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Author: Matthew Nicoll
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Anger in Offenders with Intellectual Disabilities

Submitted By: Matthew Nicoll

Thesis submitted to the University of Sheffield for the degree of Doctor of Clinical Psychology

Date: Oct 2011
Declaration

This work has not been submitted for any other degree or to any other institution or for any other qualification.
**Structure and Word Count**

**Literature Review and Research Report**

Prepared according to the guidance for the Journal of Applied Research in Intellectual Disabilities (see appendix 2).

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Abstract

Section 1: Literature Review

This paper reviews the literature relating to the cognitive behavioural treatment for anger in intellectual disability (ID) populations. It provides a narrative and also a meta-analysis of the current state of knowledge from 1999. It specifically examines cognitive behavioural interventions in both offender and non-offender populations. It provides an updated synthesis of the literature and presents a critique of it. The results indicate the effectiveness of cognitive behavioural therapy for anger treatment in adults with IDs but highlights limitations of the meta-analysis.

Section 2: Research Report

This paper reports the findings of a study examining anger in offenders with IDs. The study compares a group of offenders with a group of non-offenders. The main aim of the study is to compare levels of anger between the groups to test the hypothesis that anger levels are higher in people who have offended in comparison to people who have not offended. Fifty-six participants completed questionnaires containing measures of anger, aggression, psychological symptoms and parental anger. The study reveals no difference between levels of anger between offenders and non-offenders. The study provides theoretical and clinical implications relating to the current treatment of anger in offenders with IDs.
Section 1: Literature Review

Cognitive Behavioural Treatment for Anger in Adults with Intellectual Disabilities:

A Systematic Review and Meta-analysis

Abstract

Background The cognitive behavioural treatment for anger in adults with intellectual disabilities (IDs) has received increasing interest. The current study aims to review the current literature and provide a meta-analysis.

Method A literature search found 12 studies eligible for the quality appraisal. The studies examined cognitive behavioural treatment for anger in adults with IDs published since 1999. Nine studies were eligible to be included in the meta-analysis.

Results The meta-analysis revealed large uncontrolled effect sizes for the treatment for anger in adults with IDs, but is viewed with caution due to low sample sizes. The narrative review showed improved methodological quality of the literature.

Conclusions The emerging literature is encouraging. However, it is limited through concatenated data, a lack of comparative control groups, small study samples and a lack of normative data for levels of anger in the non-clinical ID population.
Cognitive Behavioural Treatment for Anger in Adults with Intellectual Disabilities: A Systematic Review and Meta-analysis

Introduction

Cognitive behavioural therapy (CBT) is now the dominant psychotherapy in mental health services and research has shown the modality to be effective for a wide variety of psychological disorders (Roth & Fonagy, 2005). Whilst the general population have benefitted from CBT, people with intellectual disabilities (IDs) have traditionally had little or no access to psychosocial treatments (Taylor & Lindsey, 2007). However, an evidence base for the use of CBT for people with IDs is emerging. Prevalence rates of anger control problems for people with IDs are high (Novaco & Taylor, 2004) and the treatment for anger problems is becoming one of the most widely researched issues in the field of IDs (Willner, 2007). This paper will systematically review published reports on the effectiveness of CBT for anger in adults with IDs, and conduct a meta-analysis. Firstly, definitions of terms and a background to the literature will be provided.

Anger and Aggression Definitions

Anger has been defined as a state of emotion that involves various intensities of feeling, ranging from aggravation and annoyance to rage and fury (Speilberger, 1991). It is also recognised that anger is a normal emotion with a particular value, for example, increasing motivation (Taylor, 2002). The term aggression refers to a range of observable behaviours that are intended to do harm (Berkowitz, 1993). The anger construct shares certain properties that overlap with
aggression, however the constructs are not synonymous. The distinction can be summarised by referring to anger as the emotion and aggression as the behaviour (Speilberger et al., 1995).

**Anger and Aggression**

Amongst people with IDs, anger is a frequent problem, and often associated with aggression (Willner, 2007). More specifically, research has shown that anger is a significant activator of aggression. Whilst anger is reciprocally influenced by aggression, anger is neither necessary nor sufficient for aggression to occur (Novaco, 1979; Zillmann, 1979; Novaco, 1994). Novaco (1994) has articulated the relationship between anger and aggression within his cognitive model. He asserts that anger is a subjective emotional state involving cognitions of hostility and physiological arousal, and is a causal determinant of aggressive behaviour.

The hypothesis that anger is an activator of aggression has been empirically investigated. Anger was found to predict aggression by psychiatric inpatients prior to admission (McNeil et al., 2003), and by psychiatric and forensic inpatients post-admission (Novaco, 1994; Novaco & Renwick, 2003; Wang & Diamond, 1999). Anger was also shown to predict aggression in the MacArthur Violence Risk Study (Monahan & Steadman, 1994). The study revealed a link between anger and aggression after following up over 1,100 discharged psychiatric patients, establishing the empirical grounds for anger as a risk factor for psychiatric outpatient aggression (Monahan et al., 2001).

For people with IDs, Novaco and Taylor (2004) conducted a systematic assessment of anger. Their study revealed patient anger to be a significant predictor
of assaults post-admission, controlling for offence history, personality variables, length of stay, IQ and age.

Prevalence of Anger and Aggression in People with IDs

High rates of aggression have been found in various surveys of populations of people with IDs. Harris (1993) conducted a survey amongst 1,362 people in the UK revealing rates of aggression to be 28% in hospital settings and 11% in community settings. Sigafoos et al. (1994) reported similar findings in their survey of 2,412 people with IDs in Australia, revealing an institutional prevalence of aggressive behaviour of 35%, and a community prevalence rate of 10%. Smith et al. (1996) interviewed professionals providing care for 2,277 people with IDs in both institutional settings and in the community. The prevalence rates of aggression were 40% and 21% respectively.

Whilst prevalence rates for aggression are well documented, anger has rarely been assessed outside of research studies (Taylor, 2002). However, Novaco and Taylor (2004) found that anger was predictive of assault in 47% of a male forensic ID sample (N=129). Furthermore, Lindsay and Law (1999) reported over 60% of clients with IDs referred to a community-based service for problems of aggression had clinically significant anger problems. The epidemiological and empirical studies reported indicate that aggression, and by implication anger, are significant issues among the ID population.

Cognitive Behavioural Therapy (CBT)

CBT aims to improve health through changes in thinking and behaviour and has its roots in classical learning theory and social learning theory (Roth & Fonagy, 2005). Cognitive therapy focuses on the internal mental environment of the
individual, whereby cognitions (including irrational cognitive processes) are considered to have been learned and maintained through reinforcement (Roth & Fonagy, 2005). Therapy is concerned with the exploration of beliefs, thinking patterns and emotional responses. This is intended to promote reflection and insight which in turn facilitates an understanding of how maladaptive aspects of functioning are maintained by the individual’s environment and belief system (Roth & Fonagy, 2005). Behaviour therapy has its focus on externally oriented learning and draws from behavioural models of classical conditioning, operant conditioning, social modelling, and instructional learning.

A combination of the principles and techniques of cognitive and behavioural therapies provides the principles of CBT. CBT in the anger literature has focused predominantly on Novaco’s (1975, 1994) cognitive-behavioural model, and has been the most widely adopted approach to the research and treatment of anger (Willner, 2002).

Cognitive Behavioural Therapy in the General Literature

There is a well-established evidence base for the use of CBT in the general literature. For example, the ‘What Works for Whom’ literature provides a critical review of psychotherapy research that indicates the use of CBT to treat a number of psychological problems (see Roth & Fonagy, 2005). With regard to the treatment of anger, CBT within the general literature has a growing evidence base reported in numerous meta-analyses (e.g., Beck & Fernandez, 1998; Del Vecchio & O’Leary, 2004).
**Intellectual Disability (ID)**

The term ‘intellectual disability’ (ID) will be used throughout the review. The term describes people who are characterised as: (1) having below average general intellectual functioning as measured by a standardised IQ test; (2) having concurrent deficits in social and adaptive functioning; (3) evidence of the above difficulties present from before the age of 18. These criteria are broadly those outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) and the International Classification of Diseases (ICD-10; World Health Organisation, 1992).

**The Use of CBT with People who have an ID**

It has been noted that the treatment of people with an ID was absent from the ‘What Works for Whom’ literature (Beail, 2003). It has also been noted generally that there is a gap in our understanding of the emotions of people with IDs (Arthur, 2003). Reviews suggest that research on the efficacy of psychotherapy applied to this population is lacking (Beail, 2003; Willner, 2005).

**CBT Anger Treatment for People with IDs**

Whitaker (2001) reviewed 16 studies conducted between 1978 and 1999, concluding that the evidence for CBT as an effective treatment for anger in people with IDs was weak. However, anger treatment has received growing attention in the ID field and more recent narrative reviews report an emerging evidence base for the effectiveness of CBT interventions for anger in ID populations (Willner, 2005; Taylor & Lindsay 2007; Willner, 2007).
Method

The aim of the current review is to systematically analyse the current literature and provide a meta-analysis of the effectiveness of CBT interventions for anger in adults with IDs.

Search Strategy

The initial strategy involved the search of three major electronic databases (PsycArticles, MEDLINE, and PsycINFO), for the period 1999-2011. Whittaker (2001) concluded that the evidence in the support of the treatment for anger in people with IDs was weak. This comment formed the rationale for reviewing studies from 1999 onwards. It was important that the meta-analysis gave an account of the emerging literature and therefore the search was restricted from 1999 onwards.

Key words anywhere in the title for the term ‘anger’ returned 3439 references. To limit the search to the desired population, key words anywhere in the title for the terms ‘developmental disability’, ‘learning disability’, ‘mental retardation’, and ‘intellectual disability’, returned a total 11,739 references. Each population term was entered individually with the term anger. In conjunction, the four separate searches returned 174 studies.

Selection

The 174 studies were screened for content relevance by consulting the title and abstracts in consideration of the inclusion / exclusion criteria described below. One hundred and fifty four studies did not meet the inclusion / exclusion criteria
and therefore were excluded from the study. Therefore, the search strategy yielded 20 relevant studies to be included in the review (see figure 1).

**Figure 1.** Flowchart diagram of search strategy

*Inclusion Criteria*

Studies were included on the following grounds: (1) they were published in English, in peer-reviewed journals; (2) examined the treatment of anger within a cognitive behavioural framework; (3) were conducted by qualified staff measuring the dependent variable anger; (4) were either randomised or non-randomised controlled trials, or case series designs, and (5) reported on both male and female participants.
Exclusion Criteria

Studies were excluded on the following grounds: (1) interventions that did not use CBT (i.e., any other psychotherapy or pharmacological method); (2) studies that did not measure anger as the dependent variable; (3) studies containing populations other than adults with IDs (i.e., children with IDs; studies from the general literature); and (4) reviews or other non-primary research.

Initial Inspection of the Studies

The 20 studies that met the inclusion criteria were initially reviewed and rated. However, a closer inspection revealed that some were concatenated. Where data had been used more than once, duplicate studies were removed. In these cases, the study chosen for inclusion in the quality appraisal was the most recent study, the study with the largest sample size, or the study deemed the most reliable.

Included Studies

The 12 studies that met the inclusion criteria and were not concatenated with other studies are listed in Table 1. Eight studies that met the inclusion criteria but were concatenated with other studies are listed in Appendix 4. Data for the review was gathered from the full text copies of the studies and extracted raw data from the studies to calculate effect sizes (ESs) where possible.