

# **SEXUAL ABUSE VICTIM EMPOWERMENT PROGRAMME: AN ARCHIVAL STUDY ASSESSING THE RELATIONSHIP BETWEEN ADAPTIVE FUNCTIONING AND SEVERITY OF INTELLECTUAL DISABILITY IN A GROUP OF INTELLECTUALLY DISABLED VICTIMS OF SEXUAL ABUSE.**

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## **Abstract**

### **Introduction**

The nosology and the criteria for intellectual disability (mental retardation) have been commonly accepted to include significantly sub average general intellectual functioning (having an IQ of 70 or less) and impairment in adaptive functioning manifested before the age of 18 years. The assessment of intellectual functioning as the primary criterion has been well-documented with the use of individual scales reporting good psychometric properties. However, adaptive functioning has mostly been assessed via clinical interviewing, observation and collateral interviews with significant others. Adaptive capabilities within the intellectually disabled have received less attention. The Vinelands maturity scale, an objective measure of adaptive functioning, has been used widely with good effect in diagnosis. The interaction between the severity of intellectual disability and adaptive functioning has been described for the purposes of categorization. However, attempts at providing empirical support for the differential profile have been lacking.

### **Methods**

This article reports on an archival study that aimed to examine the relationship between severity of intellectual disability and adaptive behavior. This study used verbatim protocols that formed part of a psycho-legal assessment in the SAVE programme assisting intellectually disabled victims of sexual abuse. Significant differences in adaptive functioning domains among groups of mild, moderate and severely intellectually disabled participants were tested for empirically.

### **Results**

Null findings were reported for all domains, except socialization, based on chronological age. However, significant differences were reported on all domains when using adaptive functioning scores based on test-age equivalents. In short, chronological age is not useful as a criterion when assessing adaptive functioning relative to the level of intellectual disability. A differential capability profile relative to the level of intellectual disability was empirically supported using test-age equivalents.

### **Conclusion**

The empirical evidence here can be useful to augment the findings of IQ testing, that can be flawed and subject to extraneous variables, when determining whether a diagnosis of intellectual disability is indicated.

### **Key words**

Intellectual disability, mental retardation, adaptive functioning, sexual abuse, archival research, socialization skills, activities of daily living, communication skills.

## Introduction

Research into intellectual disability has primarily focused on diagnosis (APA, 2000); adaptive functioning (Markusic, 2010); associated vulnerabilities (Morano, 2001); Sexuality (Isler, Tas, Beytut, Conk, 2009), sexual abuse (Balogh, Breyerton, Whibley, Berney, Graham, Worseley & Firth, 2001); sexual abuse intervention (Drew, Logan & Hardman, 1990); Psycho-legal aspects (Ahlgrim-DeLzell & Dudley, 2001); and Institutionalization (Hersen, McGonicle & Lubetsky, 1989). A systematic deconstruction of adaptive functioning and its differentiated profile across severity of intellectual disability and the implications thereof for clinical practice has been lacking. This article reports on an archival study that aimed to examine the relationship between severity of intellectual disability and adaptive behavior. A further aim was to provide empirical support for a differential profile in adaptive functioning based on test scores and equivalent test ages

The diagnosis of Mental Retardation, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) (APA, 2000), is defined as "significantly subaverage general intellectual functioning (having an IQ of 70 or less) resulting in, or associated with, concurrent impairment in adaptive functioning and manifested during the developmental period before the age of 18." Mental retardation is generally assessed by a combination of formal intelligence tests and observation of adaptive functioning (Burack, Hodapp & Zigler, 1998). The nosology and the criteria for this diagnosis has been commonly accepted, however the use of the term, "Mental Retardation" is a contentious issue since it is felt to be derogatory and framed within a deficit model. Some of the terms used colloquially include, but are not limited to, cognitive deficit, cognitive handicap and intellectual disability. For the purposes of this document the term intellectual disability will be used to denote the diagnosis of Mental Retardation according to the DSM-IV-TR criteria.

According to the DSM-IV-TR, individuals are classified according to the severity of their intellectual impairment as indicated by the intelligence measure (IQ) obtained on intelligence test(s) as either mild (IQ 50-70), moderate (IQ 35-55), severe (IQ 20-40) or profound (IQ below 20)

(American Psychiatric Association, 2000). Below follows a brief outline of the adaptive functioning capabilities (abilities required to function in everyday life) relative to the severity of intellectual disability.

Mild intellectual disability is the most common category including approximately 85% of individuals diagnosed with intellectual impairment who are considered "educable" (Brantley, 1988; Morano, 2001). These individuals mostly appear as normal and identification of their disability only becomes apparent during the early school years. Research has found that the environment can both positively and negatively affect a child's mental development and that mild intellectual disability is more prevalent among lower socioeconomic groups (Morano, 2001). It is further reported that children with mild [intellectual disability] typically develop social and communication skills later in the preschool years, perhaps with modest delays in expressive language. Those diagnosed with mild intellectual disability are able to be educated up to the 6th-grade level and with vocational training may be able to work and live in the community with minimal supervision. According to Morano (2001) this means that they are most likely to be exposed to compromising situations regarding sexual activity, including sexual consent, assault and abuse.

Individuals who are diagnosed to be moderately intellectually disabled comprise approximately 10% of the intellectually impaired population. They often have additional handicaps but with special help are trainable and can acquire a limited number of basic competency and self-help skills (Brantley, 1988). They are expected to gain some measure of independent functioning but will still require some form of supervision. Lemeshow (1982) asserted that individuals with moderate intellectual disability are more adaptively impaired. With regard to socialization skills, people with moderate intellectual disability have difficulties in recognizing social conventions, such as appropriate dress or humour. They are also not expected to marry and manage a family but with training will be able to participate cooperatively in their own family life and in the events of their immediate environments.

Those who are profoundly or severely intellectually disabled comprise approximately 3% of all

intellectually impaired individuals with the majority of them requiring lifelong supervised care (Brantley, 1988). The severely intellectually impaired may function at adaptive levels expected of normal peers of approximately one-third their age and their socialization may involve teaching cooperation skills and daily skills training (Lemeshow, 1982). Sadock and Sadock (2003) concurred stating that people with severe intellectual disability have poor adaptive skills. The profoundly intellectually disabled group constitutes the "totally dependent" group, requiring constant supervisory care in order to function and survive, however self-care and communication skills can be expected to increase slightly toward minimal levels of functional independence (Lemeshow, 1982).

The differential profile in adaptive functioning relative to the severity of intellectual disability outlined above has been accepted, though empirical support for it has been lacking. This has had direct bearing on the extent to which individuals with intellectual disability have had recourse to assistance in forensic cases of sexual abuse. Below is a brief description of a n intervention programme that attempts to assist in this regard and that formed the setting for data collection.

#### **CAPE MENTAL HEALTH AND THE SEXUAL ABUSE VICTIM EMPOWERMENT PROGRAMME (SAVE):**

In the past, perpetrators of sexual abuse against intellectually impaired individuals often managed to avoid prosecution due to the perception that their victims would not be able to testify against them, or that they would not be believed by the authorities (Pillay & Sargent, 2000). Seventeen years ago, the Cape Mental Health Society of the Western Cape launched The Sexual Abuse Victim Empowerment (SAVE) programme to deal with a handful of cases involving victims with intellectual disability who needed to appear in court. Today the psychologists see between seven and nine new victims a month who are referred by the Department of Justice for psychological assessment of their level of functioning and their ability to testify as a witness. These cases are particularly difficult cases for the courts to resolve as the majority of adult victims have the mental age of a small child and the victim, court and police need to be properly prepared to ensure justice is done.

SAVE is the only project of its kind in South Africa and is so effective that there is an eight-month waiting list of victims needing assessment before their cases can go to court. The SAVE programme assesses whether victims would be able to assist competently in their court proceedings as reliable witnesses. In this way, the likelihood of favourable outcomes or verdicts is increased and plaintiffs with intellectual disability are given an opportunity to make their voices heard.

The psychological evaluation in the psycho-legal programme assesses the following areas: level of intellectual functioning, adaptive functioning, sexual knowledge including the ability to consent to sex, and competence as a witness. The level of intellectual functioning is assessed using a South African scale, the Individual Scale for General Scholastic Aptitude (ISGSA). Competence as a witness and sexual knowledge are assessed using a structured clinical interview.

Adaptive functioning is defined as the extent to which individuals cope with the demands of everyday life and is assessed using the Vinelands Adaptive Behaviour Scales (Markusic, 2010). This scale is a revision of the Vinelands Maturity Scale. Bolte and Poustka (2002) reported that this scale assesses personal and social sufficiency from birth to adulthood. It does not require direct administration and can be completed by a third party who is familiar with the testee's abilities. The scale measures four domains of which three are important in the SAVE assessment namely, Socialization, Daily living skills and Communication (De Bildt, Kraijer, Sytema & Minderaa, 2005).

#### **Methodology**

Research questions: The present study attempted to answer the following questions:

1. Are there significant differences between complainants with varying levels of intellectual disability in adaptive functioning in terms of
  - Overall level of adaptive functioning (as measured by the Vinelands)
  - Communication skills
  - Daily living skills
  - Socialization skills
2. Are there significant differences between complainants with varying levels of intellectual disability in adaptive functioning in terms of

- Communication skills age equivalent
- Daily living skills age equivalent
- Socialization skills age equivalent

### Research design

The present study incorporated an archival survey design. The study was restricted in terms of access to complainants registered with CMH. After numerous meetings with the staff it was concluded that due to the fact that the population under study is a triply vulnerable population, as the complainants have (1) mental retardation; (2) have been sexually abused; and (3) may have another psychiatric diagnosis, the researcher will not be allowed access to the complainants themselves, but rather have access to the complainant's case files and the staff members working at CMH.

**Sample & Data collection procedure:** The participants were victims of sexual abuse with intellectual disability who registered with the SAVE programme during 2006 and 2008. The participants had closed folders and provided an advanced directive for their verbatim protocols to be used if its application resulted in the benefit of persons from the same category. They were drawn from a population of indigent complainants living in the Cape Town community and have the following characteristics:

- According to the ISGSA, had been diagnosed with a level of intellectual functioning below 70 (i.e. intellectually disabled)
- Had been abused sexually

The sampling frame was comprised of the register of closed cases seen in the SAVE programme during 2006 to 2008. From this sampling frame cases were selected following systematic random sampling during which every third case was selected until a sample of 250 cases have been reached. Verbatim responses on protocols were rescored by two independent researchers with considerable experience in assessing intellectual functioning in an attempt to reduce variability. In addition, ten percent of the scored data was checked for accuracy.

### Instrument

A code sheet was used for capturing demographic variables and other variables relevant to the study from the closed case files selected and kept at

CMH. For the purpose of this study, the case files housed at CMH contained details of each individual complainant, as well as their personal case material for trial. The following information was gleaned from case files: 1) demographics, 2) ISGSA protocol for the assessment of intellectual functioning and 3) protocol of the Vinelands maturity scale for the assessment of adaptive functioning.

### Data analysis

Descriptive statistics (frequency distributions) was used to summarize the demographics of the sample. Analysis of variance (ANOVA) was used to empirically test the hypothesized significant differences between the varying levels of cognitive deficit in terms of adaptive functioning.

**Ethical considerations:** The ethical requirements for non-therapeutic research were fulfilled in that 1) the research pertained directly or indirectly to the mental illness or mental defect from which the participant suffered. 2) An advance directive has been obtained from all users of the service to consent to the use of protocols, e.g. in the proposed research, for the greater good of the individual or collective agenda. 3) The guardian of the archived record has commissioned the proposed research thereby granting access to the protocols. 4) Research significantly benefits persons of the same category as the participant and 5) The same scientific results cannot be obtained by other methods, or by research on persons who do not belong to this category (Frankfort-Nachmias & Nachmias, 1992).

### Results & Descution

**Demographics:** The final sample was comprised of 235 (94%) women and 15 (6%) men whose chronological ages ranged from 8 -60 years at the time of reporting. The frequency distribution was as follows: 8-11a (3.5%), 12-22a (68.2%), 23-31 (19.6%) and 32-60 (9.1%).

Table 1 below summarizes the results from the ANOVA using the following variables: overall adaptive functioning, communication skills, daily living skills, and socialization skills, as measured by the Vinelands Adaptive Behaviour Scale.

From Table 1 it becomes evident that there were no significant differences found in adaptive functioning

in terms of communication skills ( $F=.996, p=.413$ ), daily living skills ( $F=.749, p=.561$ ) and overall adaptive functioning ( $F=1.644, p=.168$ ) between the varying levels of intellectual disability. These

null findings do not support the hypothesized differences between groups of intellectually disabled

**Table 1 Differences in Adaptive functioning between sexual abuse victims with Mild intellectual disability (n = 103 ), Moderate intellectual disability (n =93 ) and Severe intellectual disability (n = 54).**

Variable and Source	SS	MS	F	Sig
<u>Communication skills domain</u>				
Between groups	3.12	.78	.996	.413
Within groups	94.08	.78		
<u>Daily Living skills domain</u>				
Between groups	5.21	1.30	.749	.561
Within groups	208.79	1.74		
<u>Socialization skills domain</u>				
Between groups	20.08	5.02	3.758	.006**
Within groups	160.28	1.34		
<u>Overall Adaptive Functioning</u>				
Between groups	5.64	1.41	1.644	1.68
Within groups	102.10	.858		

\*\* $p < .01$

From the results it becomes evident that a significant difference in adaptive functioning was found in terms of socialization skills between the varying levels of intellectual disability stipulated in the research question ( $F=3.758, p < .01$ ). The significant differences in Socialization manifested as follows: Participants with higher degrees of intellectual disability had increasingly less adaptive socialization skills. Participants with mild intellectual disability were more adept in the social realm than participants diagnosed with moderate intellectual disability. The latter in turn were significantly more adept in their mastery of social skills than participants diagnosed with severe intellectual disability.

The findings indicate a significant difference in the social skills domain of adaptive functioning between the levels of intellectual disability. The diagnosis of intellectual disability is defined as significantly subaverage general intellectual functioning resulting in or associated with impairment in adaptive functioning (APA, 200). Thus impairments in adaptive functioning is a prerequisite for the

diagnosis of intellectual disability. The findings illustrate the differential skills level in the social domain for people with intellectual disability.

The significantly varying degree in this domain is supported by the extant literature. Bolte et al (2002) pointed out that in the social domain children with mild [intellectual disability] typically develop social and communication skills later in the preschool years, perhaps with modest delays in expressive language. These authors emphasized that development in the social is delayed and modest rather than gross and absent in children with mild intellectual disability. De Bildt et al (2005) asserted that individuals with moderate intellectual disability are more adaptively impaired. With regard to socialization skills, people with moderate intellectual disability have difficulties in recognizing social conventions, such as appropriate dress or humour.

Sadock and Sadock (2003) stated that people with severe intellectual disability have poor adaptive skills. Communication skills are largely

handicapped for persons with severe intellectual disability as they tend to communicate in three word phrases. This affects the socialization skills of people with severe intellectual disability as they can understand speech, but have considerable difficulty expressing themselves. People with severe intellectual disability are unable to live

independently in the community; they do need to live in a group home or with their families so as to provide them with assistance in care in all domains. The theorized differences postulated by De Bildt et al (2005), Bolte et al (2002), and Sadock and Sadock (2003) in overall adaptive functioning, specifically in the communication and daily skills

**Table 2 Differences in Adaptive functioning age equivalents between sexual abuse victims with Mild intellectual disability (n = 103 ), Moderate intellectual disability (n =93 ) and Severe intellectual disability (n = 54).**

Variable and Source	SS	MS	F	Sig
<u>Communication skills domain</u>				
Between groups	219.99	55.00	41.430	.000**
Within groups	155.32	1.33		
<u>Daily Living skills domain</u>				
Between groups	328.70	82.18	19.348	.000**
Within groups	492.68	4.25		
<u>Socialization skills domain</u>				
Between groups	137.61	34.40	19.41	.000**
Within groups	207.38	1.77		

\*\*p<.01

From the above table it becomes evident that there were significant differences ( $p<.000$ ) found in adaptive functioning age equivalents between complainants with mild, moderate, severe, borderline mild to moderate and borderline moderate to severe intellectual disability in terms of communication skills ( $F=41.430$ ); daily living ( $F=19.348$ ) and socialization ( $F=19.410$ ). The specific results are discussed below:

The findings indicate a significant difference in the age equivalents for the communication skills domain of adaptive functioning between the levels of intellectual disability, Participants with higher degrees of intellectual disability had increasingly lower age equivalents for communication skills. Participants diagnosed with mild intellectual disability had a significantly higher age equivalents than those diagnosed with severe intellectual disability. The latter in turn had a significantly higher age equivalent in communication skills than participants diagnosed with severe intellectual disability.

The findings indicate a significant difference in the age equivalents for the daily living skills domain between the levels of intellectual disability. Participants diagnosed with mild intellectual disability had a significantly higher age equivalent in daily living skills than those diagnosed with moderate intellectual disability. The latter in turn had a significantly higher age equivalent in daily living skills than those diagnosed with severe intellectual disability.

The findings indicate a significant difference in the age equivalents for the socialization skills domain between the levels of intellectual disability. Participants diagnosed with mild intellectual disability had a significantly higher age equivalent in socialization skills than those diagnosed with moderate intellectual disability. The latter in turn had a significantly higher age equivalent in socialization skills than those diagnosed with severe intellectual disability.

domains were not empirically supported. The null findings here might be a function of the age distribution across severity of intellectual disability. A limitation of the study is that the records selected randomly did not control for age in a cross-tabulated way. Future studies would benefit from employing a stratified approach to sampling if it were to control for age. The scores obtained on the skills in the various domains of adaptive functioning are based on chronological age and are considered less useful clinically than test age equivalents for these domains. Table 2 summarizes the results of ANOVA for differences in test age equivalents postulated in the second research question.

The findings indicate a significant difference in the age equivalents for the daily living skills domain between the levels of intellectual disability. Participants diagnosed with mild intellectual disability had a significantly higher age equivalent in daily living skills than those diagnosed with moderate intellectual disability. The latter in turn had a significantly higher age equivalent in daily living skills than those diagnosed with severe intellectual disability.

The findings indicate a significant difference in the age equivalents for the socialization skills domain between the levels of intellectual disability. Participants diagnosed with mild intellectual disability had a significantly higher age equivalent in socialization skills than those diagnosed with moderate intellectual disability. The latter in turn had a significantly higher age equivalent in socialization skills than those diagnosed with severe intellectual disability.

The findings indicated a decrease in age equivalents for all adaptive functioning domains with a corresponding increase in the extent of intellectual disability. As mentioned before, De Bildt et al (2005), Bolte et al (2002), and Sadock and Sadock (2003) asserted that there are significant differences in all domains of adaptive functioning. The findings reported here empirically supported the theorized differences in adaptive functioning as a function of the level of intellectual disability. Thus as a group, people with mild intellectual disability will have higher age equivalents for adaptive functioning compared to people with moderate and severe intellectual disability. Similarly, individuals with moderate cognitive, as a group, will have lower

age equivalents for adaptive functioning than individuals with mild intellectual disability, but higher age equivalents than individuals with severe intellectual disability. Individuals with severe intellectual disability will have lower age equivalents for adaptive functioning compared to individuals with mild and moderate intellectual disability.

### **Conclusion**

In short, the study explored adaptive functioning as one the criteria for the diagnosis of intellectual disability. The diagnostic manual stipulates a deficit in adaptive functioning as one of the criteria and implicitly suggests that adaptive functioning would have an inverse relationship with the level of intellectual disability. The categorization of the level of intellectual disability provides a brief description of the deficits and skills in adaptive functioning per level of intellectual disability. However, the differential profile provided in the categorization of intellectual disability tends to be more descriptive and summative rather than an empirical statement of a differential profile. The findings of this study illustrate empirically the theorized differences in adaptive functioning and provide useful insights into the importance of age equivalents when working with this population for the specific purposes of determining a differential profile of adaptive functioning. The empirical evidence here can be useful to augment the findings of IQ testing, that can be flawed and subject to extraneous variables, when determining whether a diagnosis of intellectual disability is indicated.

### **Limatation of the study**

The study was restricted to using complainants registered with CMH. Thus findings can only be generalized to the population of sexually abused individuals with intellectual disability. A further limitation as that case files did not consistently contain information regarding ethnicity and socio-economic status which limited the extent to which the researcher could verify that the client base of the SAVE project was in fact from an indigent group. The distribution of participants was not equal across the various groups which might have impacted the robustness of the significance or hypothesis testing.

A further limitation was the use of archival data from a sexually abused population. This might have

limited the sampling frame so that the researcher have selected from a reduced sampling frame. This would ultimately weaken the robustness of hypothesis testing. However, finding significance despite this limitation is encouraging support for the hypotheses tested.

The sample included a large range for ages of the participants which might have been a confounding variable in the hypothesis testing. However, the primary criterion for inclusion was the diagnosis of intellectual disability which made age secondary. Further the study aimed to differentiate between chronological age and developmental age/ test age equivalents since chronological age has been a confounder in the treatment of people with intellectual disability. Misappraisals about capabilities occur based on erroneous assumptions based on chronological age. Thus controlling for chronological age would have short-circuited the evaluation of age parameters as a potential confounding variable.

### Recommendation for the future study

Future studies might benefit from controlling for chronological age by employing a stratified approach to sampling. This will enable a more robust testing of the potential confounding role played by chronological age. In addition, future studies might seek to use live cases drawn from a wider population excluding sexual abuse victims.

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