# Translating Science to Clinical Practice in Correctional Settings

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## Abstract

In this paper, we will examine evidence-based practice (EBP) as a primary example of translating science into practice, and as the predominant model of clinical practice within psychology. We argue that despite the merits of EBP and its value for clinical psychology, key conceptual issues arise from the inquiry component of the EBP model. Second, we examine efforts to incorporate scientific models of psychological practice into the correctional domain, and argue that the RNR has assumed an impoverished, and therefore, problematic version of an evidence-based model of correctional psychological practice. We describe three key areas of EBP in which adhering to RNR-based model of practice is particularly detrimental: flexibility, therapeutic alliance, and psychological expertise. To further our critique of attempts to translate science to practice in corrections, we revisit the conceptual issues of the EBP inquiry process and discuss how these manifest within correctional psychology. Finally, we outline a revised formulation of the EBP inquiry process and discuss how this model can overcome current issues in the translation of science to practice in correctional psychology. In our view, the revised EBP model provides a more coherent and comprehensive model than the current approaches.


Key words: evidence-based-practice; correctional practice; risk-need-responsivity model; forensic psychology

## 1. Introduction: Translating Science to Clinical Practice in Correctional Settings

In the last forty years evidence for the value of rehabilitation in reducing recidivism has accumulated at a steady rate following the pessimistic earlier conclusion that "nothing works" (Bonta & Andrews, 2017; Martinson, 1974). However, it wasn't until the systematic research studies of Andrews, Bonta and colleagues in 1990 that correctional psychology was once again brought to the forefront (Andrews, Bonta, & Hoge, 1990; Andrews et al., 1990). These studies provided strong evidence that psychological treatment resulted in reduced rates of reoffending. Based on this knowledge of "*what works*," the Risk-Needs-Responsivity model (RNR; Bonta & Andrews, 2017) emerged as an empirically supported guide for the assessment and treatment of offending related problems and reaffirmed the value of rehabilitation in correctional practice (Gannon & Ward, 2014; Polaschek, 2012). In contrast to previous criminological theories and explanations, the *what works* movement approached the problem of crime within a scientific lens (Bonta & Andrews, 2017).

At the core of the *what works* movement is the quest for an empirical understanding of criminal behavior (Bonta & Andrews, 2017). This is reflected in the epistemological and methodological aims of the RNR, which focus on the acquisition and evaluation of statistical evidence to provide knowledge about the treatment of individuals who have offended. It is assumed that scientific investigation necessarily employs objective methods and critical processes that yield reliable information regarding the causes of crime and the practices most likely to reduce reoffending.

Therefore, rigorous research design and analytical techniques are crucial in countering motivational and cognitive biases that constitute threats to the validity of research findings and help to rule out alternative explanations that lead to misguided knowledge claims (Douglas, 2009; Haig, 2014; Ward & Heffernan, 2017). The promotion of correctional practice that is well-grounded in scientific evidence is now a stable feature of criminal justice policy (Polaschek, 2012). Given that adherence to the RNR principles appears to be the most effective strategy in reducing recidivism across treatment programs, it is reasonable to accept that program design should draw from the empirical foundations of the RNR (Bonta & Andrews, 2017).

The integration of science and practice is not uncommon across medical and health disciplines, with evidence-based and scientist-practitioner frameworks employed in fields such as medicine, nursing (Bucknall & Rycroft-Malone, 2021), public health (Brownson et al., 2003), social work (Drisko & Grady, 2020), special needs education (Schalock et al., 2017), and clinical psychology (Spring & Neville, 2011). However, careful attention must be paid to conceptual and methodological issues as they apply to each field (Claes et al., 2015). For example, a conception of science as grounded primarily in empirical evidence runs the risk of neglecting important aspects of science such as conceptual analysis, explanation, classification, problem formulation, theory generation, development, and evaluation. Furthermore, what constitutes best evidence will vary according to the specific inquiry task, as will the kind of knowledge required for each task (Ward, Haig, & McDonald., in press).

A related concern is the conflict between a fact-based, value-free approach to science and the inherently normative nature of scientific and clinical practice. The

danger of this is that values are viewed as external to scientifically informed practice, despite playing a direct role in research and practice alike (Claes et al., 2015; Douglas, 2009). Given the morally charged nature of corrections, failing to engage in a discussion of values is particularly problematic (Ward & Heffernan, 2017). Embedded within the correctional field are several important value-based concerns; these include questions of human rights duties and entitlements (Ward & Birgden, 2007), harm and victimization (Ward & Moreton, 2008), punishment and treatment (Glaser, 2003), risk and security, and conceptions of human well-being (Day & Ward, 2010; Van Hecke et al., 2021; Ward & Maruna, 2007). For example, the enduring conflict between rehabilitation and punishment proponents is essentially a normative debate in which ethical, social, and epistemic values are centrally involved, and have major implications for forensic research and practice. The RNR seemingly evades these issues by appealing to a factually based and value-free conception of science. The result is a highly value-laden intervention program that does not address its core normative assumptions.

Furthermore, the highly politicized and turbulent nature of the correctional domain presents numerous contextual challenges in the application of science to clinical practice (Polaschek, 2012; Ward & Heffernan, 2017). In the US, previous research has found that rising prison numbers (Glaze, 2010), extreme public scrutiny over security failures (Wood, 2009), resource constraints (Bell et al., 2019), and a shortage of mental health services (Kupers, 2005) has resulted in "correctional systems that are bursting at the seams" (Gannon & Ward, 2014). In response to these pressures, policy makers are likely to prioritize risk and security related concerns, with inevitable consequences for correctional practice (Ward, 2013). Three major problems in this interpretation of

science-practice integration are therefore summed up in relation to forensic practice: (1) science involves both theory and evidence, (2) values are directly tied into scientific and clinical practice, and (3) forensic practice presents specific normative challenges at several different levels.

In this paper, we will examine evidence-based practice (EBP) as a primary example of translating science into practice, and as the predominant model of clinical practice within psychology (Dimidjian, 2019). We argue that despite the merits of EBP and its value for clinical psychology, key conceptual issues arise from the inquiry component of the EBP model. Second, we will examine efforts to incorporate scientific models of psychological practice into the correctional domain, and argue that the RNR has adopted an impoverished, and therefore, problematic version of an evidence-based model of correctional psychological practice. We describe three key areas of EBP in which adhering to an RNR-based model of practice is particularly detrimental: flexibility, therapeutic alliance, and psychological expertise (see Gannon & Ward, 2014). To further our critique of attempts to translate science to practice in corrections, we revisit the conceptual issues of the EBP inquiry process and discuss how these manifest within correctional psychology. In highlighting the weaknesses of the canonical version of EBP, and the dangers of adopting the RNR, our intention is to demonstrate the need for a stronger practice model to guide correctional psychological practice. Thus, we propose a revised formulation of the EBP inquiry process and discuss how such an enriched model may overcome current issues in the translation of science to practice in correctional psychology.

## 2. Evidence-based practice

The evidence-based practice model (EBP) currently stands as the "gold standard implementation of science as practice" within psychology (Gannon & Ward, 2014, p. 437). This model has been imported from the medical domain as an approach to clinical decision making that promotes the "conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett et al., 1996, p. 71). Early conceptions of EBP purported to advance a more scientific and objective approach to medicine, prioritizing research evidence above intuition and authority in clinical decision-making (Dimidjian, 2019; Solomon, 2015). This developed from the argument that healthcare resources should be directed towards treatments that had demonstrated effectiveness through highly controlled experiments.

Driving the initial movement towards EBP were three primary goals: to improve positive outcomes for clients, to reduce the use of treatments that do not lead to improvement, and to eliminate the use of potentially harmful treatments (Drisko & Grady, 2020). In this sense, potential harms may be appreciated beyond medical practice as the effort, expense, and time lost to ineffective treatments, as well as the more immediate risk of death and injury. Ideally, these goals will be realized at both the policy level and individual level, relating both to allocation of healthcare resources and selection of individual treatments.

The EBP movement was initially adapted from medicine (Sackett et al., 2000; Strauss et al., 2019) and has since been adopted by several health disciplines as a helpful practice framework. These disciplines include social work (Drisko & Grady, 2019), nursing (Bucknall & Rycroft-Malone, 2021), public health (Brownson et al., 2003), forensic psychology (Gannon & Ward, 2014), and clinical psychology (Spring et al.,

2019). The American Psychological Association has endorsed the EBP approach and defined it in the following way: "Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" *(*APA Presidential Task Force, 2006, p. 271). In recent years a transdisciplinary model of EBP has been developed, which builds on the common elements and unique strengths of each of the social work, medicine, public health, and psychology models (see below- Satterfield et al., 2009; Spring et al., 2019). This is theoretically the strongest version of the EBP, in part due to its development of a clinical inquiry model (see below).

EBP can be conceptualized as a "three-legged stool," in which each leg represents a fundamental element of the model (Lilienfeld et al, 2013). The first leg organizes data into levels of evidence and positions it within a hierarchy according to its strength and quality. Data from comparative clinical studies, including randomized control trials, systematic reviews, and meta-analyses, are viewed as least vulnerable to sources of error and bias, and therefore occupy the top rungs of the evidence hierarchy. Data from observational studies sit below comparative clinical studies, and mechanistic reasoning, expert opinion, and uncontrolled case studies occupy the bottom rungs of the hierarchy. The second leg of the EBP stool comprises clinical expertise, referring to the roles of both clinical judgement and clinical experience in the application of research to clinical cases. Finally, client preferences and values form the third leg of EBP, constraining clinicians' selection of interventions alongside best available research and clinical expertise (Howick, 2011).

Although initial accounts emphasize the significance of best available research in the purpose and process of EBP, contemporary formulations have expanded on each element to advance EBP as a multi-part process in which clinical expertise and client characteristics are afforded equal priority (Spring & Neville, 2011). In response to several independent revisions of EBP across health disciplines, the transdisciplinary model was constructed to reflect important developments in EBP from each profession (Spring & Neville, 2011). According to this model, the decision-making process draws from three streams of data: research evidence, client characteristics, and resources, including practitioner expertise. These elements are depicted as three overlapping circles, nested within a larger circle representing the environment and organizational context. Finally, decision-making forms a central circle as the action that links these strands of data together (Spring & Neville, 2011).

Consistent with earlier models of EBP, the evidence circle refers to findings obtained from the collection of experimental and observational data, noting that the best type of research depends on the question being asked (Spring & Neville, 2011). Whilst research evidence typically provides knowledge of average cases, the application of this knowledge to an individual client must consider relevant client characteristics, including values, preferences, needs, history, and circumstances. These factors constitute important contextualizing information and suggest whether the available research may be relevant to the client. The resource circle is comprised of the skills and infrastructure support relevant to the EBP process, as well as practitioner expertise. Considering the ambiguous and often controversial understandings of practitioner expertise associated with previous models of EBP, the transdisciplinary model

operationalizes practitioner expertise as skill across the following four categories: assessment skills, evidence-based practice process skills, communication and collaboration skills, and engagement and intervention skills (Spring & Neville, 2011). An innovation of the transdisciplinary model is the inclusion of a central decision-making circle. This circle encompasses the process of clinical inquiry, in which clinicians integrate data from each of the outer circles to progress through the following five steps: *Ask* relevant questions; *Acquire* best available research evidence; *Appraise* the evidence; *Apply* the evidence; *Analyze* and *adjust* practice accordingly.

EBP has since had a major influence on practice and research across a range of disciplines and is widely regarded as constituting a core set of competencies for 21st century health professionals (Greiner & Knebel, 2003). Within applied psychology, the American Psychological Association has endorsed EBP as the governing model of best practice, describing it as the application of "empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention" (American Psychological Association Presidential Task Force on Evidence-Based Practice, 2006, p. 284). This follows from the earlier scientist-practitioner model, which similarly promoted empirically oriented practice as a core feature of the clinical psychologist role. According to this model, clinicians must integrate the best available evidence to guide therapy and select empirically supported treatments (Haynes et al., 1999). It is clear that EBP represents a more advanced model in which clinical expertise, client preferences and values, and the social and cultural context are directly factored into the decision-making process.

### 2.1 Problems with the five-step inquiry process of EBP

Despite notable advancements in the transdisciplinary model of EBP, at least four key problems persist: information overload, the neglect of theory, conflicting evidence, and the impoverished role of values (Ward et al., 2021). These issues stem directly from the five-step inquiry process embedded within the decision-making component of EBP and represent significant conceptual problems that make the current model difficult to implement in practice. The following section will briefly outline these problems as they apply to clinical practice.

Firstly, the five-step inquiry process suffers from *information overload and decision-making intractability*. The inquiry process begins with the formulation of a relevant question, which may target various uncertainties such as diagnosis, explanation, treatment, or maintenance (Spring & Neville, 2011). The search process follows from this and aims to engage in the explicit consideration of all available evidence relating to the question at hand. Whilst it is well recognized that the amount of existing research can be daunting, little guidance is provided by the model towards navigating this load (Spring & Neville, 2011). Amidst the broad range of possible questions, client problems, and assessment and treatment options, the clinician will struggle to gain *traction* in the process of making sound decisions. The inquiry process must therefore strike a balance between an inauspiciously narrow search focus and one that results in information overload; whilst the former may limit clinical options too early, the latter gives rise to problems of intractability.

A second problem with the 5-step inquiry process is a distinct *lack of theoretical and conceptual consideration*. EBP adopts an empirical epistemology, affording little attention to theory and explanation in favor of observable outcome data produced by

RCTs and population-based clinical trials (Solomon, 2015). An empirical approach may be useful if the clinical task is concerned with the selection of treatment, for example, but is inadequate when it comes to tasks involving the detection, explanation, and assessment of a client's presenting problems. Rather, these tasks involve theoretical and conceptual considerations about classification systems, key concepts, mechanisms of change, and explanatory strategies. Furthermore, these considerations must be evaluated according to conceptual criteria such as scope, simplicity, fertility, and consistency (Kuhn, 1977).

A third problem is that the inquiry process draws evidence from a variety of different sources, including clinical experience, mechanistic research, treatment efficacy studies, and patient self-report (Spring & Neville, 2011). It is reasonably likely that at times, clinicians will face *conflicting evidence*. If the best available research converged towards a clear depiction of the client's problems, or in support of a particular treatment, then the clinician would be able to make easily justifiable decisions and proposals for action. However, this is seldom the case, and yet the EBP process does not provide a clear strategy in which to prioritize certain sources of data above others. Indeed, it is unreasonable to consistently confer priority to one source of data in every situation. Part of the problem is that the EBP inquiry process is not constrained by the clinical task; rather, it is loosely directed by the question posed in the initial *Ask* phase. As the relevance of research evidence will inevitably vary according to the task undertaken, developing a rich description of the task at hand will help clinicians to determine when one source of evidence may override another.

A fourth concern regards the *impoverished role of values* in EBP. Values are an important part of EBP for two reasons; they guide actions in the form of specific goals and plans, and dictate the norms used to evaluate the "worthiness" of actions, persons, and outcomes (Sadler, 2005). By this description, values serve to frame practice and research pursuits, and thus underpin every stage of the EBP inquiry process. Different types of values relate differentially to various tasks and practices (Douglas, 2009). *Epistemic values* (e.g., internal consistency, external coherence, predictive accuracy, explanatory depth) concern which sources of evidence are most reliable and how we should prioritize knowledge. When selecting a specific methodology, for example, epistemic values such as predictive accuracy and empirical adequacy may direct the researcher to use RCTs. *Social or cultural values* (e.g., consensus, discrimination) aim to coordinate the interests of individuals in ways that are fair and reasonable, and uphold social stability. When selecting a scientific problem to direct resources towards, certain scientific problems may be prioritized according to social values such as the reduction of suffering. *Ethical or moral values* are often intertwined with social and cultural values and concern what is right and wrong, or good and bad. Lastly, *prudential values* refer to the goods (e.g., food, water, security) that affect an individual's quality of life (Ward & Maruna, 2007). Prudential values are likely to influence the clinician and client's conception of wellbeing, thus influencing the selection of clinical problems in the initial *Ask* stage of the EBP inquiry process. Furthermore, this conception will also contribute to what is considered a successful outcome in the *Analyze and Adjust* phase. Given that values undoubtably influence each step and task of EBP, attention must be paid to how they are factored into decision making.

## 3. EBP in forensic psychology: the Risk-Need-Responsivity model

Given the problems inherent in the 5-step inquiry process, EBP does not offer a strong model for guiding clinical practice; rather, it provides a loose structure for deriving correctional interventions. The widespread implementation of RNR policy, in conjunction with unique correctional pressures, has led forensic psychologists to adopt the RNR as an interpretation of EBP in guiding psychological practice (Gannon & Ward, 2014). The proceeding section will elaborate on the intended uses of each model (RNR and EBP) and aim to explicate their differing roles in forensic practice.

Prior to the RNR, correctional research was comprised mainly of vaguely supported and highly speculative social and criminological theories of crime (Bonta & Andrews, 2017). It is of no doubt, therefore, that the RNR has been instrumental in introducing science into the field of criminal justice, placing particular emphasis on the role of evidence to identify what works when it comes to offender rehabilitation. Using the newly developed technique of meta-analyses, Canadian psychologists Andrews and Bonta were able to systematically identify a set of essential features across successful programs (Bonta & Andrews, 2017; Polaschek, 2012). This knowledge formed the basis of the RNR model, which outlines several principles for reducing criminal behavior. Risk, need, and responsivity comprise the three core treatment principles underpinning RNR-based intervention. The *risk principle* is divided into two parts. Firstly, the likelihood that a person will engage in reoffending can be predicted based on several factors, ranging from previous offending behavior to current attributes. Secondly, an individual's current risk level should be identified, and the intensity of intervention should match this level of risk. The *need principle* stipulates that intervention should

target criminogenic needs, or the factors statistically associated with crime (Bonta & Andrews, 2017). Within this set of correlates and predictors, dynamic risk factors (DRF) compose a subset of potential causal factors and are therefore defined as criminogenic needs that "when changed, are associated with changes in the probability of recidivism" (Andrews & Bonta, 2010, p.49). Finally, the *responsivity principle* states that treatment should achieve compatibility with the individual's characteristics and learning style. In accordance with this principle, factors such as gender, cultural values, language, and strengths should be considered in the delivery of treatment (Bonta & Andrews, 2017). These core principles are accompanied by fifteen additional principles, each referring to various aspects of the treatment process such as human service, treatment context and resources, and empirically validated psychological theory.

The RNR is arguably the most prominent theory of rehabilitation and maintains its popularity in correctional practice worldwide (Ward et al., 2009). Several key factors appeal to the popularity of the RNR amongst practitioners and policy-makers. These include the relationship between adherence to the RNR and reduced recidivism (Bonta and Andrews, 2017; Hanson et al., 2009), the ease of implementation via highly structured manualized treatment programs (Marshall, 2009), and its consistency with the risk-focused nature of correctional institutions (Ward & Salmon, 2009). The RNR gains further reputability by virtue of its grounding in science and evidence. Notwithstanding these advantages to program provision, the RNR was not designed to be a model of psychological practice. Rather, the primary purpose of the RNR is to inform evidence-based correctional policies for assessment and treatment selection (Bonta & Andrews, 2017; Gannon & Ward, 2014). Despite purporting a commitment to

EBP, correctional agencies currently rely on RNR principles not only to guide policy but also to provide correctional psychologists with an overall model of practice. However, the implementation of the RNR principles illustrates a significant departure from evidence-based psychological practice. For example, the RNR has been heavily reworked to suit the risk and security-oriented demands of correctional settings, a move which has arguably resulted in reductionist interpretations of the model (Polaschek, 2012). Large rollouts of RNR-based programs seen in countries such as the UK, Canada and New Zealand following the uptake of evidence-based rehabilitation policy provide an example of the problematic translation of RNR principles to practice. Such programs deliver RNR according to one style of "structured, cognitive-behavioral closed-group based treatment programs" (Polaschek, 2012, p. 11).

Despite ongoing improvement and development, significant concerns remain regarding the way in which the RNR has been translated into practice. Most worryingly, Gannon and Ward (2014) have argued that the RNR appears to replace EBP as a model of clinical practice, despite bearing a distinct theoretical purpose. Difficulties associated with the implementation of EBP, alongside general misunderstandings of the model, have led to an increasing neglect of EBP in correctional psychology. In turn, the risk-oriented culture of correctional institutions and apparent absence of a strong model of clinical practice have led correctional psychologists to "succumb to a simplistic catch all interpretation of RNR as their governing model of practice" (Gannon & Ward, 2014, p. 437). Subsequently, the misguided application of the RNR to clinical practice is manifest in several issues that contribute to what has been regarded as a "crisis" for correctional psychology. The RNR is based on only the research leg of the standard EBP model of

practice, and neglects the other two legs, practitioner expertise and client characteristics and values. The implications of this will be elaborated below.

### 3.1 EBP in forensic psychology: Problems with the RNR as a model of clinical practice

The widespread acceptance of RNR-based psychology, alongside highly prioritized risk and security principles, creates a challenging context for correctional psychology practice. Indeed, correctional psychologists face what is known as the dual relationship problem, in which they must attempt to reconcile coexisting, yet conflicting, obligations to both client-focused therapy and risk-related principles (Greenburg & Shuman, 1997; Ward, 2013). Within such a context, a strong model to guide psychological practice is needed to prevent clinicians' acquiescence to the dual-relationship problem. The risk is that, by adopting RNR-based practice model, crucial aspects of evidence-based psychological practice will be ignored. Gannon and Ward (2014) have identified three key areas of EBP that are currently underserved by an RNR-based model of practice: flexibility, therapeutic alliance, and psychological expertise. We agree that these areas warrant significant attention within correctional practice, and thus call for a model that will facilitate their implementation.

#### *3.1.1 Flexibility*

EBP necessarily entails a degree of *flexibility* to sufficiently account for the various sources of data that collectively constitute the model. Whilst intervention fidelity is emphasized in the implementation of research-based practices, it is often misconstrued as a strict adherence to the procedural elements of an intervention with little appreciation for how basic treatment guidelines can be substantiated across

different clinical settings (Lilienfeld et al., 2013). The EBP model is constructed in such a way that accommodates flexibility and allows for adaptation without jeopardizing fidelity (Johnson & McMaster, 2013).

The RNR strives to achieve fidelity across large-scale program rollouts by operationalizing RNR principles in highly structured and content-specific manuals. As such, RNR-based intervention has faced criticism for its apparent "cookie cutter" approach to implementation (Polaschek, 2012, p. 11). Manualization discourages clinicians from stepping outside prescriptive treatment when difficulties that require clinical judgement, expertise, and flexibility arise in therapy. Furthermore, the expectation that therapists adhere to manuals and monitor practice accordingly constricts their ability to tailor treatment to the client. Given that research has consistently shown that treatment aimed at reducing problem behavior is more effective when it is tailored to the client's specific need, this constitutes a significant concern for correctional practice (Marshall, 2009).

The theoretical basis of the RNR has implications for therapists' understanding of how to deliver flexible and individualized intervention. Specifically, the responsivity principle concerns *how* treatment is delivered, rather than *what* is involved in treatment. This refers generally to processes and techniques, and specifically to variation among individuals (Bonta & Andrews, 2017). In this way, opportunities for flexible and individualized practice are contingent on the application of the responsivity principle. Yet, this principle is left disconcertingly underdeveloped within the RNR, generating criticism as "theoretically unsophisticated: a catch-all category" (Polaschek, 2012, p. 8). Furthermore, although neither were explicitly granted priority in RNR theory, the

principles of risk and need have come to supersede the principle of responsivity in practice. For example, an individual's level of risk, rather than therapeutic need, determines the intensity of intervention that they will receive. Although this accounts for individuals' variation in risk when allocating treatment, it does not allow for other factors that may necessitate higher intensity intervention (e.g., a client who is not high risk for offending behavior but has severe depression). Similarly, the need principle stipulates that intervention should target criminogenic needs (i.e., factors that are associated with offending behavior), to the exclusion of important therapeutic needs such as trauma, abuse, and mental health (Ward, Gannon, & Birgden, 2007). In order to deliver individualized intervention that is tailored to the client, assessment must capture more than just that which is related to offending behavior.

The issue of flexibility and individualization is further exacerbated by the risk-averse nature of correctional settings. Correspondingly, there exists a concerning disparity between attention towards client need and attention towards safety and security principles within correctional psychology. A failure to prioritize client need above the demands of the correctional system is a consequence of the dual-relationship problem; a fault that is particularly harmful given that attention to client need serves as a governing principle of ethical psychological practice (Ward, 2013). Rather than challenging strongly imposed correctional procedures and security restrictions, psychologists may choose to forgo valuable opportunities to engage in effective and flexible EBP.

### *3.1.2 Therapeutic alliance*

At the center of the EBP model is a circle dedicated to collaborative, shared decision-making (Spring & Neville, 2011). Underpinning this process, and with links to the peripheral circles of the EBP model (i.e., research evidence, client values and preferences, resources, and organizational context), is the *therapeutic alliance*. According to Bordin (1979), the therapeutic alliance is built upon three features: "an agreement on goals, an assignment of task or series of tasks, and the development of bonds" (p. 253). Empirical research shows strong support for the therapeutic alliance as an important variable for positive change in treatment (Blasko et al., 2018; Norcross, 2001). Unfortunately, several features of the correctional environment obstruct the development of successful therapeutic alliances. For example, clinicians may be asked to assist in security-related procedures (e.g., cell searches), or to break confidentiality when reporting on an individual's level of risk (Ward, 2013). By the same token, clinicians operating within RNR-based methodology (i.e., strictly adhering to therapy manuals, prioritizing risk and need principles) are strongly inhibited in their ability to develop positive therapeutic alliances. Highly scripted and content-specific treatment manuals promote professional apathy and inhibit clinicians' expressions of flexibility, interest, and experience (Gannon & Ward, 2014). Furthermore, clients presenting with features such as low self-esteem, distrust, and distress may find it difficult to form a relationship with the therapist and be less receptive to treatment as a result. Thus, attending to non-criminogenic needs in correctional programs is important for improving client motivation and responsivity (Harkins et al., 2012; Ward, Melser, & Yates, 2007).

It would seem, once again, that this issue has its roots in the dual-relationship problem. Within corrections, disparate goals between psychological work and

correctional work are likely to lead to a neglect of the former. The source of neglect for the therapeutic alliance is thus two-fold: (1) psychologists may struggle to overcome the dual-relationship problem and therefore prioritize risk management, and (2) correctional program planning fails to account for the therapeutic alliance.

#### *3.1.3 Psychological expertise*

A core aspect of sound decision-making is psychological expertise, which falls within the resources circle of the EBP model. Psychological expertise encompasses a complex suite of knowledge and skills that draw from a clinician's training and experience in appropriately managing clinical issues as they arise within the interpersonal context of treatment (Spring & Neville, 2011). The importance of psychological expertise is emphasized within the correctional setting, where clients are likely to present with particularly complex psychological behavior that is exacerbated by the conditions of the environment (Ross et al., 2008). In the effort to provide cost-effective intervention at a large-scale, treatment is often delivered with manuals by non-psychologists with little training and superficial knowledge of EBP (Marshall, 2009; Taxman & Belenko, 2012). Inexperienced staff are less likely to seek information beyond the guidelines presented in RNR manuals, and thus fail to incorporate best research evidence into practice. This inevitably leads to the exclusion of wider psychological research in favor of a more specific focus on the risk-related research that informs the RNR.

### 3.2 Conclusion: Benefits of EBP

From the above, it is clear that the RNR is inadequate across a number of key areas involved in scientifically informed psychological practice. In contrast, the EBP

prevails as a superior model of psychological practice in three major ways: the psychologist is granted more responsibility in the process of translating research to practice, EBP acknowledges a broad and ever-evolving body of psychological research, and EBP adopts a client-centered approach more akin to that of health and social services (Gannon & Ward, 2014; Lilienfeld et al., 2013; Spring & Neville, 2011; Taxman & Belenko, 2012). By recognizing the shortcomings of the RNR as an instantiation of evidence-based practice, and appreciating the merits of EBP, we argue that considerable effort must be put toward advancing EBP within correctional psychological practice. However, although the standard EBP model has greater theoretical resources than the RNR, as noted above, it does contain weaknesses, namely in the inquiry model advanced by Spring and colleagues (2019).

## 3.3 EBP in forensic psychology: Problems with the 5-step inquiry process

The above section has demonstrated conflict between EBP and aspects of the correctional system that pose fundamental challenges to its implementation within corrections. Following this critique of the correctional context, we will now turn our focus towards the problems with the 5-step inquiry process of EBP as they apply to the correctional domain.

### *3.3.1 Information Overload and Decision-Making Intractability*

Correctional psychologists must navigate an enormous amount of information available to them when beginning the process of clinical inquiry. The question initially posed during the *Ask* step of inquiry must be suitably directive to provide a useful "searchlight" for clinicians making sense of the complex and multifaceted problems a

client may present with. It may pertain to one of several clinical issues highlighted in the assessment phase, including the cause of a problem, its assessment, or treatment (Spring & Neville, 2011). Within corrections, clients are likely to present with a plethora of difficulties relating to mental health (e.g., personality disorders), developmental history (e.g., insecure attachment styles), institutional experiences, motivation, and personality traits (e.g., hostility) (Ross et al., 2008). Given such complexity, a consideration of all available research evidence relating to the question at hand is likely to be broad and unavailing. Correctional psychologists are therefore confronted with a multiplicity of complex needs and client issues, which must be considered alongside numerous potential treatments, assessment options, and other clinical questions. It should be of no surprise that a clinician would rapidly become overwhelmed and struggle with the task. In the face of such confusion, correctional psychologists may default to the highly specified (and comparatively simplistic) content provided in RNR-based treatment manuals, and risk running into the problems discussed earlier.

A further concern is that in such an environment, correctional psychologists attempting to gain some sort of traction in the search process may be overly influenced by correctional protocols. For example, rather than matching a system of classification to the client's specific problems, the clinician may instead rely on offense/risk level categories for classification regardless of whether this method is unsuitable for a client's presenting psychological issues, behavior, and needs (Carter et al., 2021). Similarly, a clinician may assess a client according to their suite of dynamic risk factors and thus focus exclusively on acquiring evidence relevant to risk-related factors, at the expense of addressing problems of well-being, mental health, and motivation. In this way, risk level

and needs become primary constraints on the task and the ongoing search process will be skewed accordingly.

Part of the problem is that formulating a *question* to guide clinical inquiry, rather than a *task*, may be simplistic and vague. Whilst task formulation requires all relevant constraints (e.g., client values and preferences, contextual features, responsivity issues) to be considered at the initial stage of inquiry, asking a question does not allow all relevant constraints to be considered until a later stage, while prior to that point the processes of acquiring and appraising information remained largely open and diffuse. This issue reflects similar problems within the RNR, in which the responsivity principle is treated as an adjunct to the primary principles of risk and need, leaving the consideration of client characteristics to be belatedly "tacked on" to a near complete treatment plan.

### *3.3.2 Conflicting evidence*

As discussed earlier, the *what works* movement and subsequent construction of the RNR introduced the value of science into the correctional domain, with a specific emphasis on the use of robust empirical evidence to inform correctional treatment. An exclusive focus on empirical evidence has persisted within correctional research and practice, as is evident in the use of statistically derived risk factors to predict and explain criminal behavior, and the evaluation of rehabilitation programs according to effect size (Polaschek, 2012).

Regarding managing conflicting evidence, EBP does not accord priority to any one of the three sources of data (Lilienfeld et al., 2013). Within the correctional domain, however, it would seem most likely that research evidence would be granted right of

veto in line with the empirical underpinnings of the RNR. The problem with this is that what constitutes best evidence depends on the task at hand; while research evidence may be prioritized when evaluating the efficacy of a treatment, it is not so relevant when generating an explanation for a client's offending or anticipating how a client will respond to treatment. Furthermore, relying too heavily on empirical evidence leaves a clinician unequipped with the necessary information to appropriately address and respond to important aspects of rehabilitation such as client characteristics and preferences. Given the impoverished role of the responsivity principle in correctional psychology currently, this is a very real risk. A similar issue is that the empirical research base of the RNR is primarily oriented to risk and offense-related behavior, and thus prioritizing empirical evidence may lead to a narrow research base.

#### *3.3.3 Impoverished role of values*

Correctional intervention has its origins in the criminal justice system; thus, it reflects the normative nature of the criminal justice arena. Crime itself is defined as behavior that violates our conceptions of law and order and causes harm to individuals and the community (Ward & Carter, 2019). In this sense, crime is not a scientific kind; it does not refer to real or natural objects and processes. Rather, it is a normative construct that exists solely within a legal and moral context. Accordingly, offending behavior is grouped into legal categories according to the harm they cause—a judgement that appeals primarily to social and ethical values. In the effort to integrate science and practice, this distinction is particularly important. False conceptions regarding the scientific status of crime and offending behavior endorse an exclusively empirical knowledge base and discourage researchers and practitioners from engaging in essential

dialogue about value-based concerns and normative considerations. In such a normatively charged domain, values must be openly and explicitly addressed to counter the risk of specific ideological motivations and biases governing the process of scientific inquiry (Ward & Heffernan, 2017).

When it comes to explanation and treatment, the classification of crime using legal (normative) categories becomes problematic. Unlike scientific categories, which group phenomena according to naturalistic properties, offense categories are normative and reflect social and ethical decisions (Carter et al., 2021). As such, they comprise a varied range of problems that do not cluster together beyond normative conventions and thus exhibit considerable heterogeneity. Furthermore, they are subject to change across time and culture—they are "moving targets" for explanation (Ward & Heffernan, 2017). From a naturalistic perspective, these categories represent arbitrary divisions in which proposed causes and symptoms of each problem are irrelevant to their grouping. For the process of scientific inquiry, the use of normative categories to make inductive inferences and construct explanations for offending behavior is challenging and for the most part ineffectual (Ward & Carter, 2019).

Theories of rehabilitation typically consist of a structure of principles or rules for actions, which are guided by values (Ward & Heffernan, 2017). Ethical values, put simply, dictate the rightness and wrongness of certain actions (e.g., theft, violence, sexual assault), and the goodness and badness of personal characteristics (e.g., aggression, callousness, hostility). The risk principle, which states that the intensity of treatment should match level of risk, therefore reflects ethical concerns regarding the likelihood that innocent individuals will be victimized by harmful actions (i.e., actions

deemed legally and morally wrong). The need principle, which states that treatment should target criminogenic needs, is based on similar assumptions of norm violation (Bonta & Andrews, 2017). Criminogenic needs are defined by their relation to crime and offending behavior, and thus carry the same normative status.

The *what works* movement has also imported several epistemic values that have come to characterize correctional research and practice. Epistemic values concern how we evaluate our sources of knowledge (e.g., consistency, scope, explanatory depth, empirical adequacy), and play a direct role in scientific inquiry (Douglas, 2009). It is clear from the construction and evaluation of the research evidence base underlying the RNR that, in line with the *what works* movement, epistemic values such as predictive accuracy, empirical adequacy, and consistency are highly prioritized within correctional research (Polaschek, 2012).

While correctional work is inextricably tied to norms and values, little attention is directed towards how these values affect research and practice. Rather, the consideration of values is typically confined to the responsivity principle, and primarily addresses prudential and social values in the form of responsivity factors such as cultural identification and client preference. Given that the RNR is a value-laden model and serves a highly normative field, it is essential that values are explicitly considered within correctional research and practice (Ward & Heffernan, 2017).

### *3.3.4 Neglect of theoretical and conceptual work*

According to Ward (2019, p. 23) theoretical illiteracy is evident "(a) when there is failure to understand the role of – and need for theory – in detecting and explaining relevant phenomena, (b) when there is a lack of competence and knowledge to critically

evaluate ideas and methods, and (c) where prescribed practice has little or no relationship to strong scientific theories." With these criteria in mind, the distinct lack of attention towards theory and conceptual analysis within contemporary correctional psychology can be recognized as a conspicuous example of theoretical illiteracy. More specifically, a failure to demonstrate that dynamic risk factors are causal and therefore responsible for reduced recidivism, doubt about their theoretical coherence, and only moderate demonstrations of efficacy for correctional interventions imply underlying theoretical problems within correctional psychology (Ward, 2019; Ward & Fortune, 2016; Ward, Melser, & Yates, 2007).

The apparent intolerance for theoretical work reflects a logical positivist epistemology. This view argues that knowledge claims must be grounded in experience, and theories that comprise of constructs that cannot be verified or operationalized in terms of experience are therefore dismissed. Logical positivism sheds doubt on human abilities to truthfully describe the realities that underlie the phenomena we observe; rather, our explanations are limited by the evidence we can gather from direct observation and experimentation (Ward, 2019).

The emphasis on collecting empirical data to construct and evaluate theory is prevalent within correctional psychology due to the adoption of risk management approaches such as the RNR. As previously discussed, the RNR relies on the statistical analyses of large sets of data to identify potential causal variables of offending and derive principles of rehabilitation. Evidence pertaining to risk level and dynamic risk factors is generated by large-scale RCTs, meta-analyses, and comparative clinical studies, which produce robust correlations. Considered to be *causally clinching* within

the RNR literature, this data is formulated as generalizable rules that contribute to the explanation and effective treatment of offending behavior (Bonta & Andrews, 2017). However, such reasoning requires making several theoretical "jumps" to reach putative coherency. This may, in part, be due to the adoption of an inductive model of scientific method, which bases theory construction on empirical generalizations (Ward, 2019). Empirical testing and the collection of data thus take top priority in the construction of theories, with important theoretical tasks such as causal inference and theoretical modeling receiving minimal attention by consequence.

In line with this apparent neglect for theoretical work is a failure to engage with adequate conceptual analysis. For example, the principles of RNR are conceptually dependent on DRF, which maintain a central role in ongoing research and practice despite exhibiting significant conceptual problems regarding coherency, causal status, and specificity (Ward & Fortune, 2016). Given the tentative integrity of DRF as conceptual constructs, it appears that the RNR rests on weak theoretical foundations that limit its ability to provide valid and accurate evidence. The RNR is further disadvantaged by its exclusive commitment to risk-based classification, rather than acknowledging additional systems of classification (e.g., functional or psychological) that may offer useful perspectives. This approach reflects an intolerance for competing theories and may lead to the premature rejection of valuable theoretical research. Under the RNR paradigm, classification is based on conceptually "thin" categories that refer to normative properties such as type of offence, level of risk, and DRF, arguably resulting in impoverished treatment plans (Ward & Carter, 2019).

### 3.4 Conclusion: Need for a stronger practice model

The EBP model represents a considerable advancement in science-informed practice and has much to offer the field of psychology. Despite this, the 5-step inquiry component of the EBP model contains several conceptual problems that undermine the successful implementation of the overall model. These difficulties have specific implications when applied to correctional contexts, in which normative constraints exert unique pressures on psychological practice. Collectively, weaknesses within the current model of EBP and overwhelming correctional pressures contribute to the widespread utilization of the RNR to guide correctional psychological practice. Although the RNR may be construed as an instantiation of an evidence-based model, it differs from EBP in several distinct ways and fails to uphold important aspects of EBP in practice. What is needed, therefore, is a reformulated version of the EBP inquiry process; one which addresses key conceptual issues and offers stronger guidance towards clinical practice.

We propose going beyond the Gannon and Ward (2014) paper which advocated for an adoption of the standard EBP model. While adopting the kind of EBP model developed by Spring and colleagues (2019) is an advancement over the narrower RNR interpretation, it still has limitations. Our hopes are that in addressing the problems with the inquiry process component of EBP, a revised model will offer the theoretical support necessary to guide appropriate and effective clinical practice in light of significant contextual challenges. The following section will outline the steps of the revised 5-step inquiry process and suggests how modifying each step may help to overcome the problems regarding EBP within corrections.

## 4. Revised 5-step inquiry model in correctional practice

*Step one: Specify key tasks*

Leading the original five-stage inquiry process is the *Ask* step, in which the clinician formulates client-oriented, practical, and answerable questions to instruct decisions about management and treatment in the latter stages of the clinical process. Questions may pertain to assessment, etiology, or treatment, among other uncertainties (Spring & Neville, 2011). A critical difference in the revised five-stage EBP inquiry process is the change from asking a question to *formulating a task*. This allows for a richer problem description than can be achieved in the form of a question. Within clinical practice, tasks refer to a practice goal and may vary from problem detection, problem description, explanation, treatment, maintenance, to risk management. Each requires different types of knowledge, and in line with science-informed practice, typically draw from the best available scientific theories and research evidence (Spring & Neville, 2011). By incorporating scientific knowledge alongside social, cultural, and folk knowledge, task description shows a greater appreciation for different types of knowledge and their respective sources.

Thus, the first step of task formulation involves developing a rich initial description of the relevant clinical phenomena. This step is based on the constraint-composition conceptualization of scientific problems, in which the problem constitutes the constraints that subsequently define the solution (Nickles, 1981). In pursuing a solution, researchers realize that there is a gap in the current structure of the problem and seek to fill it. Therefore, developing a rich description of the problem which acknowledges all relevant constraints will direct inquiry towards the solution. Task formulation in forensic practice would therefore begin with developing a rich initial description of the client's presenting problems. The clinician seeks to gather a wide

range of relevant information, as each new piece of knowledge is a further constraint on the task, or problem, and therefore serves to streamline subsequent inquiry. Rather than applying specific information in the later steps of the clinical inquiry process, a rich initial task description ensures that the steps towards acquiring and appraising evidence are heavily constrained.

It is important to acknowledge at this point that although values are often treated as auxiliary to the process of scientific inquiry, they play a central role in the formulation of problems. As mentioned previously, values inform the normative knowledge that is required for planning and evaluating practice (i.e., how to do something *properly),* and can be translated into actions and goals. Each strand of data within the EBP model contains goals and actions that guide practice. At the individual level, these strands of data converge within a practice niche; the specific contexts that both client and practitioner exist and practice in. At the core of a practice niche, and at a wider level the four circles of EBP, are clients' values (i.e., what is at stake for them). Clinicians must endeavor to understand and incorporate values and their normative implications to fully understand the nature of the clinical task at hand. In current forensic practice, client values and preferences fall under the responsivity principle. As the least developed principle of the RNR, responsivity demonstrates a weak influence on clinical decision-making and is easily lost within a process that already assigns value considerations to the final stages of inquiry (Polaschek, 2012). By contrast, task formulation necessarily entails the consideration of values to direct ongoing inquiry. Client values and preferences are therefore established early and maintain a primary role in guiding the process of inquiry.

Though not explicitly addressed at any part of the process, the RNR is underpinned by several social, ethical, and knowledge-related values that influence decision-making. The formulation of a rich problem description will require the clinician to explicate underlying values in relation to the task at hand. For example, a significant problem for RNR-based decision-making is an unbalanced appreciation for the knowledge-related values that guide epistemological tasks. This has resulted in the over-privileging of empirical knowledge and statistical evidence in developing explanations for crime that lack the necessary mechanistic knowledge for providing effective intervention targets (Ward, 2019). By asking "what constitutes a good explanation?" in the process of task formulation, clinicians engage in the explicit consideration of knowledge-related values and are thus oriented towards the sources that will help them to achieve knowledge-related tasks. Similarly, establishing the values that underlie the intended outcomes of treatment confers important guiding information towards the inquiry process. For example, prudential and ethical values likely influence whether treatment aims to maximize the wellbeing of the client or reduce their risk of causing harm to others. Describing the intended outcomes of treatment thereby incorporates constraints on the problem that help to discern satisfactory solutions.

*Step two: Acquire relevant information*

The second step of the original five-stage inquiry process requires the practitioner to acquire relevant research evidence to answer the questions posed in the first step (Spring & Neville, 2011). Step two proceeds from task formulation, in which a problem and its constraints are identified and described; in this way, the initial task

formulation aims to include relevant findings from all four sources of data that will constrain the prospective search for information. Adequate understanding of the task at hand is critical for the process of information acquisition, which will vary according to the specific task and the type of knowledge it calls upon. An innovation of the revised inquiry model is that by broadening the search for *evidence* to include all *relevant considerations*, the kind of information acquired may comprise a mix of scientific knowledge, clinical expertise, personal experience, cultural knowledge, and folk knowledge (see Ward et al., 2021). Focusing on the concept of *evidence* in the acquisition of information runs the risk of gathering knowledge that is narrowly empiricist in nature, to the exclusion of critical conceptual and theoretical analysis. Conversely, *relevant considerations* may include empirical data from RCTs and systematic reviews, as well as theoretical work such as classification, conceptual analysis, model generation, and the evaluation of explanations.

Theoretical work is an essential part of successful science and plays a fundamental role in addressing the many social, physical, and psychological problems that we face as humans (Ward, 2019). Departing from a focus on acquiring *evidence* to instead gathering *relevant considerations* may thus help to ameliorate the theoretical shortcomings of the RNR model. Rather than limiting the knowledge base to that of empirical evidence, incorporating conceptual analysis and theoretical work at this stage reduces the chance that subsequent inquiry will be based on incoherent concepts and poor scientific theories. For example, intervention may target a DRF such as intimacy problems even though this risk factor lacks specificity and may refer to several related concepts such as social rejection, lack of communication skills, and lack of concern for

others (Ward & Fortune, 2016). Refining the concept of intimacy problems involves conceptual analysis and will likely provide a more precise target for intervention. Furthermore, clinicians are provided with a variety of different types of knowledge which can be prioritized according to the task they are undertaking. For example, acquiring statistical evidence from large scale RCTs will not be useful for a practitioner who is attempting to build an explanation for an individual's offending behavior. In this case, a more successful strategy would be to seek etiological models which posit underlying causal mechanisms for the individual's behavior.

*Step three: Appraise information*

Step three of the revised clinical inquiry model reflects the changes made to the *Ask* and *Acquire* steps. Task formulation determines the kind of information acquired and may be empirical or theoretical. Appraisal, therefore, will employ different criteria according to what is most appropriate for the kind of information gathered. A notable difference between the revised version of this step and the original EBP appraisal process is the departure from simply evaluating in terms of empirical adequacy to including additional epistemic concerns such as explanatory depth, coherency, and heuristic value. Depending on the task and type of knowledge required, different criteria will be valued higher. For example, a practitioner seeking to explain an individual's offending behavior would evaluate research according to criteria such as explanatory depth, coherency, and external consistency. The best research evidence to inform treatment planning, on the other hand, would likely consist of RCTs, meta-analyses, and systemic reviews that demonstrate strong internal validity, external validity, and analytic quality. In this way, the constraints incorporated into the task formulation and

acquisition steps of the revised inquiry process help to establish clear links between practice tasks, relevant considerations, and appraisal strategies. The relationship between task, evidence, and appraisal is arguably less sophisticated within the RNR; rather, these steps appear to draw independently from the theoretically problematic assumptions and impoverished knowledge base of the RNR. An example of this is the utilization of DRF despite the clinical task at hand; DRF related research is typically appraised according to standards of prediction and assessment, and subsequently applied to explanatory tasks (Ward, 2019).

Alongside epistemic values, ethical and prudential values are also relevant to the appraisal step. This means that unlike the RNR, in which client values and preferences are considered at the stage of treatment planning and implementation, information about the client will constrain every step of the inquiry process and across all relevant tasks (whether that is problem detection, problem description, explanation, and treatment etc.). Pragmatic considerations (e.g., client circumstances, resources available to both the client and practitioner), are also likely to impose specific constraints upon the planning, implementation, and adjustment of interventions. The appraisal process is highly complex and multi-layered, and therefore requires a strategy that accommodates this complexity.

*Step four: Construct and apply intervention plan*

The fourth, and arguably most complex, stage of EBP is the *apply* step. At this stage, clinicians must integrate best available research with their knowledge of patient characteristics and resources to direct action. An important consideration is also the acceptability of the recommended treatment by the client. To incorporate the client's

values and preferences, the clinician must engage with the client in a process of joint decision-making (Spring & Neville, 2011).

The construction of an intervention plan is particularly difficult to enact within the original inquiry process due to the problems of information overload and decision-making intractability. At this point, clinicians must integrate information from the other three circles of EBP with the best research evidence; a process which is highly complex and extensive, given the amount of information under consideration. In the revised five-step model, relevant considerations are incorporated early and constrained by the task and its formulation. Therefore, by the time of application, clinicians will have the relevant knowledge to achieve the task within the context.

Correctional intervention is typically implemented using highly structured manuals that administer treatment according to the principles of risk, need, and responsivity (Polaschek, 2012). This method faces a similar problem in that relevant considerations are incorporated too late; the delivery of risk and need principles are simply adjusted according to responsivity factors, rather than being constrained at their formulation. The application of the RNR model suffers from problems discussed in the earlier steps: the nature of the problem is not captured in a comprehensive formulation of the task, the principles of risk and need are formulated and evaluated according to empirical, risk-related research, and important considerations such as values and context are consigned to the responsivity principle, which exerts minimal influence on the way the task is formulated and constrained. Thus, the RNR reflects the original EBP inquiry model in that treatment largely maintains a “one size fits all” approach until the

*apply* and *adjust* stages, and clinicians may preemptively form misguided assumptions about the client's problems and treatment.

*Step five: Analyze and adjust plan*

Finally, the clinician must analyze and adjust practice according to the outcomes of the selected intervention. According to the original EBP model of inquiry and similarly observed within RNR-based practice, treatment begins as a "one size fits all" approach which is subsequently adjusted to suit the client and context (Spring & Neville, 2011; Ward, Melser, & Yates, 2007). However, this leaves much of the important work to be done in the final steps of the process. In contrast, the revised inquiry process incorporates all relevant features at an early stage, so that they can inform each subsequent step of the process and generate more effective and appropriate decisions regarding the task at hand. Adhering to the constraint-composition conceptualization of problems (Nickels, 1981) allows this process to be streamlined.

With regard to adjusting treatment in correctional intervention, the implementation of the RNR via manuals, often by paraprofessionals, does not accommodate the flexibility and psychological expertise required for adaptation and adjustment (Gannon & Ward, 2014). As a result, the "one size fits all" approach is likely to persist throughout all stages of inquiry. A further issue is that RNR guidelines refer to empirically based generalizations and provide limited knowledge of putative mechanisms of change (Ward & Maruna, 2007). Thus, clinicians afforded a poor understanding of how an intervention works are unlikely to be able to make adjustments that maximize its effectiveness. By incorporating conceptual and theoretical knowledge,

the revised 5-step inquiry process grants the clinician with the necessary theoretical understanding to make sound and reasoned adjustments to treatment.

## Conclusions

The correctional practice domain is ethically challenging and psychologically complex. It is primarily a normative domain where legal, ethical, and social norms determine what constitutes lawful or unlawful conduct. While legal categories such as sexual or intimate partner violence are useful for cataloguing kinds of harmful action, they are not so successful in denoting psychological meaningful categories for treatment purposes. There are simply too many possible sets of clinical problems and causes associated with crimes such as child sexual abuse. Relying on clusters of dynamic risk factors or sub typologies of types of offenses to classify and explain offending related problems does not help much either. Adaptations of EBP like the RNR model simply don't possess the theoretical resources to guide ethical and effective practice. A theoretically robust model needs to incorporate the conceptual, methodological, and empirical features of science and other forms of clinically relevant knowledge. In our view, a suitably modified version of EBP does have these virtues, primarily because of its inclusion of multiple kinds of information, shared decision making, and its value-based formulation of clinical tasks. A theoretically rich and pluralistic evidence-based practice model like the one outlined in this paper, is ideally placed to reduce harm and to improve the quality of life for both victims and those who commit crimes.

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