A COMPARATIVE AND EMPIRICAL ANALYSIS OF PRACTICES IN NORWEGIAN FORENSIC PSYCHIATRY

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Quis custódiet ipsos custódies?

(Who watches the watchmen?)

Decimus Junius Juvenalis (67–127 C.E.)
Roman writer, satiric

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Original papers

Paper I:
Grøndahl, P. Scandinavian forensic psychiatric practices – an overview and evaluation. Nordic Journal of Psychiatry 2005; 59:92-102 (the comparative forensic reports paper).

Paper II:
Grøndahl, P., Ikdahl, S.E., Dahl, A.A. A study of forensic psychiatric screening reports and their relationship to full psychiatric reports. Journal of Forensic Psychiatry & Psychology 2007; 18:331-41 (The screening report paper).

Paper III:
Grøndahl, P., Værøy, H., Dahl, A.A. A study of claimed amnesia in homicide cases and how forensic psychiatric experts examine such claims. International Journal of Law and Psychiatry, 2009; 32:281-287 (The amnesia paper).

Paper IV:
Grøndahl, P., Grønnerød, C., Sexton, J. A comparative case vignette study of decision making in forensic psychiatric cases. International Journal of Forensic Mental Health, 2009; 8: (In Press) (The case vignette paper).

Abbreviations

APS	Allvarlig Psykisk Störning (term used in Swedish Penal Code for insanity)
CPA	Criminal Procedure Act
DNMFB	Danish National Medical Forensic Board
DSM-IV	The American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th edition, 1994
GAF	Global Assessment Functioning scale
HCR-20	Historical, Clinical, Risk Management (20 items)
ICD-10	World Health Organisation. International Classification of Diseases, 10th edition, 1992
IPDE	International Personality Disorder Examination
IQ	Intelligence quotients
MINI	MINI International Neuro-Psychiatric Interview
MMPI-II	Minnesota Multiphasic Personality Inventory
NMFB	National Medical Forensic Board
OR	Odds Ratio
p	P-value or significance level
PAI -	Personality Assessment Inventory
PCL - R	Hare Psychopathy Checklist Revised
SAVRY	Structured Assessment of Violence Risk in Youth
SCID-I	Structured Clinical Interview for DSM-III-R/IV for Axis I disorders
SCID-II	Structured Clinical Interview for DSM-III-R/IV for Axis II disorders
SIRS	Structured Interview of Reported Symptoms
SPSS	Statistical Package for Social Sciences
TOMM	Test of Memory Malingering
TMA	Traumatic Memory Argument
TSA	Traumatic Superiority Argument
WAIS	Wechsler Adult Intelligence Scale

1. INTRODUCTION

1.1. Forensic psychiatry

Forensic psychiatry can be defined as the part of psychiatry which deals with patients and problems at the interface between the legal and psychiatric systems (Gunn & Taylor, 1993). Forensic psychiatry is based on several disciplines such as criminology, law, philosophy, psychiatry and psychology and covers two areas: First, the contribution of the judicial system to psychiatry, i.e. by constituting rules and laws regulating the practice of psychiatry. Second, the contribution of psychiatry to the judicial system, i.e. the psychiatric evaluation of offenders in order to assist the courts in questions of "responsibility" or criminal insanity (Borup Svendsen et al., 1977). Thus, the forensic psychiatric field consists of both civil and criminal forensic psychiatry; however, this thesis will only deal with the latter part.

In criminal cases the courts may ask psychiatric or psychological expertise for guidance in complex matters such as human behaviour, criminal insanity, the competence to stand trial, the risk of repeated violence, and other related problems. For these purposes the courts may appoint one or several forensic psychiatric or psychological experts (in short, experts) to make a qualified assessment of the defendant. In some countries the findings of the experts are handed to the court as reports only, while in other countries the experts appear in court to present their report, explain their findings and answer questions. In Norway, the latter approach is practiced in the most serious cases.

1.2. Why conduct research in forensic psychiatry?

In 1994 my colleague Lene C. Holum, MA, and I intended, as our joint student thesis in psychology, to conduct interviews with patients at a high security hospital who had committed homicide. We were interested in examining if there were qualitative differences between patients who had been found legally sane and insane, respectively, first by the experts and subsequently by the court. However, the project was not approved by the Regional Committee for Medical Research Ethics. Somewhat puzzled we were unsure of what to do next. In an informal discussion with Professor Jon Martin Sundet, he suggested to us that we might interview forensic psychiatric experts regarding their methods and understanding of important concepts in forensic psychiatric work. Thus, this became the central theme of our student thesis.

After completing my degree I began to work within the forensic psychiatric field, first as a clinical psychologist at the high security hospital at Dikemark, and later as a forensic expert

at Office for Forensic Psychiatry at the Oslo Police Department. Gradually in the course of my forensic work I felt that this special field seemed to be characterised by conservative traditions and dominated by the opinions of a few highly profiled experts. In my view, the field was based upon surprisingly little empirical research. Additionally, there appeared to be a deeply rooted trust in the unstructured clinical interview, and few other methods were applied when examining a defendant. Since the reliability of such interviews is low, this approach could be a threat to the quality of such reports. A high quality would imply verifiability, which means that valid information is presented to members of the legal profession and to lay judges in such a way that the premises and conclusions are clearly understandable since verifiability demands the optimal use of clinical and test-based information.

I therefore concluded that to obtain more empirical knowledge in regard to Norwegian forensic psychiatry would be of great importance, particularly since the experts' reports to the courts can have serious consequences for the defendants.

My main intension with this thesis and the effort put into it is to contribute to Norwegian forensic psychiatry with comparative empirical studies. If successful, and with significant findings, my work could contribute to a better practice and quality of forensic psychiatry, and an eventual consequence of this would be a strengthening of the legal safeguards for the defendant in (serious) criminal cases.

To me, a good starting point was to obtain a comparative and systematic knowledge about how the Scandinavian countries organised and conducted their forensic psychiatric examinations, as possessing such knowledge could help to determine whether these other countries had procedures and methods that could contribute to improvements in Norwegian forensic psychiatric practice.

In my work at the Office for Forensic Psychiatry, my colleagues and I wrote numerous screening forensic reports, advising the principals whether a full psychiatric report was needed or not. Since we hardly ever received feedback on our recommendations, I found it worthwhile to systematically investigate exactly how our recommendations were being used by the principals since such knowledge could indicate the usefulness of the screening reports and eventually contribute to improvements (practically and/or methodologically).

The concept of amnesia (i.e. unconsciousness in the Norwegian Penal Code) is considered to be among the most difficult ones to grasp in forensic psychiatry. At the same time, defendants claiming amnesia for a serious criminal act is not uncommon and is frequently given considerable coverage by the media. On a personal level, I have experienced that claims of amnesia by defendants have often left me with doubt in terms of

how I should examine the genuineness of these claims, and I wondered how other experts methodically examined defendants claiming amnesia. According to the Norwegian Penal Code, if the amnesia is genuine, the defendant might be considered to have been unconscious at the time the crime was committed and could therefore not be punished in an ordinary way. For that reason, the advice of the forensic experts is crucial for both the court and the defendant, and to know the methodological basis of the experts' conclusions in these types of cases would be of great importance.

For quite awhile, the media and some papers in the literature have been highly critical of the work and judgments of forensic psychiatric experts in Norway, pointing to topics such as ethics, a lack of verifiability and so forth. Some papers even claimed that the judgments of laypeople were as good as those made by forensic experts. Due to the seriousness of the consequences of the judgment of forensic experts, as well as their task in the work of the courts, I found it important to obtain a more systematic knowledge of this issue.

1.3. The thesis and the papers

This thesis is an analysis of criminal forensic psychiatry with regard to the practices, methods and premises behind forensic psychiatric reports primarily in Norway, but also to some extent in Denmark and Sweden, and consists of a summary and four papers based on four different samples.

Paper I (the comparative forensic reports paper) gives an overview of Scandinavian forensic psychiatric organisation and practises, and compares examination methods in Denmark, Norway and Sweden.

Paper II (the screening report paper) examines forensic psychiatric screening reports, whether their recommendations were used by the principals, and compares them to the conclusions of the full reports issued in the wake of the screening report.

Paper III (the amnesia paper) examines the circumstances when a defendant claims total or partial amnesia for a homicidal act, and explores how experts assess this claim.

Paper IV (the case vignette paper) uses case vignettes concerning forensic issues and compares both how professionals versus laypeople and psychiatrists versus psychologists rate the same clinical vignettes.

2. BACKGROUND

2.1. Core features of forensic psychiatry

To a great extent, forensic psychiatric practices in a given country are determined by national legislation. Through its legislation, each country adheres to different models and principles, which both guide and control the tasks and work conditions of forensic psychiatry.

2.1.1. Models and principles

The forensic models in various countries are rooted in both philosophical and judicial thinking, so criminal law basically builds on the assumption that individuals have a "free will" to either commit or abstain from committing criminal acts (Syse, 2006). Without the fundamental tenet of "free will", an individual cannot understand that a criminal act is wrong, and eventually he/she should not be punished for committing that act. In order to find an individual guilty of a criminal act, two elements have to be proven: 1) That the event actually occurred and was committed by the identified person (actus reus), and 2) That the person had the required "free will state of mind" in relation to the crime (mens rea) (Gunn & Taylor, 1993).

There are two main models as to how mens rea is determined, namely the *mixed model* and the *biological model* (Table 1), with the mixed model divided into the *psychological principle* and the *causal principle* (see Table 1 based on Thorvik (2000) and Syse (2006)).

Table 1 - Overview of different models for determining mens rea, i.e. the conditions that must be fulfilled in order to consider legal insanity as the cause of a defendant's actions.

MODEL	CORE FEATURES	CRITIQUE
1 The mixed model	A cognitive approach derived from the thinking of Kant. Has an almost complete emphasis on reason and cognitive abilities. To be considered legally insane will require both a mental disorder and specific supplementary conditions. Requires both a mental disorder and a lack of ability to understand the criminal aspects of the committed act. Requires a causal connection between the mental disorder and the committed crime.	Too much emphasis upon pure cognitive abilities such as capacity to separate right from wrong. Ignorance of feelings as an important source for motivation. Same as above. Difficult for the experts and the court to reconstruct a given state of mind at the time the act was committed.
2 The biological model	A non-cognitive approach derived from the thinking of Hume. The will is independent – and man is furnished with a basic notion of sympathy for his fellow man "the fellow feeling". Emotions play an important role for our motivations and actions. Clear defects in cognition and basic emotions will imply legal insanity. The circumstances of the crime do not count, only the diagnosis and the severity of the mental disorder.	A total emphasis on a mental condition - "fishing for a diagnosis" - without any regard to the circum-stances of the crime, i.e. psychotic motivation for their act. Defendants regarded as psychotic may know that their act is wrong, but will nevertheless be regarded as legally insane. The psychotic patient is not given any responsibility for his actions

The most famous example of the psychological principle is the M'Naghten ruling from 1843. Daniel M'Naghten, who suffered from paranoid delusions, stalked the British prime minister and mistakenly shot his secretary, who he believed to be the prime minister. M'Naghten was assessed by a total of nine psychiatrists who found him criminally insane, which resulted in the court ruling that M'Naghten was not guilty due to being legally insane. This decision led to an outrage in the public partially due to his clear intent in committing the act. Therefore, the Supreme Court of England created a new model for determining mens rea, which demanded that the following elements all had to be present at the time of the crime:

A disease of mind;
The diseased mind being the cause of a defect of reason;
The defect of reason so severe that the defendant lacked the ability at the time of his actions to either:

a) know the wrongfulness of his actions, or
b) understand the nature and quality of his actions.

This model has been named the M'Naghten test or the M'Naghten rule.

An example of the causal principle is the Durham rule, named after Monte Durham, a 23-year-old man who had been in and out of prison and mental institutions since he was 17, and was convicted of breaking into a house in 1953. In the appeal case, Judge Bazelton created the Durham 1954 test, stating that: "The accused is not criminally responsible if the unlawful act is the product of mental disease or defect", which created a 14-fold increase in the number of insanity acquittals over the next three years. This ruling did not require any lack of or defect in (cognitive) reasoning (Thorvik, 2000), and was much criticised due to a wide interpretation of what constitutes mental disease.

The most famous and/or cited case in Norway based on this biological principle is one involving the Nobel prize winner in literature, Knut Hamsun. After World War II, he underwent an extensive forensic examination due to the suspicion of cognitive impairment and a pronounced hearing disability after his expressed support of the Nazi regime in Norway.

The reason why there are so few examples of cases based on biological reasons is probably because very few countries adhere to this principle, although Norway is one of them (Høyer & Dalgard, 2002). In the Norwegian forensic system, the circumstances (i.e. motivation or psychotic intent) of the crime do not count, only a person's mental state is decisive in defining sanity on legal grounds. An example which illustrates this point, concerns a man who killed one passenger and wounded four others in a bloody attack onboard a tramcar in Oslo in 2004. The experts found him to be legally insane because he clearly had psychotic symptoms and suffered from schizophrenia, and the court found him not guilty (but nevertheless sentenced him to compulsory psychiatric care) due to his schizophrenia. Whether his action was motivated because of psychotic delusions or whether he knew that his actions were illegal, was not taken into consideration by the court.

2.1.2. Judicial systems

Two main judicial systems for court proceedings dominate the Western world: the adversarial and the inquisitorial system.

In the *adversarial system*, which is found in most Anglo-Saxon countries, e.g. in Great Britain, the United States and Canada, the court has a more secluded role. It is the legal parties (the defence versus the prosecution) who are at the centre of events. Various experts represent the two parties and engage in a so-called “battle of experts”, i.e. fighting each other both professionally and academically. An illustration of this “battle of experts” was shown in the trial of John Hinckley, who attempted to assassinate President Ronald Reagan in 1981. The parties appointed a total of eight experts: four for the defence and four for the prosecution, and these experts drew opposite conclusions regarding Hinckley’s legal sanity depending on which side they testified on behalf of (Sharf, 1986; Ewing & McCann, 2006). In the adversarial system, the jury decides on guilt and the judge decides what punishment should be given if the defendant is found guilty.

The *inquisitorial system* is found in most of continental Europe and the Nordic countries, and the court plays a more prominent role in the proceedings. The experts are appointed by and represent the court, i.e. they shall act in a neutral manner and not represent either parties, and the court usually follows the advice given by these presumed neutral experts (Syse, 2006; Höglund et al., 2009; Falk-Pedersen, 1997).

2.1.3. Legislation and core concepts

Norwegian forensic psychiatry is regulated by both the Penal Code and the Criminal Procedure Act (CPA), and the current legislation was revised in 2002. The court may initiate a forensic psychiatric examination according to Section 165 of the CPA and appoints one or usually two experts, and the experts are given a specific mandate from the court concerning their examination of the defendant. As a general rule, the experts will be asked to evaluate or investigate whether the defendant is legally insane or not according to three conditions listed in Section 44 of the Penal Code. These conditions are:

Psychosis;
Unconsciousness;
Severe mental retardation (IQ <55).

Psychosis is the core condition in most countries which leads to acquittal due to reasons of legal insanity, and implies a fundamental defect of reality testing (Malt et al., 2003). The basic symptoms are:
Sensory misperceptions, i.e. visual, auditory, touch or smell hallucinations;
Disordered thinking, i.e. loosening of associations, blocking of thoughts, etc;
Delusions, false interpretations of reality that cannot be changed despite obvious evidence to the contrary; and
Confusion and other conditions, with acute or chronic severe cognitive impairment.

The rationale for legal insanity due to psychosis is that a defendant who has such a fundamental defect in reality testing cannot be held responsible for his criminal action due to the corruption of his "free will" by the psychotic disorder.

Unconsciousness is the inability to encode and store episodic memory due to organic or psychological reasons (see Section 2.5.1). The rationale for legal insanity is that such a loss of memory implies that the defendant cannot defend himself properly – since he/she does not remember what happened (Gunn & Taylor, 1993). In addition, when consciousness is presumed to be disturbed, the defendant will lack the ability to identify the criminal act as being illegal (Langfeldt, 1947). While Norwegian law uses the term "unconsciousness", other countries such as Australia, Canada and New Zealand uses the term "automatism", i.e. involuntariness comprising a complete lack of capacity in the defendant to contain his conduct (Yeo, 2002). Nevertheless, the notion that an individual can commit a criminal act while being "unconscious" or due to "automatism" remains quite controversial, both in Norway and internationally.

Unconsciousness is both difficult to comprehend and complicated to evaluate (Hartvig et al., 2003). The expert must assess whether the claimed amnesia is genuine, examine the causes of amnesia, and if the clinical condition satisfies the criteria for the legal condition termed "unconsciousness". As a consequence of this, the experts' conclusions as to whether the defendant was unconscious or not at the time of the crime can be of vital importance to the criminal proceedings. Thus, it is of interest to know how the experts conduct such evaluations, i.e. what methods are used etc., which is the topic of Study III (the amnesia paper).

Severe mental retardation, i.e. defendants who have an intellectual disability and a limited capacity to understand and control their actions. As a result, they will be regarded as being legally insane in relation to their criminal acts. In Norway, the law requires a person to have an intelligence quotient (IQ) ≤55 to be regarded as legally insane, but since persons with intellectual disability have a variable level of functioning, both the measured IQ and an evaluation of the defendant's total functioning are taken into account. An assessment of a

defendant who is suspected of severe mental retardation represents a challenge for the experts, with this issue receiving perhaps too little attention by the Criminal Justice System (Søndenaa et al., 2008).

In Norway (in addition to Sweden and the Netherlands) in accordance with the Criminal Procedure Act (§ 165), the prosecuting authorities can request a *forensic psychiatric screening report* to be made, and can request such a report if they are in doubt as to whether to instigate a full forensic psychiatric report or not. If the expert issuing the screening report expresses doubt about the defendant being criminally insane, he/she may recommend to the principals that a full report be conducted, and based on the advice given, the principals may instigate a full report. This arrangement with such screening reports is considered to save both time and money, though we do not know if the principals actually consider the report to be relevant and follow the advice given, which is the topic of Study II (the screening report paper).

In accordance with the Criminal Procedure Act (§ 147), it is mandatory that the fully completed forensic report (the screening reports are not included here) is submitted to and controlled by the National Medical Forensic Board (NMFB). The NMFB can accept the premises and conclusions in the report or can comment on the weakness of the premises behind the experts' conclusions. In a few cases, the NMFB can disagree with the experts' conclusions and request that the experts conduct a supplementary report, meaning that the experts must either form a better basis for their conclusions or change them.

In some cases after a report is conducted, the experts appear in the court proceedings to observe the defendant and present their report. Based on their observations in the proceedings, they may find that they have to change their original conclusions, and in such instances, they issue a supplementary report to account for their new conclusions.

2.1.4. Special measures

A decision by the court that a defendant is legally insane for his actions will not automatically lead to an acquittal. If the court finds the defendant to be psychotic, and the crime to be of a serious nature, the defendant may be sentenced to compulsory psychiatric treatment due to the risk of re-offending, according to Section 39 of the Penal Code. If the offender is severely mentally retarded, he can be transferred to compulsory care, according to Section 39 a.

A defendant who is not considered to be psychotic, but who has acted under the influence of a severe mental disorder in such a way that he has a reduced understanding of

his criminal act, can be given a reduced sentence, according to Section 56 c in the Penal Code.

If the defendant is held legally sane for his actions at the time of the crime, he may be sentenced to detention in certain cases, according to Section 39 c of the Penal Code. Such a special measure may be decided if the court finds the criminal act particularly severe and considers society to be in need of protection due to the risk of re-offending. The detention is not limited to a specific amount of time, although the court shall set a minimum and maximum time, and the maximum time for detention may be prolonged if the court still regards the convicted at risk of committing new and serious crimes.

2.2. Development of forensic psychiatry

To understand how the forensic psychiatric system reached its current state of practice, the knowledge of some of its history will be helpful. The development of this field has mainly occurred over the three last centuries, and the practice of forensic psychiatry, at least in Norway, is largely built upon established traditions.

2.2.1. International development

In all known societies, there are rules directing what individuals can or cannot do. If someone violates these rules, he will be subjected to some type of punishment or reaction (Qvarsell, 1993). Though our understanding of the causes of insanity has changed profoundly over time, it has nevertheless been widespread recognized that some individuals do not realize that their act(s) are wrong or illegal. For that reason, they should not be punished in an ordinary way, and this way of reasoning was clearly stated by Johann Weyer (1515-1588), who is often regarded as one of the founders of psychiatry:

"*If there is anyone who wishes conscientiously to maintain that the will must be punished severely, I wish him first of all to distinguish perfect will of a sane man from that of a man who has started to act with the sense of a troubled spirit, or, if you wish, from the corrupted will of a person who is out of his senses and with which the devil plays his game, as if the person were in the power of someone else. Such a corruption of will could also be imputed to melancholies, to the insane, to little children, about whom one may easily make believe that they have done this or that; the children themselves imagine falsely that this is so. The Lord who knows the heart of man, does not permit that all be punished in the same manner as those whose mind is free; so much less should a man permit such things to happen*" (Zilboorg, 1941).

Weyer built his viewpoints on old traditions. In ancient India (880 B.C.E – Before the Common Era, which is the same as B.C.) the laws gave special consideration to retarded

persons and children under 15 years of age (Gutheil, 2005). In the Old Testament, a passage (Deuteronomy 4: 41-42, about the 7th century B.C.E) may indicate an understanding of different motivations, e.g. insanity, behind a crime. In Antiquity, both Plato (423-347 B.C.E.) and Aristotle (384–322 B.C.E.) claimed that those without normal sense or "free will" could not be held responsible for their actions. Later, the Babylonian Talmud (approximately 500 C.E. – The Common Era, which is the same as A.D.) stated that: *"It is an ill thing to knock against a deaf-mute, an imbecile, or a minor. He that wounds them is culpable, but if they wound him they are not culpable."* The Roman Court (27 B.C.E.– 476 C.E.), which greatly influenced later court systems in Europe, also acknowledged that insane individuals who had committed a crime should be treated differently than other persons (Qvarsell, 1993).

In spite of special regulations concerning the legally insane, legal systems did not always give more humane treatment to these individuals. They were often hidden away and suffered from harsh and humiliating treatment, and were frequently at the complete mercy of their families (ibid).

There are many accounts of the various understandings of legal insanity over the centuries, and courts' trepidations as to best deal with the criminally insane. In the English courts of the 14th century, the "right and wrong test" was developed, and in the 16th century, the "wild beast test" was suggested. However, these were not formal tests, but rather merely attempts to create operational descriptions of defendants who should be considered legally insane. These descriptions were unsystematic and not based on any scientific approach, while few doctors and scientists had any particular interest in defining legal insanity. Weyer should be mentioned since he claimed that doctors rather than judges should decide how the legally insane should be dealt with.

Gianbattista della Porta (1536–1615), often said to be the first criminologist, searched for a systematic link between the physical features of a criminal and his/her compulsion to commit criminal acts. He claimed that thieves had small ears, big lips, etc., and he also claimed that criminals should undergo treatment – not punishment. My point with all of this is that these opinions and approaches were unique during their times, though they did not reflect a systematic interest shown by society at large.

From the Middle Ages until approximately 1800, two developments concerning forensic psychiatry can be traced: 1) The defendant was given an increased opportunity to make excuses, i.e. claim insanity for his actions, and 2) The science of the psychology of man and his social life gradually emerged with more of an emphasis on the individual – not merely on the criminal act itself (Moe, 2008).

Up until about the year 1800, most criminal laws focused on the criminal act only and gave hardly any consideration to the mental state of the offender (Nye, 1984; Schaanning,

2002; Moe, 2008). From the 19th century onward, several new scientific approaches emerged that were based on a more systematic study of criminals, i.e. the individual behind the crime. Although it is difficult to follow how different writers categorise these various approaches, four approaches seem to have developed: criminal psychology, criminal anthropology, social Darwinism, and (forensic) psychiatry.

Criminal psychology, founded by J. B. Friedreichs (1796–1862), attempted to explain why criminal acts occur, and wanted to develop criteria for legal sanity and explain criminal behaviour (Qvarsell, 1993). According to Friedreichs, the determination of whether a defendant was legally insane or not should be assessed by doctors or medical lawyers.

Criminal anthropology was based upon studies of physiognomy and phrenology. Franz Josef Gall (1758–1828) was an anatomist of the brain and founder of phrenology. He claimed that certain mental characteristics/abilities had special locations in the brain, and that these characteristics could be measured on the outside of the skull. Thus, by taking measurements of the skull, one could tell who had the characteristic personality features of a criminal and if this was caused by defects in the brain (Schaanning, 2002). Historically speaking, the most famous criminal anthropologist of all was probably Cesare Lombroso (1835–1909), who made systematic measurements of the skulls of Italian criminals. He claimed that certain individuals are born criminals ("huomo delinquente"), and that they could be identified by the shape of their skull. He developed a complex theory called atavism which stated that some persons were "arrested" in an earlier developmental stage and were consequently "primitive". According to Lombroso, they could also be identified by their frequent use of tattoos and several other features (language, low intelligence, etc). One of Lombroso's main ideas was that the criminal does not commit crimes out of evil, but instead does so because he is acting in the way that a primitive human being would do (Qvarsell, 1993). As a result, Lombroso said the criminal could not change, so he suggested that criminals should be detained until they no longer constituted a danger to others (ibid).

Social Darwinism emerged in the 19th century, inspired by the ideas of degeneration by Bénédict A. Morel (1809–1873), which were put forth as an explanation for mental disorders. These were deterministic ideas which claimed that some negative or positive traits (such as criminality, high/low intelligence, and mental disorders) prevailed and became worse for each successive generation in some families. A popular notion was that one had to control, even extinguish those families with bad (criminal, etc.) traits in order to stop them from destroying society as a whole – a form of social Darwinism practiced by the Third Reich (Schaanning, 2002).

Finally, *psychiatry* came as a separate branch of medicine in the English speaking world in approximately 1840 and dealt with mental disorders (Allan et al., 1995). Psychiatrists would soon offer their expertise to the courts, perhaps to distinguish their speciality or to

"explain the unexplainable" with regard to a defendant's motivation and eventual insanity in relation to serious and sometimes incomprehensible crimes. One example of such a psychiatrist is James C. Prichard (1786-1848), who introduced the term *moral insanity* which pointed to a form of mental derangement that left one's intellectual faculties uninjured, but primarily affected the capacity for moral judgment. Pritchard raised the issue of whether some defendants were "mad or just bad" - an issue that was highly relevant to the courts. In 1835, Pritchard wrote that a person suffering from "moral insanity" was: *"….incapable of conducting himself with decency and propriety in the business of life",* though according to Meloy (1988), Pritchard's approach contaminated scientific (psychiatric) objectivity with moral judgments.

The modern forensic psychiatric expert is essentially a product of the 19th century (Gutheil, 2005; Foucault, 1978; Allan et al., 1995; Skålevåg, 2002). In 1825, so-called "mad doctors" were acting as expert witnesses in English courts, although half of them did so on behalf of friends or patients they had treated (Allan et al., 1995). Eventually, independent medical experts began to replace the therapists as witnesses (Gutheil, 2005), but European courts often rejected doctors' conclusions (Foucault, 1978). From the 20th century onward, experts played an increasingly important role in the legal system in all Western countries (Qvarsell, 1993). One reason for this development was the growing fear of an (presumed) increased criminality, and the social need to control these criminal elements. The experts held the opinion that they could help to control and understand criminals in part by sharing their knowledge with the courts (ibid).

Today, experts are more or less routinely called upon to evaluate defendants for the courts in most Western countries, with medical doctors being the first to appear in court, followed by specialists in psychiatry and later by psychologists as well. The first psychologist to appear in court (a civil case) was Professor Karl Marbe (1869-1953), who did so in 1911 (Allan et al., 1995).

2.2.2. Development of Norwegian forensic psychiatry

As in other Western countries, it was during the 19th century that Norway began to use a more systematic approach with regard to the mentally ill and the law, and the Norwegian Criminal Law of 1842 was the first law to create explicit rules for the mental conditions that can lead to an acquittal due to insanity (Moe, 2008). This law adhered to the biological principle (Høyer, 1985), though the new Penal Code of 1902 was more liberal. As a result, the legally insane could receive preventive (custodial or non-custodial) supervision (i.e. "sikring") instead of punishment, and individuals with "deficient mental development" and/or "permanently impaired mental capacity" (i.e. "mangelfullt utviklede og/eller varig svekkede

sjelsevner"), although not the legally insane, could obtain a reduction in their punishment or even be acquitted (Grøndahl, 2000).

In 1929, the Penal Code was revised again due to the general concern because of an apparent increase in criminality, as it was claimed that too many criminals were acquitted due to insanity using the legal definition. Consequently, defendants with a reduced intellectual capacity would no longer be acquitted, but could now receive both punishment and preventive supervision.

The most recent and current revision of the Penal Code was introduced in Norway in 2002 and is previously described in Sections 2.1.3 and 2.1.4.

Concerning forensic expertise, medical professors were assigned the duty of assisting the courts in general forensic matters starting in 1815 (Høyer, 1985). In 1887, a radical revision of the CPA introduced a more formal arrangement in appointing experts to assess questions of insanity for the courts (Lundeberg & Skålevåg, 2004). This change, together with the establishment of the NMFB in 1900, made the psychiatric expert's role in the legal system more explicit and formalized. However, forensics has never been an established speciality in the professional psychiatric or psychological associations of Norway. Nevertheless, the system of using court appointed experts has more or less remain unchanged since 1887. The idea that experts would increase the understanding, control and legal safeguards of the defendants has been strongly endorsed. Still, for a long time, forensic psychiatry has been regarded by many as a controversial element of the courts and has been subjected to much criticism over the years, particularly from the social sciences (Ellingsen, 1987; Kongshavn, 1987; Schaanning, 2002; Halvorsen, 2002).

Despite this criticism, there is apparently little empirical data about either the quality or standards of the forensic psychiatric experts and their forensic reports. Though there are clear differences among the medico-legal systems in the various Scandinavian countries, there are also corresponding similarities, with each country applying *approximately* the same mandate (to examine whether the defendant is suffering from severe mental disorder (primarily psychosis) at both the time of the crime and the time of observation). In addition, all the Scandinavian countries adhere to the inquisitorial system and a systematic comparison of the medico-legal systems and their quality (methods used, verifiability etc.) of the Scandinavian reports can therefore indicate something about the quality of Norwegian forensic psychiatry, which is the topic of Study I (the comparative forensic reports paper).

2.3. Critique of forensic psychiatric evaluations

The question has been raised as to whether forensic experts have really brought objective knowledge, clarity, neutrality and better legal safeguards for the defendants into the courts?

The answer is equivocal. Up until the last four decades, the courts were often impressed by the experts' qualifications and seldom questioned their conclusions (Jackson, 1986; Saks & Koehler, 2005; Ennis & Litwak, 1974), although growing criticism has gradually weakened the experts' former prestige in the courtroom. Over the years, both the forensic psychiatric field in general and the experts in particular have been subjected to quite an extensive and perhaps sometimes harsh and unjust critique. Experts have been accused of being "double agents" (talking pleasantly with the defendant, while actually assisting the legal system), thereby helping society to stigmatize and restrict the defendant (Nedopil, 2002; Rogers, 2004) and failing to reach reliable and valid conclusions (Faust & Ziskin, 1988).

So, what are the problems in using evaluations by experts? To separate the legally sane from the insane is sometimes a very difficult task since the experts cannot enter a defendant's brain or see what he thinks. Psychiatry and psychology are soft sciences that get most of their information by inferences and have to draw the difficult line between matters of "facts" and matters of "values" (Rogers, 2004; Kenny, 1984). One heretical question is whether the court really needs experts in psychiatry/psychology to assist them in the first place. Are the judgements of laypeople in regard to criminal insanity the same or significantly different from that of the experts? This is the topic of Study IV (the case vignette paper).

There can sometimes be quite a lot at stake in some penal cases, and there is a huge difference between defendants being acquitted for homicide due to reasons of legally defined insanity (but in some cases sentenced to compulsory treatment) as opposed to receiving a life sentence if found legally sane. Therefore, the legal parties can use a considerable amount of time and effort in order to convince the court that the experts are wrong and to criticise them for conclusions not in favour of their client.

In summary, there are at least three aspects which contribute to controversies in the field of forensic psychiatry (Low et al., 1986):

1) Within the legal profession: Specialists of the legal profession and lawmakers cannot reach a consensus concerning whether a given insanity defence is consistent with the purposes of the Penal Code (as stated in the various jurisdictions), and exactly how to achieve these purposes.

2) Within the social and mental health profession: Specialists have trouble in achieving agreement on how to best assess, describe and present insanity and other deviant behaviour in legal terms for the courts according to the Penal Code as written.

3) Between the legal and mental health professions: Legal professionals and medical/psychological professionals have difficulty in communicating with each other due to different nomenclature, cultures, values and objectives.

In addition, the social sciences (at least in Norway) have often criticised the role and methods of forensic psychiatry experts primarily based upon ideological reasons.

This thesis will not dwell on the *first* aspect addressed above. The problems *within* the legal profession concerning the achievement of a consensus as to whether an insanity defence is consistent with the purposes of the Penal Code, and how to achieve this, is considered to be outside the realm of this thesis.

The *second* aspect concerns the main theme of this thesis: how do forensic experts methodologically assess a defendant and how is the quality of their assessments?

The *third* aspect, legal versus forensic professionals, is only partially dealt with here, primarily in Study II (the screening report study).

What is the current "state of the field" of forensic psychiatry in Norway, and what criticism is relevant? What type of knowledge is needed for the further development of forensic psychiatric practice and quality assurance in Norway? To approach these questions, a review of relevant forensic psychiatric research studies will be presented.

2.4. Research in Norway and Scandinavia

This Section mainly describes the current status of relevant clinical research within forensic psychiatry in Norway and Scandinavia (Denmark and Sweden).

2.4.1. Forensic psychiatric research in Norway

Research on the quality, practices and methods of forensic psychiatry is rather scarce in Norway, and among the studies conducted, few have been done by practicing forensic psychiatrists. These studies have mostly provided quality assurance or control methods which have been collected as descriptive statistics and summed up in annual reports. These reports have outlined the number of forensic examinations concluding with psychosis in the defendants, the number of homicide cases, etc., with one example being the reports made by the psychiatrists Kjell Noreik and Berthold Grünfeldt (Noreik & Grünfeld, 1996), while another is the annual reports of the NMFB.

Some clinical forensic research studies, however, are worth mentioning. Psychiatrist Hans Jacob Stang studied 236 forensic psychiatric examinations (178 men, 58 women) issued in the years from 1949-1954. His study had two research questions: 1) What mental disorders were covered by the legal terms of "deficient mental development", (i.e. "mangelfullt utviklede sjelsevner") and/or "permanently impaired mental capacity" (i.e. "varig svekkede sjelsevner"). Since these terms were removed in the revised Penal Code of 2002, only the second question is of interest here: 2) What is the experts' accuracy in predicting a defendant's risk of committing new crimes? Stang found that the experts' prognosis was correct in only 55% of the cases for the men and in 49% of the cases for the women, which is

hardly better than chance, as the experts had clearly overestimated the risk and dangerousness of future crimes. Since the experts had such a low accuracy in their predictions, Stang suggested that the mandate for the experts to give a prognosis of a defendant's risk of criminal recidivism (i.e. "gjentagelsesfare") should be omitted (Stang, 1966). This study had a decisive influence on the revision of the Penal Code in 1978, which freed the experts from their duty of making a prognosis on the future recidivism of defendants.

In a retrospective study, the sociologist Dag Ellingsen (1987) used a mixture of qualitative and descriptive quantitative design to examine all 110 Norwegian forensic psychiatric reports issued in 1980. He wanted to study how the experts defined and used the (formerly used) terms "deficient mental development" and/or "permanently impaired mental capacity", although his findings about the experts' use of the terms are of less interest now because the terms were abandoned by the Penal Code revision of 2002. However, he also reported that the verifiability of the reports was generally low since in half of them the experts did not state where or when the observation took place, and in the other half, the total time spent with the defendant was not stated (Ellingsen, 1987). Findings from a study of forensic reports issued only in 1980 may not be generalised since that year could be less representative than others concerning reports. Nevertheless, the methodology applied by Ellingsen seems to be valid regarding his approach to the reports in an inductive and non-hypothetical way, though it is hard to follow how he actually quantitatively registered the data from the reports. Ellingsen's study was one of the first in Norway to actually investigate the verifiability of forensic psychiatric reports, which is important because the reports are issued for both the legal parties and the courts. The reports should be clear so that the legal parties can understand the methods used and how the experts reached their conclusions, thereby enabling the legal parties to eventually challenge the validity and reliability of the stated conclusions.

Hartvig et al. (2003) studied all (n = 42) cases examined during 1981-2000 in which Norwegian forensic experts stated that the defendant was "amnesic/ unconscious" at the time of the criminal act. The authors were in disagreement with the experts' conclusions in 12 of the 42 reports and were of the opinion that many of the reports lacked valid premises for their conclusions (Hartvig et al., 2003), with roughly half of the 42 cases receiving comments or corrections from the NMFB. The authors did not substantiate their findings by means other than re-diagnosing and describing the material and stating their subjective opinions about the quality of the reports. Nonetheless, the study is interesting since the authors, despite limitations, illustrate how the quality of such forensic reports can vary in their opinion. To investigate whether a defendant is suffering from genuine amnesia is among the most challenging tasks in forensic psychiatry (see Study III).

Be that as it may, the research done on forensic psychiatry in Norway thus far has been limited to student theses on criminology (Kongshavn, 1987; Hansen, 1994; Faber, 1998) and psychology (Holum & Grøndahl, 1995; Davidsen, 1999; Lyster, 2008; Gullhagen, 2004), and all of these but one (Gullhagen) have been conducted with qualitative design and small sample sizes. Gullhagen compared nine forensic reports (Sample 1) from evaluations made at the Brøset High Security Hospital with 32 records (Sample 2) from persons admitted for ordinary psychiatric observation according to § 3 of the Psychiatric Health Care law. Gullhagen also examined the groups in regard to the number of sessions with the expert/therapist, the differences among psychiatrists and psychologists as therapists, as well as the use of specific tests and examination among other variables. Of primary interest here are the findings of Sample 1, in which Gullhagen found that the experts had a mean number of six sessions with the defendants (median 5, range 1-12) in addition to the examinations lacking a systematic or standardised approach (11% had a structured clinical interview, 22% had a psychological test, 44% had a neuropsychological test), and that the basis for the conclusions in the reports in some cases was weak according to Gullhagen (2004).

The last studies mentioned have definite limitations on the basis of being student theses, but can hardly be generalised and may at best only generate hypotheses for later quantitative research.

To sum up, there are hardly any empirically-based studies of forensic psychiatric reports published in Norway concerning the use of methods, practises and quality, so the need for this type of research therefore seems to be of great importance in relation to the serious consequences of such reports for the defendant, his family and society.

2.4.2. Scandinavian studies

Johan Calltorp, a Swedish professor of health services management stated in 1996 that *"the Nordic laboratory is a goldmine for public health and medical care research"*. The former Chief Executive of The National Board of Forensic Medicine in Sweden, Gunnar Holmberg, has argued in similar ways. He stated that the Nordic countries have many common historical, social and cultural factors in addition to homogenous populations with high social standards. The countries also share a social-democratic and humanistic view in the way that mentally disturbed offenders should not be punished or sentenced to prison if they are considered unaccountable for their actions (Holmberg, 1997a). For this reason, there should be a good foundation for collaborative and/or comparative studies in terms of forensic psychiatry. So what Scandinavian studies in forensic psychiatry exist?

Review papers

Several survey papers have been issued which give an overview and description of Scandinavian forensic psychiatry concerning the organisational differences of forensic investigations (institutions, settings, etc.), legislation (different criteria for insanity by legal terms), investigational procedures, financing etc. (Rättsmedisinalverket, 1995; Holmberg, 1997a; Borup Svendsen et al., 1977; Øjesjö, 1986). Holmberg particularly stresses the need and possibilities for research in forensic psychiatry among the Nordic countries (Holmberg, 1997b) and discusses several planned research projects. Of special interest here is the plan which aims to collect forensic psychiatric reports from Denmark, Finland, Norway and Sweden in order to perform an analysis of the similarities and differences among such reports (ibid), though to date this project has never been started.

Other studies

The Norwegian psychiatrists Noreik and Grünfeld compared the systems, settings and methods of forensic reports issued in Sweden, Denmark and Norway, and claimed that even though Denmark and Sweden both had a more standardised approach to their forensic investigations, Norwegian reports had a good overall quality. Yet, they never substantiated their viewpoint, and the authors concluded that forensic psychiatric activities should be improved in Norway (Grünfeld & Noreik, 1997). Their report is not research, but more like a travelogue in which an imminent criticism that forensic psychiatry in Norway has gone through a minimal amount of development compared to Denmark and Sweden is refuted.

Davidsen, who is mentioned above, found in a qualitative study of 12 Norwegian and six Swedish forensic reports that the Swedish reports were more standardised than the Norwegian (Davidsen, 1999).

Briefly, some other Scandinavian/Nordic studies within (forensic) psychiatry have been issued pertaining to homicide in the Nordic countries (Gudjonsson & Pétursson, 1990), a comparison of suicide in Copenhagen and Oslo (Rogde, 1996), the use of coercion in Nordic psychiatric hospitals (Høyer et al., 2002; Kjellin et al., 2006) and the fatal poisoning of drug addicts in the Nordic countries (Steentoft et al., 2001).

To conclude, little empirically-based research into forensic psychiatry has been done as a Scandinavian/Nordic collaboration, and there are mostly survey works and small qualitative studies which raise questions for empirical research, but add little new, valid knowledge to the field. In his 1997 paper, Holmberg (1997b) rightly concluded that: “So far the excellent opportunities for inter-Nordic collaboration have scarcely been exploited in the field of forensic psychiatry.” In 2010, this conclusion still seems valid.

2.4.3. Forensic psychiatric screening reports

Norway, Sweden and the Netherlands are apparently the only countries that use smaller/preliminary screening reports in their criminal law procedures. The purpose of a screening report is to examine the defendant with regard to sanity by legal definition and to conclude with a recommendation concerning the need for a full forensic psychiatric report. Other countries may also use similar screening reports but, to the best of my knowledge, they have not published anything with regard to such procedures. A literature search in Medline, PsychInfo, Embase and SveMed+ in both 2005 and 2008 only retrieved one paper on this topic (Duits et al., 2008).

Since screening reports are defined by the criminal law procedures in the aforementioned countries, it would be of interest to obtain some systematic knowledge in reference to their quality, validity and reliability. Additionally, it would also be of interest to know if the principals (police prosecutors, defence lawyers and sometimes the courts) consider the reports to be relevant, as best exemplified by whether the recommendations were followed which is the topic of Study II (the screening report paper).

Studies on screening reports

Screening reports are only mentioned in one study from the Netherlands (Duits et al., 2008). The authors investigated which items of the Structured Assessment of Violence Risk in Youth (SAVRY) were mentioned in pre-trial mental health evaluations, and such an evaluation is described as performed by forensic psychiatrists and psychologists for the juvenile courts. The purpose of the evaluations is to clarify if and to what extent a mental disorder or the deficient mental development of the defendant played a role in the index offence. Duits et al. (2008) randomly chose files from the period between 1998-2000 of 100 juveniles (93 boys, 7 girls) out of 600 who had a pre-trial evaluation, and discovered that 24 out of 30 of the SAVRY items could be extracted from 90% of the evaluations. However, five historical SAVRY items did not appear in 25-63% of the files, and the authors were surprised that the historical items seemed to play only a minor role in the evaluations. Because of this, the authors recommended that SAVRY should be used as a checklist in the evaluation and pre-trial assessment of juveniles.

Screening reports versus competency evaluations

In the United States, several research studies have been carried out in regard to the evaluations of competency/fitness to stand trial (Heilbrun & Collins, 1995; Warren et al., 2004), and screening instruments for use in such competency evaluations have been developed (Vitacco et al., 2007; Zapf & Roesh, 1997; Smith & Hudson, 1995; Zapf & Viljoen, 2003). These studies suggest that competency reports have some similarities to the

European screening reports as far as their length and the methods used, although the purpose of the competency reports is quite different, and these reports shall examine the mental status of the defendant with regard to his competence to appear in court, to understand the proceedings, and to participate or assist in his own defence.

In Norway at least, all defendants as a rule are obliged to meet in court during the proceedings, but can be excused from participating due to special circumstances such as acute illness and so on.

Can screening devices be useful?

Screening reports deal with a topic insofar as one screening device/report can influence the decision for a full report or a battery of test, etc. There is an entire body of research in this field, i.e. whether small screening devices or tests may lead to a different (clinical) decision, more extensive investigation or additional tests. Since such procedures have only a limited similarity to the research concerning screening reports, studies in this area will only be briefly mentioned.

A few studies have compared open (clinical) interviews with structured screening techniques such as the International Neuropsychiatric Interview MINI (Pinninti et al., 2003; Egan et al., 2003). In both studies, the authors found that concordance between the clinical and structured approach was poor with respect to the primary diagnosis and co-morbid conditions, and this structured approach diagnosed more positive diagnoses and co-morbid conditions than the clinical method. The authors concluded that the structured screening approach was more comprehensive, sensitive and specific than the standard clinical assessment concerning diagnoses. It should however be noted that neither of the studies presented a gold standard, so it is not known which of the methods had the best “hit-rate” concerning the diagnosis and co-morbid conditions.

Another study investigated whether a self-report screening questionnaire would produce many false negative responses in assessing personality disorders. In short, the authors found that the false negative rate as per use of the Structured Clinical Interview for DSM-III-R/IV for Axis II disorders, SCID-II, was low for every diagnosis, which was taken as support for the validity of the self-report, and that the clinicians would only need to conduct further questioning for those diagnostic elements scored positively by self-report. The authors stated that an efficient screening assessment instrument for personality disorders could combine a self-report which is reliable when a clinical assessment is needed (Jacobsberg & Perry, 1995).

Summary

There seems then to be some support for using screening instruments in both clinical psychiatric and forensic practice. One advantage of using screening devices in forensic examinations is that structured clinical interviews can yield a more reliable description of a diagnosis, thus avoiding a tendency to emphasise information according to the experts' pre-formed hypotheses (Gullhagen, 2004). Screening devices and the forensic psychiatric screening reports serve one common purpose, namely that both can be of assistance in deciding if further examination is be called for. While research has been conducted on various screening instruments, a minimal amount of research seems to have been conducted on forensic screening reports.

2.5. Amnesia and unconsciousness

This section describes amnesia in relation to the concept of unconsciousness in the Norwegian Penal Code and research on amnesia and homicide.

2.5.1. Amnesia and homicide

Amnesia is a broad term referring to psychological conditions in which the normal memory function is disturbed. Webster's Dictionary (The Merriam-Webster Online) defines amnesia as a loss of memory usually associated with brain injury, shock, fatigue, repression or illness. Another definition of amnesia is an inability to remember or a denial of memory (Gunn & Taylor, 1993).

Some experts consider a claim of amnesia for a serious criminal act to be one of the easiest symptoms to simulate and one of the hardest to disprove in a legal setting (Kiersch, 1962; Parkin, 1997; McSherry, 1998). In some countries, the question of whether a defendant actually remembers an alleged criminal act will have important implications in regard to their sanity in legal terms.

In Norway, the experts should, as part of a standard mandate from the court, evaluate whether a defendant has suffered from "unconsciousness" (Penal Code § 44) or reduced consciousness (§ 56 c). The legal concept of "unconsciousness" is difficult to comprehend. Unconsciousness is not equivalent to amnesia, even though amnesia is strongly linked with unconsciousness which involves a complete or near-complete lack of ability to encode and comprehend environmental stimuli. In NOU 1990:5, unconsciousness is described as*:*

"…the concept does also include that motoric ability is preserved, likewise the ability to see and hear ("relative unconsciousness"). It is the ability to receive and adapt information which is broken or impaired, and to put the information into a conscious context, so that this

information can later be recalled and remembered in a way that actions are based on the received and perceived information" (my translation, pp. 43) (NOU 1990: 5, 1990).

In cases of unconsciousness, the defendant will not be aware of his or her acts at the time, and this lack of encoding will consequently involve amnesia.

To conclude that a defendant acted in a state of unconsciousness at the time of a crime requires more than just a claim of lost memory. It should be documented that the memory of the actual event is lost (that is, no encoding and storage of information has occurred) and is not possible to retrieve. The mandate for the experts is to examine whether the defendant acted in a state of unconsciousness, not merely if he/she had amnesia in regard to the act. Therefore, defendants may claim amnesia, but their inability to recall an episode (however dramatic) will not necessarily be sufficient for the experts to regard the defendant as someone who acted in a state of "unconsciousness", and the court will independently decide if it agrees with this conclusion. Nevertheless, the term amnesia is used throughout this thesis since amnesia is the (clinical) concept used on an international basis in research literature.

Traumatic events – are they forgotten or remembered?

There is a controversy surrounding whether traumatic (criminal) events will impair recollection or actually enhance memory of the event. Some researchers argue that recollection of a crime-related event will be impaired due to a high stress level and extreme emotions which perpetrators experience while they commit the (violent) crime (Arbodela-Florez, 2002). The act itself then is so traumatising for the perpetrator that it will be difficult to retrieve any memory of the crime. Extreme emotions due to provocation have been labelled as "red outs" and have been suggested to cause an altered emotional state which impairs the memory of the criminal act (Swihart et al., 1999). Impaired or reduced memory due to trauma have been labelled as traumatic memory argument or TMA (Porter et al., 2007).

However, Magnussen (2004) argues that neuropsychological research demonstrates that emotional activation reinforces attention, encoding and the consolidation of episodic memory. As a consequence, traumatic events will be remembered more vividly, clearly and in greater detail than non-traumatic events according to Magnussen. The presumption that traumatic events actually enhance the memory of the criminal act is labelled as traumatic superiority argument or TSA (Porter et al., 2007). There is increasing evidence in favour of the TSA model (ibid) and support for this view originates from research conducted on both the victims and witnesses of criminal acts.

Victims and witnesses

A field study by Sporer (1996) tried to estimate whether stress had an impact on witnesses' memory of a dramatic criminal event. Three groups: victims, witnesses who had not been victims and peripheral bystanders were interviewed and the results compared after they had witnessed a criminal event. The level of stress among the three groups was assessed and classified according to the presence of weapons, personal harm/damage, reported fear, etc. Though caution should be taken regarding the possibility of obtaining accurate measures of individual stress (Magnussen, 2004), stress did not seem to impair memory. In reality, witnesses who reported the highest levels of stress ("scared to death") gave the most vivid and detailed accounts of the event (Sporer, 1996). Despite limitations (whether the details reported by the witnesses were correct was not checked, and whether much more extreme events will have the same impact on memory function is not known), the study apparently confirms the TSA model.

Research on memory for traumatic experiences has been performed on war veterans, victims of torture, and survivors of concentration camps and natural disasters. This research seems to confirm that the memory of extremely stressful and fearful events is usually very good, i.e. both vivid and detailed (Magnussen, 2004). It is not uncommon for people who have endured situations or periods of extreme stress to experience intrusive memories. That is, the episodes seem to be "glued" into the person's memory in an uncontrollable way. In one study, 78 statements (at a trial of a war criminal in the 1980s) of survivors of a concentration camp during World War II were compared with statements given to Nuremberg investigators shortly after the war. Again, the memories of the survivors was detailed and accurate on many aspects such as harsh treatment, daily routines, etc. (Wagenaar & Groenweg, 1990). According to Porter et al. (2007) *"….there is mounting evidence that both victims' and witnesses' memory of potentially traumatic events are relatively accurate for "core" details and can be highly resistant to misinformation"*.

In contrast to victims and witnesses and the TSA model, perpetrators of violence frequently claim a loss of memory for their crime.

Perpetrators

Claims of amnesia for criminal acts are not uncommon for defendants in general, but are most common in cases of homicide (Leitch, 1948; Taylor & Kopelman, 1984; Parwatikar et al., 1985; Guttmacher, 1955; Menzies, 2005; Evans, 2006; Bradford & Smith, 1979; Pyszora et al., 2003), and the prevalence of such claims ranges from 22%-47% in the aforementioned studies.

As a general rule of thumb, approximately 20%-30 % of those who commit serious violent crimes report amnesia about their criminal act (Jelicic & Merckelbach, 2007).

2.5.2. Characteristics of defendants claiming amnesia

Several topics with regard to crime and amnesia such as the characteristics of defendants claiming amnesia have been empirically studied (Parwatikar et al., 1985; Taylor & Kopelman, 1984; Cima et al., 2003; Cima et al., 2004; Häkkänen et al., 2008; Evans et al., 2009; O' Connell, 1960; Pyszora et al., 2003).

O'Connell (1960) interviewed 50 perpetrators of homicide and found that 20 claimed amnesia. Of those who claimed amnesia, 8/20 (40%) of the perpetrators had average or above average intelligence compared to 25/30 (83%) of those who did not claim amnesia, though neither the level of significance (p = .004) nor the methods used for intelligence measurement were given by the author. O'Connell also found that 50% of those claiming amnesia showed hysterical personality traits compared to 10% who made no such claim, but again, the method of measurement was not stated.

Cima et al. (2003) studied 62 male inmates at a German psychiatric correctional institute regarding their IQ, diagnosis, and eventual simulation based on case notes and initial screening routines. Applying a German version of the Wechsler Adult Intelligence Scale (WAIS), they found that the IQ of those claiming amnesia (n = 17, mean IQ = 78.5) was lower than those who did not (n = 45, mean IQ = 90.8), (p <.05), but this association between claimed amnesia and low intelligence has not been replicated in other studies. The authors also found that 87% of those who claimed amnesia were diagnosed with antisocial personality disorder versus 47% for the non-claiming group (p <.01).

Taylor and Kopelman (1984) conducted structured interviews concerning mental states at the time of the crime and details of the offence in 203 men on custodial remand for violent and non-violent offences, 34 (17%) of whom were convicted for murder. They also checked the defendants' background data such as police statements and pre-offence records, discovering that 10% of the total sample claimed amnesia for their acts, and that such claims were made in cases involving violence, most frequently in homicide cases (26% of the homicide group claimed amnesia). All the men in the amnesia claiming group had a mental disorder (21% depression, 36% schizophrenia, and 42% alcohol abuse), while men in that group were older than the non-amnesia group (41 years versus 33 years, p = .003).

Pyszora et al. (2003) also found that offenders sentenced to life imprisonment who claimed amnesia were older than their non-amnesic peers (p <.05), and they retrospectively studied the available case notes of all sentenced to life imprisonment in England and Wales in 1994 (n = 207), among whom 166 (80%) were convicted for murder. Thirty-one per cent of those convicted for murder claimed amnesia for their offence, and 20% (8/41) among those charged for other crimes (p = .14). They also found that claims of amnesia versus no amnesia were associated with alcoholic and dissociative blackouts (p <.0001), alcohol

abuse/dependence (p <.025) and a history of mental disorders, primarily anxiety, depressive and personality disorders (p <.0025).

Parwatikar et al. (1985) tested for intelligence and personality in 105 men charged with homicide as part of a routine on admission to a state maximum security unit for pre-trial evaluation, and also checked police records and the social history of the defendants. They identified three groups: 1) Those who confessed murder (n = 50), 2) Those who denied committing murder (n = 31), and 3) Those who claimed total amnesia for the alleged homicide (n = 24). Comparisons were made between Groups 1 and 3, and a multivariate analysis of variance showed that those claiming amnesia were intoxicated by drugs and alcohol at the time of the alleged murder (p <.001) and scored higher on three Minnesota Multiphasic Personality Inventory (MMPI) scales [hysteria (p <.003), hypochondriacs (p <.03), and depression (p <.037)] compared to those who did not. The groups did not differ in regard to schizophrenia or psychopathic deviancy scales of the MMPI.

Cima et al. (2004) studied hospital records of 308 convicted male patients at two forensic clinics of whom 103 (33%) were convicted for murder or attempted murder. They examined whether the patients had made a claim of amnesia for the index crime by studying psychotherapists' notes and police interviews. If a claim of amnesia had been made, the records were studied for inconsistencies (changing their stories regarding their ability to remember the crime) by the defendant, crime details, neurological impairments and the type of psychological testing done. Out of the 72 patients (23%) who claimed partial or total amnesia, 26 (36%) had no recollection of the crime; while in the amnesia group 24 (33%) had committed murder. Members of the amnesia group were older than the non-amnesia group (p <.01), had more prior convictions (p <.01) and higher frequency of substance abuse (p <.01). The authors did not find any significant association between psychosis and claims of amnesia.

A large Finnish study examined homicide offender (females n = 79 and males n = 577) characteristics in those claiming no, partial or total amnesia. They studied the both forensic examination and crime reports of all defendants subjected to forensic examination between 1995 and 2004. Of the cohort, 238 (36%) claimed partial amnesia and 53 (8%) total amnesia. The authors found that a larger proportion of women (61%) claimed partial amnesia compared to the men (42%), (p <.01), though no significant gender difference was found as far as total amnesia was concerned. For men, being intoxicated from alcohol or drugs (p <.001), being alcohol dependent (p <.001), and being older (p <.001) were associated with claims of total amnesia. As for women, claims of total amnesia were associated with the presence of a personality disorder (p <.05). No significant differences were found between those claiming amnesia and not, concerning intelligence and psychopathology in either gender (Häkkänen et al., 2008).

Finally, 105 young (mean 19.7 years) male offenders convicted of a serious violent crime were interviewed regarding their memory of their crime. They found that 19% claimed partial amnesia and 1% claimed a total loss of memory, and the only variables significantly associated with claims of amnesia were those of a high alcohol intake and an emotional tie to the victim. The proportion of those claiming total amnesia was unusually low in this sample in comparison to other studies (Evans et al., 2009).

Reactive versus instrumental violence

The distinction between reactive and instrumental violence may also be informative as it pertains to those claiming amnesia in serious criminal cases. According to Christianson et al. (2007), a reactive homicide is due to an impulsive reaction, which is characterised by spontaneity, high emotional stress, and an intention to harming the victim following a provocation. By contrast, an instrumental homicide is planned, goal-oriented, less driven by emotion and the offender has no strong attachment to the victim. Due to the planning involved in instrumental homicides, it would be expected that such offences would be easy to remember (Christianson et al., 2007). In an as yet unpublished paper, Christianson and von Vogelsang consider this hypothesis to be confirmed. They gathered information about 146 homicide cases, 89 of which were coded as reactive and 57 as mainly instrumental, and they compared the offenders' memory before, during and after the crime. Forty-seven percent of the reactive homicide offenders and 28% of the instrumental homicide offenders claimed a loss of memory in the early stages of the investigation phase (p = .02). Later, 23% of the reactive offenders and 14% of the instrumental ones maintained a claim of amnesia during their criminal act (p = .15) (Christianson & von Vogelsang, 2006). For this reason, the type of homicide act committed may give an indication as to which offenders will be more likely to claim and maintain a loss of memory for their crime.

To sum up, the referred studies are of varying quality and demonstrate quite mixed results regarding the characteristics of offenders claiming amnesia versus those who do not. Alcohol intoxication and a violent crime, especially homicide, seem to be two common factors for defendants who claim amnesia in a criminal setting (Taylor & Kopelman, 1984; Cima et al., 2003; O' Connell, 1960; Häkkänen et al., 2008; Parwatikar et al., 1985; Pyszora et al., 2003). There is also a moderate amount of support for an age factor, i.e. that defendants claiming amnesia are older than those without such a claim (Cima et al., 2004; Taylor & Kopelman, 1984). Otherwise, there appears to be no clear "amnesia claiming profile" or causal factor for claiming amnesia in the offender groups, with the possible exception of the distinction between reactive and instrumental violence.

2.5.3. Are claims of amnesia in penal cases genuine or false?

Another widely debated and important topic is whether or not claimed amnesia in criminal cases is genuine or mainly simulated, with the term "simulated or malingered amnesia" referring to amnesia simulators who intentionally exaggerate memory problems (Wiggins & Brandt, 1988). The debate related to empirical studies such as those mentioned above has produced two camps that interpret the findings somewhat differently.

The following arguments in favour of the authenticity of claimed amnesia have been proposed: 1) Some defendants contact the police after a crime, but are still unable to recall the criminal act itself (Taylor & Kopelman, 1984; Porter et al., 2001; Hopwood & Snell, 1933; Pyszora et al., 2003). 2) Amnesia per se is not regarded as a valid defence in some countries, so as a consequence, the motivation for simulating amnesia will be minimal in those places (Kopelman, 1995; Gunn & Taylor, 1993).

On the other hand, there are many reasons for falsely claiming loss of memory about a crime. According to Porter et al. (2007), this could be an attempt to raise doubt about the degree of involvement in the offence, while additionally avoiding having to lie about involvement in the crime and trying to gain sympathy from family members or the court/jury. In some countries, a loss of memory can have legal implications - such as automatism in Australia, Canada and New Zealand. In Norway a defendant may, in a very few cases, be regarded as "unconscious" which has clear legal implications. Merckelbach and Christianson (2007) summarised three related motives for simulating amnesia in legal settings: 1) A claim may enable the defendant to remain silent without appearing uncooperative. 2) The claim may initiate a forensic psychiatric examination which could increase the probability that the defendant will be found to have some type of mental disorder due to experts' pathology bias (Wedding & Faust, 1989), and 3) The defendant may avoid painful memories, and loss of memory gives them an excuse not to speak with experts or therapists about their crime.

Scepticism has also been raised in relation to claimed amnesia in criminal cases since witnesses and even victims of extreme violence often have good rather than poor memory of the dramatic events (Porter et al., 2001; Magnussen, 2004). Even so, others have argued against the notion that claimed amnesia in criminal cases can be genuine or authentic (Cima et al., 2003; Magnussen, 2004; Christianson & Wentz, 2002).

Several clinical indicators of malingered amnesia have been suggested such as a sudden onset of memory loss after an event, a global loss of memory for the alleged crime and a dogmatic attitude by the defendant, i.e. refusing to explore the possibilities of memory retrieval (Christianson & Wentz, 2002; Power, 1977; Schacter, 1986). There are some claims that malingered amnesia can resemble how amnesia is presented in films, i.e. a profound loss of identity and autobiographical knowledge, a complete change in personality (in *Crime*

Doctor from 1943, a dodgy criminal receives a blow to the head and soon thereafter becomes a leading criminal psychologist!), and the full embracement of a psychological rather than neurological basis for amnesia (Baxendale, 2004), which indicates that in some cases, amnesia may be learned. Defendants who simulate amnesia may score extremely low (below chance levels) on memory-based tests (Jelicic & Merckelbach, 2007), although the evidence for this latter assumption has not been conclusive.

Post-conviction – does memory return?

Despite frequent claims of amnesia among perpetrators of violent crimes, some memories may return after the conviction. Hopewood and Snell (1933) studied 100 maximum security hospital patients with a mixture of offences (71% homicide) who were selected due to a claim of amnesia at the trial. After studying the case files, they considered 14 patients as obvious malingerers and concluded that 78 suffered from genuine amnesia. Among them, 30 (38%) regained their memory of the crime, and most of them did so within six months.

Pyszora et al. (2003) found that of the 207 defendants sentenced to life imprisonment, 29% claimed amnesia for their offence. At three years post-conviction, 33% of the amnesic sample had a complete recovery of their memories, 26% had partial a recovery, while the rest reported no recovery of their memories.

Christianson et al. (2006) sent a questionnaire to 182 prisoners sentenced for homicide or sexual offences and 83 responded, including roughly half the homicide offenders and half the sexual offenders. One of the items concerned whether they wanted to forget their criminal act, and 53% of the homicide and 35% of the sexual offenders confirmed that they did, indicating that offenders actually want to forget or suppress their crimes. The offenders were also asked if they had either a complete or partial loss of memory for their crime, and 58% of the homicide and 45% of the sexual offender group confirmed such an experience. A follow-up question concerned the current vividness of their memory for their crime, and 23% of the homicide group stated that they had only a very vague memory of their crime. Since 58% had reported a partial or total loss of memory, the authors calculated that 35% have had more or less memory recovery of their crimes (Christianson et al., 2006).

These studies indicate that perpetrators' memories of their crimes, though initially stated as forgotten, are often recalled to a certain extent over time.

Summary

There is a considerable amount of research literature on defendants who have claimed memory loss for their homicidal act, including various characteristics such as whether the homicide is instrumental or reactive, whether the claim is feigned or genuine, etc.

The literature presents suggestions on how experts methodically should or could assess claimed amnesia in criminal cases (Jelicic et al., 2004; Jelicic et al., 2006; Jelicic & Merckelbach, 2007; Heinze & Purisch, 2001; Christianson et al., 2007; Parwatikar et al., 1985). In the opinion of this author, however, no studies have evaluated how experts actually examine claims of amnesia in homicide cases, and such a study could help to identify strengths and weaknesses in the experts' examinations of amnesia claiming defendants. By acquiring such knowledge, we may be able to provide the experts with the necessary tools for conducting a thorough examination of the authenticity of claimed amnesia, which is the topic of Study III (the amnesia paper).

2.6. Forensic psychiatric and clinical decision making

According to the psychologists Tversky and Kahneman, there are several ways clinicians and (forensic) experts may commit systematic errors of judgement, i.e. so-called bias. In human judgement, we regularly use "rules of thumbs" which reduce the effort and increase the speed of making judgements (Tversky & Kahneman, 1974). In certain cases, however, these rules - or heuristics - may lead to systematic errors in judgement. According to these authors, the most common heuristics are: *availability* (the most recent and salient information will bias judgement), *confirmatory* (to overvalue supportive evidence and undervalue counter-evidence), *anchoring* (not sufficiently reconsider/change a judgement despite new information), *overconfidence* (to be unreasonably confident in a decision or statement), *hindsight bias* (the inclination to see events that have occurred as more predictable than they in fact were before they took place), and *illusory correlations* (the phenomenon of seeing the relationship one expects to see in a set of data even when no such relationship exists, i.e. the overestimation of a link between two variables).

Forensic psychiatric experts are asked to determine whether a defendant fulfils the medico-legal criteria for insanity. Optimally, the experts should provide the court with as verifiable, objective, valid and reliable information as possible. Unsystematic biases cannot be totally avoided, though the systematic biases of the experts are a potential problem for the court.

Forensic psychiatric judgements may be investigated by studying eventual differences between the decision making processes of experts versus those of laypeople. If laypeople make judgements that do not significantly differ from those made by experts given the same case material, then it could be discussed as to whether the courts really need experts doing forensic examinations in the first place.

2.6.1. Laypeople versus professional judgements

Studies have investigated judgements made by experts versus laypeople in many different fields (Oscamp, 1965; Jackson, 1986; Rowe & Wright, 2001).

Oscamp (1965) examined the level of accuracy and confidence in clinical decisions among eight clinical psychologists with “several” years of experience (five with PhDs), 18 psychology graduate students, and six undergraduate psychology students. To determine the accuracy of their judgment, a case study was constructed which simulated the clinical situation as closely as possible. The case was of a “normal” adolescent who had never been psychiatrically hospitalised (see the case of Joseph Kidd, as reported by White (1952) in his book “Lives in progress”). The task of the judges was to predict his future actions by five (multiple) choices as they successively received more information, and at each stage, they should also mark their level of confidentiality in their predictions. Stage 1 contained only brief demographical data; Stage 2 added 1.5 pages of Kidd’s childhood and so forth until Stage 4, which covered Kidd’s life up until the age of 29. Confidence judgments were made according to a scale that defined confidence in terms of the expected proportion of correct decisions (Adams, 1957).

Oscamp found that none of the judges ever reached a 50% accuracy rate in their predictions, with an average accuracy of 28%. Interestingly, there were no significant differences among the three groups of judges in terms of accuracy and expressed confidence. Increasing information did not produce a significant increase in accuracy, although the mean stated confidence in all the group judgments increased from 33% at Stage 1 to 53% at Stage 4. It remains an open question whether the material presented in this study really gave the participants a fair and objective chance of making accurate judgements.

Rowe and Wright (2001) evaluated nine empirical studies of experts versus lay judgments with regard to the risk of a negative event occurring. In these nine studies, experts’ and laypeople’s’ judgments were compared on several topics such as toxicology, ecological risk, nuclear risk, risk of the millennium data-bug, risk to oil field workers and so on. Though there was a trend towards experts’ perceptions of risk as being less than that of laypeople, there was no evidence to support the fact that experts’ judged risk any differently than laypeople, and the hypothesis that the experts were more veridical in their risk assessments than laypeople was not confirmed. However, a methodological reservation has to be made concerning these results: The authors concluded that the studies referred to were so flawed (characteristics of the expert and lay samples were poorly defined, and important demographic aspects of expert and lay samples were not controlled for in all

studies) that it was hard to draw any definite conclusions in terms of the differences or similarities between experts and laypeople.

In a Canadian study, Jackson (1986) examined possible differences in the decision making processes between laypeople and professionals as to forensic psychiatric assessments, and her study investigated laypeople (n = 180, rating one case each), psychiatrists (n = 10, rating nine cases each), and court judges (n = 10, rating nine cases each). The study used criminal case vignettes combined with three classes of information: positive, negative or absent concerning social and psychiatric history, and the severity of the crime. Based on these study descriptions, the laypeople and professionals rated several variables such as legal insanity, prediction of future offence and so forth, and were told to state the degree of confidentiality in their judgements.

Jackson found no significant differences in the ratings between professionals and laypeople in their judgements on fitness to stand trial, criminal responsibility, dangerousness or prediction of future offence, and 80% of the laypeople were extremely or quite confident in their "fitness to stand trial" ratings (Jackson, 1986). The confidence of the professionals generally followed the same pattern as the laypeople, though with slightly lower ratings.

There are no corresponding studies from Scandinavia, with the exception of one Swedish study by Yourstone et al. (2008) that found a gender bias in forensic psychiatric decision making on homicide cases since 45 practicing experts, 46 judges and 80 psychology students rated a case vignette describing a homicide case in the same way. The only difference in the case description was if the perpetrator was female or male, and a significant effect was connected to the gender of the perpetrator since the information was rated as more indicative of legally defined insanity if the perpetrator was a woman, p <.01 (Yourstone et al., 2008).

Summary

The literature reviewed here suggests that the judgements of professionals do not markedly differ from that of laypeople. It could be that the studies do not give the experts the opportunity to use their training in an optimal way, thereby hampering their chance of making better judgements compared to laypeople. It would therefore be of interest to perform a study to reveal whether these findings are replicable in a Norwegian setting using a design resembling Jackson's study, but moderated for Norwegian conditions.

2.7. Summary background

Psychology and psychiatry are international disciplines. In contrast, forensic psychiatry and psychology are national in nature because of the ties to the legislation of individual countries

in relation to the criteria for legal insanity (Rasmussen, 2008). In court proceedings, Norway adheres to the inquisitorial system in which the courts appoint experts to conduct a part-neutral examination of the defendant (i.e. not acting on behalf of either legal party), resulting in a forensic report.

Norway is one of the only countries in the world to use the purely biological principle, meaning that the experts should only investigate if the defendant was suffering from psychosis, unconsciousness/amnesia, or severe mental retardation at the time of the crime since the defendant's motivation for the crime is not an issue. There is no standard setting in which this forensic evaluation takes place, no speciality in forensic psychiatric or psychological expertise, and therefore no systematic recruitment of new forensic psychiatric experts. In almost all penal cases which require a forensic evaluation, two experts are appointed.

The NMFB makes a quality assurance of all forensic reports issued in Norway and functions somewhat like a peer review organ.

The status of Norwegian forensic reports is unclear in terms of the use of methods, standards, verifiability and quality, with most of the current practice in that field seemingly based on traditions, values and strong subjective opinions. Consequently, we have only small, fragmented empirical knowledge about forensic psychiatric practices carried out in Norway and Scandinavia. Forensic reports can play a vital role in criminal proceedings, and the quality of such reports may have implications concerning the legal safeguards of the defendant. In addition, the victim's sense of justice may be influenced, although this thesis does not deal with that particular aspect.

Some have argued that neither psychiatry nor psychology have developed a sense for the critical examination of their own practices (Wright & Cummings, 2005). Hence, a constructive and scientifically based evaluation of a field may pave the way for improved methods. It is this author's belief that empirical studies may raise the level of discipline in the quality of the forensic psychiatric field.

3. THIS THESIS

3.1. Setting

I started to work as a clinical psychologist in the Office for Forensic Psychiatry at the Oslo Police Department in 1998. The head of the office, chief psychiatrist Stein E. Ikdahl, MD, suggested that I should possibly start a previously planned study comparing various Scandinavian forensic psychiatric reports (Paper I). This work was completed with support from the Centre for Research and Education in Forensic Psychiatry, Oslo University Hospital, Ullevål. In completing Paper I, I obtained relevant reports and received support and help from chief psychiatrist Peter Kramp, MD, PhD, head of the Clinic of Forensic Psychiatry in Copenhagen, Professor Sten Levander, MD, PhD, head of the Forensic Psychiatric Clinic of Malmö and the former head of National Medical Forensic Board (NMFB) in Norway, Professor Kjell Noreik, MD, PhD.

In cooperation with Stein E. Ikdahl and one of my supervisors, Professor Alv A. Dahl, MD, PhD, a sample of forensic psychiatric screening reports and the decision of the principals were studied (Paper II). To compare screening reports and full reports, the former head of the NMFB, Randi Rosenqvist, MD, procured access to the full reports. The amnesia study (Paper III) was completed in collaboration with senior psychiatrist Henning Værøy, MD, PhD, Akershus University Hospital and Alv A. Dahl. And once again, Randi Rosenqvist at the NMFB was most helpful in obtaining access to the full forensic reports.

The last study (Paper IV), was conducted together with Assistant Professor Cato Grønnerød, MA, PhD, from the Department of Psychology, and post doc statistician Joseph Sexton, MS, PhD, Department of Biostatistics, both from the University of Oslo, as well as the help of my supervisor, Professor Petter Laake, MS, PhD.

I received a research grant for this project from the Norwegian Foundation for Health and Rehabilitation.

3.2. The studies for this thesis

An overview of the studies for this thesis is outlined in Table 2:

Table 2 - Overview of the studies for this thesis

	PAPER I	PAPER II	PAPER III	PAPER IV
SAMPLE/ MATERIAL	20 Danish reports 20 Norwegian reports 20 Swedish reports	419 Screening reports (SR) 91 Full reports (FR) made in the wake of a screening report	102 Forensic reports	21 psychologists 14 psychiatrists 126 laypeople
OFFENCES	Homicide	All types	Homicide	All types, i.e. "serious" or "minor"
TARGET VARIABLE	General overview of the forensic systems. Assessment of the different forensic evaluations as done in Norway, Sweden, and Denmark.	Evaluate whether the conclusion of the SR is followed by the principals. Check the concordance between the SR and a later FR.	Examine when a defendant claims amnesia for a homicidal act. Explore how experts methodically assess the claimed amnesia.	Compare the groups judgements of insanity, risk assessment and need for treatment.
DESIGN	Comparison among the three countries concerning settings, acting professions, methods, and premises for forensic conclusions.	Score all SR demographic and offence variables, diagnosis and main forensic conclusions. Compare these data with FR Register check to see if conclusions in SR's were properly followed.	Compare demographic, criminal and diagnostic variables in defendants with full or partial claim of amnesia vs. no claims. Register all methods used by experts.	18 vignettes of positive, negative (or absent) information regarding psychiatric and social history and serious vs. minor offence compared among the groups.
STATISTICS	Descriptive, Inter-rater reliability by Pearson's *r*. Continuous variables by ANOVA with Bonferroni's correction for multiple comparisons. Categorical variables by chi-square.	Descriptive, Inter-rater reliability with kappa statistics. Categorical data with chi-square. Continuous data with independent sample t tests. Logistic regression - strength of associations was expressed with OR.	Descriptive, inter-rater reliability with kappa statistics. Fisher's exact test. Univariate logistic regression analysis -strength of associations expressed with OR.	Descriptive, group comparisons using the Linear Mixed Model (accounts for correlated responses from the same individual).

3.3. Study I: Scandinavian forensic psychiatric practices – an overview and evaluation (the comparative forensic reports paper)

3.3.1. Background

The Scandinavian countries of Denmark, Norway and Sweden share many common features, i.e. geographic closeness, similar languages, democratic ruling systems, high level of education, etc. These countries also have a common humanistic perspective that mentally disturbed offenders should not be punished in an ordinary way if considered legally insane for their offence. Despite these similarities, the countries have quite different ways of organising their forensic psychiatric system and the way that experts make a forensic psychiatric evaluation.

According to Wettstein (2005), forensic psychiatry has yet to incorporate new and relevant developments within psychiatry and psychology, and make quality issues an important item on its agenda. Though he was concerned about the situation in the United States, his concerns could be relevant to Norwegian forensic psychiatry as well in my opinion. As noted in Section 1.2, I have considered Norwegian forensic psychiatry to be based somewhat on conservative attitudes and opinions as opposed to empirical research and evidence-based knowledge. The forensic psychiatrist Park Dietz encouraged experts in forensic psychiatry to work to achieve excellence in their field (Dietz, 1996). Quality improvement may come from more empirical research, and one issue is comparative studies of forensic practices among countries. More empirically-based knowledge on the different practices of Scandinavian countries may enable us to improve the quality of our own practice. As a result, a comparative study of the Scandinavian countries was considered relevant, though in order to make comparisons meaningful, we focused on one of the most serious types of crime, namely that of attempted homicide and homicide.

3.3.2. Aims

The aims of this were twofold: first, to compare how the Scandinavian countries organised their forensic psychiatric practices, and second, to compare how their experts assessed defendants concerning methods used, setting of the observation, profession of the experts, and premises for the experts' conclusions in cases of homicide.

3.3.3. Research questions and hypotheses

Would there be: 1) Substantial differences among the forensic psychiatric practices of the three countries, and 2) Significant differences of the assessment methods used?

Hypotheses: 1) Due to differences in the organisation of forensic psychiatry in the three countries, substantial differences in practices would be observed. 2) For the same reason, significant differences in assessment methods would also be observed.

3.3.4. Materials

The study sample consisted of 20 forensic psychiatric reports from Denmark, Norway and Sweden, respectively, 60 reports altogether. To obtain comparability, the reports were chosen according to the following criteria:

1) The crime charged should be homicide or attempted homicide;
2) The defendant should be a male of Scandinavian origin (to omit language and cultural problems); and
3) The reports should have been issued during the period from 1999-2001. Only the original, and not supplementary reports, were included (see page 16).

I contacted institutions and persons who had formal access to such reports who could give the valid legal permission needed for me to read and score them. In Denmark, Peter Kramp, MD, PhD, head of the Clinic of Forensic Psychiatry in Copenhagen, gave us access after approval had been given by the Danish Department of Justice. In the process, we realized that only scoring reports issued at this clinic could lead to a selection bias. I was therefore granted access to the files of the Danish National Medical Forensic Board (DNMFB) who had reports issued from all parts of Denmark. I scored eight reports issued at the clinic and 12 reports issued from other parts of Denmark.

I went to the Clinic of Forensic Psychiatry in Copenhagen and the DNMFB, and scored the Danish reports there. The Norwegian reports were obtained by personal communication with the former leader of the NMFB Kjell Noreik, MD, PhD. The reports were copied by the staff at NMFB, and then sent to and scored by me, and lastly, the Swedish reports were obtained with help from Sten Levander, MD, PhD, head of the Forensic Psychiatric Clinic of Malmö, who chose a sample from the files of the National Board of Medico-legal Affairs which were then copied, anonymised, sent to me and scored.

3.3.5. Methods

Rating form

Since I could not find any studies which had compared forensic psychiatric reports, I developed a structured rating form with 53 variables divided into five sections:
Basic demographic data on the defendant;
Setting of the observation;
Profession of the experts;
Methods used; and
Premises forming the basis for the conclusions.
This form was developed in order to obtain a systematic coverage of information that was positively stated and evaluated in the reports.

Two aspects were registered in relation to *the setting of the observation*: the *time span* from when the crime was committed until a) the court decided that a forensic report should be made, b) until the expert received the case, c) the first meeting of the expert with the defendant, and d) until the report was delivered. The *place* of the observation, in addition to the *duration* and *number* of sessions with the defendant were also covered (See Appendix I).

To check inter-rater reliability, an experienced psychiatrist, Pål Hartvig, MD, who had previous experience with forensic work, and I independently scored 10 of the reports concerning Sections 3, 4 and 5 of the form. The inter-rater reliability was scored between Hartvig and me.

Statistics

The material was analysed by use of SPSS-PC version 11.0 in order to obtain descriptive statistics of the variables. The level of significance was set at $p < .05$ and two-sided tests were applied. Continuous variables were analysed by an analysis of variance (ANOVA), with Bonferroni's correction for multiple comparisons and categorical variables by chi-square test. The inter-rater reliability was estimated by Pearson's correlation coefficient *r*.

3.3.6. Main results

Inter-rater reliability

The scoring by Hartvig and myself showed an inter-rater reliability in relation to methods of $r = 0.83$, profession of the experts $r = 0.95$, premises $r = 0.61$ and overall $r = 0.83$.

Registered information about the defendant in the reports

All reports contained information about education, employment, psychiatric history and the current psychiatric state of the defendant, previous convictions were registered in all but one report, and all but five Norwegian reports contained information from third parties. In a total of 18 cases (30%), there was no information as to whether or not the defendant had undergone earlier forensic examination, and in seven reports (12%), it was not stated whether the defendant was intoxicated at the time of the crime.

Setting of the observations

The mean time between the committed crime and the finished forensic report was significantly shorter in Sweden (mean 73 days, range 31 - 176, median 65) compared to Norway (mean 190 days, range 48 - 608, median 131), with Denmark (mean 120 days, range 27 - 307, median 117) in between (p = .003). In Denmark, the time from when the crime was committed to a court decision to instigate a forensic examination was a mean of 28 days (range 1 - 90, median 14), while in Norway, the time was a mean of 109 days (range 1 - 589, median 31) and a mean of 42 days (range 1 - 147, median 36) in Sweden (p = .047).

Briefly, all the Swedish examinations took place with inpatients in forensic clinics, while in Denmark and Norway, the places of examination could be a forensic institution/clinic, prison or the expert's office. Ten of the Danish reports did not specify where the examination took place.

The number of hours spent with the defendant was only accounted for in 16 of the Norwegian reports, and was not given in the Swedish or Danish reports.

Methods used

All the reports were based on at least one clinical interview with the defendant. Nevertheless, the countries differed concerning the application of other methods, in regard to both their number and kind. The Swedes applied significantly more tests and other instruments in comparison to the Norwegians and the Danes (p <.001). This finding was evident concerning the use of clinical medical examinations, diagnostic inventories and global functioning scales (such as SCID I and II, and the Global Assessment Functioning scale - GAF), different risk assessment instruments such as Historical, Clinical, Risk Management (HCR-20), and the Hare Psychopathy Checklist Revised (PCL – R).

Premises for the conclusions

Sweden was the only country that systematically recorded the defendant's psychiatric (according to DSM-IV) and somatic diagnoses (according to ICD-10) in 19 out of 20 reports.

In both Norway and Denmark this proportion was five out of 20, and the difference between Sweden and Norway/Denmark was significant (Fisher exact, p <.001).

No reference was made to medical, psychiatric, psychological or other types of literature or theory in any of the reports, except for one Norwegian report. In 57 (95%) of the reports, the experts stated no doubts with reference to the validity of their conclusions.

To conclude, our hypotheses were confirmed: 1) There were substantial differences among the psychiatric practices of the three countries, 2) The use of assessment methods showed significant differences.

3.4. Study II: A study of forensic psychiatric screening reports and their relationship to full psychiatric reports (the screening report paper)

3.4.1. Background

To the best of my knowledge only a few countries in the world have implemented a system using forensic psychiatric screening reports, and within Europe, they are Norway, Sweden and the Netherlands. Since hardly any study has been published regarding screening reports, it is difficult to know which countries and to what extent they are used.

According to the Norwegian CPA (§ 165), the purpose of a screening report is to explore the need for a full report. A more specific translation of the CPA on this subject is: *"If there is any doubt whether forensic psychiatric observation is necessary, the prosecuting authority or the court may decide to obtain a provisional report from an expert by way of guidance"* (unofficial translation collected by the Faculty of Law Library, University of Oslo). This implies that if the principals are in doubt (after examining the case file of the defendant and perhaps talking to the defence attorney), as to whether there is a need to instigate a full report, they can appeal for provisional psychiatric expert guidance. The arrangement with screening (provisional) reports may be viewed as a procedure used in order to save time and money, as well as professional resources. The formulation of the CPA indicates that the expert should offer guidance to the principal in this matter, but *how* this should be done is not further specified in the CPA.

It is seldom that the experts at the Office for Forensic Psychiatry at the Oslo Police Department are given a specific mandate by the principals, as they normally only request a screening report to be made. An expert at the office will then make a clinical psychiatric examination of the defendant, and if the expert concludes that there is any doubt about whether the defendant is legally insane (due to psychosis, unconsciousness or severe

mental retardation), the expert will state this doubt and may eventually recommend a full report be made. The practice of the office is to conclude with one of three alternate recommendations: to recommend a full report, to not recommend one or to leave the decision open/undecided.

The screening report is considered as expert advice to the principals who are free to follow or not follow the recommendations given. If the screening report states that there is any doubt about the criminal sanity of the defendant and recommends instigation of a full report, the prosecutors may: a) follow the advice and instigate a full report, b) stop further prosecution of the case due to code 065 (a special code the prosecuting authorities use concerning prosecutory routines), i.e. doubt concerning the legal sanity of the defendant, c) ignore the advice and go on with an ordinary prosecution of the case, or eventually, d) stop the case due to other reasons (e.g. no criminal act can be proven).

Empirical knowledge could indicate how the screening reports are viewed and can contribute to improvements concerning such reports.

3.4.2. Aims

The aims were to examine: 1) The quality of a sample of Norwegian forensic screening reports; and 2) To explore how the recommendations issued in these reports were handled by the principals.

3.4.3. Research questions and hypotheses

Four research questions were addressed: 1) What are the characteristics of persons who are subjects for a full report after a screening report versus those who only get a screening report? 2) Do the principals follow the recommendations of the screening reports? 3) What part of the screening reports is most strongly associated with the prosecutors' request for a full report? 4) What is the relationship between the conclusions of the screening and full reports concerning the criteria for legal insanity?

We held four hypotheses: 1) The characteristics of the defendant hypothesis: Full reports would be instigated if the defendant was charged with having committed a serious crime, 2) The characteristics of the crime in question hypothesis: The principals positive willingness to follow the recommendations of the screening reports depended on the severity of the crime, 3) The recommendation of a full report would lead the principals to instigate a request for a full report hypothesis: The principals would try to safeguard themselves against the risk of not considering possible criminal insanity by ignoring expert advice, and 4) The screening versus full reports hypothesis: There would be differences between the screening and the full reports regarding the conclusions of legally defined insanity.

3.4.4. Materials

The authors PG and SI had access to screening reports since we both worked at the Office for Forensic Psychiatry at the Oslo Police District. We were granted access for research purposes in this study by approval from the Oslo Police Department and the Directorate of Public Prosecution. The material for this study consisted of all 419 screening reports issued by the office from January 1, 2002 to May 31, 2005. Additionally, all 91 (22%) full reports issued concerning these defendants were collected from the files of the NMFB based on approval of the study from the Board of the NMFB. Only the original full reports, and not the supplementary reports, were included (see page 16).

3.4.5. Methods

Rating form

Since we could not find any studies which covered screening reports and their relationship to full forensic reports, a structured rating form was developed by me with the assistance of Stein Ikdahl.

The form consisted of 33 items for the screening reports, with 17 additional items concerning the full reports, creating a total of 50 variables. Information rated from the screening reports was the *demographic data* on the defendant (age, sex, work employment, partner relation and earlier psychiatric/psychological treatment), *type of crime charged* and the *ICD-10 diagnoses if any* (they had originally been stated for internal use only at the Office for Forensic Psychiatry, the Oslo Police Department). The recommendations of the screening reports were noted, and the presence of psychosis, unconsciousness or severe mental retardation (IQ <55) was considered.

The 17 items rated for the full reports contained corresponding variables of those for the screening reports for the sake of comparison such as the experts' main conclusion (psychosis, unconsciousness and severe mental retardation). However, the experts' conclusions regarding test use, stated diagnosis and if they had stated any doubt concerning their conclusion were recorded for the full reports as well.

The concordance of the conclusions for psychosis, unconsciousness or severe mental retardation for the screening and full report was calculated by using kappa statistics (see code book, Appendix II).

Information on how the recommendations in the screening reports were handled by the principals was collected from the Norwegian Criminal Register, independently of the ratings forms. This handling was checked against the conclusions of the screening reports, that is, the recommendation for a full report, case dismissed (and the reason for this, i.e. doubt

concerning the defendant's accountability, etc.), and whether the defendant was sentenced or not.

All the reports were scored according to the forms by either Ikdahl or me. In order to examine the inter-rater reliability, both of us scored 30 of the screening reports as to key variables such as presence of psychosis, unconsciousness or severe mental retardation, as well as the main conclusions: positive, negative or open recommendation of a full report. The screening reports were scored at the Office for Forensic Psychiatry, and the full reports were scored at the NMFB. We did not score reports issued by ourselves in order to avoid a potential selection bias in the scoring. If one of the authors had issued a report in the sample, the other author would score his report.

Statistics

The analyses were performed using SPSS version 14.0 software. A significance level of $p < .05$ was set, all tests were two-tailed, and the inter-rater reliability was estimated by kappa statistics.

Categorical data were analysed by chi-square test and continuous data by independent sample t-tests. The associations between relevant independent variables and the initiation of full reports (dependent variable) or not (reference) were examined using logistic regression analyses. The strengths of the associations were expressed as odds ratios (ORs) with 95% confidence intervals (95%CI).

3.4.6. Main results

Inter-rater reliability

Concerning psychosis, the agreement between Ikdahl and me was kappa 0.88, while there was complete agreement concerning the presence or not of unconsciousness and mental retardation (kappa 1.00). For the main conclusion of the screening reports, our agreement was kappa 0.56.

Characteristics of defendants with a full report following a screening report

In univariate regression analyses, we found that three variables were significantly associated with instigation of a full report, namely the (younger) age of the defendant ($p = .007$), a positive recommendation stated in the screening reports ($p < .001$) and the severity of crime, i.e. particularly homicide and attempted homicide ($p < .001$). However, in the multivariate analysis, only positive recommendation ($p < .001$) and severity of crime ($p = .006$) were significantly associated with instigation of a full report.

The principals handling of the recommendations of the screening reports

Among the 118 screening reports with a positive recommendation of a full report, 59 (50%) led to instigation of such a report by the prosecution authorities. Of the 59 reports in which a positive recommendation was not followed, 20 (34%) of the cases were dismissed by the prosecutors due to doubt regarding the defendant's legal sanity, and 32 (54%) of the cases were not closed with a final decision at the time of our study. In seven cases, we found no further information, except that an ordinary sentence had been given. If the recommendation in the screening report was negative, this advice was followed in 98% of the cases, while in the 181 cases with an "open" recommendation, 16% were followed by a full report.

In a follow-up analysis conducted in October 2009, we rechecked the 32 cases which had not been closed with a final decision when we first analysed the data. Of the 118 SR's with a positive recommendation for a full report, 81 (69%) had led to instigation of such a report, and in 37 cases (31%), recommendations of such a report were not followed. Of these 37 reports, 27 (73%) had been dismissed by the prosecution authorities because of doubt concerning the defendant's accountability, four were dismissed for other reasons (decision not to bring criminal charges), and six were sentenced (see Appendix III a-b).

Concordance between screening and full reports regarding insanity by legal terms

The agreement between the conclusion of psychosis for the screening and the full reports was 46%, kappa 0.25. Concerning unconsciousness, the agreement was 78% (kappa not applicable), though the agreement occurred mainly through negative conclusions since the diagnosis was uncommon. The agreement concerning severe mental retardation was 94% (kappa not applicable) for the same reasons as indicated with unconsciousness.

Concerning psychosis, 33 of the screening reports concluded in doubt, while in the conclusion of the full reports, such doubt was only stated in one report. There was a high agreement (24 cases) among the reports with negative conclusions, i.e. no psychosis, and none of the negative conclusions in the screening reports concerning psychosis was overruled in the full reports. However, 10 of the positive psychosis conclusions in the screening reports were negative in the full reports, and doubt was expressed in the 18 screening reports in contrast to none in the full reports.

In conclusion, the four hypotheses of Study II were all supported: 1) Defendants accused of a serious offence were significantly associated with the instigation of a full report, 2) The severity of the offence was significantly associated with the prosecutor's willingness to follow the recommendations of the screening reports, 3) Recommendation of a full report led the principals to instigate a request to conduct a full report, 4) There were differences between

the screening and full reports regarding the conclusions of insanity by legal terms, especially regarding psychosis.

3.5. Study III: A study of claimed amnesia in homicide cases and how forensic psychiatric experts examine such claims (the amnesia paper)

3.5.1. Background

Some of the most complicated forensic psychiatric cases concern defendants who claim that they are unable to remember their alleged criminal act. How can the experts investigate the authenticity of such a claim?

In homicide cases it is not uncommon for defendants to claim that they have lost all or most of their memories of their alleged crime, and several strategies and methods have been suggested in how to best assess claims of amnesia and whether the claim is genuine or not. According to the Norwegian Penal Code, the experts shall evaluate whether a defendant acted in a state of unconsciousness (see page 29) and not evaluate the amnesia per se. Nonetheless, the term amnesia will be used here since international literature commonly uses this term.

To the best of my knowledge, there have been few if any studies which have evaluated the practice of experts assessing claimed amnesia in homicide cases. In other words, what sources they use to evaluate a case, and what type of instruments and methods they employ.

Obtaining knowledge about the methodological basis behind the experts' conclusions in amnesia cases could contribute to a discussion of how this should be done, thus leading to a more standardised procedure in this regard.

3.5.2. Aims

The aims of this study were: 1) To explore the circumstances of amnesia claims in a cohort of Norwegian defendants charged with homicide, and 2) To examine how forensic psychiatric experts methodically assess claimed amnesia in such defendants.

3.5.3. Research questions and hypotheses

What seems to characterise defendants (a Norwegian cohort) charged with homicide who claim amnesia for their crime? 2) How do forensic psychiatric experts methodically assess claimed amnesia in such defendants?

We hypothesised that the experts would: 1) Conduct two or more interviews with the defendant and collect supplementary information from third parties, and 2) Differ as to what type of methods they used based on a claim of amnesia or not, and that only in a very limited way would they apply personality, diagnostic, memory, neuropsychological/neurophysiologic (CT, Cat Scan, EEG, etc.) or other tests as a basis for their conclusions.

3.5.4. Materials

We made an application to the NMFB to obtain access to all Norwegian forensic psychiatric reports issued for the courts in the period from January 2002 to May 2007 pertaining to defendants charged with homicide, but only the original and not the supplementary reports were included (see page 16). The cohort consisted of a total of 105 reports, and none of the defendants had been convicted when the reports were issued.

3.5.5. Methods

Rating form

I developed a structured rating form which was modified after a pilot testing in five reports with the help of Henning Værøy, MD, PhD. The form eventually consisted of 92 variables, which we divided into nine sections:

Table 3 - Content of rating form of Study III

Variables	Items
1. Socio demographic:	Age, sex, place of birth, education, employment, economy, partner relation, former contact with psychiatric health care, and previous sentences and forensic psychiatric examinations
2. Observation setting:	Dates for the alleged act and for the examination, and if the defendant agreed to participate or not
3. Profession of experts:	Psychiatrists, psychologists, team of different professionals
4. Main conclusions of amnesia:	Total , partly or none
5. Type of amnesia if present:	Organic, psychogenic (dissociative) or simulation
6. More information on eventual amnesia:	Former episodes of amnesia, substance abuse at the time of crime, sleep disorders or other organic factors
7. Psychiatric/diagnostic evaluation:	According to ICD-10 system if present
8. Methods applied by the experts:	Clinical interview, information from third parties, neuropsychological, personality and memory tests, screening devices, neurophysiologic tests (e.g. CT, Cat Scan, EEG) etc.
9. Eventual comments from the NMFB:	No comments, general comments or request for revision of conclusions

For further details, see Appendix III.

Værøy and I independently scored all the reports. In order to check the inter-rater reliability, both of us scored 12 reports related to the following three key variables: claimed amnesia for the act or not, if the claim was accepted by the experts, and the presumed main cause if valid amnesia was detected. If one of us had issued a report to the cohort, the other author would score it in order to avoid a potential selection bias in the scoring.

Statistics

The inter-rater reliability was estimated by kappa statistic. Continuous variables were analysed with a Mann-Whitney U-test (non-parametric). The categories of claimed amnesia (partial and total) versus non-claimed amnesia were analysed in 2 x 2 contingency tables with a Fisher's exact test because of the small expected numbers in the cells. The level of statistical significance was set at p <.003 due to multiple comparisons based on Bonferroni's correction, all tests were two-tailed, and the statistical analyses were carried out using SPSS version 15.0 software.

3.5.6. Main results

The main topic here was to investigate the characteristics of defendants who claimed partial or total amnesia and to explore how experts methodically assess claimed amnesia in homicide cases.

Inter-rater reliability

Whether the defendant had claimed amnesia for the act obtained a kappa of 0.75. There was complete agreement (kappa 1.00) between both raters as to whether the expert accepted the claim for amnesia as being valid or not, as well as concerning the eventual main cause of the amnesia.

Socio-demographic and criminal profile of the cohort

The mean age of the 102 defendants was 33 years (SD = 10.5), and 94 of the defendants were men and 8 were women. Seventy per cent were Norwegian citizens, and 55% had nine years of education or less. Sixty percent were single, 57% were unemployed, 51% had previous convictions, 11% had undergone a previous forensic examination, and a total of 61% had former contact with the psychiatric health care system.

Characteristics of the defendants claiming amnesia

Of the 102 defendants, 26 claimed partial and 17 total amnesia for their alleged act, a total of 43 defendants (42%). We found no significant differences concerning socio-demographic or criminal variables among those who claimed partial, total or those who had no claim at all. No significant differences concerning the same variables as previously listed were found when the group that claimed *any* type (i.e. total or partly) of amnesia was compared to the non-claim group.

Methods applied by the experts in assessing claimed amnesia

We found no significant differences among the three amnesia groups, i.e. no claim, partial claim or total claim of amnesia as per the experts' number of examinations (the experts had conducted at least two clinical interviews with the defendant in 90% of the cases and the mean of number of examinations was 3 – range 7, median 3), use of diagnostic instruments, neurophysiologic examinations, neuropsychological tests, memory tests or somatic examinations. Only one defendant with no claim of amnesia was given a memory test.

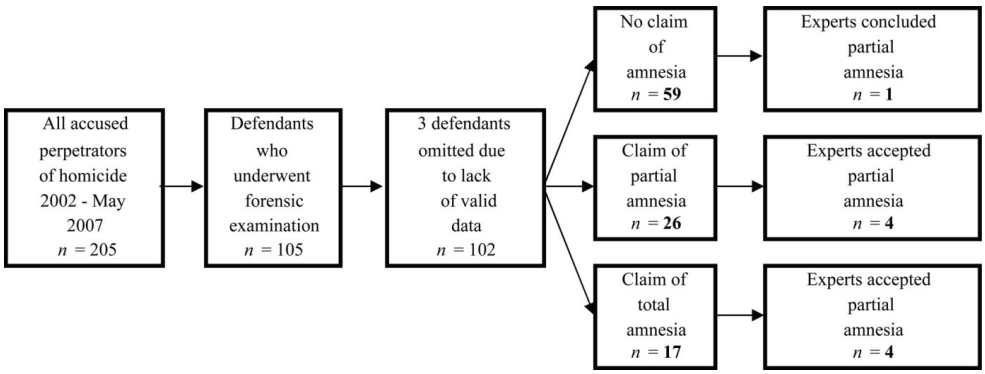
When we tested the combined (total and partial) claims of amnesia group versus the group with no claims of amnesia, no significant differences emerged in the methods applied by the experts, and no significant differences were observed in the use of methods between the teams of two psychiatrists and the team of one psychiatrist and one psychologist.

One report contained only information from the police documents, while 28 reports contained information from two sources: police documents and the clinical examination, and 54 of the reports contained information from three sources: police documents, personal examination of the defendant, and information collected from third parties. Furthermore, 13 reports used four sources/methods, five used five sources/methods, none used six of the sources/methods, and one used all seven methods listed.

Accepted cases of amnesia

The experts accepted that nine had partial but not total amnesia out of the 102 cases, which constituted 9% (95%CI 4.5-16.1%). Four of those claiming total and four of those claiming partial amnesia were accepted as being partially amnesic by the experts (Figure 1). One defendant was classified as partially amnesic due to intoxication from alcohol/drugs, although this defendant had made no amnesia claim.

Figure 1 - Overview over the material and the different groups regarding claims of amnesia



Three of the nine reports concluding with amnesia received corrective comments from the NFMB, the quality control organ for all forensic reports issued in Norway. This was in contrast to the total cohort where such corrections were given in 17 of 93 (18%) cases (p = .37).

Time span

The mean time from when the alleged crime was committed to the first examination of the defendant by the experts was 193 days (SD 476, range 1 - 3987) (two cases were not registered). After omitting seven cases that were observed more than a year after the criminal act, the mean time was reduced to 91 days (SD 73, range 1 - 353).

In conclusion, the hypotheses of Study III were partially confirmed: 1) In 90% of the 102 cases, the experts had conducted at least two interviews with the defendants, and in 60%, they had collected supplementary information from third parties. 2) The experts hardly differed as far as what type of methods they used whether the defendant claimed amnesia or not. Only in a very limited way, did they apply personality, diagnostic, memory, neurological or other tests as a basis for their conclusions. However, using small groups will increase the risk of making Type II errors.

3.6. Study IV: A comparative case vignette study of decision making in forensic psychiatric cases (the case vignette paper).

3.6.1. Background

Up until the last four decades, the courts more or less uncritically accepted the psychiatric assessments of the experts. A growing body of criticism has emerged due to a presumed lack of reliability and validity of the conclusions made by the experts, a failure to meet scientific standards and a failure to follow established methods. As such, some authors have concluded that forensic psychiatric experts are prone to the same types of notions, heuristics and biases as non-experts.

Despite this criticism, little empirical research has actually been conducted on the quality of the work done by the experts and the conclusions they have reached. Therefore, we wanted to empirically test one aspect of the criticism, namely that the judgments made by experts in regard to forensic issues hardly diverge from the judgments made by laypeople.

A forensic psychiatric assessment can be roughly divided into three phases: 1) Collection of data (obtaining documents, interviewing the defendant, etc.), 2) Assessments/judgments of the data, and 3) Presentation of the findings/conclusions based on data. This study concerns the *second phase*, namely that of assessing the data.

To observe how professionals and laypeople judge the same forensic case vignettes may tell us how such judgments are done and if there are differences among the samples. Such knowledge may enable us to learn more about how experts in this special field can contribute to the legal process.

3.6.2. Aims

The aim of this study was to examine whether the judgments concerning forensic psychiatric case vignettes would be significantly different between laypeople and professionals and psychologists and psychiatrists.

3.6.3. Research questions and hypotheses

Would the judgements of the professionals, i.e. experts, (specialists in psychiatry and psychology) differ significantly from judgements made by laypeople based on the same case vignette material? Also, would the judgments made by forensic psychiatrists differed significantly from the judgments made by forensic psychologists?

We held one hypothesis: There would be no significant differences among laypeople, psychiatrists and psychologists when they evaluate: a) insanity by legal terms, b) risk of crime recidivism, and c) need for psychiatric treatment.

3.6.4. Materials

In order to produce the case material, we were given access to the forensic psychiatric screening reports issued after 2002 at the Office for Forensic Psychiatry, and we chose 42 reports. The reports were selected to find clear and/or prototypical descriptions of both positive and negative psychiatric and social histories as well as descriptions of both major and minor offences. We made such a selection because we wanted to see if there would be different judgments among psychiatrists, psychologists and laypeople based on whether case vignettes had a positive or negative description.

I recruited psychiatrists and psychologists based on a list acquired from the NMFB of all acting experts who had issued at least one forensic court report in Norway since 2002. Of the 82 experts invited, 51 (62%) responded and 37 (45%) agreed to participate. However, three experts who had agreed to participate never returned the questionnaire and the responses

from one expert could not be used due to incoherent answers. We managed to recruit two additional experts as replacements and ended up with 14 psychiatrists and 21 psychologists.

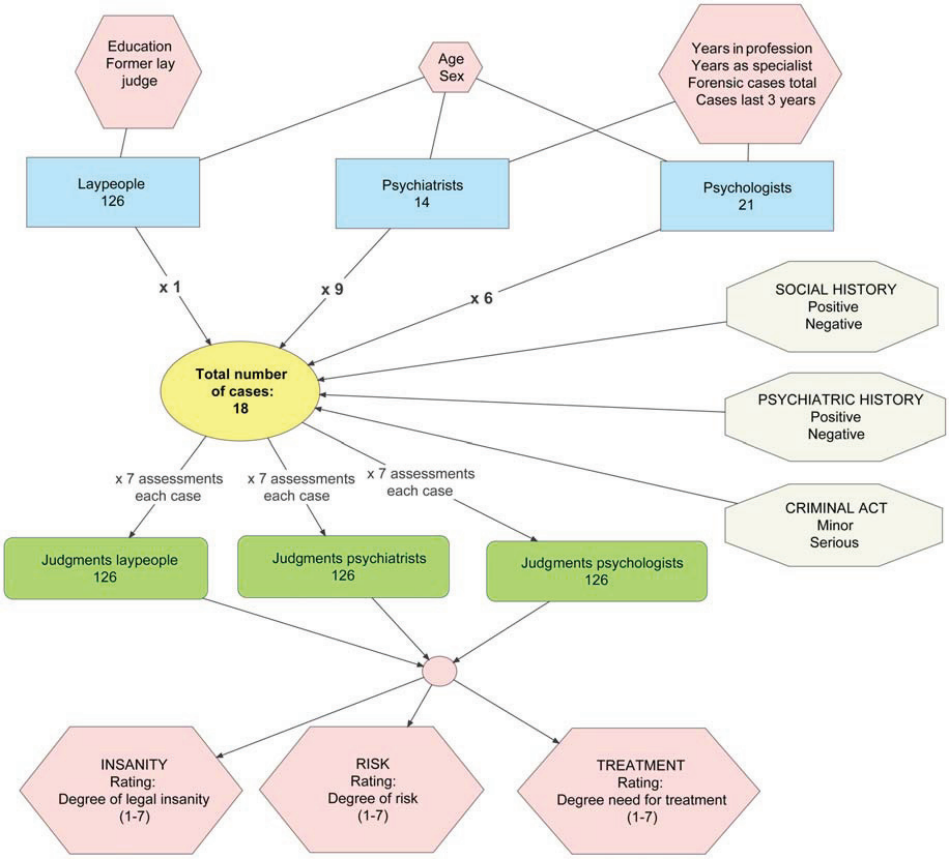
We registered the following data for each expert: gender, age, the approximate number of forensic cases in their professional history as well as the number of cases over the last three years, whether they had obtained a doctoral degree, whether the psychologists had obtained a specialist degree, the number of years of professional experience, and the number of years as a specialist.

We recruited a sample of 126 laypeople among lay judges in court cases in Oslo during the spring of 2008 with the help of two paid assistants. The assistants asked a random selection of lay judges whether they were willing to participate in a study of how laypeople evaluated descriptions of criminal offenders. We excluded psychologists, psychiatrists, judges, lawyers and police personnel from the sample, and the assistants kept recruiting until the aforementioned total of 126 laypeople was reached. Each lay judge rated one randomly selected vignette under the guidance of the assistants and received a lottery ticket as reward, and the gender, age, level of education, occupation and previous experience as a lay judge were registered.

3.6.5. Methods

The design of the study is graphically presented in Figure 2:

Figure 2 - Graphical presentation of the design of the case vignette study



Validation of the case vignettes

We extracted suitable descriptions from the reports to form anonymous and balanced sets of: 1) A positive psychiatric history (lack of serious psychopathology, e.g. no reports of psychiatric treatment, generally healthy mental functioning, no reported serious psychiatric symptoms) and a negative psychiatric history (presence of serious psychopathology, e.g. hospitalised in a mental hospital, previous suicide attempts, psychotic symptoms), 2) A corresponding set of a positive social history (e.g. uncomplicated background, parent(s) present and caring, school years with no serious problems) and a negative social history (e.g. drug problems, alcoholic parents, juvenile delinquency, domestic violence), and 3) A set

of former convictions for minor crimes (e.g. driving under the influence, minor thefts) and serious crimes (e.g. homicide, rape, arson).

We then transformed the 18 vignettes into an opposite description. In other words, positive psychiatric and social histories were transformed into negative ones, and vice versa, and serious offences into minor, thereby creating an alternate set of 18 vignettes based on the initial descriptions. By creating an alternative set of vignettes, we temporarily had a total of 36 vignettes (18 ordinary and 18 alternate ones).

We examined the content validity of the vignettes by asking representatives of various professions such as psychiatric nurses, psychologists, psychiatrists, lawyers, and mercantile personnel from the staff at the Centre for Forensic Psychiatry at Oslo University Hospital to evaluate both sets of 18 cases. We established two groups with five persons in each group who evaluated the cases individually without contacting each other. They were asked to rate the vignettes according to what type (positive or negative psychiatric and social history or crimes (minor/serious)) they preferred. If the group unanimously rated a given case description as having a negative psychiatric history, we would choose this description as one of the validated negative psychiatric cases to be used in the study. If one or more of the five in the group rated the given case description as positive and the rest of the group rated it as negative, the description was rejected. Based on this feedback, we only selected cases which achieved a unanimous agreement in terms of positive/negative psychiatric and social history and minor/serious crime descriptions.

The validation process concluded with a final set of 18 “definite case” vignettes without negative comments on a lack of clarity or coherence, which covered all possible combinations of elements. These vignettes were presented to the participants with a random case number, without any identification of the specific combination of psychiatric and social histories and minor/serious crimes present.

The dependent variables

We asked the participants to rate each case based on three outcome variables. The first variable was Insanity by Legal Terms (“insanity”) defined according to Norwegian Penal Code, Section 44 (see Section 2.1.3), and a brief definition of insanity was given on each rating form. The second variable was Risk of Repeated Offence (“risk”), defined as risk of committing a new criminal offence. The third variable was Need for Treatment (“treatment”) in psychiatric health care in the immediate future.

Ratings of the variables were done on a 7-point Likert scale from 1 (not present) to 7 (present to a high degree), i.e. a higher scale score indicated more insanity, a higher risk and a higher need for treatment, respectively. We obtained three variable ratings from the

participants in each case, and also obtained ratings on 12 other related variables that will be analysed in a subsequent publication.

Statistics

The members of the professional group each rated multiple cases, so evaluations from the same individual were not independent. Because of this, we used the Linear Mixed Model (LMM) to analyse the data because this model is an extension of the standard regression model which allows multiple outcomes to be dependent.

When we analysed, e.g. insanity, we treated this as the outcome variable and used the model to investigate how it was dependent on a) the participant group (layperson, psychologist, or psychiatrist), and b) case history components (negative or positive social history, negative or positive psychiatric history, minor or serious criminal offence), and risk and treatment were treated in a similar manner.

All computations were performed using the R statistical software (R Development Core Team, 2004), with the significance level set to $p < .05$.

3.6.6. Main results

One noticeable difference is that the psychiatrist group had a much higher number of previous forensic cases than the psychologist group. The effect of experience cannot therefore be separated from the effects related to the differences in professional training.

Age and gender (which were analysed together since separate analyses yielded no difference) of the raters were not, however, significantly related to any of the outcome variables, i.e. Insanity ($p = .42$), Risk ($p = .20$), and Need for Treatment ($p = .15$). With this in mind, we did find differences between the groups.

Participant group differences

We found differences between laypeople and experts on both Insanity ($p = .008$), Risk ($p = .024$) and Need for Treatment, ($p = .009$). On average, the laypeople rated all variables higher than the experts, i.e. they considered the case vignettes as being more Insane, having more Risk and more Need for Treatment.

There were no significant differences between the psychiatrists and psychologists concerning Insanity ($p = .28$), but they differed in their judgments on Risk ($p = .030$) and Need for Treatment ($p = .021$), as the psychologists gave higher ratings than the psychiatrists on these two variables.

Insanity

The groups evaluated Insanity differently (p = .025). Laypeople rated insanity significantly different from the experts (p = .008), while the difference between the psychiatrists and psychologists was not significant (p = .276).

The average rating by laypeople was 3.13, which was somewhat higher than the psychiatrists and psychologists, who scored in a similar manner, approximately 2.4 on average. Case descriptions with a described negative Psychiatric History received ratings which on average were 1.54 points higher than cases with a positive Psychiatric History. The difference between case descriptions with a negative and positive Social History was small, only 0.14 and a serious offence resulted in a 1 point higher rating than in cases where the offence was minor.

Risk

There were significant differences among the three groups (p = .003) concerning Risk. Laypeople and experts rated Risk differently (p = .024), while the psychiatrists and psychologists also rated differently from each other (p = .030) on this variable.

The average Risk ratings from laypeople were the highest (i.e. more risk) of the three groups. The corresponding average rating of the psychiatrists was considerably lower regarding Risk, with the psychologists' ratings in between. Furthermore, on average, cases with a negative and positive Psychiatric History were rated similarly. Cases with a negative Social History yielded mean ratings approximately 1.3 points higher than cases with a positive Social History, and on average, a severe criminal offence produced evaluations roughly 1.4 points higher than a minor offence.

Need for Treatment

There were a significant difference in the mean scores among the three groups with respect to the Need for Treatment ratings (p = .004), and the ratings from the laypeople were significantly higher than those of the experts concerning the Need for Treatment (p = .009). The psychiatrists and psychologists also rated Need for Treatment differently (p = .021), and the psychologists gave higher ratings than the psychiatrists on this variable.

The laypeople gave the highest mean ratings regarding Need for Treatment, and the psychiatrists giving the lowest ratings. Cases with a negative Psychiatric History were given considerably higher mean ratings than cases with a positive history, with a difference of about 3 points. On average, cases with a negative Social History were rated somewhat higher than cases with a positive Social History, and a Serious Criminal Offence produced an average evaluation about 1.3 points higher than a minor offence.

In conclusion, our hypothesis was not confirmed. There were significant differences in the judgments of the case vignettes between laypeople and forensic experts (psychologists and psychiatrists) in their judgements concerning: a) Insanity, b) Risk and the c) Need for Treatment. There were significant differences between the laypeople and the professionals in all three outcome variables, but no significant differences between the psychiatrists and the psychologists regarding insanity, although there were significant differences between the two groups regarding risk and treatment.

3.7. Ethics

For Study I, approval and access was granted by the NMFB in Norway and the Norwegian Department of Justice. In Denmark, approval and access was granted by the NMFB and the Danish Department of Justice. In Sweden, we contacted Sten Levander, MD, PhD, head of the Forensic Psychiatric Clinic of Malmö who granted us the permission and necessary help to obtain relevant reports. It was not clear to us, however, if he sought or received approval from the Swedish Department of Justice.

The National Data Inspectorate approved of Studies II and III, while the Directorate of Public Prosecution granted permission to study the screening reports in Study II. In addition, we were granted exemption from a declaration of non-disclosure of confidential information for research purposes from the Justice Department concerning Study II, and none of the defendants were informed that their reports were used for the research described in this thesis.

All the respondents in Study IV gave their informed consent to take part.

The studies for this thesis were approved by The Regional Committee for Research Ethics of Health Region East.

3.8. General Discussion

3.8.1. General methodological issues

The aim of this thesis was to conduct an analysis of forensic psychiatric practices, methods and judgment processes as is primarily performed in Norway. This was done with regard to setting, verifiability, methods, premises stated in the forensic reports and judgement processes in forensic experts versus laypeople. To fulfil this aim, four studies were conducted. Studies I - III were quite similar in design and use of methods and will therefore be discussed together, whereas Study IV will be discussed separately.

3.8.2. Design issues

Since at the time of inception we could not find any studies that had previously empirically studied the aims of Papers I - III, we had to develop relevant rating forms for each of the three studies. These forms had a common aim, namely to convert data extracted from the text of the reports into unambiguous numbers for quantitative analyses. Positive statements in the forensic psychiatric reports pertaining to: 1) Basic demographical, psychiatric and criminological data on the defendant, 2) Observational settings, and 3) Content such as length of the reports and the premises for the conclusions all received their unique numbers.

Each form was developed based on a combination of experiences with forensic work and the need to obtain relevant data in order to elucidate the problems raised in each study. Drafts of the forms were made and revised several times after discussions with colleagues and supervisors. The testing of a new questionnaire should go through several phases of pilot trials and feedback in order to secure reliability and validity, but such testing was not done with these forms which must be considered a major weakness of design concerning Papers I - III. On the one hand, most of the information collected with these forms had a factual character that described time, procedures, places of examination and so on. Few data demanded interpretation or value judgments from the rater, while on the other hand, the rater eventually was not free of interpretation bias. As a result, the major conclusions and most important information were checked by two raters, their inter-rater reliability coefficients were calculated, and these coefficients showed satisfactory findings. However, the samples were small, so the reliability calculation showed a wide confidence interval. The problem of small sample sizes, low statistical power, and the risk of Type II errors are discussed below.

The rating form of Paper I should cover the methods used in Sweden, Denmark and Norway, although my lack of detailed knowledge about the practices of Sweden and Denmark could cause the risk of leaving out relevant information. In Studies II and III, this was not much of a problem since I had issued numerous screening and full reports and was very familiar with their content.

Study IV was based on the design of a study by Jackson (1986), but her design was adapted and extended for the Norwegian court settings. Jackson included fitness to stand trial, insanity, dangerousness, need for treatment, criminal responsibility and the prediction of future offences as outcome or dependent variables. In our study, we only included three outcome variables: Insanity, Risk and Need for Treatment, and we also made the case vignettes somewhat longer than those done by Jackson. We considered the fact that her vignettes were somewhat lacking in the necessary information, and that more information would demand more cognitive processing from the participants. In addition, longer case vignettes could better reflect the “real world” (that is, most forensic cases usually contain a lot

of information) and consequently initiate a more realistic judgment process among the participants.

Our design also differed from that of Jackson since we included psychologists instead of judges. The main design challenge of Study IV was to make case vignettes which contained the necessary and sufficient amount of information in a form by which the values of the cases (positive/negative, social and psychiatric history and serious/minor crime) would be clear and easily understood. We used pilot testing of the vignettes with personnel at our centre with a variable professional background in order to reach this goal, and their feedback led to modification of the vignettes.

3.8.3. Validity issues

Internal validity

Internal validity is defined as the extent to which a study is representative of a particular group of individuals being studied. The degree to which a study's results can be generalised to other individuals or settings reflects its *external* validity, and representativeness, possible bias and confounding factors could affect internal validity (Friis & Vaglum, 1999; Benestad & Laake, 2004).

Bias can be defined as the result of *systematic* error in the design or conduct of a study. Systematic error results from flaws in either the methods of selection of the study participants or in the procedures for gathering relevant exposure and/or disease information. A consequence of a bias may be that the observed study results will tend to differ from the true ("real world") results. This tendency towards erroneous results is called bias (Szklo & Nieto, 2004). *Systematic error (bias)* needs to be distinguished from *random sampling error* due to the variability which results from the use of samples to estimate the study parameters in the reference population. The sample estimates may differ substantially from the true parameters because of random error, so if our samples are different from their populations in a *systematic* way, then we have caused a bias in the samples. There are various types of bias that can occur which need to be discussed in relation to our samples.

Selection bias is in operation if we intentionally or without realizing it select patients and controls that systematically differ from their populations. The reports examined in Paper I are samples drawn from the respective population of defendants charged with attempted homicide or homicide in Norway, Sweden and Denmark. I had quite specific inclusion criteria for the reports required, but given the small sample size the representativeness of the collected reports is uncertain. As a consequence of that, a selection bias concerning the selection of the reports cannot be ruled out (see limitations under Section 3.8.4, page 73). We have further discussed selection bias in the Danish sample of Paper I, since originally,

only cases from Copenhagen were considered. To what extent the sample selected by Professor Levander had a bias concerning defendants from Sweden in Paper I should have been explored, but this has not been done.

By including all screening reports in Paper II and all amnesia cases in Paper III, the risk of selection bias was negligible in those studies.

In Study IV, we obtained laypeople serving as lay judges in Oslo courthouse. The procedure for approaching lay judges in Norway was done randomly in order to obtain a representative sample of "laypeople". However, not all people can be appointed to serve as lay judges. People with any former jail sentences, drug addicts, the mentally retarded, etc. will not be appointed, which can be seen as a selection bias regarding the entire population of Norway. On the other hand, the sample is probably representative of appointed lay judges, except from a geographical perspective, since our laypeople sample came from the Oslo region and not other parts of the country.

The psychiatrists were chosen from a list obtained from the NMFB and were experts known to have conducted forensic examinations. The psychologists were also chosen from the same list, although they had less experience than the psychiatrists in regard to the number of forensic examinations. The psychologists had a median of 10 cases, range 1–350, compared to the psychiatrists' 100 cases, range 5–1087, so the psychiatrists were much more forensically experienced. Yet, this professional difference cannot be considered as a selection bias, but rather as a confounder that eventually should be controlled for in the statistical analyses.

Information bias is regularly understood in two ways. The first is in terms of wrong information about the defendants. All (Norwegian) defendants subjected to forensic examination have been identified in the official register of the NBMD as *suspected* of homicide. Now, since they had not been convicted, a selection bias may have occurred since some of the defendants were innocent and did not belong in the sample of persons who had committed homicide. A re-examination of whether the defendants were considered innocent by the court would only have been possible by obtaining the court verdicts from various parts of the country, and some of the cases could have also been dismissed by the prosecution authorities. It is therefore questionable whether such re-examinations were even possible.

The second understanding of information bias is systematic deviations in relation to key information given by the participants. Key information in this thesis concerns the positively stated information which has been written down in the screening and full reports, though we cannot be assured of the validity of the information that the experts issuing these reports have put into them. According to Wettstein (2005), the forensic report is only a "window" into the evaluation that has occurred. Hence, what is recorded in the reports may differ from what actually took place. The risk of information bias is considerable simply because for various

reasons, some of the experts might have omitted (important) information or misinterpreted some of the data in the cases.

Since the same case vignettes were used for both laypeople and experts, there is no information bias in Study IV.

Interpretation bias concerns the raters' understanding of what has been written in the reports and our check for this bias are the measures of inter-rater reliability.

In Paper I, we obtained a Pearson's correlation of $r = 0.83$, 0.95, 0.61 and overall $r = 0.83$, respectively, (see page 45) which reflects a large positive correlation. In Study II, the kappas were 0.88, 1.00 and 056 (see page 50) regarding the three variables checked, and the agreement varied from moderate to (almost) perfect. In Study III, we obtained a kappa of 0.75, 1.00 and 1.00 for the three variables we checked (see page 55).

The experts' interpretation of observed and reported psychopathology is an important source of bias that we are unable to evaluate, as one possible source of random error concerns the entire transformation process. Studies I - III were all based on register data, i.e. we read, analysed and scored the forensic reports. After we read them, we transformed their content into data in the forms. Some of the reports were of considerable length, and some were quite difficult to comprehend in order to locate the relevant information we were interested in. Ellingsen, who studied all reports from 1980, stated that: *"Some reports are difficult to read. They could have a long and an indefinite start. They can be unclear or organised in an unusual way",* and: *"Unfortunately, there are also many reports which are so badly edited, that they are almost impossible to navigate through"* (Ellingsen 1987, p. 11, my translation). In some cases, this was a problem for our studies as well, and this may have led to random rather than systematic errors in the scoring process.

In Study IV, we run the risk of interpretation bias since the case vignettes had only brief descriptions of social and psychiatric background and crimes committed, possibly creating an opening for different interpretations. However, this was only an eventuality among the experts who rated several vignettes because among the laypeople who only rated one vignette each, the error could only be random.

Availability bias is a human cognitive bias which causes people to systematically overestimate probabilities of events associated with memorable or vivid occurrences. In Study IV, all groups systematically gave higher insanity ratings of vignettes with serious crimes in comparison to minor crimes, which might reflect an availability bias connecting crime and insanity, perhaps intensified by media coverage.

The term *confounding* refers to a situation in which an association between a given exposure and an outcome variable is observed as the result of a third variable (or group of variables), usually designed as a *confounding variable,* or merely a *confounder.* The

confounding variable is causally associated with the outcome and non-causally or causally associated with the exposure, but is not an intermediate variable (mediator) in the causal pathway between exposure and outcome. The common cofounders in this thesis are age, gender and level of education, and we checked and eventually adjusted for all these variables in all the studies.

External validity

External validity involves generalisations, i.e. external validity is the degree to which the conclusions in a study would hold for other persons in other places and at other times.

In Study I, we chose homicide/attempted homicide as an index crime, and in Study III, we only chose reports with homicide as the index crime. The reason for this was that homicide of course is one of the most serious crimes to be accused of anywhere in the world. Even so, from an international perspective, the annual rate of homicides has been stable over the last 10 years at approximately 40 in Norway (0.91 per 100,000 inhabitants in 2002) which is quite low (in Finland about 160 homicides take place annually, which yields approximately 3.2 per 100 000), so those charged of homicide in Norway may therefore differ from those in other countries and cultures. Given the seriousness of such a crime and the eventual long sentence that ensues if the defendant is found guilty, we presumed that the forensic experts would apply the best methods available ("peak performance") in order to reach valid conclusions of their examinations. Focusing on homicide also gave us the opportunity to compare the methods used when the experts assessed the same type of serious crime, and yet another reason to choose homicide as index crime was that a homicide is legally clear to interpret since a charge of homicide will imply that a very serious act has occurred – a person has died. Attempted homicide on the other hand is not so easy. Attempted homicide could be interpreted by prosecutors as an assault, actual bodily harm, or as an attempted homicide. Inclusion of attempted homicide would have enlarged our sample size, but the ambiguity would (in Study III) reduce our opportunities to investigate the possible characteristics of defendants claiming a loss of memory for an alleged homicidal act. In addition, several international studies have used homicide as an index crime in claimed amnesia, thus making it natural to choose reports with homicide as index crime for the sake of comparison.

The external validity of our findings in Paper III might possibly be reduced since we cannot automatically make generalisations in forensic examinations for defendants of other serious crimes such as armed robbery, rape or attempted homicide. Nevertheless, such a reduction of validity is probably not likely since we examine the procedures for a forensic examination, which should be quite similar as it concerns all types of serious crimes.

Study I demonstrated that there were considerable differences among Norway, Sweden and Denmark in terms of procedures and work methods concerning forensic reports, which has to do with established administrative traditions and lawmaking in these countries. The fact that countries which have so much in common differ to such an extent shows that external validity across countries and jurisdictions is a definite challenge in forensic psychiatry. For that reason, we are of the opinion that external validity in such matters is mainly limited to within each country.

In Study II we chose only screening reports issued at the Office for Forensic Psychiatry, Oslo Police Department. As far as we know, screening reports are made in *about* the same way all over Norway according to established rules and jurisdiction, so there is reason to consider strong external validity in relation to our findings here.

In Study III, we chose all reports concerning homicide in the period from 2002 – May 2007. This constituted a complete coverage of the cases in question which were forensically assessed in Norway in that period, due to the good quality of the register of NMFB, thereby indicating that our findings probably give a reliable picture of the current methods applied by the experts in Norway.

In Study IV, all the cases were originally drawn from psychiatric screening reports issued at the Office for Forensic Psychiatry to constitute "real" forensic cases which we later transformed into prototypical cases, and all of them contained different information regarding social and psychiatric history and the crime committed. Our vignettes are at the disposal of other researchers who want to replicate our study or use them in an alternative design. Consequently, the external validity must be considered to be good.

Support for the validity of our results would come from the replication of our research design with other samples drawn from the same population, or from other researchers conducting the same studies on different samples. However, the first three papers of this thesis have been based on themes in which we lack comparable studies, and support from similar results in other studies cannot be drawn on to support the validity of our findings. So the conclusion of our studies is that they may have both considerable internal validity, and to a variable degree, external validity as well within Norway.

Statistical issues

The small sample size in Study I give an apparent risk of Type II errors, i.e. significant differences do not materialise as they would in a larger sample. Nonetheless, we found that significant differences should be considered as robust considering the sample size, and we used Pearson's correlation coefficient *r* as a measure for inter-rater reliability. In hindsight, we consider this a limitation since it does not consider differences in variance, and only

measures association and not agreement. Instead, we should have used the kappa or intraclass correlation statistics for testing inter-rater reliability.

In Study II, we had a considerable sample size (n = 419) which provided adequate statistical power for the analyses. We were therefore able to draw conclusions without having to consider Type II statistical errors.

In Study III, we had 102 reports concerning homicide cases. The level of statistical significance was set at p <.003 due to multiple comparisons based on Bonferroni's correction, so the risk of spuriously significant associations was thereby virtually eliminated. No significant differences were observed when comparing the amnesia claiming group with the group that made no such claim. These findings may reflect the truth, but may also be due to Type II errors which is the price paid for not making Type I errors since these two types of statistical errors are related.

One example which illustrates that a larger cohort has found differences is the study done by Häkkänen et al. (2008). They had a cohort of 656 Finnish homicide convicts and found several significant differences in the characteristics of those who claimed vs. no claim of amnesia (see page 33). On the other hand, such a large cohort may produce Type I errors with spuriously significant differences.

In Study IV, we used the Linear Mixed Model (LMM) since the experts each rated multiple cases and evaluations from the same individual were not independent, while the LMM allows multiple outcomes to be dependent. We found significant differences among the three groups, although we also found that the different groups rated the cases differently according to the descriptions given. Hence, we found interaction effects, but there were individual configurations for each case, and it is difficult to grasp the actual interpretations of the interactions. The statistical analysis was carried out by Joseph Sexton, MS, PhD.

3.8.4. Discussion of specific results

The comparison study

Main findings to be discussed:

A comparison of the three countries revealed differences concerning forensic psychiatry in organisation, legislation and the setting of the observation. As far as the methods used, it was found that Swedish, and to some extent Danish experts had a more frequent use of tests and instruments as a supplement to the clinical interview than Norwegian experts (p <.001). The time span from the committed crime to the finished forensic report was a mean of 73 days in Sweden, 120 in Denmark and 190 in Norway (p <.003). Sweden also had the longest sections of discussion in their reports compared to Denmark and Norway (p <.001).

Discussion:

The fact that Swedish experts applied more tests than their Scandinavian colleagues is a reflection that almost all Swedish defendants are examined while being inpatients in a forensic clinic (where examinations are made by teams of psychiatrists, psychologists, nurses, and other relevant professionals) for four weeks. Thus, the experts will have both more time and better settings for more extensive testing. The Danish experts will also have this opportunity when the observation takes place within a hospital setting or at a clinic (perhaps outpatient) like the Clinic of Forensic Psychiatry in Copenhagen. The Norwegian experts observe defendants at various places such as at the defendant's home, in prisons etc., which does not allow for the best opportunities for conducting time consuming and concentration demanding tests.

In half of the Danish reports, it was not stated where the examination took place. The reason for registering this variable was to check the verifiability of the reports, i.e. what was stated regarding the framework conditions behind the issued reports, which can be of great interest for the legal parties in the court proceedings. Under what conditions did the examination take place, and were these conditions sufficient for a thorough and optimal examination of the defendant? Since half of the Danish reports missed were lacking this information, they may be somewhat less verifiable in this respect than the reports from Norway and Sweden.

The reason for registering the time span from the crime to the finished forensic report was to check the circulation time of the cases in the medico-legal context of these countries. Too long of a time span could imply more recall problems for the defendant, which is considered essential information for the forensic examination. The mean time in Norway of 190 days (more than half a year) intuitively seems "too long", and may make information based on memory less valid, and conclusions about criminal insanity at the time of the crime will also suffer from long time spans such as the Norwegian one.

An explanation for this variation in time from committed crime to finished report could be the different organisation of the police investigation routines, court systems, etc. within the respective countries. Another explanation could also be the circumstances related to the homicide in question. In some homicides, the defendant is obvious and immediately caught, while in other cases the criminal investigation goes on for a long time before the suspect is arrested, so it is reasonable to state that the time from arrest to finished report would be of importance.

The time also varied from the experts' first meeting with the defendant to the finished report, but this time span was not registered in the Swedish reports. Still, in most cases,

Swedish defendants are examined on an inpatient basis for four weeks in specialised forensic clinics as a standard procedure, meaning that the time span is less relevant to register. The reason why the Norwegian experts used a longer period of time to deliver finished reports than the Danes is not known, though the Danish forensic psychiatric system seems to be somewhat more organised than their Norwegian counterpart. For instance, some Danish counties have specialised forensic psychiatric clinics such as the one mentioned in Copenhagen, leading one to speculate that this mode of organisation could increase the effectiveness in relation to the circulation time of each case.

The Swedish reports contained longer sections of discussion than the Danish and Norwegian ones, which mean at best, this indicates that Swedish reports are more thorough in discussing the premises for their conclusions. However, this must be labelled as "soft data" since there might be numerous reasons that Swedish reports contain longer chapters with discussion about font type, margins, line spacing, tradition, etc, and counting pages is probably not a very valid way of examining forensic reports.

Limitations

As previously mentioned, the study has a small sample size and there is a risk of Type II errors.

The reports were selected by others (in Denmark, the Clinic of Forensic Psychiatry and the DNMFB; in Norway, the NMFB and in Sweden the National Board of Medico-legal Affairs, see page 44). Although the reports are based on a set of clear criteria, I cannot rule out a selection bias because those who selected them may have chosen reports which they felt had a very high quality since they would be included in a Scandinavian study.

Another eventual limitation is whether the study, as mentioned on page 69 under external validity, is representative. The sample included 60 evaluated forensic reports from the period from 1999-2001. *Approximately* 550-600 reports are issued every year in each of the Scandinavian countries studied in this thesis. This is equal to a total of about 5,000 reports issued over a three-year period, thus our sample covers about 1.2% (60/5,000) of the total number of issued reports, and in this study, I only registered cases of males charged with homicide or attempted homicide. To further illustrate: 285 ordinary reports were issued in Norway in 1999, and 44 of them were concerning charges of homicide/attempted homicide which represents 15% of all forensic reports issued that year, with the same figure for 2000 also at 15%. In 1999 and 2000, the corresponding figures for Sweden were 16.5% and 18%, respectively, while we lack data from Denmark. This means that approximately 85% of the Norwegian and 83% of the Swedish forensic reports did not concern charges of homicide or attempted homicide in these years, so the findings from the forensic reports for these crimes might not be representative of the other reports. It could however be argued that reports

concerning homicide and attempted homicide may tap the “peak performance” of the experts since such cases are the most serious and often imply extensive coverage in the media.

I did not register the type of homicide, i.e. whether it was planned/instrumental (see page 34) or committed in a strong affect/intoxicated state by alcohol or other substances. Consequently, the time span registered (between committed crime and finished report) can be a result of technical aspects of the investigation. That is to say, a difference in time span between the countries could to a certain degree be explained by different types of homicide.

I registered “methods used” for forensic examination (Table 3 in Paper I), though I only registered methods which I presumed would be commonly known and eventually applied such as SCID I and II, GAF, WAIS, etc. As a result, the most frequently used method was named “other” (14 in Denmark, 5 in Norway 17 in Sweden), which could imply that some methods could have been missed by my lack of detailed knowledge of the applied methods in Denmark and Sweden.

Given these limitations, Paper I can only present hypotheses related to the quality of Scandinavian forensic reports as to defendants charged with homicide or attempted homicide.

The screening report study

Main findings to be discussed:

The severity of the crime, i.e. especially homicide and attempted homicide (p <.001) and a positive recommendation stated in the screening report, (p <.001) compared to an open recommendation, characterised the defendants who had a full report after a screening report. We found that 50% of the 118 screening reports which recommended a full report were followed by the prosecution authorities. In a follow-up analysis undertaken in October 2009, we found that of the 118 positive recommendations, 81 (69%) had led to a full report, and a non-recommendation of a full report was followed-up in 98% of the cases. Among the 181 reports without a clear recommendation, 16% were followed-up by a full report. The concordance between screening and full reports on insanity by law was 46% regarding psychosis, 78% regarding unconsciousness and 94% regarding mental retardation.

Discussion:

The principals almost always followed the advice *not* to initiate a full report. The use of screening reports may be seen as a way of speeding up the criminal proceedings in a case, i.e. not initiating a full report which takes time and/or to save money. When the recommendation from the provisional report is to not instigate a full report, this might be a readily taken indication that there is no doubt concerning the legal sanity of the defendant. Hence, there will be no need for a (time consuming) full report. Another interpretation is that

the prosecutors themselves did not find any considerable psychopathology in the defendant, much the same as the experts doing the screening reports.

After the first round of analysis, the impression would appear to be that the principals found screening reports with “positive” recommendations, that is, they were advised to initiate a full report of moderate use, but they only followed 50% of the positive recommendations.

Twenty of the 59 cases with a recommendation for a full report were not prosecuted further, meaning that the prosecutors stopped the case according to code 065, (see page 48) because of doubt concerning the defendant’s sanity by legal terms. This implies that positive recommendations led the prosecutors to stop the case and not prosecute it any further, and 32 of the cases had not been finalised with indictments at the time of our study.

An updated analysis, including the 32 formerly undecided cases given in Paper II was conducted in October 2009. Of the 118 positive recommendations of the screening reports, 81 (69%) were followed. Of the 37 cases in which the positive recommendation had not been followed by the prosecution authorities, 27 cases (23%) had not been prosecuted further due to doubt concerning the legal sanity of the defendant.

This implies that the conclusions in the screening reports seem to be quite useful for the prosecutors, which is in contrast to our statement in the Paper II. In other words, the prosecutors apparently found the positive recommendations useful since they followed the advice in a clear majority of the cases. A positive recommendation seems to then function as both an instigation for a full report and as an instigation to stop further prosecution of the case due to doubt regarding the legal sanity of the defendant – especially if the crime in question was minor.

There is a concern that 181 (43%) of the screening reports had an “open conclusion”, though an open conclusion does not seem to fulfil the need of the principals for a conclusion in regard to legal sanity. One possible explanation for the high number of “open conclusions” could be that the expert took this to be a code for a negative conclusion/recommendation and implicitly believed that the principals would understand this code.

This point came to light in a personal communication with the head of the Office for Forensic Psychiatry, chief psychiatrist Stein E. Ikdahl, MD. Perhaps there is a need for a change in the practices of the office, i.e. to state a clearer and more explicit recommendation in all the reports, which might increase the utility of the screening reports for the principals.

The agreement between the screening reports and the full reports in terms of psychosis was quite low, which could put into question the validity of the screening reports. Still, one factor might lessen these concerns. None of the negative conclusions regarding psychosis was overruled by a positive conclusion in the full reports, i.e. there were few false negative diagnoses of psychosis in the screening reports, thereby using the full reports as the “gold

standard". In fact, the screening reports did produce more false positive conclusions when the full reports are used as the gold standard. However, the screening reports produced no false negatives when we used the conclusions of the full reports as the gold standard, which implies that the screening reports fulfilled their task as a practical screening device. A few defendants might get their cases incorrectly dismissed due to doubt regarding their legal sanity based on a screening report, although that probably only occurs when the crime is of a minor nature.

Limitations

In Study II, we only chose screening reports issued at the Office for Forensic Psychiatry in Oslo. Despite our stretched deduction that screening reports are made in *about* the same way in Norway, we did not examine this, and despite the regulations in the CPA, established rules and jurisdiction could imply that screening reports issued by other police departments diverge somewhat from those issued at the Oslo Police Department, which can be considered as a limitation of the representativeness of this study. On the other hand, it is a problem to obtain screening reports from other parts of the country because that there are no similar forensic psychiatry offices in other police districts in Norway. We could have asked each district if they happened to store their screening reports, but it would be quite dubious if that were the case.

Another limitation is the inter-rater reliability values observed between Dr. Ikdahl and myself on the main conclusions of the screening reports. Our agreement was kappa 0.56, with a kappa of 0.41 - 0.60 considered as being in moderate agreement. We had expected a higher agreement on this issue and found that we had a somewhat different interpretation of what constituted a clear conclusion/recommendation. The 30 reports were rescored after we agreed that only explicitly stated conclusions in the reports should be regarded as a positive or negative recommendation. However, we did not conduct a new inter-rater study, so we do not know whether our new procedure actually increased our inter-rater reliability or not. In hindsight, we should have conducted a new inter-rater study, but this was not done.

<u>The amnesia study</u>

Main findings to be discussed:

In the 102 homicide cases, 26 defendants claimed partial and 17 claimed total amnesia. We observed no significant differences in the characteristics of the defendants among the partial, total and no amnesia claiming groups. There were also no significant differences observed among the three amnesia groups with concern to the experts' application of diagnostic instruments, neurophysiologic examinations, neuropsychological tests, memory tests or

somatic examinations. Only one defendant - with no claim of amnesia - had a memory test, and the procedures and content of the experts' examination were no different in cases with claims of partial or total amnesia.

Discussion:

The lack of significant characteristics for the defendants claiming partial or total amnesia for their alleged act comes as no surprise since other studies have come up with mixed results when trying to identify such characteristics. Previous studies (see Section 2.6.2) have found that those claiming amnesia have a lower IQ, more pathological personality traits (hysterical traits), more mental disorders, more prior convictions and were older than the non-claimers. The only finding that has gained some support is that amnesiacs are older than those making no claim of amnesia, and there are *apparently* no clear characteristics of defendants who claim partial or total amnesia for alleged homicide. It seems then that dynamic variables (factors characterised by continuous change, activity or progress) are more influential or decisive for a claim of amnesia in homicide cases. Substance abuse and the homicide being "proximate", i.e. very physically close to the victim such as a stabbing or strangulation, relational closeness of the victim, etc., seem to be significant factors in relation to a claim of amnesia. We could therefore speculate if it is futile to search for specific characteristics of defendants claiming amnesia, though a more valid approach could be to look for dynamic and social factors leading up to a claim of amnesia.

The experts were quite thorough in interviewing the defendant. That is, in 90% of the 102 cases, the experts had conducted at least two interviews with the defendant. In approximately two-thirds of the cases, they had also collected information from third parties, but there were few other supplementary methods. Though the experts accepted a few claims of amnesia (9/43, 21%) as being genuine, and then only as partial amnesia, none of the defendants were actually tested in order to find evidence of simulation of the alleged amnesia. According to Christianson et al. (2007), an expert will only be able to identify simulators by the use of tests and structured interviews that focus on specific memory characteristics. There may be several reasons for the low proportion of test applications observed in our study. First, both in Norway and the other Nordic countries, there seems to be no established tradition for the use of tests as part of a standard forensic psychiatric examination (Grøndahl, 2005). Second, we find that forensic textbooks seldom give good recommendations as to how to make assessments of claimed amnesia in defendants. Third, the settings of the observation may be suboptimal, e.g. in the defendant's home, visiting rooms in prisons and so on. Fourth, the experts making forensic assessments are mainly psychiatrists without sufficient psychometric expertise to employ the relevant test, although such competence will vary, and fifth, during the examination in court, some experts may

consider it easier to defend no use of tests rather than being exposed to tricky questions from lawyers about the validity and reliability of such tests.

In reality, there is a vast array of tests, inventories, etc. which can be used in addition to the more traditional methods for the assessment of the validity of claimed amnesia, and 10 examples of such instruments are given in Table 4:

Table 4 - Ten examples of instruments that could help experts in detecting possible memory disorders or the deliberate feigning of mental and/or memory disorders.

NAME	REFERENCE	TARGET VARIABLE	ADMINISTRATION	TESTED PSYCHOMETRIC PROPERTIES	APPLIED IN MATERIAL (N)
DES[a]	(Bernstein & Putnam, 1986) (Carlson et al., 1993)	Dissociative symptoms and disorders	Self-report measure	Yes Se=76% Sp=85%	No
GKT[b]	(Iacono & Patrick, 2008; Jelicic & Merckelbach, 2007)	Memory malingering (i.e. to obtain what the defendant knows of a crime)	Lie detection/polygraph	Unknown	No
MMPI-2[c]	(Sweet et al., 2008; Rogers et al., 2003)	General psychopathology, validity scales and profiles (fake good/bad)	Test/self-report measure	Yes Se & Sp only on different subscales	Yes (6)
RMFIT[d]	(Jelicic & Merckelbach, 2007; Sweet et al., 2008)	Memory malingering	Test	Yes Se=36% Sp=85%*	No
SCID-D[e]	(Steinberg, 1993)	Dissociative symptoms and disorders	Semi-structured interview	Unknown	No
SIMS[f]	(Jelicic et al., 2004; Jelicic & Merckelbach, 2007)	Malingering of mental disorders or cognitive impairment	Self-report measure	Yes Se and Sp labelled as "high"	No
SIRS[g]	(Rogers, 2008)	Malingering of mental disorders	Structured interview	Yes Se & Sp not stated	No
SVT[h]	(Jelicic & Merckelbach, 2007; Cima et al., 2003)	Memory malingering	Test	Unknown	No
TOMM[i]	(Jelicic & Merckelbach, 2007; Sweet et al., 2008)	Memory malingering	Test	Yes Se=45% Sp=95%	No
WMS[k]	(Bosnes, 2007; Sweet et al., 2008)	General memory	Test	Yes Se & Sp only on subtests	Yes (1)

Note: [a]Dissociation Experience Scale; [b]Guilty Knowledge Test; [c]Minnesota Multiphasic Personality Inventory-2; [d]Rey's 15-Item Memory Test; [e]Structured Clinical Interview for DSM-IV Dissociative Disorder; [f]Structured Inventory of Malingered Symptomatology; [g]Structured Interview of Reported Symptoms; [h]Symptom Validity Testing; [i]Test of Memory Malingering [j]Victoria Symptom Validity Test; [k]Wechsler Memory Scale
Se= sensitivity, Sp= specificity, *= Figures vary

However, none of these methods are either appropriate or suitable for the Norwegian (or perhaps even a Scandinavian) setting. Polygraph testing such as the Guilty Knowledge Test remains highly controversial and only a few of the instruments such as the DES, the MMPI-2, the SCID-D, and the WMS (WMS-R, translated in 1992) have been translated into Norwegian. On the other hand, both the TOMM and SVT are easily administrated even without any translation. Even so, none of these can actually detect whether the defendant was amnesic at the time of the crime, but they may constitute a valuable supplement to clinical judgement in such cases.

Limitations

Study III has a relatively small sample size and there is a consequent risk of Type II errors. Our results may reflect true findings, but in a larger sample our non-significant differences could turn out to indeed be significant. To obtain a larger cohort of course would of have required a longer sampling period with a risk of changes in forensic legislation, methods, etc.

We did not register the distinction between reactive and instrumental homicides in our rating form. If we had done so, we might have been able to explore further characteristics of those claiming amnesia versus those who did not. Unfortunately, such a distinction is not always made in the Norwegian forensic psychiatric reports, so we would have had to interpret and classify this distinction ourselves based on the content of the reports which would have probably led to a low reliability in the scorings since the reports do not usually describe such a distinction. This could have also led to interpretation bias since we would have had to interpret whether the homicide in question should be placed in the reactive or instrumental category.

We studied reports issued on unconvicted defendants, but studies of amnesia can be vulnerable as far as reliability is concerned. That is to say, cases of claimed amnesia might not be reliable due to the confounding effects of the legal process (Evans, 2006), as some cases might result in an acquittal due to presumed innocence. So when we studied the characteristics of defendants in reference to a claimed loss of memory, we may have inadvertently studied persons not belonging to the homicide sample at all.

The case vignette study

Main findings to be discussed:

We found differences between laypeople and experts with regard to judgments of Insanity (p = .008), Risk of New Crimes (p = .024) and Need for Treatment, (p = .009). The laypeople gave the case vignettes higher ratings, i.e. being more Insane, having more Risk and being more in Need for Treatment, than the forensic experts did. The difference regarding Insanity between the experts (psychologists and psychiatrists) was not significant (p = .276), though we found significant differences between the experts concerning Risk (p = .030) and Need for Treatment (p = .021), and the psychologists gave higher ratings regarding Risk and Need for Treatment than the psychiatrists.

Discussion:

The only difference between the experts and the laypeople in our study was a higher mean rating, so one could speculate whether laypeople could just replace the experts in the courts with instructions to downscale their ratings, although this would probably not be the case. When both the laypeople and experts had exactly the same ratings in relation to insanity, the overall case descriptions of the vignettes were positive. But when any negative element was introduced into the social, psychiatric or crime description, the laypeople gave higher ratings than the experts. For this reason, the laypeople and experts actually assessed the components of psychiatric history, social history and crime quite differently.

Generally speaking, the psychiatrists had the lowest case ratings concerning Insanity, Risk and Need for Treatment of the three different groups of judges despite the negative descriptions of psychiatric history and serious crime, but the psychiatrists were the most experienced group in terms of forensic work. Hence, this might imply that the psychiatrists had a higher threshold for considering a person to be legally insane or at least higher than the two other groups, and they were also less affected by a negative psychiatric case description compared to the other groups. The psychiatrists also judged the cases as having a lower risk for committing new crimes as compared with the laypeople, while the psychologists' rating were in between these two groups.

Again, one might speculate on whether more forensic experience and knowledge results in lowered ratings, which may imply that the experienced experts reflect the standards of the field, but alternatively, it could also mean that the experienced experts have an artificially high threshold regarding risk assessment.

It is worth noting that the psychologists had the highest ratings of treatment in cases with only positive descriptions, thereby possibly reflecting a tendency within the psychologists group to think that more people are in need of therapy than the psychiatrists, even when the

cases lacked negative social and psychiatric descriptions, and the offences were minor. Consequently, many of these judgements are seemingly connected to experience with forensic work, although it should be stressed that differences varied across case description and did not follow a clearly discernable pattern.

There were no differences in the judgements between psychologists and psychiatrists in terms of insanity, a finding that perhaps indicates that there is no need for a debate as to which profession makes the most valid forensic assessments. We find it noteworthy that all the groups considered descriptions of serious crimes to yield higher insanity ratings compared to minor crimes. A serious criminal act is often associated with insanity, and may reflect an availability bias (a human cognitive bias that causes us to overestimate the probability of events associated with memorable or vivid occurrences), thus connecting crime and insanity which is perhaps intensified by media coverage (McKenna et al., 2007). As my personal experience with several court proceedings has shown me, defence lawyers in criminal cases frequently highlight such a connection. Connecting crime and insanity also reflects a European point of view when it comes to the criteria for initiating a forensic examination, as opposed to other parts of the world in which more of an emphasis is put on the behaviour of the defendant as a reason for initiating a forensic report (Soothill et al., 1983).

The results from this study are in contrast to several other studies which did not find significant differences in the judgements between experts and laypeople such as Oscamp (1965) and Jackson (1986). Our diverging results are difficult to explain, though we could speculate that we used more comprehensive case vignettes than in Jackson's study, thereby enabling the experts to use their professional skills in a better way in the judgement of the vignettes. Our findings were more in concordance with Rowe and Wright (2001) which discovered that experts perceived the risks of various scenarios as being lower than laypeople did.

Two tentative conclusions can be drawn from our study: First, when judging clinical vignettes, being an expert does make a difference. The experts make different ratings compared to laypeople, possibly due to a combination of clinical experience and a particular knowledge of the threshold for insanity by legal definition. This point towards a continued need for experts to assess criminal insanity in defendants in penal cases, though there is a clear difference between just judging clinical vignettes and filing a full report. The study indicates that the claim related to the fallacy of the forensic expert is exaggerated, but despite this, there is still a need for the further development of quality and standards of forensic psychiatric examinations and testimony (as seen in Study III), though the need for such quality improvement does not imply that the experts should be discarded from the courts.

Second, the psychologists and psychiatrists performed in a similar way when judging case vignettes regarding insanity, so whether the expert is a psychologist or psychiatrist does not seem to be of great importance since both groups can perform this task in approximately the same manner given their experience and knowledge of the standards of the field. The results can be considered encouraging, as both professional judgment and experience do seem to matter. This conclusion should be noticed in both the courts and within the field of decision making in psychology, the reason being that this will allow the courts to gain access to more professionals conducting such reports.

Limitations

There are two limitations concerning this study:

First, the participants' judgments were not compared to a known outcome or a so-called "gold standard" since we only investigated whether there were differences in the judgments between the groups regarding three outcome variables. With a known outcome, we could also have compared the groups' accuracy in their judgments, but based on our design we cannot tell if any group made more - or fewer - "correct" judgments than the other.

Second, as previously mentioned, a forensic psychiatric assessment can be roughly divided into three phases: 1) Collection of data (obtaining documents, interviewing the defendant, etc.), 2) Assessments/judgments of the data, and 3) Presentation of the data, both in the written report, and in some cases, verbally in court. In this study, the participants only made an assessment of the data, i.e. the second phase, thus reducing the ecological validity of the study since our study did not represent the entire task of the experts. When they make a forensic report, the experts must *obtain* the data, which is an essential task requiring specialised skills as some defendants can be difficult to interview, and the forensic expert must be explicit in differentiating what information will be of relevance in order to answer the mandate from the court. Nevertheless, the judgement process itself is of interest to study since judging the obtained data is crucial for the final conclusion. In addition, since the creation of a full forensic report consists of obtaining, judging and presenting data, this can strengthen our conclusion that the criticism of the fallacy of the forensic expert is exaggerated due to a lack of knowledge concerning the process of making a full forensic report.

3.8.5. Summary, consequences and suggestions for future research

One could claim, at least for Studies I and III, that they just confirm "what everybody already knows in the field". However, despite their limitations, these studies are among the first of their kind in Scandinavia within forensic psychiatry to use an empirical design and research

approach to assess the state of the field today. Consequences and suggestions for future research based on the findings of our four studies are:

Paper I:
In Norway, the setting of the observation needs to be improved. It is questionable from an ethical perspective that examinations of defendants take place in their cells, visiting rooms in prisons, etc. A more standardised setting could also give the experts an opportunity to conduct a more thorough examination with access to various assessment tools and tests. The three Centres for Forensic Psychiatry in Norway could provide both practical aid and suitable offices for several forensic examinations to take place, and in the long run, we could establish observation clinics staffed with specialised milieu personnel, nurses and clinicians. External experts could obtain very valuable information from observations of a defendant in such a clinic, which would be a development toward the Swedish method of practice.

Future research may want to involve larger samples of Scandinavian reports (with regard to the comparison study) to better validate the findings of the present study. This research could also examine whether there is a growing trend among forensic psychiatric experts towards a greater use of research-based methods that would also be of interest in order to compare the quality of the reports with the severity of the criminal charge. This may be accomplished by scrutinising possible methodological differences in reports concerning homicide as compared to less severe criminal acts.

Paper II:
Forensic psychiatric screening reports seem to be valid and useful for the principals who mainly followed the recommendations stated in the reports. Moreover, none of the negative conclusions in the screening reports related to psychosis were overruled and changed into a positive conclusion in the full reports. Hence, screening reports did not seem to overlook serious psychiatric conditions such as psychosis, although they created a few false positive cases in our sample.

Screening reports seemed to fulfil the function intended by the law makers. However, due to a lack of general criminal statistics concerning their use, we do not know whether these reports are cost effective or time saving. This type of useful statistical information is built into the criminal registry as a routine practice in Sweden, with a similar practice in the Norwegian penal system possibly allowing for more knowledge about the effects of the screening reports. If future research confirms the usefulness of such reports, they could be implemented in a more regular way within the penal system.

The findings of the screening report study should therefore encourage more studies in terms of the reliability of the experts conducting such forensic examinations, which would

hopefully increase both the quality and scientific base of this branch of forensic psychiatry. We only studied reports from the Office for Forensic Psychiatry in Oslo, although a nationwide study is needed for further recommendations on the use of screening reports in the penal system.

Paper III:
In the amnesia study, no characteristics distinguished the defendants who claimed amnesia from other defendants. Whether the defendant claimed amnesia or not did not influence the methods used by the experts, despite the apparent difficulty in assessing such claims. There are no legal regulations that require the use of standardised tools in the creation of forensic assessments in either in Norway or the other Scandinavian countries, and recommendations concerning the evaluation of claimed amnesia in criminal cases should be developed, which could be done by using the methods of guideline development established in psychiatry or by a specially appointed “task force” group.

We found no traits to significantly distinguish defendants claiming amnesia from other defendants, thus a more fruitful research approach could be to identify the dynamic factors involved in such a claim. In doing so, we may find predictors (in addition to substance abuse) that can aid in empirically verifying or validating this phenomenon.

Paper IV:
Laypeople rated case vignette histories far differently from the experts with regard to Insanity, Risk and Need for Treatment, giving more severe ratings pertaining to all three variables as compared to the experts. The psychiatrists had the lowest severity ratings among the three groups, i.e. scoring less on Insanity, Risk and Need for Treatment, while psychologists and psychiatrists had roughly the same judgements about insanity, demonstrating that professional judgement and experience do seem to make a difference in how forensic cases are assessed.

As a result, procedures to further increase the validity and reliability of the judgments made by the experts should be developed. One such step would be to establish educational programs in forensic psychiatry, incorporating knowledge of law, decision theory, conduct of optimal forensic examination, use of tests and so forth. This type of program should include not only theory, but also practical exercises and discussion of cases, and such courses are currently being developed at the Centre for Forensic Psychiatry at Oslo University Hospital in collaboration with the Department of Justice.

Obtaining feedback is a powerful stimulus for change, and for more experienced experts, feedback routines could be developed in collaboration with the NMFB which in addition to the short and official comments given (see page 16), could provide the experts with more

comprehensive advice (which they do, though it is kept internally within the NMFB). In addition to enhancing the quality of the examinations and methods of the individual expert, the entire organisation of Norwegian forensic psychiatry could be subjected to a comprehensive quality control and evaluation.

Study IV only gave an indication that experts judge forensic case vignettes differently than laypersons. Other studies could more deeply explore how experts and laypeople are similar or different in their judgments, and can tell what characterises the expert vs. the lay judgment. Further research could investigate whether the judgments and predictions of experts and laypeople diverge when given a case vignette with a known outcome. In other words, are judgments made by experts in the field of forensics more accurate than those made by laypeople based on forensic case descriptions? It would also be of interest in exploring what judgments and decision making procedures (priming effects, sequence of information, etc.) constitute the differences in judgments between experts and laypeople. The reason for such a study could be twofold: 1) Because there are approximately 50,000 people serving as lay judges in Norwegian courts, it is important to know what factors in the court proceedings they are influenced by so as to better give an indication of how information should be presented to them in an optimal way. 2) It could also give us knowledge about how experts assess and judge given material, thus helping to prevent systematic bias and improving the quality of forensic psychiatric examinations.

3.8.6. General conclusions

Forensic psychiatry faces the challenge of new laws, new specialised tests regarding defendants found to be legally insane, new detention rules concerning defendants considered to be at a high risk of recidivism, and the implementation of new methods for risk assessment. At the same time, the practice of Norwegian forensic psychiatry appears to be quite static and based on tradition, with indications that experts are slow and even reluctant to absorb new findings and make proper adjustments to create a more scientifically based practice. Additionally, the organisation of forensic psychiatry should be subjected to debate and evaluation, and the relevant topics are:

The appointments of experts to the courts - Would appointing experts differently than the way we do it ensure the courts access to the “best” professionals in the field?

Setting of the examinations - Are the settings in which we conduct forensic examinations satisfactory? At this moment, there are no standard settings and they take place in prisons, hospitals, the expert’s office or the home of the defendant. Should we establish forensic clinics for such purposes?

Specialisation - Should forensic psychiatry and psychology become specialised fields as they are in Sweden? Would such specialisation and the establishment of a forensic psychiatric department (as is done in Sweden) enhance the possibilities for support, a better milieu and research in the field?

The forensic system - Would implementation of the psychological rather than biological principle help to create more thorough examinations (since the expert must find a connection between insanity and the crime at the time the crime occurred) and enhance the legal safeguards for the defendant?

Research regarding the quality of forensic examinations is sparse, and there are many limitations such as the lack of a gold standard, which restrains the use of experimental methods, as well as ethical considerations, since it would be unethical to make manipulations of the forensic methods. As mentioned by Wettstein (2005), the forensic report is only a "window" into the evaluation itself and is therefore limited. In other words, we only study the reports and not how the examination with the defendant actually took place. One way to overcome such a limitation would be to record and/or videotape forensic examinations, although the feasibility of this approach is faced with ethical and practical limitations. Anonymous peer reviews of reports within a quantitative design may also enhance knowledge of the strengths and weaknesses of the issued report for the courts.

Research concerning the memory of offenders is also sparse. Follow-up studies with in-depth interviews of defendants who have claimed amnesia before the court proceedings could yield valuable information about the nature and validity behind claims of amnesia in a criminal setting.

Studies of how professional judges and attorneys perceive the work of experts could also give valuable knowledge to better optimise forensic psychiatric examinations. A Norwegian replication of a study conducted in the UK (Leslie et al., 2007) is called for.

In sum, the aforementioned suggestions may increase the reliability and validity of forensic examinations. Forensic psychiatry could develop from a practice dominated by clinically-based opinions, beliefs and tradition into a more verifiable, standardised, research-based practice. This development could further contribute to the recruitment of more experts from additional professions (the courts are sometimes in need of more experts), hopefully resulting in an enhanced quality of reports. As a result, principals may also perceive the standards, work and conclusions in a more positive manner. At best, such a development could increase the legal safeguards of the defendants, although such actions must be followed up with financial incentives from, e.g. the Department of Justice. This should not be too hard to achieve, considering the relatively small expense that forensic psychiatry constitutes today.

3.9. Reference List

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4. PAPERS AND APPENDIXES

PAPERS I - IV

Paper I

Grøndahl, P. Scandinavian forensic psychiatric practices – an overview and evaluation. Nordic Journal of Psychiatry 2005; 59:92-102 (the comparative forensic reports paper).

Paper II

Grøndahl, P., Ikdahl, S.E., Dahl, A.A. A study of forensic psychiatric screening reports and their relationship to full psychiatric reports. Journal of Forensic Psychiatry & Psychology 2007; 18:331-41 (The screening report paper).

Paper III

Grøndahl, P., Værøy, H., Dahl, A.A. A study of claimed amnesia in homicide cases and how forensic psychiatric experts examine such claims. Intational Journal of Law and Psychiatry, 2009; 32:281-287 (The amnesia paper).

Paper IV

Grøndahl, P., Grønnerød, C., Sexton, J. A comparative case vignette study of decision making in forensic psychiatric cases. International Journal of Forensic Mental Health, 2009; 8: (In Press) (The case vignette paper).

I

Paper I

II

Paper II

Paper III

III

Paper IV

IV

Running Head: FORENSIC PSYCHIATRIC DECISION MAKING

A Comparative Case Vignette Study of Decision Making In Forensic Psychiatric Cases

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Abstract

We tested whether the judgment of forensic psychiatric experts differed from that of laypersons. We constructed 18 case vignettes that were rated by 21 psychologists, 14 psychiatrists and 126 laypeople on the following variables: Insanity by Legal Terms, Risk of Repeated Offense, and Need of Treatment. We found significant differences among laypeople and professionals on all three variables ($p = .008$, $p = .024$, and $p = .009$, respectively), although the differences were dependent on the composition of the case vignettes. Case vignettes containing negative descriptions and/or serious crimes were rated high on all variables by laypeople, whereas the professional groups' ratings varied according to the variations given in the information.

A Comparative Case Vignette Study of Decision Making In Forensic Psychiatric Cases

One of the first known evaluations of expert judgment found that corn seed experts were often wrong in their judgments, and based their conclusions on fewer indications than the experts themselves had presumed (Hughes, 1917; Kirkebøen, 1999). Later, several studies have shown that experts' judgments both within medicine (Einhorn, 1974), psychology (Oscamp, 1965) and law (Ebbesen & Konecni, 1975) are often inaccurate and unreliable (Shanteau, 1992).

The expert forensic psychiatric witness is essentially a product of the 19th century (Gutheil & Simon, 2005; Foucault, 1978; Allan, Louw, & Verschoor, 1995). These experts play an important role in advising the courts in complex matters such as human behavior, criminal responsibility, competence to stand trial, and risk assessment. Up until the last four decades, the courts were often impressed by the experts' qualifications, and more or less uncritically accepted their psychiatric assessments (Jackson, 1986; Saks & Koehler, 2005; Ennis & Litwak, 1974). A growing body of criticism has weakened the expert witnesses' elevated status in the courtroom, and this criticism has been comprehensive and sometimes quite harsh: a lack of reliability and validity of the conclusions made by the experts (Faust & Ziskin, 1988; Dawes, 1994; Wettstein, 2005), a failure to meet certain scientific standards in treating data, the presentation of theories in an idiosyncratic manner, a general failure in following established methods (Coles & Veiel, 2001), and little use of data sources other than the clinical interview (Petrella & Poythress, 1983; Heilbrun & Collins, 1995; Grøndahl, 2005).

A persistent point of criticism has been that judgments made by psychiatric court experts are prone to the same types of notions, heuristics and biases as those of non-experts. For that reason, the judgments made by the experts will not necessarily substantially diverge from

those of laypersons (Ackerson & Brodsky, 2005; Jackson, 1985; Nedopil, 2002; Cima, Merckelbach, Nijman, Knauer, & Hollnack, 2002).

Despite all this criticism, relatively little research has actually been conducted with regard to the quality of forensic evaluations, i.e. standards, practices, and the use of methods (Wettstein, 2005). A few studies however have been conducted in regard to the clinical decisions of experts versus laypeople. Oscamp (1965) examined the level of accuracy in clinical decisions among experienced clinical psychologists and undergraduate psychology students using a true case vignette. The judges should predict his actions by the use of five multiple choices as they received more information in four successive stages about the person in question. None of the judges ever achieved a 50% accuracy rate in their predictions, and there were no significant differences among the three groups of judges with regard to accuracy (Oscamp, 1965).

Rowe and Wright (2001) evaluated nine empirical studies on expert versus lay judgments for various types of risk. The judgments concerned topics such as ecological risks, nuclear contamination risks, risks from the millennium data bug, etc. Even though the main conclusion drawn was that experts did not evaluate risk any differently from laypeople, the authors found that the studies had several methodological weaknesses since characteristics of the expert and lay samples were poorly defined. Important demographic aspects of expert and lay samples were not controlled for in all studies, thus making it difficult to draw any definitive conclusions pertaining to the differences or similarities between experts and laypeople (Rowe & Wright, 2001).

Jackson (1986) examined the judgments of laypeople and professionals in forensic psychiatric assessments using a criminal case vignette design. One hundred and eighty laypeople rated one case each, and 10 psychiatrists and 10 court judges rated nine cases each. The raters received information divided into three categories: positive or negative, absent

social and psychiatric history, and minor or serious crime. The subjects rated variables such as legal insanity, prediction of future offenses, etc. Jackson found no significant differences in the ratings among the professionals and the laypeople (Jackson, 1986).

To sum up, the literature suggests that the judgments of professionals do not markedly differ from those of laypeople. We think it is important to investigate the established claim that there are small differences between laypeople and professionals in clinical and forensic judgments. If this claim holds true, one consequence would be that appointing professionals to assist the courts in forensic psychiatric matters would be deemed to be unnecessary. Confirming such a claim could therefore support an argument in favor of a radical change of practice in the courts and by relevant professionals. On the other hand, if there are differences in the judgments made by laypeople and professionals, it could be argued that some of the persistent criticism of professionals acting for the courts is not supported by research. A forensic psychiatric assessment can be roughly divided into three phases: 1) collection of data (obtaining documents, interviewing the defendant, etc.), 2) assessments/judgments of the data, and 3) presentation of the data, both in the written report, and in some cases, verbally in the court. This study concerns the second phase, namely assessing the data. Consequently, the main aim of this study is, to examine if the judgments are the same or if there are significant differences between laypeople and professionals.

We based our study on Jackson (1986), and adapted and extended her design to a Norwegian setting. Based on professionals and laypeople reading the same clinical case vignettes, we propose the following hypothesis: We will not find significant differences among laypeople, psychologists and psychiatrists when they evaluate: a) insanity by legal terms, b) risk of repeated offense, and c) the need of psychiatric treatment. These are the core issues in forensic psychiatric examinations as requested by the courts.

Methods

We used an experimental case vignette design, which is a commonly used method used in the evaluation of both mental health professionals' and laypeople's perceptions of various mental health issues (Taylor & Sorenson, 2007; Stevens & Brodsky, 1995; Bjørkly, 1998; Yourstone, Lindholm, Grann, & Svenson, 2008). The study was approved by the National Committee for Research Ethics of Health Region East and the National Data Inspectorate.

Case material

We obtained 42 forensic psychiatric screening reports from the Office for Forensic Psychiatry, Oslo Police District, Norway, issued after 2002 (after a revision of the penal code). Such screening reports are regularly used within the Norwegian penal system to check to see if a full psychiatric report is needed (Grøndahl, Ikdahl, & Dahl, 2007).

We extracted suitable descriptions from the reports to form anonymous and balanced sets of: 1) a positive psychiatric history (lack of serious psychopathology, e.g. no reports of psychiatric treatment, generally healthy mental functioning, no reported serious psychiatric symptoms) and a negative psychiatric history (presence of serious psychopathology, e.g. hospitalized in a mental hospital, previous suicide attempts, psychotic symptoms), 2) a corresponding set of a positive social history (e.g., uncomplicated background, parent(s) present and caring, school period without serious problems) and a negative social history (e.g., drug problems, alcoholic parents, juvenile delinquency, domestic violence), and 3) a set of former convictions for minor crimes (e.g., driving under the influence, minor thefts) and serious crimes (e.g., homicide, rape, arson). The psychiatric and social history could also be absent, with this classification creating a total of 18 combinations (3 psychiatric * 3 social * 2 convictions), and each combination formed one case vignette.

We then transformed the 18 vignettes into opposite descriptions. That is, we transformed positive psychiatric and social histories into negative, and negative psychiatric and social histories into positive, serious offenses into minor and so on in order to complete an

alternative set of 18 vignettes based on the same descriptions. By creating an extra alternative set of vignettes, we temporarily created a total of 36 vignettes (18 ordinary and 18 alternative).

We examined the content validity of the vignettes by asking representatives of various professions such as psychiatric nurses, psychologists, psychiatrists, lawyers, and mercantile personnel from the staff at the Centre for Research and Education in Forensic Psychiatry, Oslo University Hospital, to evaluate both sets of 18 cases. We established two groups, with five persons in each group, who evaluated the cases individually without contacting each other. They were asked to rate the vignettes according to what type (a positive or negative psychiatric and social history) or offense (minor/serious) they considered them to be. If the group unanimously rated a given case description as having a negative psychiatric history, we would choose this description as one of the validated negative psychiatric cases to be presented in the study. If one or more of the five in the group rated a given case description as positive and the rest of the group rated it as negative, we would reject that description. Based on this feedback, we selected only cases that obtained a unanimous agreement in the positive/negative and minor/serious case description.

This validation process gave us a final set of 18 definitive vignettes without any comments on a lack of clarity or coherence, which covered all the possible combinations of elements. We then presented these definitive case vignettes with a random case number devoid of any identification for the specific combination of negative/positive/absent and minor/serious which the case represented.

Rating procedure

We then asked the participants to rate each case based on three variables. The first was Insanity by Legal Terms (“insanity”), defined according to the Norwegian Penal code, Section 44, implying one of three conditions: psychosis, amnesia/unconsciousness, or serious mental

retardation. A brief definition of insanity was given on each rating form. The second was Risk of Repeated Offense ("risk"), defined as the risk of committing new criminal offenses, and the third was Need of Treatment ("treatment") in terms of psychiatric health care.

The ratings were done using a 7 point Likert scale from 1 (not present) to 7 (present to a high degree), i.e. higher scale scores indicated more insanity, a higher risk and a higher need for treatment, respectively. In total, we obtained three ratings from the participants for each case, and also obtained ratings on 12 other related variables that will be analyzed in a subsequent publication.

Participants

We recruited a sample of 126 participants among lay judges in court cases in Oslo during the spring of 2008 with the help of two paid assistants. The lay judges were asked if they wanted to participate in a study of how laypeople evaluate descriptions of criminal offenders, and we excluded psychologists, psychiatrists, professional judges, lawyers and police personnel from participating. The assistants kept recruiting until a total number of 126 were reached. Each lay judge rated one randomly selected case from the case material and received a lottery ticket as a reward. We also registered the following data for each participant: gender, age, level of education, occupation and previous experience as a lay judge, as summarized in Table 1.

The first author recruited psychiatrists and psychologists based on a list taken from the National Medical Forensic Board over all acting forensic experts who had issued at least one forensic court report in Norway since 2002 when changes in the penal code were made. Of the 82 experts invited to take part in the study, 51 (62%) responded. Thirty-seven agreed to participate and 14 declined. Three experts who had agreed to participate never returned the questionnaire, and the responses from one expert could not be used due to incoherent answers. We managed to recruit two additional experts as replacements and ended up with 14

psychiatrists and 21 psychologists. We registered the following data for each participant, as detailed in Table 1: gender, age, approximate number of forensic cases in their professional history in addition to the number of cases during the last three years, whether they had obtained a doctoral degree, whether the psychologists had obtained a specialist degree, the number of years of professional experience, and the number of years as a specialist, when applicable.

Each of the 21 psychologists rated six and the 14 psychiatrists rated nine of the 18 case vignettes. Thus, each vignette combination was rated seven times by each of the three groups, making a total of 126 ratings per group across the 18 cases.

Statistical Analysis

The members of the professional group each rated multiple cases, and evaluations from the same individual were therefore not independent. We therefore used the Linear Mixed Model (LMM) to analyze the data. This model is an extension of the standard regression model which allows multiple outcomes to be dependent.

When we analyzed, e.g. insanity, we treated this as the outcome variable and used the model to investigate how it depended on a) the participant group (layperson, psychologist, or psychiatrist), and b) case history components (negative or positive social history, negative or positive psychiatric history, minor or serious criminal offence). Risk and treatment were treated in a similar manner.

Preliminary analyses showed that the case history components interacted. The effect of having, say, a negative psychiatric history depended on the social history and criminal offence components. For this reason, we formed a new categorical dummy variable entitled Case History which had eight categories, one for each combination of the case components (the effect of absence of information was not analyzed). The effect of the participant group could express itself in two ways (the categorical dummy variable was called Group). There might be

a constant difference between the groups regardless of case history components, or the difference between the groups may depend on the case descriptions. As a consequence, Group was entered in the regression model as both an additive and interaction term with Case History. Thus, if this latter interaction was significant, then the differences between the groups depend on the case description. On the other hand, if only the additive group term was significant, then the difference between the groups appears to be constant across case descriptions. All computations were performed using the R statistical software (R Development Core Team, 2004). The significance level was set to $p = .05$.

Results

One noticeable difference in Table 1 is that the psychiatrist group had a much higher number of previous cases than the psychologist group. The effect of experience is therefore indistinguishable from the effects related to the differences in professional training. Age or gender of the raters were not, however, significantly related to any of the outcome variables ($p = .42$, $p = .20$, and $p = .15$, respectively). With this in mind, we did find differences between the groups.

Group Differences

The results of the statistical analysis are given in Tables 2 and 3. Table 2 shows the *p*-values of the model terms for the three outcome variables. Each model in Table 2 contains a total of 24 regression parameters; therefore, the tables only present a brief summary of some key aspects of the estimated models. Table 3 shows the average response of each group across all case descriptions which form the basis of the significance tests in Table 2, and also shows how the different case components influenced the evaluations on average across the groups. As shown in Table 2, four out of six differences in either Group or Group by Case History were significantly different in the groups (Group and Group by Case for Insanity, Group for Risk, and Group by Case for Treatment). Table 3 shows the most notable result, this being

that on average laypersons rated all variables higher than the professionals, and negative case elements were on average rated higher on all variables, except risk in cases with a negative psychiatric history.

Table 4 gives an overall test of the group effects, as well as tests comparing the laypersons with the professional groups and a test comparing the psychiatrists with the psychologists. All group effects were significant except insanity for Lay vs. Psychologist and Psychologists vs. Psychiatrist, risk for Lay vs. Psychiatrists, and treatment for Lay vs. Psychologist.

Insanity by Legal Terms

Table 4 shows that we found a significant group effect ($p = .025$) for insanity. It also shows that the laypersons rated significantly differently as compared to the professionals ($p = .008$), while the difference between the psychiatrists and psychologists was not significant ($p = .276$). Furthermore, Table 2 demonstrates that we see that the Group by Case History term is significant ($p = .044$), indicating that the differences between the groups varies with the case descriptions.

Table 3 shows that the average rating by laypersons was 3.13, somewhat higher than the psychiatrists and psychologists, who had a similar rating of approximately 2.4 on average. The table also shows that case descriptions with a negative Psychiatric History received ratings which were 1.54 points higher on average than cases with a positive Psychiatric History. The difference between case descriptions with a negative and positive Social History was small, only 0.14. A severe Criminal Offense resulted in a 1 point higher rating than cases in which the Criminal Offense was minor.

Figure 1 shows average ratings by the groups split into case elements, with a positive versus negative psychiatric history providing the strongest effects. We also noted that laypeople consistently rate higher than the professionals.

Risk of Repeated Offenses

Table 4 shows a significant difference between the groups ($p = .003$), as the difference between laypersons and professionals was significant ($p = .024$). The psychiatrists and psychologists also rated differently ($p = .030$). The Group by Case History term in Table 2 was not significant, while the Group term was ($p = .022$). This indicates that the group differences were relatively constant across case descriptions.

Table 3 shows that the average rating from the laypersons was the highest of all the groups. The corresponding average rating of the psychiatrists was considerably lower, with the psychologists in between. On average, we see that cases with a negative and positive Psychiatric History were rated as fairly similar. Cases with a negative Social History yielded ratings about 1.3 points higher than cases with a positive Social History. A severe Criminal Offense on average produced evaluations roughly 1.4 points higher than a minor offense.

Figure 2 shows the ratings for risk. Here, we see that psychiatric history plays less of a role for psychiatrists, whereas social history is more important. All groups agree that the seriousness of the crime is the major factor for an underlying increase in risk.

Need for Treatment

Table 4 shows that there was a significant difference between the groups with respect to Need for Treatment ratings ($p = .004$). The ratings from the laypersons differed from those of the professionals ($p = .009$), and the psychiatrists and psychologists also rated significantly differently ($p = .021$). Table 2 shows that the Group by Case History term was significant ($p = .027$), indicating that the differences between the groups varied by case description.

Table 3 shows on average that laypersons gave the highest ratings, followed by the psychologists, with the psychiatrists giving the lowest ratings. Here, cases with a negative Psychiatric History were given considerably higher ratings than cases with a positive history, a difference of approximately 3 points. On average, cases with a negative Social History were

rated somewhat higher than cases with a positive Social History, and a severe Criminal Offense produced on average evaluations about 1.3 points higher than a mild offense.

Figure 3 shows treatment ratings that are quite similar to insanity ratings, except that laypersons are not consistently higher than the professionals. Both psychiatric history and the type of crime provide the strongest basis for the ratings.

Discussion

We found significant differences among psychiatrists, psychologists and laypeople regarding judgments of Insanity by Legal Terms, Risk of Repeated Offense and Need for Treatment. Laypeople rated insanity, risk and treatment significantly higher than the professionals. We also found significant differences between psychiatrists and psychologists in terms of the ratings for risk and treatment.

It is interesting to note that laypeople gave the highest ratings concerning all three variables compared to the professionals. At first glance, one could hypothesize that the only differences between the professionals and the laypeople were higher mean ratings, and as a consequence, one might just replace the professionals with laypeople with instructions to downscale their ratings. However, the interaction effects demonstrate that this is not the case. As an example, the lay and professional groups had exactly the same ratings regarding insanity when the case descriptions were positive overall. But when any negative element was introduced in the social, psychiatric or crime description, the laypeople gave higher ratings than the professionals did. As a result, the laypeople and professionals actually gave a different assessment of the components of psychiatric history, social history and crime differently.

Generally speaking, the psychiatrists had the lowest ratings of the three groups. They considered the case vignettes as being less insane, less associated with risk and less in need of treatment. This was the case despite the negative descriptions of psychiatric history and serious crime. The psychiatrist group was the most experienced (in terms of having the most

cases) in forensic work. Therefore, this might imply that the psychiatrists judged the threshold for considering a person as legally insane as high as or at least higher than the two other groups, and were less affected by a negative psychiatric case description compared to the other groups. The psychiatrists also judged the case vignettes as having a lower risk compared with the laypersons, and the psychologists rated levels in between the two other groups. Again, one may speculate that experience and knowledge of the field resulted in lower ratings with regard to ratings of risk. This could imply that the experienced professionals reflect the standards of the field, though it could also mean that the experienced professionals have an artificially high threshold regarding risk assessment.

It is worth noting that the psychologists had the highest ratings of treatment in cases with positive descriptions only. This may reflect a tendency in the psychologist group to regard more people in need of treatment than the psychiatrists, even when the case lacks negative social and psychiatric descriptions and the offenses are minor. Consequently, many of these judgments are seemingly connected to experience with forensic work, yet it should be stressed that differences varied across case description and did not follow a clear, interpretable pattern. There were no differences in the judgments between psychologists and psychiatrists regarding insanity, a finding that in the long run can minimize the need for a debate as to which profession makes the most valid forensic assessments.

We find it interesting to note that all groups felt that descriptions of serious crimes should yield higher insanity ratings compared to those of minor crimes. A serious criminal act is often associated with insanity, and could possibly reflect an availability bias connecting crime and insanity, probably intensified by media coverage (McKenna, Thom, & Simpson, 2007). As experienced by the first author, defense lawyers in criminal cases frequently highlight such a connection. Connecting crime and insanity also reflects a European point of view when it comes to the criteria for initiating a forensic examination, as opposed to other parts of the

world which have more of an emphasis on the behavior of the defendant as the criteria for initiating a forensics report (Soothill et al., 1983).

Our results stand in contrast to other studies that did not find any differences in the judgments between professionals and laypeople such as Oscamp (1965) and Jackson (1986). Our diverging results are difficult to explain. Nevertheless, we could speculate that we used more comprehensive case vignettes than in Jackson's study, thereby better enabling the professionals to use their well honed skills in a clinical judgment of the case vignettes. On the other hand, our findings were more in concordance with Rowe and Wright (2001), who as a trend, found that experts perceived the risks of different scenarios as being lower than those found by laypeople.

Two tentative conclusions can be drawn from our study. First, it does make a difference to be an expert in a forensic setting. The professionals rate things differently as compared to laypeople, possibly due to a combination of clinical experience and knowledge of the threshold which constitutes insanity by legal terms in particular. This argument is strengthened considerably in that in this study, all the data was already collected and the only task that remained was for the participants to make their judgments. In ordinary cases, all the data has to be collected. We must presume that the forensic expert possesses far better skills in collecting the data compared to a layperson, e.g. interviewing the defendant and perhaps third parties. This indicates that the persistent criticism and claim of the fallacy of the forensic expert is premature and exaggerated. In contrast, we still think that the quality and standards of forensic psychiatric examinations and testimonies should be further developed, but the need for such quality improvement does not imply that the experts should be discarded from the courts altogether. Secondly, psychologists and psychiatrists performed similarly when judging case vignettes in regard to insanity, so whether the expert is a psychologist or a

psychiatrist does not seem to be of importance. Both groups can perform this task in roughly the same manner given their experience and knowledge of the standards in the field.

We did find interaction effects between group and case history, although it is difficult to grasp the actual nature of these interactions. We saw that the case with all positive descriptions was rated differently by the groups, but beyond that there were individual configurations for each case. We provided only one case for each combination of case elements (e.g. only one case with a positive psychiatric history, a negative social history, and serious crime), so we cannot rule out that particular elements of the actual story had an effect in addition to the valour of the case elements. Providing several cases with the same combination would enable us to minimize these effects, though it would also mean that each case would be rated fewer times given our limited supply of participants.

Furthermore, an important limitation of our study is that the participants' judgments were not compared to a known outcome or a so-called gold standard. We only investigated whether there were differences in the judgments between the groups regarding the three outcome variables. With a known outcome, we could also have compared the groups' accuracy in their judgments. Based on our design, we cannot tell if any group made more - or fewer - "correct" judgments than the other. To investigate whether the judgments and predictions of professionals and laypeople diverge in accuracy when given a case vignette with a known outcome is the aim of a new study which is being planned. It would also be of interest to explore what judgment processes (priming effects, sequence of information, etc.) constitute the differences in judgments between professionals and laypeople, which will be the topic of a future publication based on our material.

We are encouraged by our results. Both professional judgment and professional experience does seem to matter. This conclusion should be noted in the courts, as well as within the field of decision making in psychology.

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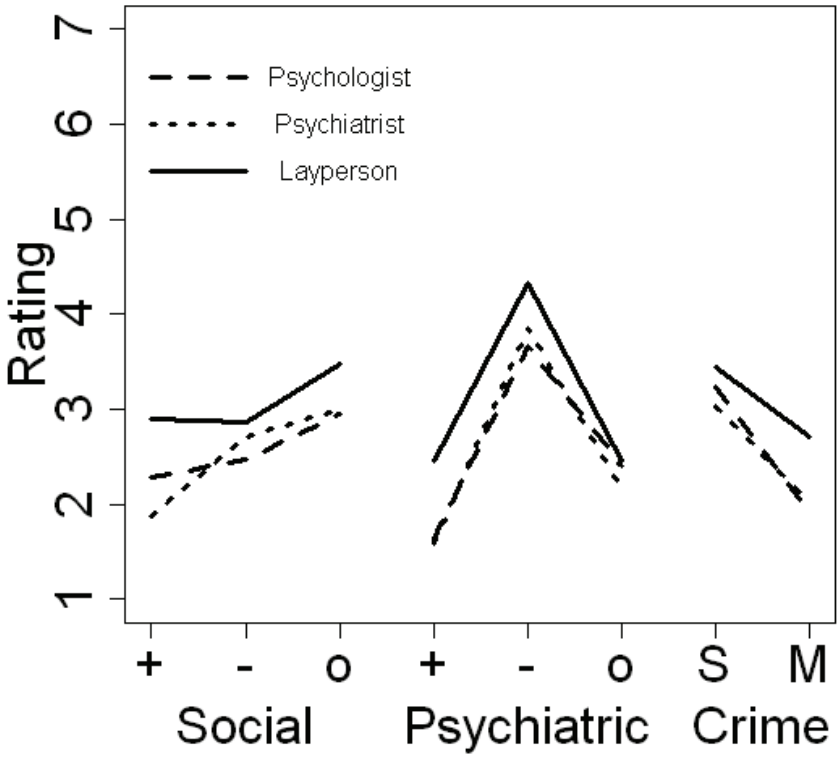
Figure 1

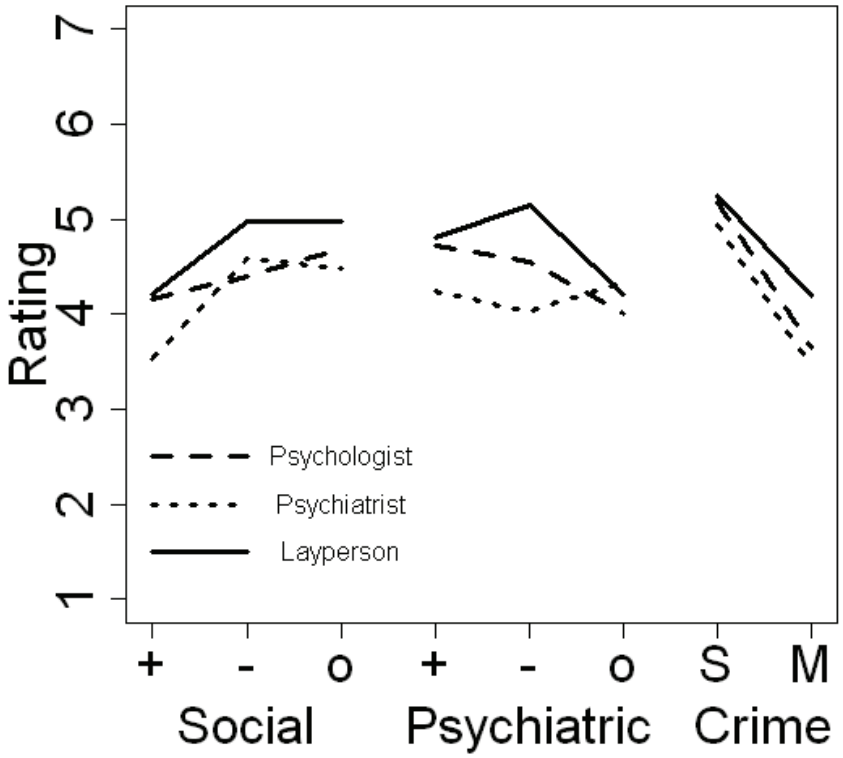
Average Insanity by Legal Terms Ratings



Note. + = positive description, - = negative description, o = description is absent, S = serious crime, M = minor crime.

Figure 2

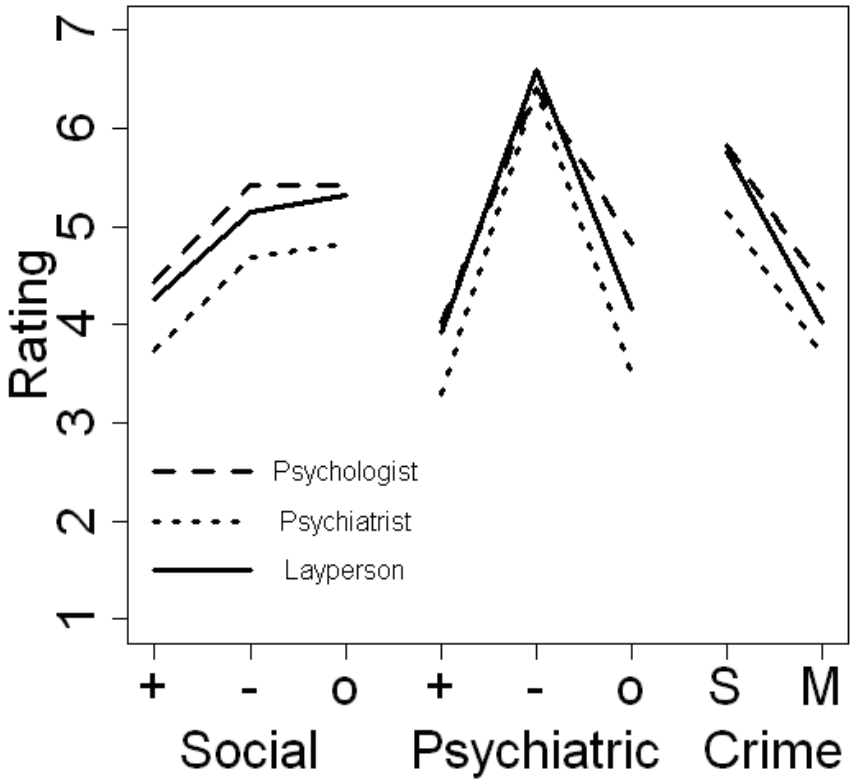
Average Risk of Repeated Offense Ratings



Note. + = positive description, - = negative description, o = description is absent, S = serious crime, M = minor crime.

Figure 3

Average Need of Treatment Ratings



Note. + = positive description, - = negative description, o = description is absent, S = serious crime, M = minor crime.

Table 1

Demographic Data

	Laypeople	Psychiatrists	Psychologists
N	126	14	21
Gender			
Female	61	2	3
Male	64	12	18
Age			
M	51.5	57.1	52.8
SD	13.7	12.6	9.0
Lay Sample Education (years)			
Comprehensive School	4 (3%)		
Vocational school	19 (15%)		
College	25 (20%)		
University	78 (62%)		
Prior experience as lay judge	111 (88%)		
Professional Samples			
Doctoral degree (PhD)		4 (29%)	1 (5%)
Specialist degree		14 (100%)[a]	20 (95%)[b]
Total No Forensic Cases			
M		196.6	29.8
SD		284.9	76.3
Forensic Cases Last 3 Years			
M		36.3	7.3
SD		33.1	8.6
Years of Professional Experience			
M		29.4	24.7
SD		13.4	8.4
Years as Specialist			
M		21.9	16.1
SD		13.4	7.9

Note. [a] Psychiatry is a medical specialist degree obtained after five years of training/courses, etc.

Note. [b] As for psychiatrists, a specialty in psychology requires five years of training and courses. There are several types of specialists (child, neuropsychological etc). Clinical Adult Specialist will be the most frequent specialty in forensic work.

Table 2

Linear Mixed Models Showing Group Differences

		Insanity by Legal Terms		Risk of Repeated Offense		Need of Treatment	
	df	*F*	*p*	*F*	*p*	*F*	*p*
Intercept	1/88	363.6	<.001	1248.6	<.001	1991.5	<.001
Group	2/88	3.4	.039	4.0	.022	2.1	.133
Case History	7/56	13.2	<.001	16.9	<.001	60.0	<.001
Group by Case History	14/56	1.9	.044	1.5	.161	2.1	.027

Note. df = Degrees of Freedom, F = F Test value, p = p-level.

Table 3

Mean Rating and Relative Rating Change with Standard Deviation for Groups and Case Elements by Variable

	Insanity by Legal Terms		Risk of Repeated Offense		Need of Treatment	
	Mean	*S.E.*	*Mean*	*S.E.*	*Mean*	*S.E.*
Laypersons	3.13	0.20	4.75	0.17	5.09	0.15
Psychiatrists	2.38	0.26	3.91	0.23	4.50	0.20
Psychologists	2.43	0.24	4.32	0.21	4.79	0.19
Negative Social History	0.14	0.22	1.32	0.19	0.63	0.16
Negative Psychiatric History	1.54	0.22	-0.18	0.19	3.03	0.17
Severe Criminal Offense	1.00	0.22	1.44	0.19	1.34	0.17

Note. S.E. = Standard Error, *Negative Social History* = The figure represents the average increase (positive) or decrease (negative) in the rating for cases with a negative social history compared to a positive social history, and similarly for a *Negative Psychiatric History* and *Severe Criminal Offense* compared to a minor criminal offense. E.g., when social history changes from positive to negative, the risk rating increases by 0.14 on average across all groups.

Table 4

Linear Mixed Model Showing Group Differences

		Insanity by Legal Terms		Risk of Repeated Offense		Need of Treatment	
	df	*LRT*	*p*	*LRT*	*p*	*LRT*	*p*
Group Effect	16	28.8	.025	35.8	.003	35.2	.004
Lay vs. Professionals	8	20.6	.008	17.7	.024	20.5	.009
Lay vs. Psychiatrists	8	20.4	.009	13.9	.086	21.4	.006
Lay vs. Psychologists	8	14.4	.073	25.2	.001	13.6	.092
Psychiatrists vs. Psychologists	8	9.8	.276	17.0	.030	18.0	.021

Note. df = Degrees of Freedom, LRT = Likelihood Ratio Test, p = p-level.

APPENDIXES

APPENDIXES I - IX

Appendix I

Codebook – Study I

Appendix II

Codebook – Study II

Appendix III a-b

Responses to recommendations – open/closed cases

Appendix IV

Codebook – Study III

Appendix V

Registration form – lay persons – Study IV

Appendix VI

Registration form – experts – Study IV

Appendix VII

Registration form of the Case Vignettes for all groups – Study IV

Appendix VIII

Two examples of the Case Vignettes – Study IV

Appendix IX

Introductory letter to the experts

Appendix I

Codebook – Study I

K O D E B O K

Ikke opplyst/ukjent skåres 99

Erklæringens kodenummer →

0 **Erklæringens årstall** →

1 **Erklæringens nasjonalitet**

No	1
Sv	2
Da	3

Observanden: **Skåring**

2 Alder →

3 Tidl. rettspsykiatrisk us

Ja	1
Nei	2

4 Siktet for

Drap	1
Drapsforsøk	2

5 Tidl. dømt

Ikke dømt	1
Dømt en gang tidl.	2
Dømt 2 - 4 ganger	3
Dømt 4 >	4

6 Utdannelse

Ingen skole	1
Grunnskole	2
Videregående	3
Fagutdanning	4
Høyskole/universitet	5

7 Arbeide

Fast arbeid	1
Hjemmeværende	2
Arbeidsledig	3
Sykemeldt	4
Midlt. Tiltak	5
Attføring/uføretrygd	6
Elev/student	7
Pensjonist	8
Sosial stønad	9
Annet	10

8 Bor med

Alene	1
Alene m/barn	2
Ektefelle	3
Samboer	4
Særboende	5
Foreldre	6
Annen/andre	7

9	Psykiatrisk historie	Ikke tidl. beh 1 Poliklinisk beh 2 Tidl innlagt en gang 3 Innlagt 2 - 4 ganger 4 Innlagt 4> 5	→
10	Rus v/påklaget handling	Alkohol 1 Stoff/med 2 Ikke ruset 3	→
11	Akuelt rusmisbruk - alkohol	Ja 1 Nei 2	→
12	Aktuelt rusmisbruk - legemidler	Ja 1 Nei 2	→
13	Aktuelt rusmisbruk - narkotika	Ja 1 Nei 2	→

	Betingelser v/observasjonen		**Skåring**
14	Dato for påklaget handling	Da. Må. År.	→ . .
15	Rettens beslutning om obs/us	Da. Må. År.	→ . .
16	Sakkyndige/avd mottatt saken	Da. Må. År.	→ . .
17	Sakkyndiges/avd 1. møte m/obs	Da. Må. År.	→ . .
18	Avgitt erklæring	Da. Må. År.	→ . .
19	Observasjonen	Foretatt på sk ktr 1 Foretatt i obs. hjem 2 I fengsel 3 I psykiatrisk istitusj. 4 I rettspsyk klinikk 5 Annet 6	→
20	Antall samtaler m/obs		→
21	Antall timer direkte m/obs		→

	Erklæringens innhold/metoder			**Skåring**
22	Antall sider			→
23	Komparentopplysninger	Vurdert	Ja 1 / Nei 2	
			Ja	Nei
24	Intervjuer	Klinisk intervju	1	2
25	Strukturert intervju	SCID-I	1	2
		SCID-II	1	2

26	Strukturert kartlegging	GAF	1	2	
		PANSS	1	2	
27	Psykologiske tester/us.	MMPI	1	2	
		Rorschach	1	2	
		WAIS	1	2	
		Annet	1	2	
28	Strukturerte risikovurderinger	HCR-20	1	2	
		PCL-SV	1	2	
		VRAG	1	2	
		SVR-20	1	2	
29	Fysiologiske undersøkelser	EEG	1	2	
		CAT-Scan	1	2	
		Klinisk legeus.	1	2	
		Annet	1	2	

Sakkyndige		**Skåring**
30	Antall sakkyndige →	

			Ja	Nei	
31	Hvem deltatt i observasjonen	Psykolog	1	2	
		Psykiater	1	2	
		Lege	1	2	
		Sykepleier	1	2	
		Sosionom	1	2	
		Kurator/sos. rådg.	1	2	
		Andre	1	2	

32	Totalt antall deltatt v/obsevasjonen →			
33	Hovedansvarlig for erklæringen	Psykiater	1	→
		Psykologspesialist	2	
		Lege	3	
		Psykolog	4	
		Team	5	

Grunnlag for konklusjonene		**Skåring**
34	Diskusjon/vurdering - antall sider →	

35	Vurderes relasjon obs/sakkyndige	Ja	1	→
		Nei	2	
36	Vurderes obs. troverdighet	Ja	1	→
		Nei	2	
37	Vurderes årsakssammenheng	Ja	1	→
		Nei	2	

38	Referert til litteratur	Ja 1 Nei 2	→
39	Referert til beslutningsteori	Ja 1 Nei 2	→
40	Referert til annen teori	Ja 1 Nei 2	→
41	Referert til psykologiske tester	Ja 1 Nei 2	→
42	Referert til fysiologiske us	Ja 1 Nei 2	→
43	Referert til strukturerte intervjuer	Ja 1 Nei 2	→
44	Diskutert diagnose	Ja 1 Nei 2	→
45	Uttrykt tvil	Ja 1 Nei 2	→
46	Status presens/klinisk vurdering	Ja 1 Nei 2	→
47	Satt diagnose	Ja 1 Nei 2	→
48	Diagnose - ICD-10	→	**F .**
49	Bidiagnose - ICD-10	→	**F .**
50	Satt konklusjon	Ja 1 Nei 2	→
51	Med referanse til lovparagraf	Ja 1 Nei 2	→
52	Anbefalt/tatt stilling til tiltak	Ja 1 Nei 2	→
53	Med referanse til lovparagraf	Ja 1 Nei 2	→

Appendix II

Codebook – Study II

KODEBOK - PJO

Ikke opplyst/ukjent skåres 00

Politilegens arkivnummer →

1 **Erklæringens kodenummer** →

2 **Erklæringens årstall (4 siffer)** →

3 **Rekvirerende politidistrikt**

Oslo	1
Asker og Bærum	2
Romerrike	3
Follo	4
Annet	5

→

Observanden: — Skåring

4 Alder →

5 Kjønn

Mann	1
Kvinne	2

→

6 Fødested

(tre bokst. kode)

→

7 Statsborgerskap

(tre bokst. kode)

→

8 Tidl vært undersøkt

Ja	1
Nei	2

→

9 Siktet forhold **I**

Drap	1
Drapsforsøk	2
Mish. Barn/samboer	3
Annen vold	4
Trusler	5
Voldtekt/voldt. forsøk	6
Incest	7
Annen sedelighet	8
Frihetsberøvelse	9
Ran/utpressing	10
Ildspåsettelse	11
Vinning	12
Annen øk. forbr.	13
Narkotikalovgivning	14
Alkohollovgivning	15
Vegtrafikklovgivning	16
Annet	17

→

10 Siktet forhold **II** →

11 Siktet forhold **III** →

12	Tidl. dømt	Ikke domfelt 1 Domfelt en gang tidl. 2 Dømt ≥ 2 3	
13	Utdannelse (antall år)		
14	Inntekt	Arbeide 1 Pensjon annen ytels 2 Sykemeldt 3 Arbeidsledig 4 Elev/student 5	
15	Sivil status	Gift, partner relasjon 1 Singel, sep/skilt 2	
16	Tidligere behandling	Ingen kjent tidl beh. 1 Poliklinisk beh 2 Innlagt institusjon 1g 3 Innlagt institusjon >1 4	
17	Rus v/påklaget handling	Ingen 1 Alkohol 2 Stoff 3 Medikamenter 4 Blandingsmisbruk 5	

	Betingelser v/undersøkelsen og omløpstid ved PJO		**Skåring**
18	Dato for påklaget handling	Da. Må. År.	. .
19	Dato for undersøkelse	Da. Må. År.	. .
20	Hvor er undersøkelsen foretatt?		

	Sakkyndige		**Skåring**
21	Undersøker	Psykiater 1 Psykologspesialist 2	

	Erklæringen		**Skåring**
22	Antall sider		
23	Satt eller fremkommet diagnose?	Ja 1 Nei 2	
24	I så fall hvilken/hvilke?		

25 Gitt uttrykk for usikkerhet

Ja	1
Nei	2

Sakkyndiges konklusjoner i PJO

26 Type hovedkonklusjon PJO

Anbefalt	1
Ikke anbefalt	2
Åpen	3

27 Psykose

Ja	1
Nei	2
I tvil	3

28 Bevisstløshet

Ja	1
Nei	2
I tvil	3

29 Utviklingshemming

Ja	1
Nei	2
I tvil	3

30 Sterk bevissthetsforstyrrelse

Ja	1
Nei	2
I tvil	3

31 Lettere psyk. utviklingshemming

Ja	1
Nei	2
I tvil	3

32 Risiko for gjentagelse

Ja	1
Nei	2
I tvil	3

33 **Intern** F. diagnose

Begrunnelse for konklusjonen

Korresponderende judisiell observasjon

34 Erklæringens kodenummer →

35 Erklæringens årstall →

Omløpstid ved fullstendig JO

36 Retten oppnevnt sakkyndige — Da. Må. År. → . .

37 Sakkyndige første møte m/obs — Da. Må. År. → . .

38 Avgitt erklæring — Da. Må. År. → . .

39 Hvor er undersøkelsen foretatt?

Sakkyndiges konklusjoner i JO

40 Psykose

Ja	1
Nei	2
I tvil	3

→

41 Bevisstløshet

Ja	1
Nei	2
I tvil	3

→

42 Utviklingshemming

Ja	1
Nei	2
I tvil	3

→

43 Sterk bevissthetsforstyrrelse

Ja	1
Nei	2

→

44 Lettere psyk. utviklingshemming

Ja	1
Nei	2
I tvil	3

→

45 Risiko for gjentagelse

Ja	1
Nei	2
I tvil	3

→

46 Annet

Erklæringen — Skåring

47 Antall sider →

48 Foretatt testing

Ja	1
Nei	2

→

49 Testen/testenes navn

50	Satt diagnose?	Ja 1 Nei 2	→
51	I så fall hvilken/hvilke?		
52	Gitt uttrykk for usikkerhet	Ja 1 Nei 2	→

Appendix III a-b

Responses to recommendations – open/closed cases

Appendix IIIa: Prosecutors' responses to the recommendations of the screening reports – 32 cases not closed in the judicial system

Variables	Full report requested (n = 91)	Full report not requested (n = 328)	P
	N (%)	**N (%)**	
Screening report conclusion:			
Full report recommended	59 (65)	59 (18)	< 0.001
Full report not recommended	3 (3)	117 (36)	< 0.001
Open recommendation	29 (32)	152 (46)	0.01
Fate of "full recommended"		59 (100)	
Case dismissed†		20 (34)	
Other reasons		7 (12)	
No information/case still open		32 (54)	
	N	**N**	
Fate of "full not recommended"	3		
Case dismissed†	1		
Other reasons	0		
No information/case still open	2		
Open recommendation	29	152	
Case dismissed†	13	58	
Sentenced	7	63	
No information/case still open	9	31	

†Dismissed due to doubt of the defendants accountability (code 065 in the criminal register)

Appendix IIIb: Prosecutors' responses to the recommendations of the screening reports – 32 cases closed and included in analysis

Variables	Full report requested (n = 113)	Full report not requested (n = 306)	P
	N (%)	**N (%)**	
Screening report conclusion:			
Full report recommended	81 (72)	37 (12)	< 0.001
Full report not recommended	3 (3)	117 (38)	< 0.001
Open recommendation	29 (25)	152 (50)	<0.001
Fate of "full recommended"		37 (100)	
Case dismissed†		27 (73)	
Other reasons		4 (11)	
Sentenced		6 (16)	
	N	**N**	
Fate of "full not recommended"	3		
Case dismissed†	1		
Other reasons	0		
No information/case still open	2		
Open recommendation	29	152	
Case dismissed†	13	58	
Sentenced	7	63	
No information/case still open	9	31	

†Dismissed due to doubt of the defendants accountability (code 065 in the criminal register)

Appendix IV

Codebook – Study III

K O D E B O K - AmPr

Ikke opplyst/ukjent skåres 99 Ikke aktuelt skåres 999

1	**Erklæringens kodenummer**	→	
2	**Erklæringens årstall (4 siffer)**	→	

I	**Observanden:**		**Skåring**
3	Alder	→	
4	Kjønn	Mann 1 Kvinne 2	→
5	Fødested	(tre bokst. kode)	→
6	Tidl rettspsykiatrisk undersøkt	Ja 1 Nei 2	→
7	Tidligere domfellelser	Antall	→
8	Utdannelse (antall år)	→	
9	Hovedinntekt	Arbeide/Stud/Elev 1 Arbeidsledig 2 Sykemeldt 3 Pensjonert 4 Sosial stønad/rehab 5 Uføretrygd 6	→
10	Sivil status	Gift, partner relasjon 1 Singel,sep, skilt 2	→
11	Tidligere beh./kont m/psyk. h.vern	Ingen kjent tidl. beh. 1 Poliklinisk beh 2 Innl. institusjon 1g 3 Innl. institusjon >1g 4	→
12	Obs hevdet amnesi for handlingen	Ja 1 Nei 2	→
13	Sakkyndige ansett obs m/bhf?	Ja 1 Nei 2	→

II	**Betingelser v/undersøkelsen og omløpstid ved observasjonen**		**Skåring**
14	Dato for påklaget handling	Da. Må. År.	→ . .
15	Dato for undersøkelse	Da. Må. År.	→ . .
16	Observanden medvirket til us	Ja 1 Nei 2	→

17	Observanden erkjent skyld § 233	Ja	1	
		Nei	2	

III	**De sakkyndige**	**Skåring**

18	Undersøker	Psykiater/psykiater	1	
		Psykiater/psykolog	2	
		Psykiater	3	
		Psykolog	4	

IV	**Sakkyndiges kategorielle hovedkonklusjoner**

19	Psykose	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	
20	Bevisstløshet	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	
21	Utviklingshemming	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	
22	§ 56c	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	
23	Sterk bevissthetsforstyrrelse	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	
24	Lettere psyk. utviklingshemming	Ja	1	
		Nei	2	
		Ikke tatt stilling	3	
		I tvil	4	

V	**Gitt sakkyndiges positive konklusjon om bevissthetsforstyrrelse**

25	Hovedårsak	Rusmiddel	1	
		Organisk	2	
		Psykogent	3	
26	Biårsak	Rusmiddel	1	
		Organisk	2	
		Psykogent	3	

VI Supplerende opplysninger knyttet til evt. amnesi

27 Tidligere episoder med bev.h.forst

Ja	1
Nei	2

28 **Rusmidler** v/påklaget handling

Ja	1
Nei	2

29 Alkohol

Ja	1
Nei	2

30 Promille

Absoluttverdi	

31 Illegalt stoff/narkotika

Ja	1
Nei	2

32 Type

Opiater	1
Cannabis	2
Hallusinogener	3
Komb/blanding av fl	4
Annet	5

33 Legale stoffer/medikamenter

Ja	1
Nei	2

34 Hvilke med

Benzodiazepiner	1
Sovemedikamenter	2
Antidepressiva	3
Antipsykotiske	4
Komb/blanding av fl	5
Andre	6

35 **Organiske** årsaker

Ja	1
Nei	2

36 Hvilke

Epilepsi	1
Blødning/slag	2
Blodpropp	3
Svulst	4
Hjernerystelse	5
Trykk (forandring)	6
Anatomisk endring	7
Løsemidler	8
Gasser	9
Atypisk rus	10
Diabetes	11
Hypoglykemi	12
Annet	13

37 Søvnforstyrrelser

Ja	1
Nei	2

38 Hvilke

Utmattelse/deprivasj	1
Somnambulisme	2
Andre	3

39	**Psykogene** årsaker	Ja 1 Nei 2	→
40	Hvilke	Dissosiativ amnesi 1 Dissosiativ fuge 2 PTSD 3 DID 4 Fortrengning 5	→
41	Type amnesi	Retrograd 1 Anterograd 2 Begge 3	→
42	Omfang	Delvis 1 Total 2	→
43	Amnesiens forløp	Brå start/stopp 1 Gradvis start/stopp 2	→
44	Amnesiens lengde (i minutter)		→
45	Situasjonelt stress forut for handl	Ja 1 Nei 2	→
46	Type stress	Trusler 1 Samlivskonfl/brudd 2 Krenkelser 3 Provokasjon 4 Ulykke/tapsopplevel 5 PTSD 6 Oppl.av livsfare 7 Annet 8	→
47	Offerets relasjon med observanden	Samboer/Partner 1 Foreldre 2 Barn 3 Søsken 4 Venn/venninde 5 Fremmed/ukjent 6 Annet 7	→

VII Diagnostisk vurdering

48	Satt diagnose	Ja 1 Nei 2	→
49	Hoveddiagn. - ICD-10 vektl i erkl		→ **F .**
50	Bidiagnose - ICD-10 vektl i erkl		→ **F .**
51	Bidiagnose - ICD-10 vektl i erkl		→ **F .**

VIII	Kvalitetsmål på erklæringen, inkl usikkerhetsmomenter		
52	Antall sider	→	
53	Antall samtaler m/obs	→	
54	Reg. antall timer m/obs	→	
55	Innhentet komp oppl m/samtykke	Ja 1 Nei 2 →	
56	Foretatt testing/undersøkelser	Ja 1 Nei 2 →	
57	Diagn/persh/karakter testing	Ja 1 Nei 2 →	
58	MMPI	Ja 1 Nei 2 →	
59	SCID I/II	Ja 1 Nei 2 →	
60	PANSS	Ja 1 Nei 2 →	
61	HAD-Scale	Ja 1 Nei 2 →	
62	MADRS	Ja 1 Nei 2 →	
63	Rorschach	Ja 1 Nei 2 →	
64	Andre	Ja 1 Nei 2 →	
65	Hvilke i så fall	String dvs. →	
66	Symptomliste	Ja 1 Nei 2 →	
67	GAF	Ja 1 Nei 2 →	
68	GHQ 28	Ja 1 Nei 2 →	
69	SCL-90	Ja 1 Nei 2 →	

70	Andre	Ja 1 Nei 2	
71	Hvilke i så fall	String dvs. ord	
72	Nevropsykologisk testing	Ja 1 Nei 2	
73	WAIS	Ja 1 Nei 2	
74	Ravens matriser	Ja 1 Nei 2	
75	Luria	Ja 1 Nei 2	
76	Wisconsin card	Ja 1 Nei 2	
77	Halstead-Reitan	Ja 1 Nei 2	
78	Andre	Ja 1 Nei 2	
79	Hvilke i så fall	String dvs. ord	
80	Foretatt somatisk legeundersøk?	Ja 1 Nei 2	
81	Foretatt nevrofysiologiske us?	Ja 1 Nei 2	
82	I så fall hvilke?	EEG 1 CT 2 MRI 3 Andre 4 Flere 5	
83	Hukommelse/minne/dissosiasjon	Ja 1 Nei 2	
84	Hvilke	TOMM 1 SIMS 2 SCID-D 3 Andre 4 Flere 5	
85	Risikovurderinger	Ja 1 Nei 2	

86 Hvilke

HCR-20	1
PCL-SV	2
SARA	3
SVR-20	4
Andre	5

87 Gitt uttrykk for usikkerhet

Ja	1
Nei	2

88 I så fall hvor

I sammendraget	1
I vurderingen	2
U/pkt 8 i st. mandat	3
Annet	4
Ikke usikkerhet	5

89 Usikkerheten basert på

Sakdokumenter	1
Inkons oppl fra obs	2
Bevissprsm/premiss	3
Ikke usikkerhet	4

IX Kommisjonens bedømmelse

90 Kommisjonens bedømmelse

Ingen anmerkninger	1
Anm om till oppl/erkl	2
Anm om revurdering	3
Anb nye sakkyndige	4

X Vår bedømmelse av erklæringen

91 Vår skjønnsmessige bedømning

Flere mangler	1
Noen mangler	2
Midt på treet	3
God	4
Svært god	5

92 Kvaliativ vurdering/kommentarer Inntill **100 tegn** (String)

Appendix V

Registration form – lay persons – Study IV

Registreringsskjema

Id-nr.
L-

Dato _____ **Testleder** _____

Deltakeropplysninger

Kjønn ❑ Kvinne
❑ Mann

Alder _____ år

Utdanning ❑ Grunnskole
❑ Lærling/yrkesutdanning
❑ Videregående skole
❑ Universitet/høyskole
❑ Doktorgrad

Appendix VI

Registration form – experts – Study IV

Registreringsskjema

Id-nr.
P-

Deltakeropplysninger

Kjønn ❑ Kvinne
❑ Mann

Alder _____ år

Profesjon ❑ Psykolog
❑ Spesialist
❑ Lege
❑ Psykiater
❑ Doktorgrad

Antall sakkyndighetssaker

Totalt ca. _____ stk

Siste tre år ca. _____ stk

Antall år i profesjon _____ år

Antall år som spesialist _____ år

Appendix VII

Registration form of the Case Vignettes for all groups – Study IV

Vurderingsskjema

På bakgrunn av kasusbeskrivelsen vil vi be deg om å vurdere noen forhold som beskrevet under. For hvert av de tre første forholdene ber vi deg sette ett kryss i første rad i ruten du mener passer best med din vurdering av forholdet. Les teksten nøye før du gjør din vurdering. Sett deretter et nytt kryss i andre rad som viser hvor sikker du syns du kan være på vurderingen du gjør. Velg så til slutt det ene av de to avdelingene. Gjenta på samme vis for de to neste forholdene.

1. Utilregnelighet

Forklaring
En utilregnelig personen er *enten*
psykotisk: har mistet kontakt med virkeligheten ved at vedkommende ser eller hører ting andre ikke ser eller hører (hallusinasjoner), har forestillinger om at andre vil skade eller forfølge vedkommende (vrangforestillinger), eller at vedkommendes tanker kan leses av andre eller at de blir påvirket av andres tanker (tankeforstyrrelser), *eller*
bevisstløs i gjerningsøyeblikket: vedkommende husker ingenting fra hele eller deler av den handlingen vedkommende er tiltalt for, *eller*
eller **psykisk utviklingshemmet**: forsinket eller mangelfull utvikling av evner og funksjonsnivå (IQ under 55).

	Helt util-regnelig						Ikke util-regnelig
Mener du at denne personen er utilregnelig?	☐	☐	☐	☐	☐	☐	☐
	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne vurderingen?	☐	☐	☐	☐	☐	☐	☐

	Ja	Nei
Hvis du måtte velge ett alternativ, ville du si personen er utilregnelig?	☐	☐

	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne siste vurderingen?	☐	☐	☐	☐	☐	☐	☐

Hva påvirket vurderingen av utilregnelighet mest?

- ☐ Sosial historie
- ☐ Psykiatrisk historie
- ☐ Beskrivelse av lovbruddet
- ☐ Annet: _____

2. Risiko for gjentakelse

	Liten risiko						Stor risiko
Hvor stor risiko/fare mener du det er for at denne personen kommer til å begå et nytt lovbrudd?	☐	☐	☐	☐	☐	☐	☐
	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne vurderingen?	☐	☐	☐	☐	☐	☐	☐

	Ja	Nei
Hvis du måtte velge ett alternativ, ville du si personen vil gjenta et lovbrudd?	☐	☐

	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne siste vurderingen?	☐	☐	☐	☐	☐	☐	☐

Hva påvirket vurderingen av risiko for gjentakelse mest?

- ☐ Sosial historie
- ☐ Psykiatrisk historie
- ☐ Beskrivelse av lovbruddet
- ☐ Annet: _____

3. Behov for behandling

Forklaring

	Stort behov						Lite behov
Hvor stort behov mener du denne personen har for å få psykologisk/psykiatrisk behandling?	☐	☐	☐	☐	☐	☐	☐
	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne vurderingen?	☐	☐	☐	☐	☐	☐	☐

	Ja	Nei
Hvis du måtte velge ett alternativ, ville du si personen bør få behandling?	☐	☐

	Veldig usikker						Veldig sikker
Hvor sikker syns du at du kan være på denne siste vurderingen?	☐	☐	☐	☐	☐	☐	☐

Hva påvirket vurderingen av behov for behandling mest?

- ☐ Sosial historie
- ☐ Psykiatrisk historie
- ☐ Beskrivelse av lovbruddet
- ☐ Annet: _____

Appendix VIII

Two examples of the Case Vignettes – Study IV

Kasus vignett nr. 3: Positiv sosial and psykiatrisk historie og mindre straffbart forhold

Kasus nr. 3 Mann, 53 år

Han er født og oppvokst på Østlandet, far var mellomleder i et firma, mor var hjemmeværende. Det virker ikke som det har vært spesielle sosiale vanskeligheter i familien. Han har en ni år yngre søster som han fortsatt har god kontakt med. Faren døde relativt tidlig, moren ble gammel. Han beskriver et godt forhold til faren. Etter å ha fullført yrkesskole har han alltid arbeidet innenfor kjøttbransjen. Han utviklet en spesialitet i forhold til import og eksport av spesielle kjøttprodukter og startet egen bedrift, og gir uttrykk for at denne har gitt god avkastning.

Han oppfatter seg selv som psykisk frisk og alminnelig robust, og har aldri hatt kontakt med psykisk helsevern eller psykiater/psykolog. Han har heller ikke på noe tidspunkt savnet slik hjelp. Han har heller aldri hørt at noen har anbefalt ham å oppsøke slik behandler. Han har ikke hatt stemmer i hodet, eller tanker om å være forfulgt, utsatt for draps- eller forgiftningsforsøk.

Han er siktet for kjøring i alkoholpåvirket tilstand. Etter firmaets årlige sommerfest fant han ut at han ville kjøre hjem på tross av at han hadde drukket alkohol. Kjøringen, som skjedde sent på kvelden, forløp rolig til politiet stanset ham i en rutinekontroll. Blodprøve ble tatt umiddelbart etter pågripelsen. og ble målt til 0,6 promille. Siktede fremsto ikke tydelig beruset ved pågripelsen, og han har erkjent de faktiske forhold. Ikke tidligere domfelt.

Kasus vignett nr. 18: Negativ sosial and psykiatrisk historie og alvorlig straffbart forhold

Kasus nr. 18 Mann, 41 år

Han født på Østlandet og er yngst av to søsken. Hans fem år eldre søster har vært plaget med kronisk sykdom. Barndommen har vært preget av farens vold mot mor. Hun døde etter om lag et halvt års sykeleie etter at faren påførte henne alvorlige skader gjennom mishandling. Han har ingen kontakt med sin søster. Etter fullført grunnskole har han arbeidet som sjåfør, truckfører, med assistentjobber med mer, og er for tiden lagerarbeider. Han giftet seg 21 år gammel, men ekteskapet ble oppløst etter fem år, og de fikk en datter sammen. Han har ingen kontakt med datteren, fordi han ikke orker. Senere har han flere kortvarige og flyktige forhold til mange kvinner.

Han har flere alvorlige selvmordsforsøk bak seg, det første skjedde da han var 13 år gammel. Senere har han forsøkt å begå selvmord ved hjelp av tabletter og ved å skyte seg selv. Han har også skadet seg selv ved hjelp av risping og skjæring på kroppen flere ganger. Han har vært innlagt til psykiatrisk behandling mange ganger, hovedsakelig i forbindelse med selvmordsforsøkene. Siden 14-årsalderen har han misbrukt flere tyngre narkotiske stoffer. Han har flere avvennings- og rehabiliteringsforsøk bak seg. Han opplever behandlingssituasjonen sin som svært vanskelig på grunn av manglende tilbud om rehabilitering. Han er mye deprimert og fortvilet over sin situasjon og har derfor valgt å isolere seg alene hjemme de siste fire årene.

I forbindelse med en utestående gjeld etter narkotikakjøp, har siktede vært utsatt for trusler. Siktede oppsøkte da den personen han følte seg truet av. Han slo og sparket vedkommende gjentatte ganger mot hodet og kroppen slik at han døde. Siktede var ved nevnte anledning påvirket av rusmidler og skal ha vært bevæpnet. Da politi og helsepersonell kom til stedet lå fornærmede død foran hovedinngangen til sin bopel. Siktede lot seg arrestere uten dramatikk. Han er domfelt to ganger tidligere for vinningsforbrytelser.

Appendix IX

Introductory letter to the experts – Study IV

Navn på eksperten Dato

Vi er to forskere som skal gjennomføre en studie av rettpsykiatrisk sakkyndighet og ekspertise innen rettssystemet.

I den forbindelse er vi interessert i å vite om du har utferdiget en sakkyndig erklæring (judisiell/rettspsykiatrisk erklæring, evt. prejudisiell erklæring eller annen sakkyndig uttalelse) innen strafferetten siden 2001. Dersom du har det, vil vi gjerne be deg om å delta i denne studien. Kort fortalt innebærer dette å vurdere ni korte kasushistorier som vi vil stille noen spørsmål til. Svarene returneres til oss etterpå. Alle besvarelser avidentifiseres.

Vi ber deg om å *krysse av* dersom du ønsker å delta i studien og returnere skjemaet i den frankerte svarkonvolutten. Trenger du mer informasjon kan vi nås på telefon: 22 02 92 38, mobil: 91 81 48 30, e-brev: pagron@kompetanse-senteret.no (Grøndahl), mobil: 99 35 09 70, e-brev: cato.gronnerod@psykomatikk.no (Grønnerød).

☐ **Ja**, jeg har utferdiget en sakkyndig erklæring innen rettspsykiatri siden 2001

☐ **Nei**, jeg har ikke utferdiget en sakkyndig erklæring innen rettspsykiatri siden 2001

Hvis **Ja**:

☐ **Ja**, jeg vil delta i studien

☐ **Nei**, jeg vil ikke delta i studien

Med vennlig hilsen

Pål Grøndahl
psykologspesialist, stipendiat
Kompetansesenteret

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