

The Risk-Need-Responsivity model: 1990 to the Present

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HM Inspectorate of Probation Academic Insights 2023/06

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Foreword

HM Inspectorate of Probation is committed to reviewing, developing and promoting the evidence base for high-quality probation and youth offending services. *Academic Insights* are aimed at all those with an interest in the evidence base. We commission leading academics to present their views on specific topics, assisting with informed debate and aiding understanding of what helps and what hinders probation and youth offending services.

This report was kindly produced by James Bonta, summarising the history of the Risk-Need-Responsivity (RNR) model of assessment and rehabilitation from 1990 to the present day. The model is now supported by a multitude of studies and meta-analyses, and has been hugely influential in the development of assessment instruments and intervention programmes across jurisdictions, including in England and Wales. Those who have set out shortcomings in the model have often focused on the earliest principles rather than considering the model in its complete current form. It now includes 15 principles, grouped into (i) overarching principles, (ii) the core RNR principles and key clinical issues, and (iii) organisational principles (setting, staffing, and management). Moving forward, the intention is for the model to continue to evolve as more evidence accumulates and constructive suggestions for improvements are implemented. Within the Inspectorate, we will continue to monitor and review all developments in the evidence base underpinning high-quality probation and youth offending services.

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1. Introduction

The search for 'what works' in the assessment and rehabilitation of justice-involved persons dates back at least to the 1960s and an argument can be made that it is even earlier than that. However, it was probably Lipton, Martinson, and Wilks' (1975) review of the treatment literature that catapulted 'what works' to the forefront of correctional research and practice. The story of their review and Robert Martinson's popularisation of the review is well known. The conclusion from the review was that 'these data...give us little reason to hope that we have in fact found a sure way of reducing recidivism through rehabilitation' (Martinson, 1974, p.49). This proclamation was quickly translated into 'nothing works' and opened the gates to the 'get tough' movement. After all, it was argued, if treatment does not work than our only alternative is to punish law-breakers justly and fairly in the hope that it will deter them from further crime.

The view that 'nothing works' did not go unchallenged. Ted Palmer (1975) was almost alone in supporting rehabilitation efforts at the time. He was soon joined by others who found in their reviews of the literature that treatment can indeed reduce recidivism (e.g., Gendreau and Ross, 1979, 1987; Lipsey, 1988). However, the reasons why some interventions were more effective than others was understood in the broad strokes. Cognitive-behavioural interventions and matching therapist characteristics to client characteristics were common themes. But, was there something more? That is where the risk-need-responsivity model entered the stage.

2. The Risk-Need-Responsivity (RNR) model

2.1 RNR makes its debut

In 1990, Andrews, Bonta and Hoge summarised what they viewed as the major tenets for effective interventions with justice-involved persons ('effective' was meant as a reduction in recidivism). Four principles were described. The first was the *risk principle*: match the level of risk to the intensity and breadth of services. Practically speaking, provide high levels of services to the higher risk cases and none or minimal services to the lower risk. Second, was the *need principle*. Treatment programmes should address the needs of their clients but not indiscriminately. Andrews et al. recognised that some needs are associated with recidivism reductions and others not. There are criminogenic needs (e.g., substance misuse, procriminal attitudes) and non-criminogenic needs (e.g., self-esteem, anxiety). Therefore, in order to decrease the client's likelihood of recidivism, treatment providers should focus on criminogenic needs. That is, match the targets of treatment to the criminogenic needs of the client.

The third principle was the *responsivity principle*: match the style and method of treatment to the client's abilities and learning style. The responsivity principle called for the use of elements of cognitive-behavioural treatment. The treatment literature had well-established by 1990 that cognitive-behavioural therapy was more effective than other interventions with justice-involved persons. The principle was further sub-divided into general and specific responsivity in 2007 (Andrews and Dowden, 2007; Bonta and Andrews, 2007) and formally codified in the 5th edition of *The Psychology of Criminal Conduct* (PCC; Andrews and Bonta, 2010). In the second edition of PCC (1998), reference was made to 'specific responsivity considerations', but it was not listed as a separate principle. Specific responsivity demanded attention to client characteristics that may influence responsiveness to the therapist(s) and the intervention(s) (e.g., gender, mental disorder, impulsiveness).

Finally, there was the principle of professional override (today called professional discretion). There will be occasions when a client presents a unique set of circumstances falling outside of the first three RNR principles. This principle allows the professional to deviate from the principles but only under specified reasons (i.e., not based on unstructured clinical judgement).

As described, the concept of matching is prevalent in RNR and extends beyond the case-by-case illustrations of the literature from the 1980s. The Andrews, Bonta and Hoge article was followed-up in the same year with an empirical test of the principles. Andrews, Zinger, Hoge, Bonta, Gendreau, and Cullen (1990) reviewed 80 studies (yielding 154 effect size estimates) and found that adherence to all three principles had a mean effect size r = 0.30. Treatment programmes that failed to attend to any of the principles showed an *increase* in recidivism (r = -0.06). As Andrews and Bonta (1998) enlarged the meta-analysis in the second edition of PCC (294 comparisons), the pattern of results was re-affirmed.

In the third edition of the book, Andrews and Bonta (2003) reported the results from their final meta-analysis with 374 tests of the effects of treatment and criminal justice sanctions. The mean effect size (r) for providing any type of treatment service was 0.12, and as expected, criminal justice sanctions were associated with an increase in recidivism (-0.03). Programmes that followed only one principle yielded a r = 0.02 (did not matter which principle was followed). When adhering to two principles r = 0.18, and for full adherence r = 0.26. As shown by Figure 1, the impact of adhering to the principles is enhanced when delivered in a community setting.

40 35 30 25 Decrease Community 20 Residence 15 Recidivism 10 5 0 0 1 2 -5 Increase -10 No. of core RNR principles applied -15 [⊥]

Figure 1: Impact of RNR by setting

2.2 The expansion of RNR

The most recent version of the RNR model now includes 15 principles (see Table 1). The principles are configured around three different themes (Bonta and Andrews, 2024):

- overarching principles
- core RNR principles and key clinical issues
- organisational principles.

Table 1: The Risk-Need-Responsivity (RNR) model of assessment and treatment

Principle	Descriptor
Overarching principles	
1. Respect for the person and the normative context	Services are delivered with respect for personal autonomy in a just, humane, and ethical manner
2. Psychological theory	Base programmes on general personality and cognitive social learning (GPCSL) theory
3. General enhancement of crime prevention services	Reducing recidivism is an objective of agencies within and outside of the criminal justice system
Core RNR principles and key of	linical issues
4. Introduce human service	Rely on human services to reduce criminal behaviour and not deterrence
5. Risk	Match intensity of service with risk level

Principle	Descriptor
6. Need	Target criminogenic needs
7. General responsivity	Use cognitive-behavioral techniques
8. Specific responsivity	Match the style and mode of treatment to the characteristics of the individual clients (e.g., age, gender, ethnicity, personality)
9. Breadth (multimodal)	Target as many criminogenic needs as the case presents
10. Strength	Assess strengths for prediction and treatment
11. Structured assessment	Use structured and validated assessments of RNR factors and strengths to guide intervention
12. Professional discretion	Only under specific reasons one may deviate from RNR recommendations
Organisational principles	
13. Community-based	Services in the community are preferred, although RNR also applies to more controlled settings
14. GPCSL-based staff practices	Treatment is enhanced by staff who have high-quality relationship (e.g., collaborative) and structuring skills (e.g., cognitive restructuring)
15. Management	Select, train, and supervise staff in accordance to RNR principles

Overarching principles

The origins of the three overarching principles date back to the early work of Andrews and formed the value base to PCC described in the first edition of PCC (Andrews and Bonta, 1994). They were never stated as principles but their writings clearly showed the roots to the overarching principles. In the very first paragraph of the book, Andrews and Bonta write 'these values include a respect for human diversity...' (p.1; i.e., respect for the person). They continued in Chapter 7 to advocate for the application of a general personality and social psychological approach to criminal conduct (i.e., principle 2). Then in the final chapter of the first edition they called for governments, universities, and social service agencies to adopt the goals of crime prevention and recidivism reduction (i.e., principle 3). Stating these values explicitly as principles was late in coming but they are now enshrined in the RNR model.

Core RNR principles and key clinical issues

The RNR model is the application arm of the general personality and cognitive social learning (GPCSL) perspective presented in PCC; the GPCSL perspective outlines how key personal and social relationship variables interact with the environment to shape criminal behaviour. Principles 4 through 12 form the core RNR principles and key clinical issues. For practitioners and service providers, these are the guidelines of what to do with their clients. The overarching principles essentially lay the foundation for human services. After all, if one does not respect individuals and value GPCSL theory to improve the life condition of justice-involved persons and the communities in which they reside then it is unlikely one will introduce human services (Principle 4).

Principle 4 highlights the empirical fact that, to reduce recidivism, the way forward is through rehabilitation and not deterrence. In the first and second editions of PCC,

contrasting the effectiveness of rehabilitation against deterrence was done by referring to the Andrews, Zinger, et al. (1990) meta-analysis referenced earlier in this paper. However, in the third edition of PCC (2003) a separate chapter was devoted to the ineffectiveness of deterrence. More importantly, *why* deterrence fails was explained by summarising the psychology of punishment. Subsequent editions continued the tradition.

By now, the reader is already familiar with principles 5 through 8 and principle 12 described by Andrews, Bonta, and Hoge in 1990. Of course, research on rehabilitation did not stop in 1990 and, as the evidence mounted, existing principles were more fully fleshed out and new principles formulated. As examples, Dowden and Andrews' (2004) meta-analysis of core correctional practice informed the description of specific responsivity, and reviews of the literature introduced principle 9 (breadth; Andrews and Dowden, 2007). In addition, research with the Level of Service/Case Management Inventory and other Level of Service instruments highlighted the importance of using structured assessment instruments that include the assessment of strengths (Wormith and Bonta, 2021; Wormith, and Truswell, 2022; see also Academic Insights paper 2021/14 by Kemshall).

Organisational principles

The organisational principles describe the social context within which services are delivered. The meta-analysis of rehabilitation programmes in 1990 by Andrews, Zinger, et al. found that interventions in the community that followed the principles of risk, need, and responsivity were much more effective than those delivered in institutional/residential settings. The results from meta-analytic reviews reported in the various editions of PCC consolidated the findings. Thus, we have principle 13: community-based treatment is preferred over programmes delivered in residential and custodial settings.

Agency staff working with correctional clients are usually not fully versed in the skills demanded by RNR. Very few come to the work setting knowing the differences between criminogenic and non-criminogenic needs, how to do cognitive restructuring, and how to modify their approach to working with women, minorities, or persons with serious mental illness, etc. (Bonta, Rugge, Scott, Bourgon and Yessine, 2008). Staff need to apply relationship and structuring skills (principle 14; see Figure 2), and, if necessary, they should be trained in GPCSL-based practices (principle 15). It is the organisation's responsibility to provide the necessary training and support.

Figure 2: Staff relationship and structuring skills

Relationship skills

Engaging service users in relationships which are respectful, caring, enthusiastic, collaborative, motivational and which value personal autonomy.

Structuring skills

Facilitating changes in attitudes and behaviour through prosocial modelling, effective reinforcement and disapproval, skill building, cognitive restructuring, problem solving, effective use of authority, and advocacy-brokerage.

An illustration of principles 14 and 15 in action is the Strategic Training Initiative in Community Supervision (STICS). In the STICS model, probation staff were trained to work with medium to high-risk clients and target criminogenic needs by applying cognitive-behavioural interventions within the context of specific responsivity considerations. The original evaluation of STICS found that the trained officers were more likely to behave in accordance with RNR principles compared to the control officers and the clients of trained staff had lower recidivism rates (Bonta, Bourgon, Rugge, Scott, Yessine, Gutierrez and Li, 2011). Moreover, these results were replicated in a large-scale evaluation involving 357 probation officers (Bonta, Bourgon, Rugge, Pedneault and Lee, 2021). Today, there are several similar RNR-based training programmes that have been developed and evaluated showing positive results (Bonta, 2023; see also Academic Insights paper 2019/05 by Raynor).

Finally, there is principle 15: management. Building on principle 14, agency management needs to assume leadership in building the right culture. This involves selecting, as much as possible, staff who are receptive to playing a role as a helper and to evidence-based interventions (Debus-Sherrill, Breno and Taxman, 2023; Viglione, 2018). As noted in the discussion of principle 14, staff do not come fully prepared to apply RNR-based interventions and management must provide the appropriate *system* of training and supervising staff (see Academic Insights paper 2020/02 by Carr). Note that the word 'system' is italicised to indicate that training and supervision is a major characteristic of agency culture. In the STICS model (and similar programmes), an important feature is the provision of ongoing professional development which includes regular meetings, refreshers, and expert feedback to staff. There are probably other ways of creating an organisational structure that supports RNR and this is a critical role for senior leadership teams.

3. Conclusion

The RNR model of assessment and rehabilitation has been a major influence on the development of assessment instruments and treatment programmes (Newsome and Cullen, 2017; Wormith and Zidenberg, 2018). Concrete and direct spinoffs of RNR include, in the area of assessment, the Level of Service (LS) risk/needs instruments and, in the area of treatment, STICS. The LS is used in many countries with over one million administrations per year (Wormith and Bonta, 2021). STICS has been implemented in several jurisdictions in Canada, Sweden, and Denmark and similar programmes such as STARR and EPICS in the US have literally touched the lives of hundreds of thousands justice-involved persons (Bonta, 2023).

In England and Wales, attention to RNR principles can be seen through the development of the Offender Assessment System (OASys) and a range of cognitive-behavioural accredited programmes, overseen by the Correctional Services Advice and Accreditation Panel (CSAAP). In Scotland, the Risk Management Authority has published RATED to assist practitioners in applying appropriate tools as part of a structured assessment approach to facilitate the identification of risk factors, needs and strengths of an individual. More generally across Europe, the Council of Europe Probation Rules (see Academic Insights paper 2019/02 by Canton) includes the following rule for assessment:

'When required before and during supervision, an assessment of offenders shall be made involving a systematic and thorough consideration of the individual case, including risks, positive factors and needs, the interventions required to address these needs and the offenders' responsiveness to these interventions'.

To be sure, RNR is not perfect and it will continue to evolve as evidence accumulates and constructive suggestions for improvements are implemented. Critics of RNR who claim it ignores strengths, specific sub-groups, relevant theories or something else focus on the earliest three principles and rarely consider the full model. Sometimes alternatives are offered such as the Good Lives Model or the practice principles from desistance theory(ies), but further research and evaluations are required to demonstrate the effectiveness of their applications; a focus is required upon ensuring that all research, whatever its type, is as robust and rigorous as possible. At present, the empirical evidence base supporting the RNR principles is the best we have.

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Published by:

HM Inspectorate of Probation 1st Floor Civil Justice Centre 1 Bridge Street West

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ISBN: 978-1-915468-92-5