ISSN: 1889-1861

THE EUROPEAN JOURNAL OF PSYCHOLOGY APPLIED TO LEGAL CONTEXT

Volume 2, Number 2, July 2010

The official Journal of the
SOCIEDAD ESPAÑOLA DE PSICOLOGÍA JURÍDICA Y FORENSE
Website: http://www.usc.es/sepjf

Official Journal of the *Sociedad Española de Psicología Jurídica y Forense*
(www.usc.es/sepjf)
Published By: SEPJF.
Volume 2, Number, 2.
Order Form: see www.usc.es/sepjf
Frequency: 2 issues per year.
ISSN: 1889-1861.

The European Journal of Psychology Applied to Legal Context, 2010, 2(2)
www.usc.es/sepjf

CONTENTS

Articles

Judicial judgement-making and legal criteria of testimonial credibility
Mercedes Novo and Dolores Seijo 91

Juvenile delinquency and young offender: bibliographical and
bibliometric review of two perspectives of study
Francisco Javier Rodríguez, Luis Rodríguez-Franco,
Javier López-Cepero, and Carolina Bringas 117

Modelling alcohol consumption during adolescence
using zero inflated negative binomial and decision trees
Elena Gervilla, Berta Cajal, Joan Roca, and Alfonso Palmer 145

Mobile phone quality vs. Direct quality:
How the presentation format affects earwitness identification accuracy
Lisa Öhman, Anders Eriksson, and Pär Anders Granhag 161

A stepwise approach to identify intellectual disabilities
in the criminal justice system
Erik Søndenaa, Tom Palmstierna, and Valentina Cabral Iversen 183

The European Journal of Psychology Applied to Legal Context, 2010, 2(2): 183-198
www.usc.es/sepjf

A STEPWISE APPROACH TO IDENTIFY INTELLECTUAL DISABILITIES IN THE CRIMINAL JUSTICE SYSTEM

Erik Søndenaa *, Tom Palmstierna**, and Valentina Cabral Iversen***
* St. Olavs University Hospital, Forensic Department Brøset,Trondheim, Norway
** St. Olavs University Hospital, Forensic Department Brøset and Department of Clinical Neuroscience, Karolinska Institutet, Division of Forensic Psychiatry, Stockholm, Sweden and Department of Neuroscience, Norwegian University of Science and Technology (NTNU),Trondheim, Norway
*** St. Olavs University Hospital, Department of psychiatry, Østmarka and Department of Neuroscience, Norwegian University of Science and Technology (NTNU),Trondheim, Norway

(Received 20 January 2010; revised 29 April 2010; accepted 3 May 2010)

Abstract

A significant proportion of the prison inmates have an IQ level corresponding to intellectual disability (ID) or borderline ID. These persons are rarely identified and subsequently not offered any compensation for their learning and comprehension deficits. The purpose of this study was to explore and help providing methods for better identification of ID at an early stage during criminal proceedings. 143 randomly selected prisoners serving sentences in prisons were assessed using The Wechsler Abbreviated Scale of Intelligence (WASI) and the Hayes Ability Screening Index (HASI) while a semi-structured interview was carried out to obtain data on health as well as social and criminological issues. A total of 10.8% (n = 15) of the participants showed an IQ below 70. From previous analyses of the semi-structured interview, a checklist was extracted and found to have good predictive validity on ID (AUC = 93%). The resulting identification referred 32% (n = 46) of the sample for comprehensive assessment. Within this group, all participants with an IQ below 70 were included. Identification through this checklist, the screening and a full assessment is essential in improving the quality of the services.

Keywords: intellectual disability, intelligence screening, intelligence checklist, forensic setting, forensic assessment..

Resumen

Una proporción significativa de los reclusos tienen un CI propio de la discapacidad intelectual (DI) o en el límite. Estas personas rara vez son identificadas por lo que no les ofrece un tratamiento ajustado a sus déficit de comprensión y aprendizaje. El propósito de este estudio era explorar y ayudar a proporcionar los métodos para su identificación en una fase temprana en el proceso penal. 143 presos elegidos al azar que cumplen condenas en las cárceles se evaluaron utilizando la Escala Abreviada de Inteligencia de Wechsler (WAIS) y el Hayes Ability Screening Index (HASI), al tiempo que, por medio de una entrevista semi-estructurada, se obtuvieron datos sobre la salud, condiciones sociales y criminológicas. Un total del 10,8% (n = 15) de los participantes mostraron un coeficiente intelectual CI por debajo de 70. Del análisis de la entrevista semi-estructurada, se extrajo un checklist que se encontró que presentaba una buena validez predicativa de la DI (ABC = 93%). De los resultados se derivó una propuesta que relacionaba al 32% (n = 46) de la muestra para una evaluación integral. Este grupo incluía a todos los participantes con un CI inferior a 70. La identificación a través de este checklist, el cribado y la evaluación completa son esenciales para mejorar la calidad de los servicios.

Palabras clave: discapacidad intelectual, cribado de inteligencia, checklist de inteligencia, contexto forense, evaluación forense.

Correspondence: Erik Søndenaa. St. Olavs Hospital. Forensic Department, Brøset Postbox 1803, Lade. 7440 Trondheim (Norway). E-mail: erik.sondenaa@hist.no

ISSN 1889-1861

Introduction

A broad range of studies have addressed different issues related to people with intellectual disabilities (ID) who have experienced the Criminal Justice System (CJS). Studies report a large range of prevalence estimates, from 2% to 40%, depending on methodology and diagnostic approach (Jones, 2007). Studies during the last 10 years seem to confirm that ID may be present in a significant proportion of people in randomly selected prison samples, varying from 7.1% (Hayes, Shackell, Mottram, & Lancaster, 2007) to 28.8% (Murphy, Harold, Carey, & Mulrooney, 2000).

People with ID who are actual or alleged law offenders may struggle in the CJS. Without awareness that a person has ID, the Criminal Justice System (CJS) will not take into account the needs and difficulties that are specific to people with intellectual problems. Several studies (Clare & Gudjonnson, 1995; Gardner, Graeber, & Machkovitz, 1998; Petersilia, 1997) emphasise that the majority of persons with ID experience considerable injustice at various stages in the CJS, which goes beyond that of other groups of offenders. The possible consequences of having an ID may cause victimisation of the offender through all phases of the CJS (Clare & Gudjonnson, 1995; Gardner et al., 1998; Petersilia, 1997).

Identifying ID in the CJS is complicated by the wide range of diagnostic and classification criteria used, as well as the variety of assessment tools utilised by clinican and researcers (Jones, 2007).

Arrest and prosecution

During the initial contact with the CJS, alleged offenders with ID are exposed to several situations with a potential source of bias or conflict: a) Pre-arrest and arrest, b) Caution and legal rights, c) Detection, d) Interview and e) Disposal (Jacobson, 2008). An offender with ID may have a highly overt "offending behaviour" marked by impulsivity which lacks sufficient forethought and planning to avoid detection (Prins, 1980). Many people with ID do not understand the benefit of the protection afforded by the US Miranda warning against self-incrimination (e.g. you have the right to remain silent), which is typically read or stated to a suspect by a police officer at the time of arrest (Baroff, Gunn, & Hayes, 2004). The same is probably true for comparable warnings in other countries. During interrogation, suspects with cognitive impairments

tend to be more suggestible and therefore more vulnerable to the pressures of interrogation (Den-Rettsmedisinske-Kommisjon, 2008; Petersilia, 2000). An increased desire to please the authorities may lead to a false confessions by innocent suspects with ID (Gudjonsson, 2002; Perske, 1994, 2005). Most offenders proceed through the various stages of the justice system without anyone raising the issue of ID (Holland, Clare, & Mukhopadhyay, 2002; Petersilia, 2000), and the policies of providing diversion to people with ID vary between countries (McBrien, 2003; Søndenaa, Rasmussen, & Nøttestad, 2008). There is a fine balance between holding the offender accountable and diverting him or her from the CJS. The diverted services have not been developed for offenders with ID compared to offenders with a psychiatric diagnosis (Hayes, 2004). Diversion from the criminal justice system may also not be in the best interest of the individual with an ID, because the length of stay in a forensic unit is likely to be longer than a prison stay (Myers, 2004).

In Norway there is an option of sentencing offenders to community service or a penalty that represents an alternative to prison, and community sentences for less serious offences have been four times more frequent than they were ten years ago. But the statistics do not include any details on offenders with ID (Statistic-Norway, 2008).

Conviction

In the US, offenders with ID are unlikely to meet the criteria for personal recognizance or bail because the individual is probably unemployed and living in a less stable environment, two of the major criteria used in decision making involving bail (Petersilia, 1997). Persons with ID confess more readily, provide more incriminating evidence to authorities, and are less successful in plea bargaining. As a result, they are more likely to be convicted and to receive longer sentences (Petersilia, 1997). The ID defendant often gives a quick confession during interrogation because of the stressful situation and the desire to please (Gudjonnson, Clare, Rutter, & Pearse, 1993; Perske, 2005). The lack of knowledge on the part of staff, officers or the authorities about the presence of ID often prevents a request for a pre-trial forensic examination from being made (Gardner et al., 1998) and the strain throughout the trial prevents offenders with ID from appealing the conviction (Milne & Bull, 2001).

Imprisonment

According to a recent British report, only 20% of prisoners with an ID had any information regarding the disability available at the time of imprisonment (Talbot, 2007). Prison staff have doubts about the adequacy of the resources allocated to this group of inmates and point out several problems, including missing identification of people with ID, a lack of appropriate support, exclusion from the prison rehabilitation services, diminished access to prison information, insight into their own offending circumstances, victimisation in prison and a lack of supporting strategies in prison staff (Talbot, 2007).

Prisoners with ID may be exposed to bullying and intimidation from other prisoners. They may also be tricked out of their money by other prisoners when striving to be accepted within the prison culture, and resorting to exploitative behaviour in order to fit in (Cockram, Jackson, & Underwood, 1998).

Prisoner rehabilitation programmes are generally not adjusted to support the needs of people with ID, and their lack of participation in turn reduces the chances of improvement (Petersilia, 2000; Søndenaa, Rasmussen, Palmstierna, & Nøttestad, 2008). The lack of social or problem-solving skills that might have contributed to the contact with the CJS in the first place is usually unchanged upon release.

Post-release

When released, there is usually no distinction made between ID and no-ID parolees, and local agencies appointed to serve people with ID are absent. With a criminal record, the ID offender will have almost no possibility of getting a job (Petersilia, 1997). Social isolation, lack of community support, homelessness and an unstructured life may contribute to the reported high recidivism rate of offenders with ID (Hodgins, 1992; Lindsay & Taylor, 2005). We do not know the situation of offenders with ID in Norway, but the problems that people with ID encounter in the CJS are probably similar to those cited in the international studies. The high recidivism rates have been confirmed in a recent study (Søndenaa, Rasmussen, Palmstierna, et al., 2008).

Absent but requisite identification

In the International Classification of Diseases (ICD) ICD-10 diagnostic guidelines, intellectual disability is characterised by impairment of skills manifested during the developmental period, which contribute to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities. Significant limitations in adaptive functioning are essential for the diagnosis. However, within this definition, professionals working in the field disagree on the methods of identification and assessment (Bradley, 2009).

Some studies identify two different groups of offenders with ID (Holland et al., 2002): Those known to or supported by the services for people with ID, and those who do not have a diagnosed ID but are intellectually and socially disadvantaged compared to the general population.

Grunfeld and Noreik studied all Norwegian forensic reports in the period between 1980-1996 (N = 3.343) where the charged persons were diagnosed with ID (Noreik & Grunfeld, 1998). A total of 294 examinations concluded with a diagnosis of ID. Compared to the prevalence of ID in the Norwegian prison population (Søndenaa, Rasmussen, Palmstierna, et al., 2008), a very small proportion of offenders with ID is detected during forensic examinations. A paragraph in the Norwegian criminal code enables the court to reduce the penalty to a milder form of punishment below the minimum prescribed for the act when the offender is identified as having an ID. This paragraph has only been invoked eleven times during the last five years (Mæland, Sagfossen, & Revis, 2008).

The problem of identifying people with ID in the criminal justice system (Gudjonsson, 2002; McAfee & Gural, 1988) is probably one of the major challenges in the field. According to (Denkowski & Denkowski, 1985) only people with the most serious disabilities are identified. A recent study interviewed 80 jail administrators and examined how people with ID were identified in prisons, and confirmed the missing screening for ID in these settings (Scheyett, Vaughn, Taylor, & Parish, 2009).

Accordingly, the aim of this study is to explore and provide methods for better identification of ID at an early stage of the criminal proceedings. Using the WASI as a criterion, the HASI and a short checklist consisting of three questions as screening measures was validated.

Methods

Participants

A total of 143 prisoners serving sentences in prisons participated in the study. A randomised sample of 370 (50%) prisoners satisfying the inclusion criteria were asked to participate. The sample was randomly selected based on the internet randomise-service (http:// www.randomizer.org). Seven were released after selection, one was admitted to hospital, and three was moved to another prison and 31 refused to participate, leaving a sample of 143 subjects (77%), 136 men and seven women. The mean age was 34.6 (*SD* = 10.6; *range* 19-68). The age distribution and male/female ratio correspond well to the general prison population of Norway (The Correctional Services Annual Statistics, 2006).

Design

The study lasted for a period of one year in 2007. Data were collected from the Norwegian Correctional Service Region North. Non-Norwegian speaking prisoners or persons in custody were excluded. The region has six prisons with nine separate units of varying security levels, each holding from 11 to 144 prisoners.

Procedure and ethical considerations

After a semi-structured interview conducted to obtain data on health, social and criminological issues, the participants first completed the HASI followed by the WASI. The order was the same in all cases. All participants signed an informed consent form, and the study was approved by the regional ethical committee for medical research, the Norwegian Data Inspectorate, and the Director of the Correctional Service of Region North. Information was given in plenary to all prisoners in each prison unit, and participation was rewarded with a lottery ticket. The instruments were administered by the first author of this study, and were extended by approximately one hour.

Instruments

The Wechsler Abbreviated Scale of Intelligence (WASI; Wechsler, 1999) was used in assessing ID. The WASI consists of two tests assessing verbal IQ (Vocabulary and Similarities) and two tests assessing performance IQ (Block Design and Matrix Reasoning). A Norwegian translation (Sundet, Ørbeck, Brager-Larsen, & Bang-Nes, 2000-2001) was applied, although US norms were used. A study of the psychometric properties of the Norwegian WASI translation found that mean T-scores and IQ results, as well as intercorrelations of subtests and IQ values, closely resemble results published with regard to the US population (Brager-Larsen, Sundet, Engvik, Ørbeck, & Bang-Nes, 2001). The WASI Full Scale also correlates significantly with the WAIS-III Full Scale (r = .92 and r = .93) (Bosnes, 2005, 2009; Wechsler, 1999). The administration time for the WASI is roughly half an hour.

The Hayes Ability Screening Index (HASI; (Hayes, 2000)) was applied to validate a screening tool for identifying ID in the criminal justice system. The HASI consists of three short tests measuring spelling, visuospatial, and visuoconstructional ability. In addition, it includes four questions about already known learning difficulties. Administration and scoring can be completed within 10-15 minutes. The HASI has been shown to be a valid and user-friendly instrument screening for ID within the criminal justice system (Hayes, 2002). The Norwegian version has also been demonstrated to be valid in a non-offender sample (Søndenaa, Bjørgen, & Nøttestad, 2007). Of all subjects (N = 143), 139 completed both HASI and WASI, the four inmates who did not complete WASI (of which three did not complete HASI) were excluded from the analyses.

A checklist consisting of three questions with high relevance to ID was derived from the interview guide of a prevalence study in Norwegian prisons (Søndenaa, Rasmussen, Palmstierna, et al., 2008). The occurrence of ID (IQ < 70) was related to all variables from a interview guide in a binary logistic regression model, using a forward stepwise method (Wald). In the final model, including only variables significantly contributing to the model, the most significant variables were 1) the present status on medical interventions for mental health problems and 2) the history of academic needs. In addition to a question of learning problems, these two items were studied as the checklist.

Statistics

Receiving Operating Characteristics curve analyses (ROC) were conducted to test the significance of the HASI as a screening tool in comparison to the WASI and WAIS-III. The ROC curve is a plot of the sensitivity versus specificity of a screening test, where the different points on the curve correspond to different cut-off points used to designate test positive (Rosner, 2006). The key value for interpreting a ROC curve analysis is the area under the curve (AUC). The better the screening test, the further the curve is from the straight diagonal line – the "by chance" alternative. The AUC varies in the range between 0 and 1, where 1 represents a perfect screening and 0.5 represents a random screening of no value. The ROC curve analyses is preferred in prediction of binary results with a low prevalence, often found in risk-assessment (Grann & Sjöstedt, 2002). The terms of sensitivity and specificity of the Screening and Checklist are concerned with the correct screening of the proportion of people who have an ID (sensitivity) and the correct screening of the proportion of people who do not have an ID. The sensitivity is calculated by dividing the True Positives (TP) by the screened positives (TP+FP) and the specificity is calculated by dividing the True Negatives (TN) by the screened negatives (TN+FN). The prediction of HASI on having ID or not was also explored with a binary logistic regression with the scores of HASI as independent variable and the dichotomous outcome of having ID or not as dependent variable.

Results

The mean IQ score for the prison population on the WASI was 91.5 (*SD* = 15.5). A total of 10.8% (*n* = 15) of the participants showed an IQ below 70 and an additional 12.2% (*n* = 17) had scores in the borderline range (IQ 70-79). Thus a total of 23.0% had considerable intellectual impairments defined by an IQ below 80 as measured by the WASI. Out of the 46 cases referred for neuropsychological examination, 15 scored below IQ 70 on the WASI, 14 scored between IQ 70-79 and 18 scored above IQ 80. The mean IQ score was 78.0 (*SD* = 12.2).

There was no correlation between WASI scores and age. A majority of the participants (88%) achieved higher scores on the performance tests than the verbal tests on the WASI. An overview of the WASI scores is given in table 1

Table 1. Wechsler Abbreviated Scale of Intelligence, Norwegian version (WASI) and Hayes Ability Screening Index, Norwegian version (HASI) results.

	Mild or moderate IQ < 70	**Borderline IQ 70 – 79**	**Average IQ ≥ 80**
WASI			
Verbal (n = 132)	18.9% (25)	17.4% (23)	63.6% (84)
Performance (n = 133)	4.5% (6)	7.5% (10)	88.0% (117)
Full-scale (n = 139)	10.8% (15)	12.2% (17)	77.0% (107)

Screening (HASI)

The mean score on the HASI was 85.5(*SD* = 10.1). The two scales HASI and WASI correlated significantly and conducting a ROC analysis with the WASI as a dichotomous criterion variable divided by subjects scoring below or above IQ of 70, indicated high sensitivity and specificity at different cut-off scores for the HASI. The area under the ROC curve (AUC) was .932, whereas a perfect diagnostic instrument would achieve an area of 1.0. An AUC > .90 indicates a high precision of a screening instrument (Sjöstedt & Grann, 2002) At a HASI cut-off score of 85, sensitivity was estimated at 93.3% and specificity at 72.4%, meaning that the number of false positives was high (31). By lowering the HASI cut-off score to 80, the sensitivity was maintained at 86.7%, the specificity at 84.6%, and the number of false positives was decreased to 13. The correlation between the HASI and the WASI full scale was significant, $r = .717$, $p < .001$ (two-tailed). The HASI correlated with the verbal tests, $r = .632$, $p <. 001$ (two-tailed), and the performance tests in WASI, $r = .743$, $p < .001$ (two-tailed). In a binary logistic regression with not having ID as positive outcome variable and the total score of HASI as predictor, a significant hazard ratio of 1.21 (95% CI 1.12-1.32, $p < .001$) was found with 94.9% correct predictions, thus confirming the result of the ROC-analyses.

Checklist (3 Questions)

One or more of the confirmed checklist items included all persons with an IQ below 70 giving a specificity of 100. With a cut off score of one checklist item, the

number of persons included inspite of their IQ being above 70 was high and expressed with a specificity of 54.9. Comparing participants with no positive checklist items (n = 55) and participant with one or more positive items (n = 84) showed a significant difference in IQ, $t(137) = 6.79$, $p < .001$. The magnitude of differences in the means was large ($\eta^2 = .25$).

The number of positive checklist items was compared to three groups of prison inmates dependant on their performance on the WASI. These three groups were persons with ID, persons with borderline ID and others. Differences in the number of checklist items was found between the three groups, $\chi^2(6, N = 139) = 55.2$, $p < .001$. Table 2 illustrates the distribution of checklist scores and ID categories. The correlations between the checklist and the WASI full scale, $r_s = -.549$, $p < .001$, and between the checklist and the HASI, $r_s = -.741$, $p < .001$, were both significant.

Table 2. Checklist scores in persons with ID, with borderline ID and others.

	Checklist scores			
	0	**1**	**2**	**3**
WASI<70	0	5	3	7
WASI 70-79	1	4	9	3
WASI ≥ 80	55	31	19	2

Prior identification of ID and services

All but one subject replied that they had no history of receiving services intended for people with ID. This subject showed a WASI score of 73, and was not included in the ID sample with a WASI score below 70.

Discussion

The results show that a significant proportion of the prison inmates in Norwegian prison have low IQ at a level similar to ID or borderline ID. These persons have not been identified and subsequently not offered any compensation for their learning and comprehension deficits. Concerning the civil and legal rights of people with an ID, the missing identification represents a significant breach of the legal protection for offenders and alleged offenders with ID. A restrictive segregation of

people with ID in the criminal justice system would of course be preferable if the services covered the whole range of comprehension and learning deficits. In Norway such adaptations are not available.

The sequences of the criminal justice system - arrest, prosecution, conviction, imprisonment, discharge and aftercare - should ideally work as a continuum to some offenders with ID. Identified deficits in a person during the proceedings should indicate the appropriate care and intervention in the subsequent phase. The correctional services conduct a personal examination of all persons in custody before the conviction. This examination could easily include questions from the suggested checklist, and be followed by a screening and eventually a full assessment. The personal examination has been established as one of the directing documents in the criminal justice system, and including ID in the issues of interest would certainly help the objective of identification.

Recent international studies have emphasised the shortcomings of identification of ID in the criminal justice system (Scheyett et al., 2009) as well as regarding adaptations during interviewing and interrogations (Cant & Standen, 2007). The awareness that a significant number of persons have ID and that decisions concerning identification should be more available may enable us to better address the needs of these persons.

More than one confirmed checklist item qualify to enter the screening and two or three confirmed checklist items require a further assessments. A HASI score below 85 also require further assessments.

The results of this study reflect the great importance of introducing a model of identification based on a Norwegian prison sample at an early stage. The model should be introduced upon arrest or before interrogation with the help of a checklist and subsequent screening before the prosecution and completed by a full neuropsychological assessment.

A significant proportion of the prison inmates in Norwegian prison have low IQ at a level similar to ID or borderline ID. To secure the legal rights and care for people with ID (often people who are unable to stand up for their own rights during the criminal justice proceedings), identification should be a primary and urgent step.

A model of identification based on a Norwegian prison sample should be introduced at an early stage (when arrested or before interrogations) with the help of a checklist, followed by screening before the prosecution and completed by a full neuropsychological assessment as illustrated in figure 1. Out of the 46 cases referred for

neuropsychological examination, 14 scored below IQ 70 on the WASI, 14 scored between IQ 70-79 and 18 scored above IQ 80. The mean IQ score was 78.0 (*SD* = 12.2).

The present study has some limitations that need to be considered. The results should be viewed as proposals and are based on a retrospective analysis of a prison sample. Further prospective studies are necessary to clarify the usefulness of a checklist as suggested here. A formal assessment of ID should include adaptive measures rather than IQ alone. The criteria for the diagnosis are thus incomplete (World Health Organization, 1993).

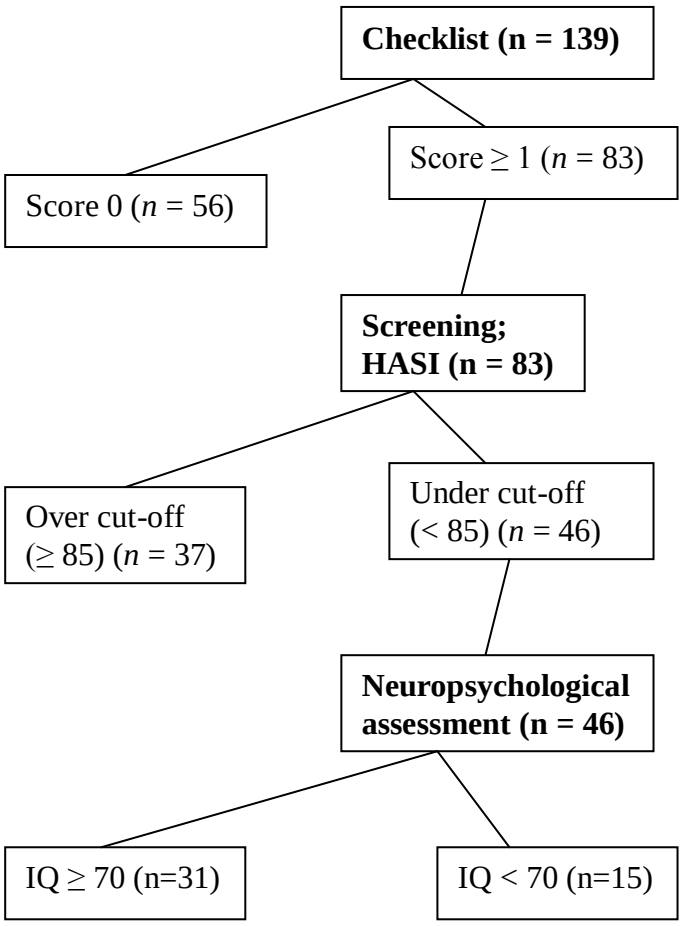

Figure 1. A model of identification of Intellectual Disabilities in the Criminal Justice System.

Acknowledgement

The authors would like to thank Magnus Clark for valuable comments and proof reading.

References

Baroff, G. S., Gunn, M., & Hayes, S. (2004). Legal issues. In W. Lindsay, J. Taylor, & P. Sturmey (Eds.), *Offenders with developmental disabilities* (pp. 37-65). West Sussex: John Wiley and Sons.

Bosnes, O. (2005). En sammenligning av Wechsler Adult Intelligence Scale/Wechsler Intelligence Scale for Children-Revised med Wechsler Abbreviated Scale of Intelligence i et norsk klinisk utvalg [A comparison of Wechsler Adult Intelligence Scale/Wechsler Intelligence Scale for Children-Revised with the Wechsler Abbreviated Scale of Intelligence in a Norwegian clinical sample] *Tidsskrift for Norsk Psykologforening, 42*, 598-602.

Bosnes, O. (2009). Norsk versjon av Wechsler Abbreviated Scale of Intelligence: Hvor godt er samsvaret mellom WASI og norsk versjon av Wechsler Adult Intelligence Scale-III? [The Norwegian version of Wechsler Abbreviated Scale of Intelligence (WASI): Do scores on the WASI correspond with scores on the Norwegian version of the Wechsle Adult Intelligence Scale- III (WAIS-III)?] *Tidsskrift for Norsk Psykologforening, 46*, 564-568.

Bradley, K. (2009). *The Bradley report*. London: Department of Health.

Brager-Larsen, L. M., Sundet, K., Engvik, H., Orbeck, B., & Bang-Nes, R. (2001). Psychometric properties of a Norwegian research version of the Wechsler Abbreviated Scale of Intelligence (WASI) *Bulletine of the Norwegian Neuropsychological Association, 4*, 70.

Cant, R., & Standen, P. (2007). What professionals think about offenders with learning disabilities in the criminal justice system. *British Journal of Learning Disabilities, 35*(3), 174-180.

Clare, I. C., & Gudjonnson, G. (1995). The vulnerability of suspects with intellectual disabilities during police interviewes: A review and experimental study of decision making. *Mental Handicap Research, 8*, 110-128.

Cockram, J., Jackson, R., & Underwood, R. (1998). People with an intellectual disability and the criminal justice system: The family perspective. *Journal of Intellectual and Developmental Disability, 23*, 41-57.

Den Rettsmedisinske Kommisjon (2008). Nyhetsbrev nr. 19 fra psykiatrisk gruppe, den rettsmedisinske kommisjon, juni 2008. [Letter nr.19 from psychiatric unit, the forensic committee, June 2008].

Denkowski, G. C., & Denkowski, K. M. (1985). The mentally retarded offender in the state prison system: Identification, prevalence, adjustment and rehabilitation. *Criminal Justice and Behavior, 12*, 55-70.

Gardner, W. I., Graeber, J. L., & Machkovitz, S. J. (1998). Treatment of offenders with mental retardation. In R. M. Wettstein (Ed.), *Treatment of offenders with mental disorders,* (pp. 329-364). New York: Guilford Press.

Gudjonnson, G., Clare, I. C. H., Rutter, S., & Pearse, J. (1993). *Persons at risk during interviews in police custody: The identification of vulnerabilities.* London: HMSO.

Gudjonsson, G. H. (2002). *The psychology of interrogations and confessions: A handbook*. Chichester: John Wiley and Sons.

Hayes, S. (2000). *Hayes ability screening index. Manual*. Sydney: University of Sydney.

Hayes, S. (2004). Pathways for offenders with intellectual disabilities. In W. R. Lindsay, J. L. Taylor, & P. Sturmey (Eds.), *Offenders with developmental disabilities* (pp. 67-90). Chichester: John Wiley and Sons.

Hayes, S., Shackell, P., Mottram, P., & Lancaster, R. (2007). The prevalence of intellectual disability in a major UK prison. *British Journal of Learning Disabilities, 35*, 162-167.

Hayes, S. C. (2002). Early intervention or early incarceration? Using a Screening Test for intellectual disability in the Criminal Justice System. *Journal of Applied Research in Intellectual Disabilities, 15*, 120-128.

Hodgins, S. (1992). Mental disorder, intellectual deficiency, and crime. Evidence from a birth cohort. *Archives of General Psychiatry, 49*, 476-483.

Holland, T., Clare, I. C., & Mukhopadhyay, T. (2002). Prevalence of criminal offending by men and women with intellectual disability and the characteristics of offenders: Implications for research and service development. *Journal of Intellectual Disability Research, 46*(Suppl. 1), 6-20.

Jacobson, J. (2008). *Police responses to suspects with learning disabilities and learning difficulties: A review of policy and practice.* London: Prison Reform Trust.

Jones, J. (2007). Persons with intellectual disabilities in the criminal justice system: Review of issues. *International Journal of Offender Therapy and Comparative Criminology, 51*, 723-733.

Lindsay, W. R., & Taylor, J. (2005). A selective review of research on offenders with developmental disabilities: Assessment and treatment. *Clinical Psychology and Psychotherapy, 12*, 201-214.

McAfee, J. K., & Gural, M. (1988). Individuals with mental retardation and the criminal justice system: The view from States' Attorneys General. *Mental Retardation, 26*, 5-12.

McBrien, J. (2003). The intellectually disabled offender: Methodological problems in identification. *Journal of Applied Research in Intellectual Disabilities, 16*, 95-105.

Milne, R., & Bull, R. (2001). Interviewing witnesses with learning disabilities for legal purposes. *British Journal of Learning Disabilities, 29*, 93-97.

Murphy, M., Harrold, M., Carey, S., & Mulrooney, M. (2000). *A survey of the level of learning disability among the prison population in Ireland*. Dublin: Department of Justice.

Myers, F. (2004). *On the borderline? People with learning disabilities and/or autistic spectrum disorders in secure, forensic and other specialist centres.* Edinburgh: Scottish Development Centre for Mental Health.

Maeland, O., Sagfossen, B., & Revis, E. (2008). *Etterkontroll av reglene om strafferettslig utilregnelighet, strafferettslige saerreaksjoner og forvaring. [Reexamining the rules of non-responsibility and the established sanction-options]*. Oslo: Justis- og politidepartementet.

Noreik, K., & Grunfeld, B. (1998). Mentally retarded persons who have undergone psychiatric forensic examination. *Tidsskrift for den Norske Laegeforeningen, 118*, 2149-2151.

Perske, R. (1994). Thoughts on the police interrogation of individuals with mental retardation. *Mental Retardation, 32*, 377-380.

Perske, R. (2005). Search for persons with intellectual disabilities who confessed to serious crimes they did not commit. *Mental Retardation, 43*, 58-65.

Petersilia, J. (1997). Unequal justice? Offenders with mental retardation in prison. *Corrections Management Quarterly, 1*, 36-43.

Petersilia, J. (2000). *Doing justice? Criminal offenders with developmental disabilities*. Berkeley: University of California.

Prins, H. (1980). *Offenders, deviants, or patients: An introduction to the study of socio-forensic problems*. London: Tavistock.

Rosner, B. (2006). *Fundamentals of biostatistics* (6th ed.). Belmont: Thomson.

Scheyett, A., Vaughn, J., Taylor, M., & Parish, S. (2009). Are we there yet? Screening processes for intellectual and developmental disabilities in jail settings. *Intellectual and Developmental Disability, 47*, 13-23.

Statistic Norway (2008). *Straffereaksjoner, etter type reaksjon og lovbruddskategori. 1997-2006. Absolutte tall og per 1 000 innbyggere [Penal reactions, according to type and category of the crime. 1997-2006. Numbers per 1000 inhabitants]*. Retrieved November 5, 2009, from http://www.ssb.no/emner/03/05/a_krim_tab/tab/tab-2007-09-19-26.html

Sundet, K., Orbeck, B., Brager-Larsen, L. M., & Bang-Nes, R. (2000-2001). Wechsler Abbreviated Scale of Intelligence (Norwegian version). Oslo: University of Oslo.

Sondenaa, E., Bjorgen, T. G., & Nottestad, J. A. (2007). Validation of the Norwegian version of Hayes Ability Screening Index for mental retardation. *Psychological Reports, 101*, 1023-1030.

Sondenaa, E., Rasmussen, K., & Nottestad, J. A. (2008). Forensic issues in intellectual disability. *Current Opinion in Psychiatry, 21*, 449-453.

Sondenaa, E., Rasmussen, K., Palmstierna, T., & Nottestad, J. A. (2008). The prevalence and nature of intellectual disability in Norwegian prisons. *Journal of Intellectual Disability Research, 52*, 1129-1137.

Talbot, J. (2007). *Identifying and supporting prisoners with learning difficulties and learning disabilities: The views of prison staff*. London: Prison Reform Trust.

Wechsler, D. (1999). *Wechsler abbreviated scale of intelligence manual*. San Antonio, TX: Harcourt Brace & Company.

World Health Organization (1993). *The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research*. Geneva: World Health Organization.

Instructions

Presentation

The *European Journal of Psychology Applied to Legal Context*, the Official Journal of the Sociedad Española de Psicología Jurídica y Forense, publishes empirical articles, theoretical studies and focused reviews of topics dealing with psychology and law (e.g., legal decision making, eyewitness). Only original papers (not published or submitted elsewhere) will be published. Papers driven to both legal systems, inquisitorial and adversarial, will be welcome as well as papers based in concrete laws of a European country. Neither the Editors nor Publishers accept responsibility for the views or statements expressed by the authors.

Paper submission

Manuscripts should be submitted electronically to the Editors to the e-mail address of the journal (ejpalc@usc.es). Postal address should be used exceptionally (The European Journal of Psychology Applied to Legal Context, Facultad de Psicología, Universidad de Santiago de Compostela, E-15782 Santiago, Spain). Submission of a paper to this journal implies that it represents original work not previously published, and that it is not being considered elsewhere for publication.

Review

The manuscripts will be reviewed by two external blind referees. The reviews are anonymous for authors and reviewers. Author identities will be removed before sending out a manuscript to the reviewers.

Copyright

Authors submitting a manuscript do so with the understanding that if it is accepted for publication the copyright of the manuscript, including the reproduction of the paper in all forms and media, shall be transferred to the publisher.

Permissions and responsibility

The author is responsible for obtaining permission necessary to quote from other works, to reproduce material already published, and to reprint from other publications. The opinions expressed and the contents of the paper are under exclusive responsibility of the author(s) and do not reflect the point of view of The European Journal of Psychology Applied to Legal Context.

Style

Manuscripts must be adhere to the instructions on references, tables, figures, abstract, format, narrative style, etc. as described in the Publication Manual of the American Psychological Association (5th edition). Manuscripts that do not fit to the style set forth in this manual will not be considered for publication.

Check list of requirements

The abstract should be 150-200 words.

Title page (include the authors´ name, affiliations, full contact details).

Full paper text (double spaced with numbered pages and anonymised).

References (APA style).

Tables and figures placed at the end of the paper or attached separately.

The European Journal of Psychology Applied to Legal Context

CONTENTS

Articles

Judicial judgement-making and legal criteria of testimonial credibility
Mercedes Novo and Dolores Seijo 91

Juvenile delinquency and young offender: bibliographical and bibliometric review of two perspectives of study
Francisco Javier Rodríguez, Luis Rodríguez-Franco, Javier López-Cepero, and Carolina Bringas 117

Modelling alcohol consumption during adolescence using zero inflated negative binomial and decision trees
Elena Gervilla, Berta Cajal, Joan Roca, and Alfonso Palmer 145

Mobile phone quality vs. Direct quality: How the presentation format affects earwitness identification accuracy
Lisa Öhman, Anders Eriksson, and Pär Anders Granhag 161

A stepwise approach to identify intellectual disabilities in the criminal justice system
Erik Søndenaa, Tom Palmstierna, and Valentina Cabral Iversen 183