Emerging international perspectives in forensic psychology

Bogaerts, S.

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INTRODUCTION

Emerging International Perspectives in Forensic Psychology: Individual Level Analyses

STEFAN BOGAERTS, PhD

Tilburg University, Intervict and Forensic Clinical Psychology, The Netherlands

Forensic psychology and psychiatry have acquired an amount of knowledge in the past decades in the field of psychological, sociological, criminological, neuropsychological and neurobiological research into causes and explanations of delinquent behavior. From different perspectives this special issue presents some interesting scientific publications that can help to improve the treatment efficacy in forensic patients and to prevent or reduce future recidivism.

KEYWORDS forensic psychology, risk assessment, HKT-30, N = 1 analysis, lie detection

INTRODUCTION

Forensic psychology and psychiatry have acquired an amount of knowledge in the past decades in the field of neuropsychological and neurobiological research into causes and explanations of delinquent behavior. The most important development in the past 10 years is the rediscovery of biological determinants of delinquent behavior. Aggressive behavior is caused by an interplay of brain activities; biochemical processes and hormones and cognitions; emotions and environmental risks; and protective environmental factors, in and outside the family (Duntley & Shakelford, 2004). Innovative techniques in the field of functional magnetic resonance imaging (fMRI) give new insight into blood flow changes related to neural activity in the brain. Since the mid-nineties, fMRI has been introduced into the forensic

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Address correspondence to Stefan Bogaerts, Tilburg University, Room M 736, PO Box 90153, Tilburg, 5000. LE, The Netherlands. E-mail: s.bogaerts@uvt.nl

field and has become increasingly important to investigate brain functions among forensic patients. In recent years, disturbances in the hypothalamus, the amygdala, and the neo-cortex have been examined frequently in relationship to delinquent behavior (Strandberg, Elfgren, Rorsman, & Kallen, 2009).

In this edition, an interesting article describes in a clear way the most important bio-physiological, psychological, and psychiatric determinants of criminal behavior. Forensic psychology and psychiatry can not be seen as unitary sciences but maintain strong relations with biology and neurology and criminology, sociology, victimology, and economy. Different disciplines contribute to the broadening and deepening of the psychological and clinical view of the forensic psychologist and psychiatrist on complex disorders frequently found in forensic patients. Despite all these innovative developments, practical utilization of these technologies for clinical practice hardly exists. The knowledge transfer of fMRI outcomes into clinical treatment goals is not currently made and is necessary in the coming years.

Beside these spectacular developments, a lot more occurs, such as the improvement of diagnosis and risk assessment and risk-management tools. The most important goals are the optimization of estimations, preventions, and remediation of dangerous behavior that may lead to future recidivism. The further development of risk assessment instruments is a process that was increasingly dominant in the past 20 years in the forensic investigation. At a certain moment, we must dare to ask ourselves whether we achieve or do not achieve statistical limits to improve, for example, the predictive validity of risk assessment tools for clinical practice and individual decision making. We note first signals of turning points and doubt. At this moment, Douglas and colleagues are working on the revision of the HRC-20 in consultation and collaboration with forensic experts and psychologists all over the world. In the same period as the improvement and revision of the HCR 20, the HKT-30 is currently under revision in the Netherlands. The HKT-30 is a risk assessment instrument comparable to the HRC-20 but with the major difference that the HKT-30 has been developed especially for the Dutch forensic situation and that the instrument is also used for treatment evaluation because of the emphasis on clinical variables.

Finally, the treatment of forensic individuals is very important to enhance public safety. Treatment targets should be theoretical and assessment-driven and has to be supported by the "what-works" principles. However, only focusing on the what-works principles is not enough. Questions of why an intervention works, with whom, under what condition, and in which context are equally important. Most intervention strategies are based on evidence and practice-based treatment approaches, but they create some problems. The effectiveness of forensic treatment programs on reducing future recidivism is difficult to prove for various reasons. Very often, forensic patients achieve combined therapies such as psychotherapy

and pharmacological treatment. Moreover, there is also the influence of the environment in which the forensic patient resides. Another problem is the standard use of randomized controlled trial (RCT), whereby the population is distributed at random in an intervention and a control group. RCTs are considered to be the best epidemiological research methods to measure treatment effectiveness. The question is whether RCT designs are always suitable in the forensic field. Research groups are often small; purposely abstaining from treatment is unacceptable because of ethical reasons and the protection of society. Furthermore, the effectiveness is determined by comparing group means between the experimental and control groups.

In this special edition, we highlight some important forensic and methodological domains because of their growing impact in the coming years. More than 30 years ago, Megargee (1976) and Monahan (1981) stressed the importance of the interaction between personality situational and environmental factors. They underlined the importance of risk and protective social networks and stated that recidivism is not only a matter of personality characteristics but depends on environmental factors and mutual influence. An important challenge in the future is to examine potential links between personality characteristics and network characteristics. The assumption is that personality disorders will be reflected in network positions for social diagnoses. This can add extra dimensions to diagnostic tools that are currently focused very strongly on persons (individual diagnoses) and less on persons in their environment.

In this edition, first insights will be presented into the relationship between relational networks of forensic patients during residential treatment and functioning variables. The way someone is socially positioned to other patients and staff in a forensic hospital is informative for insight into past and future social positions. Insight in social networks is not only important from diagnostic perspective but provides useful tools for post-release outcomes and risk management. Clinical information provides information about current and past risk and highlights on potential risk and protective areas after release. The first article stresses the importance of social networks in forensic settings as an additional social diagnostic tool, and the second article describes the importance of social networks in the context of risk management. The next contribution provides a statistical and methodological alternative to RCTs. The $N = 1$ analysis is very suitable for analysis at a detailed level to study changes in response to treatment. The $N = 1$ analysis is much more sensitive than group comparisons and is fundamentally important in a domain where we have to prevent new offenses and victims.

Finally, the use of polygraph tests in law enforcement or forensic screening situations is still a criticized method because of its false-positive (and -negative) error rates. Lie detection tests are regularly used in interrogation of suspects and sex offenders. In most countries, the test is not allowed as legal evidence in court. Scientific publications critical of sloppy

procedures in the application of lie detection tests and research show that their reliability is still weak. An interesting article describes the possibilities and limitations of the methodology of the polygraph. Most researchers conclude that the concealed information test (CIT) is uncontested. The CIT is a promising tool in clinical and forensic research. The central theme of the five articles is the emphasis on the individual level. Politicians, policy makers, and policy researchers focus too much on "the average forensic patient" and have little knowledge about the "real forensic world behind walls." It is important to refocus on the individual patient level and to use the appropriate methods.

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