RNR) Model: Applications and Implications in Offender Rehabilitation**

Rabia Siraj<sup>1</sup>, Hina<sup>2</sup>, Dr. Shaista Ali<sup>3</sup> & Dr. Ghazala Yasmeen<sup>4</sup>

<sup>1</sup> Lecturer, Department of Home Economics, University of Swat

<sup>2</sup> Lecturer, Department of Home Economics, University of Swat Email: [hina.khan@uswat.edu.pk](mailto:hina.khan@uswat.edu.pk)

<sup>3</sup> Lecturer, College of Home Economics, University of Peshawar

<sup>4</sup> Professor, College of Home Economics, University of Peshawar

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### **Abstract**

*This study critically evaluates the applications of the Risk-Need-Responsivity (RNR) model within rehabilitation settings, focusing on its role in reducing recidivism. As a fundamental concept in correctional psychology, the RNR model addresses the offenders' risk levels, criminogenic needs, and specific responsivity factors that are essential in reducing recidivism. A systematic review of studies published from 2018 onwards was conducted to assess the effectiveness of the RNR model across various settings, identifying its strengths, limitations, and areas for improvement. Findings indicate that the RNR model is generally effective in lowering recidivism rates and facilitating offender reintegration. However, challenges such as limited resources, inadequate practitioner training, and the need for enhanced collaborative treatment approaches were also reported. The study examines recent trends and adjustments to the RNR framework aimed at enhancing its efficacy in contemporary rehabilitation practices. Based on the findings, recommendations for future research and practice are proposed to further improve the RNR model's impact on offender rehabilitation and reintegration.*

### **Keywords**

RNR Model, Recidivism, Rehabilitation Settings

### **Introduction**

The Risk-Need-Responsivity (RNR) model stands out as the predominant framework in assessing and implementing rehabilitation interventions for offenders. Proposed initially by Andrews, Bonta, and Hoge in 1990, the model has since evolved into a comprehensive theory of criminal conduct that incorporates personality traits and cognitive social learning (Andrews & Bonta, 2006).

In criminology, the RNR model offers a structured approach to reducing recidivism by evaluating offenders according to their risk levels, identifying necessary programs or services, and placing them in suitable settings. This model builds on earlier work from the 1960s and 1970s by researchers such as Lee Sechrest and Ted Palmer, focusing on offender treatment classifications. The primary developers of the RNR model, Canadian scholars James Bonta, Donald A. Andrews, and Paul Gendreau, have contributed significantly to its acceptance as the gold standard for offender treatment decisions (Taxman & Smith, 2020).

The RNR model is guided by three core principles. The Risk Principle asserts that the level of intervention should correspond to the offender's risk of recidivism. While high-risk offenders probably need intensive treatments to make any kind of transformation, low-risk offenders might not need complicated and expensive programs (Brogan et al., 2015).

The need principle emphasizes that every offender has certain criminogenic requirements or dynamic risk variables that, when met, can forecast shifts in the likelihood of reoffending. For the best outcomes, interventions should therefore concentrate on these unique demands. Finally, the Responsivity Principle highlights that intervention methods vary in their effectiveness for reduction of

recidivism. Cognitive-behavioral interventions and behaviorist approaches are generally preferred. Additionally, the effectiveness of these interventions can depend on the offender's attributes, such as age, gender, cognitive abilities, and motivation, necessitating tailored approaches for different individuals (Shishane et al., 2023).

This model ensures that moderate- and high-risk offenders receive appropriate rehabilitative measures while avoiding the overtreatment of low-risk offenders. By focusing on dynamic criminogenic needs, the RNR model provides guidelines for delivering interventions using cognitive social learning techniques, thereby promoting behavior change. The emphasis on evidence-based practices in evaluating and treating offenders leads to more successful rehabilitation outcomes. Ultimately, the RNR approach aims to optimize resource allocation, ensuring that interventions are both effective and efficient (Lewis et al., 2023).

**Methodology**

A systematic review was conducted to critically appraise the application of the Risk-Need-Responsivity (RNR) model in the rehabilitation of offenders. Ten peer-reviewed articles were selected for in-depth analysis based on strict inclusion criteria. Critical appraisal of the selected articles was performed and the mind map was constructed. Themes were identified in the articles related to the application of the model in Rehabilitation of criminals.

**Search Strategies and Protocols**

A comprehensive literature search was conducted across multiple databases, including PubMed, PsycINFO, and Google Scholar. The search focused on articles published from 2018 onwards that applied the RNR model in criminal rehabilitation settings. Keywords such as "Risk-Need-Responsivity model," "criminal rehabilitation," and "recidivism" were used in various combinations with Boolean operators to refine the search results. Initial searches yielded approximately 35 articles, which were then filtered based on relevance, recency, and adherence to the RNR framework.

**Inclusion Criteria**

- Articles published from 2018 onwards.
- Studies explicitly applying the RNR model in offender rehabilitation.
- Peer-reviewed articles with a clear methodological approach.

**Exclusion Criteria**

- Articles published before 2018.
- Studies focusing on models other than the RNR.
- Non-peer-reviewed articles, book chapters, and opinion pieces.

**Results**

The key findings from the selected articles, and the specific application of the RNR model in rehabilitation settings, are summarized in the following table. Authors' details, publication dates, and other important information is also given in the table.

S#	Author/publishing date	Title	Key Findings	Applications	Limitations
1	Juan Luis Basantaa Francisca Fariña Ramón Arceb (2018)	<b>Risk-need-responsivity model: Contrasting criminogenic and non-criminogenic needs in high and low risk juvenile offenders</b>	High-risk juvenile offenders exhibit significantly behavioral disorders and school failure compared to low-risk offenders, who in turn show higher rates of these issues than the general population.  High-risk juvenile offenders had greater deficits compared to low-risk offenders, while no significant differences were	Criminal systems should focus on implementing rehabilitation models for preventing recidivism and accurately identify high-risk juvenile offenders. By defining the underlying causes of non-criminogenic characteristics and needs of high-risk offenders, not low risk offenders, and to assess the	As psychopathic individuals were recruited for the study in forensic setting, so potential distortions like malingering should be considered. Criminogenic and non-criminogenic needs may also not be directly generalized to other variables of the same type. Third, the classification of juvenile offenders was on the basis of

			found between low-risk offenders and the general population.	efficacy of the intervention with low risk offenders, are required.	high or low recidivism risk, limiting the generalization to other classification levels (e.g., low, medium, medium-high, high).
2	<b>Seena Fazel Connie Hurton Matthias Burghart Matt DeLisi Rongqin Yu (2024)</b>	<b>An updated evidence synthesis on the Risk-Need-Responsivity (RNR) model: Umbrella review and commentary</b>	Individuals classified as high-risk who participated in treatment programs indicated low risk of recidivism compared to low-risk individuals, who typically received little to no services. A psychological factor, namely low motivation, was linked to increased levels of attrition and recidivism.	Specific responsivity principle addresses that, treatment should be customized to fit the needs of each individual. General responsivity principle on the other hand suggests the effectiveness of rehabilitative treatment by employing cognitive-social learning methods to modify criminal behavior.	The empirical evidence finding testing the model have low reliability and validity, affecting the nature of the conclusions drawn. Innovative research designs may be needed to validate the impact and address theoretical concerns. Without establishing the practical utility of the RNR model, implementing it in modern jurisdictions may not be recommended. The degree of intervention offered need to be commensurate with the person's likelihood of reoffending.
3.	<b>David A. D'Amora (2023)</b>	<b>Understanding the Expanded Risk Need-Responsivity Model</b>	Programs following the RNR principles demonstrate greater effectiveness when delivered in community settings, yet institutional or residential services adhering to RNR principles can also contribute to reducing recidivism. Reducing victimization is a legitimate objective for service providers, both inside and outside the prison and justice systems. Opportunities for employment and education may be associated with a lower chance of criminal activity.	Services are provided with consideration for individuals, including respect for personal autonomy, adhering to principles of humanity, ethics, justice, legality, and other normative standards. Norms regarding service delivery may vary depending on the agency or specific settings; for instance, agencies focused on youth prioritize educational issues and child protection etc. Personal well-being concerns can be addressed by mental health	Overscrupulous supervision and programming may occur from disregarding the assessment results and the RNR principles.

				services (for example, trauma and/or parenting issues may be given priority by agencies serving women).	
4	<b>James Bonta (2023)</b>	<b>The Risk-Need-Responsivity model: 1990 to the Present</b>	Establishing connections with service users that are marked by tolerance, compassion, zeal, teamwork, drive, and a dedication to individual freedom. Encouraging changes in behavior and attitudes through advocacy, skill development, problem-solving, proper use of authority, cognitive restructuring, good role modeling, and effective reinforcement and correction.	Rather than depending on deterrence, rely on human services to reduce criminal conduct. Adjust the treatment's approach and style to each client's unique needs (e.g., age, gender, ethnicity, personality). Strong relationship-building i.e. collaborative approaches and cognitive restructuring skills are recommended for the staff members increase treatment success.	The model has been criticized that it ignores strengths, relevant theories and specific sub-groups, Alternatives such as the Good Lives Model or principles from desistance theories are occasionally proposed, but additional research and evaluations are needed to establish their effectiveness in practice. There is a need for a concerted effort to ensure that all research, regardless of type, maintains robustness and rigor.
5	<b>Anne M. E. Bijlsma Mark Assink Geert Jan J. M. Stams Claudia E. van der Put (2022)</b>	<b>A Critical Evaluation of the Risk, Need, and Responsivity Principles in Family Interventions for Delinquent Youth: A Meta-Analysis</b>	Family interventions showed a significant effect in lowering juvenile reoffending.  When comparing the efficacy of programs that followed the RNR principles to those that did not, no discernible variations in efficacy were seen.  The need principle did not receive strong empirical support from the results.	Interventions that specifically addressed antisocial recreational activities, as well as those tailored to the youth's cultural background, and age, significantly enhanced overall effectiveness. Family interventions showed a significant effect in lowering juvenile reoffending.	The studies selected in the review investigating the RNR principles and intervention effectiveness faced design limitations. Recommendations are made to enhance the quality of both primary and secondary research, essential for establishing stronger empirical evidence supporting the widely recognized RNR model. Findings were influenced by shortcomings in the coding procedures of the risk principle. Several studies identified staff reluctance to
6	<b>Johan Axelsson, Leni Eriksson &amp; Lina Grip</b>	<b>Managing Violent Extremist</b>	The Risk-Need-Responsivity (RNR) model, widely	Risk-oriented assessments are crucial for prison	

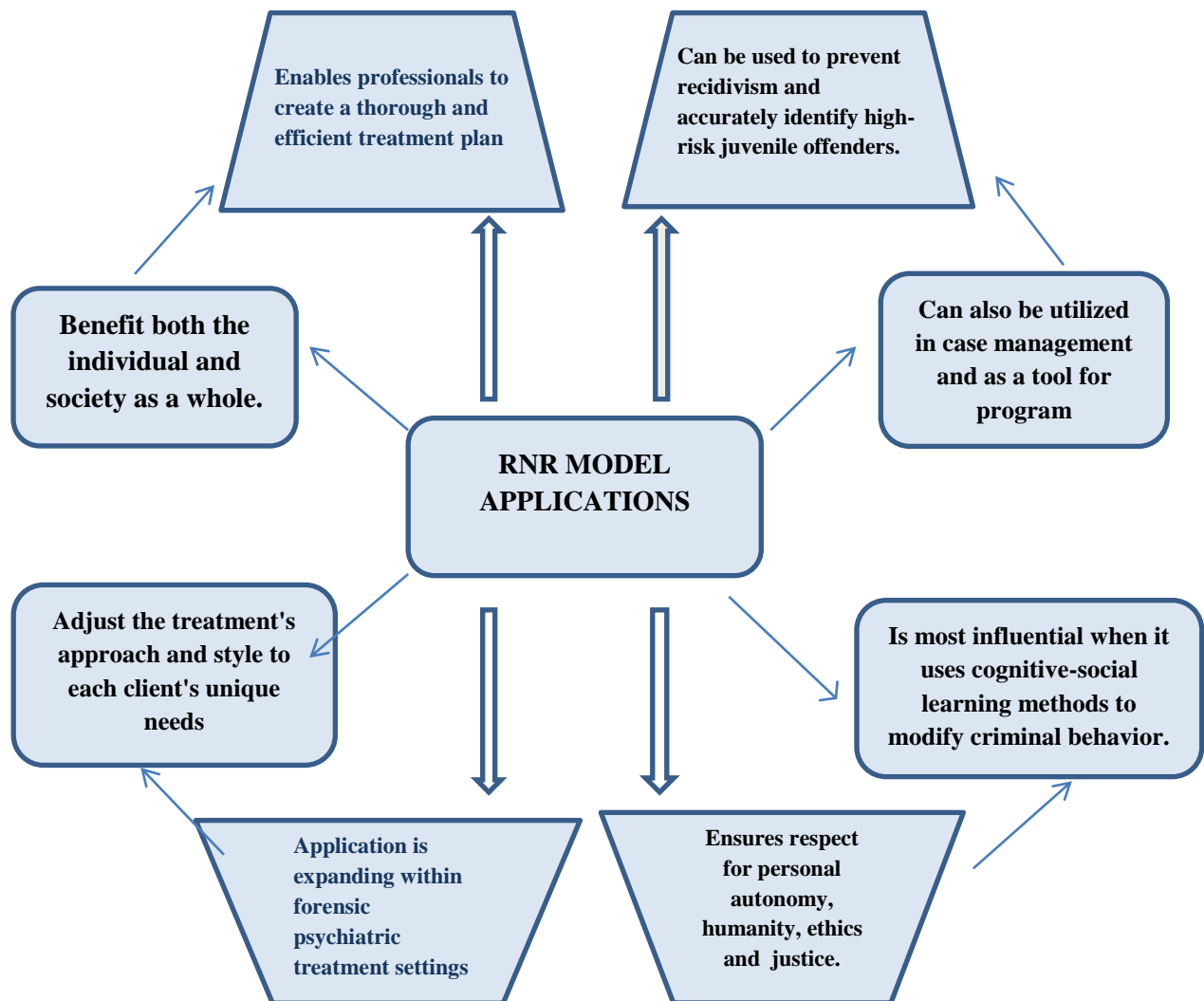
(2024)	<b>Clients in Prison and Probation Services: A Scoping Review</b>	<p>regarded as the primary theoretical framework for client treatment and assessment. Two studies highlighted in this review criticized the effectiveness of the RNR model in assessing violent extremists. RNR model neglects the significance of identity in rehabilitation, a crucial factor in radicalization, disengagement, and deradicalization. RNR model may not be suitable for clients motivated by political ideologies, and risk assessments not tailored to these clients may not be effective for VECs.</p>	<p>and probation services. However, professionals working with VECs (Vulnerable Extremist Concerns) must move beyond mere risk assessment and ensure equitable treatment for every client. Staff also require adequate training to accurately identify and differentiate potential signs of radicalization from religious expressions.</p>	<p>engage in these actions. Although staff were knowledgeable about the indicators to observe, they lacked clear guidance on which behaviors to report. Furthermore, they expressed a need for further training to enhance their understanding of radicalization.</p>	
7	<b>Maximilian Lutz, Davide Zani, Michael Fritz, Manuela Dudecka, Irina Franke (2022)</b>	<b>A review and comparative analysis of the risk-needs-responsivity, good lives, and recovery models in forensic psychiatric treatment</b>	<p>The RNR model explains the risk of reoffending, and the specific needs that contribute to or deter criminal behavior, as well as an individual's responsiveness to different types of interventions. According to the RNR framework, criminal behavior is shaped by personality traits, learned behaviors, and an individual's expectations influences the consequences associated with criminal actions.</p>	<p>The model is rooted in the idea of personal recovery in mental health care, emphasizing the cultivation of a sense of purpose and mastery in navigating the effect of a mental disorder. This approach is pivotal in rehabilitation broadly, and its application is expanding within forensic psychiatric treatment settings. Interventions aligned with RNR principles have successfully decreased rates of sexual, violent, and overall recidivism.</p>	<p>The model might exaggerate the influence of personal growth in criminal behavior. The core issue lies in the potential disruption or diminished effectiveness of multiple protective processes among high-risk offenders, particularly those classified as MDOs (Mentally Disordered Offenders). As a result, the RNR model may not fully address this type of offending, prompting questions about the additional benefits that might arise from applying such models.</p>
8	<b>Leah A. Jacobs And Jennifer L. Skeem (2021)</b>	<b>Neighborhood Risk Factors for Recidivism:</b>	<p>According to the RNR model, understanding the criminal behavior of</p>	<p>The study broadens its emphasis beyond the individual to</p>	<p>The sample comprises only 38% of the probation</p>

	<b>For Whom Do They Matter?</b>	<p>individuals rather than relying on theories about community-wide crime rates are useful for preventing recidivism. Economic factors such as deindustrialization and demographic changes like population growth during economic downturns contribute to disparities in resources and crime rates among neighborhoods. The risk of recidivism affects how neighborhood conditions influence reoffending. Individuals on probation with lower risk levels may reoffend when residing in disadvantaged and disorderly neighborhoods, whereas the neighborhood environment has minimal impact on those with higher risk levels.</p>	<p>investigate how environmental elements may help or impede an individual's successful re-entry in the criminal justice system. This study illustrates the potential application of ecologically grounded research methods to promote resilience in members of a socially marginalized population—those who are involved in the legal system.</p>	<p>population. Findings may not be applicable to all individuals on probation with residential addresses who were assessed for risk shortly after intake. Additionally, participants' neighborhoods are characterized on the basis of their addresses at the beginning of probation, although some participants relocated during probation. Our utilization of data from residential contexts immediate surrounding subjects did not entirely mitigate potential errors related to how geographic units are defined.</p>
<p>9 <b>Henmar Cudal Cardíño</b> <b>Jigo Rafael Catamio</b> <b>Ryan B Corona</b> <b>Gladys S. Canillo</b> <b>(2023)</b></p>	<p><b>RISK-NEED-RESPONSIVITY MODEL: BASIS FOR PROGRAM DEVELOPMENT IN BUREAU OF CORRECTIONS</b></p>	<p>The Risk-Need-Responsivity (RNR) model stands out as one of the most influential frameworks for assessing and treating offenders. The RNR Model applies to offenders across the spectrum of low-risk, moderate-risk, and high-risk categories. It has been determined that the RNR Model can be effectively applied within the current correctional system of the country,</p>	<p>The RNR model has been extensively adopted by numerous legal institutions and is recognized for its effectiveness in managing cases related to criminogenic behavior and recidivism among offenders. The RNR model enables professionals to create a thorough and efficient treatment plan, facilitating</p>	<p>There is currently no reliable method to distinguish between low-risk and higher-risk offenders for determining the appropriate level of treatment. There is significant concern regarding the lack of experience in applying the responsivity principle within correctional facilities. Some staff members lack the necessary expertise to</p>

		provided sufficient preparation and consideration of relevant factors.	offenders in developing a positive self-concept and effectively transitioning to normal life. The theoretical framework and concepts of the RNR Model are firmly established and applicable across different demographics. It can also be utilized in case management and as a tool for program development.	effectively implement responsive approaches that benefit the Bureau of Corrections. Inexperienced staff are more prone to errors in organizing and coordinating their work, often due to a lack of past experiences that could inform their responsibilities and improve their performance.	
10	<b>Rais Gul, Badshah Muhammad, Rahman Hussain (2021)</b>	<b>An Analysis of Risk-Need-Responsivity Model to Reform Pakistan's Prisons</b>	Prison Management in the Criminal Justice System, requires the use and application of RNR Model, in Pakistan. Pakistani policymakers are tackling issues with the rehabilitative prison system by putting the RNR Model into practice. Through this project, Pakistan's jails will be brought into compliance with legal and theoretical goals related to care, control, correction, cure, and readjustment to the community. The ultimate objective is to reintegrate criminals into society as law-abiding, productive members of society.	The most effective approach to ensure offenders become law-abiding and productive when released into the society is through their rehabilitation or reintegration. The model would undoubtedly benefit both the individual and society as a whole. The goal of imprisonment should be to shield society from the damage done by criminals. But in order to accomplish this, freed criminals and inmates must be prepared to give up their bad habits.	It is difficult to motivate criminals primarily by reducing risk. The significance of human narrative identity and agency—that is, self-direction—is disregarded by the RNR approach. The concept might be fully implemented to address ingrained problems including overcrowding, undertrained staff, a dearth of customized assessment-based programs, and the absence of jails with dedicated facilities for offenses of a certain kind. Moreover, this strategy may considerably break the cycle of recidivism.

Concept Map

Concept Map based on Selected Articles



**Common Themes in the Articles**

The review identified several common themes in the selected articles related to the application of the RNR model in criminal rehabilitation:

- **Targeting Criminogenic Needs:** Focus on addressing needs directly linked to criminal behavior, such as antisocial attitudes, substance abuse, and poor problem-solving skills.
- **Prioritizing Interventions Based on Risk Levels:** The necessity of tailoring interventions to the offender's risk level, with more intensive programs for higher-risk individuals.
- **Acknowledging Individual Differences:** Recognition of the diverse characteristics among offenders, including cognitive abilities, motivation, and cultural background, which require personalized intervention strategies.
- **Trainer Expertise:** The importance of specialized training for practitioners to effectively implement the RNR model.
- **Need for Behavior Modification:** The integration of behavior modification techniques to reduce criminal behavior.

**Discussion**

The identified themes are crucial for enhancing the effectiveness of rehabilitation programs under the RNR model. Each theme plays a significant role in the offender's learning process and ultimate reintegration into society.

**Targeting Criminogenic Needs Related to Criminal Behavior**

This theme highlights the necessity of addressing specific criminogenic needs—such as antisocial attitudes, criminal peer associations, and substance abuse—through targeted interventions like



cognitive-behavioral therapy. Addressing these needs is critical for reducing the likelihood of reoffending, as they are directly linked to criminal behavior.

### **Interventions Based on the Offender's Risk Level**

The RNR model emphasizes the importance of assessing an offender's risk level using systematic tools. This assessment determines the intensity of the intervention required, with high-risk offenders receiving more comprehensive and intensive treatment programs to effectively lower their chances of reoffending.

### **Acknowledging Individual Differences**

Offenders exhibit a wide range of individual differences, including learning styles, cognitive abilities, and motivation levels, which influence how they respond to interventions. The RNR model advocates for tailoring interventions to accommodate these differences, ensuring that each offender receives the most effective treatment for their specific needs.

### **Trainer Expertise**

Effective implementation of the RNR model relies heavily on the expertise of practitioners. Specialized training is essential to equip trainers with the knowledge and skills needed to apply the RNR principles effectively. Without this expertise, the application of the model can be inconsistent, leading to suboptimal rehabilitation outcomes.

### **Need for Behavior Modification**

Incorporating behavior modification strategies from the Behaviorism School of Thought is vital in altering criminal behavior. These strategies complement the RNR model by providing structured approaches to behavior change, further reducing the risk of reoffending.

The RNR model stands out from other rehabilitation programs by focusing on personalized interventions based on the offender's risk levels and specific criminogenic needs (Bijlsma et al., 2022). The findings from this review underscore the necessity of individualized approaches in reducing recidivism and facilitating successful reintegration into society (Fazel et al., 2024).

### **Practical Challenges**

Despite its strengths, the implementation of the RNR model is not without challenges. The review identified a need for reliable and valid assessment tools to ensure that interventions are appropriately matched to each offender's behavior. Additionally, ongoing training and support for practitioners are crucial for the consistent and effective application of the RNR principles.

### **Conclusion**

This study identifies key applications of the RNR model in the rehabilitation of offenders across various settings. It highlights the importance of practitioner training, individualized approaches, and accurate assessments. The findings indicate that the RNR model is instrumental in enhancing rehabilitation outcomes and preventing recidivism. By addressing the challenges and optimizing the application of the RNR model, the field of offender rehabilitation can move towards more effective and efficient practices, ultimately contributing to safer communities and improved outcomes for offenders.

### **Implications**

The findings of this study have significant implications for offender rehabilitation programs. They emphasize the need to tailor rehabilitation efforts to the individual risk levels, needs, and responses of each offender. This approach can lead to improved reintegration outcomes and reduced rates of reoffending. Furthermore, the study highlights the importance of a universal approach that can be applied broadly while still addressing the diverse factors contributing to criminal behavior.

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