University of Surrey

A Portfolio of Academic, Clinical and Research Work

Paula Maggi

Volume I
University of Surrey

An Evaluation of a Psychometric Model for Risk Assessment in a Forensic Population of Offenders in Two Secure Settings

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Contents

Acknowledgements vii
Introduction to Portfolio 1

1. Academic Section

1.1. Summary 3


1.3. Dynamic Models Essay: Discuss the Changes in the Psychoanalytic View of Childhood Sexual Abuse and its Repercussions in Adults who have been Abused. 24

1.4. Older Adults Essay: What is Entailed in the Provision of Person-Centred Care? 44

1.5. Neuropsychology Essay: Is Neuropsychological Rehabilitation Effective? 64

1.6. Specialist Forensic Placement Essay: Are People with Psychotic Disorders at Increased Risk of Offending Behaviour? Discuss with Reference to Relevant Theories and Models of Treatment. 82

2. Clinical Section

2.1. Summary 107

2.2. Adult Mental Health Core Placement Summary 109
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.</td>
<td>Adult Mental Health Core Placement Contract</td>
<td>110</td>
</tr>
<tr>
<td>2.4.</td>
<td>Adult Mental Health Case Report Summary: Brief Systemic Intervention with a 35-year-old male Client, presenting with Memory Difficulties and his Wife</td>
<td>112</td>
</tr>
<tr>
<td>2.5.</td>
<td>Learning Disabilities Core Placement Summary</td>
<td>114</td>
</tr>
<tr>
<td>2.6.</td>
<td>Learning Disabilities Core Placement Contract</td>
<td>115</td>
</tr>
<tr>
<td>2.7.</td>
<td>Learning Disabilities Case Report Summary: Behavioural Analysis of Challenging Behaviour by a 29-year-old female Client with Severe Learning Disabilities</td>
<td>118</td>
</tr>
<tr>
<td>2.8.</td>
<td>Children, Adolescents and Families Core Placement Summary</td>
<td>120</td>
</tr>
<tr>
<td>2.9.</td>
<td>Children, Adolescents and Families Core Placement Contract</td>
<td>121</td>
</tr>
<tr>
<td>2.10.</td>
<td>Children, Adolescents and Families Case Report Summary: Assessment and Management of a 9-year-old Boy with Enuresis and Encopresis</td>
<td>124</td>
</tr>
<tr>
<td>2.11</td>
<td>Older Adults Core Placement Summary</td>
<td>126</td>
</tr>
<tr>
<td>2.12.</td>
<td>Older Adults Core Placement Contract</td>
<td>127</td>
</tr>
<tr>
<td>2.13.</td>
<td>Older Adults Case Report Summary: Psychometric Assessment of a 71-year-old male Client with a Deterioration in Mental Functioning</td>
<td>130</td>
</tr>
<tr>
<td>2.14.</td>
<td>Forensic Specialist Placement Summary</td>
<td>132</td>
</tr>
<tr>
<td>2.15.</td>
<td>Forensic Specialist Placement Contract</td>
<td>133</td>
</tr>
<tr>
<td>2.16.</td>
<td>Forensic Specialist Placement Case Report Summary: Analytic Interpretations of the Behaviour of a 27-year-old male Client with Personality Disorder in the Context of his Behavioural Plan</td>
<td>136</td>
</tr>
<tr>
<td>2.17.</td>
<td>Systemic Social Constructionist Consultation Specialist Placement Summary</td>
<td>138</td>
</tr>
<tr>
<td>2.18.</td>
<td>Systemic Social Constructionist Consultation Specialist Placement Contract</td>
<td>139</td>
</tr>
</tbody>
</table>
3. **Research Section**

3.1. Summary 144

3.2. Literature Review: Predicting the Risk of Violence amongst Psychiatric Patients: Risk Assessment and Dangerousness 146

3.3. Small-Scale/Service-Related Research Study on Clinical Placement: The Consistency of Careworkers' Assessments of Aggression and Social Withdrawal in Children in Care
   - Abstract 180
   - Introduction 181
   - Method 184
   - Procedure 188
   - Results 192
   - Discussion and conclusion 208
   - Appendices 219

3.4. Large-Scale Research Study: An Evaluation of a Psychometric Model for Risk Assessment in a Forensic Population of Offenders in Two Secure Settings
   - Abstract 251
   - Introduction 252
   - Method 283
   - Procedure 293
   - Results 299
   - Discussion 333
   - Conclusion 345
   - Appendices 366
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Introduction to the Portfolio

This Portfolio of Academic, Clinical and Research Work contains selected work completed during the three years for the Doctorate (PsychD.) programme in Clinical Psychology. The Portfolio is divided into two volumes. Volume I contains three sections: Academic, Clinical and Research.

Section 1 refers to Academic work. This includes five of the eight essays presented to the course and covers both core and specialist topics. Section 2 refers to Clinical work. It includes details of all the placements undertaken during the course, placement contracts, and a summary of five out of seven clinical case reports. Section 3 refers to Research work. This section includes a literature review undertaken during the first year of the course, a small-scale/service-related research study conducted in the second year, and a large-scale research study conducted in the third year.

In addition, a separate and confidential volume submits in full the five case reports presented in Volume I, together with all placement documentation including evaluation forms, log books and clinical activities.

The work in each section reflects the variety of clients, referral problems and approaches covered during the three years. In each section, the work is presented in chronological order, thereby reflecting the development of interests and thinking over the course.
Academic Section
Summary of the Academic Section

This section comprises five out of eight essays completed during the course, and intends to reflect the depth and breadth of work covered over the three years. The essays are presented in the order in which they were completed. The first three essays presented in this section were written during the second year. They cover issues presented during the Children, Adolescents and Families, and the Older Adults placements, with the third resulting from the teaching on Dynamic Models. The remaining two were part of the work undertaken during the third year. The fourth essay was part of a taught block on Neuropsychology and the fifth covers issues pertinent during a Forensic specialist placement.

The essays cover aspects of the theory and practice of psychological approaches to human difficulties. These have been present during my work with clients across all placements and have informed clinical practice.
We must consider the impact of the academic and scientific training and the intellectual and professional ideals that are transmitted ... 

An ideal may be inherently not only guiding and leading, but also restraining and prohibiting, closing off certain channels of perception and learning. A central point of contrast is that between 'learning from experience' ... [in Bion's sense] ... [an apprentice model] ... and learning from an appraisal of the research literature ... [a scientific model] ... [which] ... indeed should ideally be combined [for providing different, but equally important] sources of knowledge (Mollon¹, 1989).

PsychD in Clinical Psychology

University of Surrey

Children, Adolescents and Families Essay

What Role do Cognitive, Behavioural and Systemic Therapies have in Eating Disorders in Adolescence?

Paula Maggi

Year II

March 1997
Eating Disorders: Criteria, Descriptions, and Characteristics

The literature on eating disorders in childhood and adolescence presents a variety of behaviours associated with food. Although some are well researched, others are less well described or unrecognised (Bryant-Waugh and Lask, 1995; see Lask and Bryant-Waugh, 1992 for descriptions).

Bulimia and anorexia nervosa are categories describing a variety of behaviours and beliefs about food, shape and weight, and with a variety of treatments.

The two disorders differ in age of onset, their affect on gender, and their presentation of clinical symptoms, with research findings suggesting inheritability in anorexia (Bryant-Waugh and Lask, 1995) but not in bulimia (Steinhausen, 1995). Criteria for these disorders is available in DSM-IV\(^1\) and ICD-10 (cf. Bryant-Waugh and Lask, 1995; Steinhausen, 1995; Lask and Bryant-Waugh, 1992). Bulimia develops in approximately a third of cases of anorexia (Treasure, Todd and Szumukler, 1995; Kronenberg, Nachshoni, Neumann and Gaoni, 1994) and those have a poor outcome (Wilson, Rossiter, Kleinfield and Lindholm, 1986; Fairburn, 1981).

Disparity has been found in the incidence of these disorders (Bryant-Waugh and Lask, 1995; Steinhausen, 1995; Dodge, Hodes, Eisler and Dare, 1995; Lask and Bryant-Waugh, 1992). In anorexia the incidence has been reported to vary between 0.08 and 8.1 per 100,000 affecting specific groupings in the population. The prevalence rate of bulimia amongst adolescents and young adult women is about 1% to 2%. Most studies have found that these adolescents were not in treatment, and many do not obtain treatment until in their twenties (Dodge, et al., 1995) as weight is usually maintained within the normal range (Bryant-Waugh and Lask, 1995). Variations in incidence are due to disparity in the methodology of accounts.

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\(^1\) Anorexia Nervosa is diagnosed if there is: refusal to maintain body weight at more than 15% below normal weight for age and height; intense fear of gaining weight or becoming fat, or of normal body weight; disturbed perception or experience of body weight, size or shape; and endocrine disorder manifests in women by an absence of at least three consecutive menstrual cycles. Bulimia Nervosa is diagnosed if there is: recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period of time); a feeling of lack of control over eating behaviour; behaviour aimed at preventing weight gain such as self-induced vomiting, use of laxatives or diuretics, or fasting; and persistent over-concern with body shape and weight.
These disorders most typically onset in adolescence, (Steinhausen, 1995; Lask and Bryant-Waugh, 1992). Anorexia is associated with the transition from childhood to adolescence and bulimia with that from adolescence to adulthood. Although rarely observed in boys, the symptomatology is similar (see Bryant-Waugh and Lask, 1995; Steinhausen, 1994; Freeman and Newton, 1992; Lovett, 1990).

The psychopathology of anorexia and bulimia has been classified into both specific\(^2\) and general\(^3\) types shared with other disorders (Treasure, et al., 1995; Steinhausen, 1995; Freeman and Newton, 1992; Fairburn, Jones, Peveler, Carr, Solomon, O'Connor, Burton and Hope, 1991; Garner and Bemis, 1982). Subjective disturbances in body disparagement (Lask and Bryant-Waugh, 1992) occur as a result of deep dissatisfaction with the body and the self. These behaviours tend to become habitual and can lead to dangerous physical difficulties (Dodge, et al., 1995; Kronenberg, et al., 1994). Given these complications, physical and psychological assessment is mandatory (Bryant-Waugh and Lask, 1995).

Hsu (1990; cf. Lask and Bryant-Waugh, 1992) suggested a multifactorial model of aetiology in which adolescent dieting provides an entry to an eating disorder which can be intensified by adolescent turmoil, low self-esteem, and poor identity formation (see also Button, 1990). The risk is increased with a family history of affective or eating disorders or substance abuse. Others support this view (Steinhausen, 1995; da Silva, 1995; Bryant-Waugh and Lask, 1995; Kronenberg, et al., 1994; Hall, 1987; Garner and Bemis, 1985; Garner and Bemis, 1982), with emphasis on predisposing, precipitating and perpetuating factors of an individual, familial, sociocultural, and biological nature. Developmentally, the disorder settles as the convergence occurs of physical changes and psychosocial challenges (Bryant-Waugh and Lask, 1995; Steinhausen, 1994).

\(^2\) Dysfunctional thoughts and concern about weight and shape, dread of fatness, rigorous and chaotic dieting, laxative abuse, excessive exercise, fasting, and self-induced vomiting.

\(^3\) Eating rituals, social withdrawal, self-harm, chemical misuse, poor concentration, food preoccupation, stealing, depression, obsessive compulsive traits, perfectionism, impulsivity, feelings of guilt, shame and anger, poor self-esteem, difficulties with social adjustment, and attempted or active suicide.
The Role of Treatment

Early diagnosis and competent treatment of eating disorders is essential due to the serious and sometimes irreversible physical and medical complications which interfere in the development of the child. Early decisions are necessary regarding the need for hospitalisation; with severe emaciation an indication of a requirement for inpatient treatment for anorexia (Treasure, et al., 1995). Familial factors may also encourage inpatient treatment (Steinhausen, 1995). In bulimia, indications for admission are similar although weight loss is less significant. Outcome after treatment in a specialist unit has been shown to be substantially better than that in non-specialist services (Bryant-Waugh and Lask, 1995), although relapse after inpatient treatment is common, especially for those under 16 years of age (see Treasure, et al., 1995). Admission may also carry the message that specialist professional staff have skills which parents may not be expected to possess (Dare and Eisler, 1995).

The goals of inpatient and outpatient treatment are similar regarding weight gain, decrease in vomiting, and the stabilisation of eating habits (Treasure, et al., 1995). Once these short-term needs have been accomplished, the long-term goals of treatment include the restoration of a normal eating pattern and the need to understand and alleviate the contributing psychological factors (Bryant-Waugh and Lask, 1995). These are met through psychotherapeutic methods, and the literature suggests a growing need to combine multimodal approaches.

Pharmacological, nutritional, cognitive-behavioural therapy, and self-help support methods have come to dominate research with bulimia nervosa, while individual psychotherapy, behaviour therapy and family therapy have mostly been applied to anorexia (Steinhausen, 1995; Dodge, et al., 1995). Common to all treatments is that clients with eating disorders will feel panic at the prospect of weight gain. Anxiety and despair are common (Treasure, et al., 1995). Success has generally been dependent on the disorder being uncomplicated (by alcohol, drugs, suicidal thoughts, psychosis) and on the willingness of the client or family to change (Steinhausen, 1994). Crisp et al. (1992; cf. Treasure, et al., 1995) suggest that while medical treatment may reduce early mortality, a multimodal approach, including psychotherapeutic treatment, may
reduce late mortality and prevent relapse after discharge from hospital (Steinhausen, 1995).

There is little place for medication in the treatment of eating disorders (Bryant-Waugh and Lask, 1995; Freeman, 1995) with only short-term results (Steinhausen, 1994) and little effect beyond the weight gain which can be achieved through skilled nursing management (Treasure, et al., 1995). This calls for an exploration of the contribution of the main psychological approaches to eating disorders.

**Behavioural Approaches**

Behaviour therapy has been directed at particular aspects of eating disorders (Fairburn and Cooper, 1987), and is mainly based on a 'withdrawal of privileges' with their reinstatement, on a graded basis, determined by weight gain (Bemis, 1987). Some argue that there has been little evidence for its effectiveness, and it is gradually being discarded (Bryant-Waugh and Lask, 1995).

The main approach is that of operant conditioning, regardless of age (Steinhausen, 1995) and this is mostly used in the hospital setting where the control of target behaviours is more easily accomplished (Freeman and Newton, 1992; Vandereycken, 1989). Negative and positive reinforcement schedules are operative in order to motivate the client to gain weight. Some encourage outpatient treatment so that improvements are more likely to be maintained (Bemis, 1987).

Restoration of body weight has been the main target of most therapeutic interventions, particularly with regard to anorexia. Operant conditioning procedures using consistent daily reinforcement, have been used successfully (see Lovett, 1990; Bemis, 1987; Fairburn and Cooper, 1987). While these are an efficient means of bringing about weight gain and maintaining eating habits, longer term outcome is relatively poor, with some clients developing bulimia (Hall, 1987). Within a multifactorial model of eating

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4 Hospitalisation per se, bed rest, seclusion, and tube feeding.
5 Access to recreational activities, visiting privileges, and freedom of movement within a system of rewards.
disorders, weight restoration, though essential treatment in anorexia, is only one aspect of the total therapeutic programme.

A mixture of cognitive and behavioural treatments, with self-monitoring and advising (Fairburn, 1981) and exposure (Fairburn and Cooper, 1987), have been suggested for bulimia.

Exposure and vomit prevention have succeeded in dealing with self-induced vomiting within an anxiety-reduction model in which vomiting is seen as an avoidance behaviour maintained by negative reinforcement (Wilson, et al., 1986; Fairburn, 1981). Exposure has also indicated some success in modifying body image disparagement. Systematic desensitisation has been the only explicitly behavioural procedure to deal with concerns about shape and weight (see Fairburn and Cooper, 1987), though weight gain is mainly short term.

Social learning theory (see Bemis, 1987) suggests that behavioural procedures work by extinguishing the classical conditioned anxiety responses and by altering mediating cognitive process. Wilson et al. (1986) tested this hypothesis by comparing cognitive restructuring (CR) against CR exposure and vomit prevention (CR/EVP) in bulimia. Results indicated that CR/EVP with relapse prevention elements were superior to CR alone in producing cessation of binge eating and vomiting and perception of self-efficacy. One-year follow-up confirmed these results. Simply stopping binge-vomiting episodes in the absence of equipping clients with cognitive coping strategies seems to predispose clients to relapse.

Follow-up studies of behaviour modification (Bemis, 1987; Garner and Bemis, 1982) suggest that clients remain preoccupied with food and weight issues, continue to manifest abnormal eating behaviours and show a poor psychological or interpersonal adjustment.

Critics of the behavioural approach (see Vandereycken, 1989; Touyx, Beumont and Dunn, 1987; Bemis, 1987) have suggested that clients eat their way out of hospital; that long-term effects are questionable; that signs of bulimia and/or vomiting are
developed in clients with anorexia; that early contingency management programmes are coercive and punitive; that the approach neglects contingencies which maintain the eating disorder; and that it shows disregard for individual differences or the therapeutic alliance, and neglects the interactional meaning of the 'hunger strike'. Studies using behaviour modification have also been criticised on methodological grounds (see Fairburn and Cooper, 1987).

Nevertheless, behaviour therapy appears to produce favourable short-term results, and any negative effects depend not on the method itself but on its users (Vandereycken, 1989). It is clear that behaviour modification is an effective method of weight restoration, with the modest advantages (see Bemis, 1987) of being efficient and economical, and using clear, teachable and easily administered technology.

Behavioural studies considering changes in body experience using psychomotor therapy and involving the family have also shown encouraging results. Vandereycken, (1989) and Touyx, et al., (1987) have implemented a lenient, flexible behavioural programme, within a multidisciplinary context, using the classical operant treatment as a negative reinforcer. Despite successful weight restoration, the long-term outcome remains unknown. More rigid behavioural approaches have obtained higher rates of weight gain.

Almost all treatment programmes, whether behaviourally oriented or not, incorporate some aspect of behaviour therapy (Fairburn and Cooper, 1987; Bemis, 1987) using reinforcement for weight gain. Despite focusing on this symptom, behavioural approaches rarely take into account the many functional connections of starvation with other areas of the patient's life. A broader behavioural approach incorporating the cognitive and systemic approaches is needed for eating disorders to be considered a complex biopsychosocial phenomenon. Further, behavioural procedures are not recommended for children (Bryant-Waugh and Lask, 1995) who are in a poor position to give informed consent to a treatment that requires their co-operation.
Cognitive Approaches

Two recent developments have changed behavioural procedures for anorexia: the emergence of bulimia and the recognition of the role of cognitive processes in the maintenance of psychiatric disorders in general (Fairburn and Cooper, 1987). Moreover, a majority of clients with eating disorders show signs of psychiatric disturbances some time after treatment (Dare and Eisler, 1995; Garner and Bemis, 1982), retaining abnormal eating patterns, preoccupation with weight and body image disturbances. While classical behaviour therapy is concerned with the direct modification of overt behaviour, cognitive therapy is primarily designed to produce cognitive change.

The choice of specific treatment method needs to be related to the aetiology and maintenance of eating disorders (Wilson, et al., 1986). According to the cognitive view, concerns about shape and weight are fundamental to eating disorders, of diagnostic significance, and important in their maintenance (Freeman, 1995; Steinhausen, 1994; Fairburn and Cooper, 1987). This approach suggests that a change in attitudes is necessary to achieve full and lasting recovery. Thus approaches which focus exclusively on modifying these patients’ behaviours may not be beneficial to cognitive change.

Models of Cognitive Therapy used in depression and anxiety are well fitted for bulimia, and changes have been recommended for anorexia (Freeman, 1995; Garner and Garfinkel, 1985) with the use of fewer behavioural techniques (see Garner and Bemis, 1982), in view of both positive and negative reinforcement maintaining the behaviour, and with emphasis on the modification of deficits in self-esteem and self-awareness (Fairburn and Cooper, 1987; Garner and Garfinkel, 1985).

Cognitive therapy involves examining the validity of clients’ current beliefs, in the form of automatic thoughts and dysfunctional assumptions, including an analysis of thinking errors which perpetuate the eating disorder. Intervention techniques modify these cognitions (see Fairburn et al., 1991; Garner and Bemis, 1985), and aim at improving self-esteem and overcoming deficits in self-awareness, personal trust, and anxiety.
management (Steinhausen, 1995; Freeman and Newton, 1992) as well as providing education towards the normalisation of the eating behaviour.

A strong therapeutic alliance is recommended to overcome issues of trust, the fear of weight gain (Garner and Bemis, 1982), and to explore meaning in distorted cognitions (Beck and Haaga, 1992). As with behavioural approaches, accepting weight gain is a prerequisite of change with target weights set in collaboration with clients (Fairburn and Cooper, 1987). Garner and Bemis (1982) suggest strengthening the experimental model throughout treatment for a more effective management of anxiety (see also Freeman, 1995).

Fairburn (1981) discusses a treatment strategy for bulimia to interrupt the cycle of overeating and vomiting by increasing coping strategies to control food intake. The strategy also focuses on problem-solving and identifying thoughts which prevent behaviour change, and attempts to challenge and replace them. In addition, behavioural strategies are employed, such as exposure to 'banned' foods to reduce their dietary significance. Results indicate a reduction in frequency of overeating and vomiting and a reduction in the intensity of abnormal attitudes towards food, eating, body weight and shape. No control group or treatment comparison were used. Fairburn et al. (1986; cf. Freeman, 1995; see also Fairburn, et al., 1991; Fairburn and Cooper, 1987) developed this programme further for groups and individual therapy, advocating seven stages with an emphasis on cognitive restructuring, relapse prevention, and follow-ups with continuing self-help. Improvements endure for at least a year post-treatment (Fairburn, et al., 1991; see also Freeman, 1995 for follow-ups in anorexia). Concerns have been expressed (Fairburn and Cooper, 1987) regarding the feasibility of applying cognitive restructuring that has not been individually tailored.

A combination of cognitive and behavioural techniques has been deemed more successful (Freeman, 1995; Steinhausen, 1994; Wilson et al., 1986) compared to a waiting list, cognitive restructuring, behaviour therapy, or drug treatment alone; or to interpersonal psychotherapy and a simplified behavioural version of cognitive behaviour therapy (Fairburn, Jones, Peveler, Carr, Solomon, O'Connor, Burton and Hope, 1991). This latter study suggested that Cognitive Behavioural Therapy is
superior due to the 'specific' techniques that characterise it; supporting Beck and Haaga's (1992) views regarding the 'specificity' of cognitive therapy. Gains were observed in terms of attitudes to shape and weight, attempts to diet, and use of vomiting over the other two modalities. This is of clinical importance as these features have a marked influence on this disorder with importance for relapse.

There is little scientific evidence that CBT in anorexia works and it has not been compared with other treatments in a randomised controlled trial. When successful, this model has been suggested for older adolescents (Steinhausen, 1995) but with little indication as to an optimal younger age. The need to explore formation and change of beliefs during therapy, and the need for restructuring emotions as well as cognitions (Beck and Haaga, 1992), has also been expressed.

**Systemic Approaches**

Within Family Therapy, Minuchin, and Selvini-Palazzoli developed major aspects of their contribution through the treatment of eating disorders (Dare, Eisler, Colahan, Crowther, Senior and Asen, 1995; Dare and Eisler, 1995; Bryant-Waugh and Lask, 1995; Viaro, 1990; Selvini-Palazzoli and Viaro, 1988; Hall, 1987; Minuchin, 1985). Therapy focused on tendencies for intergenerational alliances and family configurations (Dare, et al., 1995; Lange, Schaap and Van Widenfelt, 1993). Families with children with eating disorders were described as over-involved, overprotective, rigid and conflict-avoiding, hindering the development of individuality (see Bryant-Waugh and Lask, 1995; Hall, 1987).

Anorexia was seen to result from a historical relational organisation of the family (Selvini-Palazzoli and Viaro, 1988) with relationships described as 'imbroglio' (Vaz-Leal and Salcedo-Salcedo, 1995; Viaro, 1990). Palazzoli (1974; cf. Bryant-Waugh and Lask, 1995) considered families with anorexia as rigid, homeostatic systems governed by secret rules. Others (see Lieberman, 1995) add that rules were about keeping appearances. Children with anorexia are seen as triangulated in unacknowledged marital conflicts. Rather than negotiate change, the family supports the symptoms to maintain the status quo (see also Dare and Eisler, 1995). The therapeutic relationship was seen as instrumental during sessions, consisting of an exchange of information
between therapist and patient. Outside the therapeutic relationship, the therapeutic effects of this exchange occur in a much wider context and includes other people, especially the family (Viaro, 1990). The early stages of treatment were directed towards reversing the client’s eating disorder, while later stages focused on family issues (see Hall, 1987; Minuchin, 1985).

Family intervention is currently the only treatment for anorexia nervosa shown to be effective in the long term by randomised controlled trials (see Dare and Eisler, 1995) for clients under 18, whose condition is not chronic (less than 3 year duration) and with an early onset. In the Maudsley Hospital studies, family therapy has been shown to be effective together with parental counselling (Bryant-Waugh and Lask, 1995; Dodge, et al., 1995; Freeman and Newton, 1992), with some exceptions (Dare et al., 1995). Therapy focused on strengthening the parental subsystem, and on issues of adolescent psychological development, particularly separation and individuation, with improvements in attitudes towards eating (Le Grange, Eisler, Dare and Hodes, 1992). Follow-up findings confirmed that, after five years, the intervention was also effective in preventing relapse (Treasure, et al., 1995).

The Maudsley Hospital studies (Colahan, 1995; Dare and Eisler, 1995; Le Grange, et al., 1992), comparing family counselling with family therapy, indicated that counselling was more effective (achieving higher weights), and longer-term in families where parents expressed high levels of criticism of the client. Explanations suggested that counselling, which does not address feelings of guilt and self-blame, was perceived as less threatening. Findings do not fit easily with an explanatory model which assumes that therapeutic change occurs through a direct restructuring of family patterns. Parents’ firm control over the child’s eating habits needs to be combined with the therapist’s awareness of the parents great difficulties (Dare and Eisler, 1995). Other studies confirm the effects of EE in poor therapeutic outcome (see Evans and Street, 1995; Le Grange, et al., 1992), particularly when the critical attitude is from the mother (Van Furth, Van Strien, Martina, Van Son, Hendrickx and Engeland, 1996).

While dysfunctional family patterns may predispose or precipitate the onset of an eating disorder (Bryant-Waugh and Lask, 1995), there is no evidence of their isolated
contribution to causation, with little indication of whether they result from or predate the disorder (Van Furth, et al., 1996; Hall, 1987) or are a systemic response to the metabolic crises of one member (Lange, et al., 1993). Studies of family interactions (see Hall, 1987) indicate that parents of those with anorexia may lack confidence, and have difficulty expressing firm opinions. Others have found no support for any family characterisation (see Bryant-Waugh and Lask, 1995; Dare, et al., 1995; Hall, 1987).

Eisler (1995) suggests that family typologies are unhelpful since much interaction is simply a normal developmental process (e.g. struggle for independence, children leaving home, sexuality issues). He further suggests that research explore the conditions where some families tackle their difficulties more effectively than others.

In contrast to anorexia, a role for family therapy has yet to be established in bulimia by empirical studies. The few anecdotal reports that exist are based on low numbers or single case studies (Bryant-Waugh and Lask, 1995). The lack of specific descriptions of treatment for adolescents with bulimia may partly be due to the secrecy of the behaviour preventing the problem being recognised (Dodge, et al., 1995). Nevertheless, results using hospital staff as a surrogate family during in-patient treatment have been encouraging (Kronenberg, et al., 1994), and similarly when evaluating the effectiveness of family therapy in a group of bulimic adolescents (Dodge, et al., 1995). In the latter study, the therapy was problem-oriented using a structural framework. Discussions focused on strengthening the parental subsystem and in differentiating between control over life-threatening and age-appropriate behaviours.

Although Family Therapy is recommended for those under 18 and for adults whose family is thought to contribute to the disorder (Freeman and Newton, 1992), it was found that few families are motivated to co-operate in attending therapy (Hall, 1987). Current systemic approaches have moved from first-order certainty to a second-order cybernetic where work focuses on discourse as stories, conversations and constructions, and attention is paid to how reality and meaning are constructed and negotiated with others via language (Speed, 1995; Anderson, Goolishian and
Winderman, 1986; Keeney and Ross, 1985). This work may encourage positive research outcomes in families with children with eating disorders.

Conclusions

Many approaches are widely used and are thought helpful with eating disorders. The three approaches reviewed each make some contribution to the essential therapeutic goals in the treatment of eating disorders as identified in the introduction. However, few have been evaluated in isolation and therefore some of their value remains uncertain (Fairburn and Cooper, 1987), although behavioural methods reveal short term effectiveness inducing weight gain. Cognitive behavioural methods have been evaluated as effective for bulimia but not necessarily with anorexia. Family therapy, though widely used, has only one study indicating superior results compared with individual therapy (Steinhausen, 1995).

In view of the poor prognosis of many clients with eating disorders (Van Furth, et al., 1996; Steinhausen, 1995; Vaz-Leal and Salcedo-Salcedo, 1995; Bryant-Waugh and Lask, 1995; Kronenberg, et al., 1994; Freeman and Newton, 1992), and despite psychological and medical intervention, further clinical and research investigations need to continue to explore multifactorial interventions (da Silva, 1995; Garfinkel and Garner, 1983) and the effectiveness of different elements of single approaches. Frameworks have been suggested (see Freeman and Newton, 1992; Garner and Bemis, 1985; 1982).

Psychotherapeutic efforts are helpful within a multidisciplinary approach, particularly for more severe cases (see Kronenberg, et al., 1994; Freeman and Newton, 1992). The complex nature of eating disorders provides scope for different complementary models. There is no fundamental incompatibility between family therapy, operant conditioning and cognitive therapy, although it may be desirable to adjust specific strategies to reduce dissonance between the different aspects in a comprehensive plan (Garner and Bemis, 1982). It is of importance not to overlook the need to help families with the medical crisis in a practical way (see Lange, et al., 1993).
Apart from clinical observations and theoretical accounts, the literature presents little empirical evidence for a pure approach. Although limited in a comprehensive fashion, the approaches reviewed have a useful role in accounting for proximal factors which lead to certain behaviours and how these are maintained and strengthened (de Silva, 1995; Fairburn, 1981).

While anorexia is often chronic and unremitting, bulimia takes an episodic course with remissions and relapses (Steinhausen, 1994). The questions that remain unanswered are whether treatment methods improve the long-term recovery and whether chronicity has a chance of recovery. Little is known about prevention of eating disorders and this should become a priority area (Bryant-Waugh and Lask, 1995). No prognostic factor has been found to be consistently predictive of outcome across studies.
References


Discuss the Changes in the Psychoanalytical View of Childhood Sexual Abuse and its Repercussions in Adults who have been Abused

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Year II
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General Observations about Sexual Abuse

Definitions of childhood sexual abuse (CSA) have varied over the years in the literature. Freud (1981; cf. Krout Tabin, 1993) used the term 'seductions' to refer to abuse and conceptualised observations of the primal-scene before age 2 as indications of abuse. He later included the buccal cavity and the rectum, but gave extragenital processes no etiologic importance (García, 1987). Over the years, the definitions of CSA have expanded to include any sexual activity involving children, ranging from sexual stimulation to intercourse (see Cohen, 1993; Krimendahl Wolf and Alpert, 1991). CSA often co-exists with physical abuse (Bryer, Nelson, Miller and Krol, 1987; Steele, 1980).

The literature indicates that caregivers who abuse are most often those in parental positions, inviting a role reversal dynamic, giving priority to their needs over the child's (Steele, 1980). Most of the literature is concerned with incest with only a few articles about perpetrators in maternal roles who appear to have more severe pathology than do fathers (Krimendahl Wolf and Alpert, 1991). There is some evidence of the link between dysfunctional aspects of perpetrators and family dynamics in abusive families (see Cohen, 1993; Panken, 1991; Krimendahl Wolf and Alpert, 1991; Walker, Katon, Harrop-Griffiths, Holm, Russo and Hickok, 1988). The triangulation dynamics exist where the father, usually with an alcohol problem, uses threat to express affection in a sexual fashion to the child; while the mother, an unreliable early object, provides inconsistent care, and is distant or depressed, leaving the child unprotected. Steele (1980) suggests that CSA is an expression of seriously disturbed family relationships.

Ranges of prevalence of sexual abuse vary. For non-clinical populations the figures vary from 20% to 60% for women and 10% to 40% for men (Christo, 1997; Joyce, 1995; Cohen, 1993). Epidemiological research (see Rachman, 1995; Stone, 1989) indicates that 19% of adult women had a history of incest; with 10% reporting an experience with a relative, and 1% victims of father-daughter incest (Hare-Mustin, 1983). Figures for psychiatric populations tend to exceed those for the normal population. In a small clinical study, Rosenfeld (1987) found that approximately
33% of psychiatric outpatients had been molested; and 44% to 50% in clinical populations in general (see Briere and Zaidi, 1989), with 33% reporting experiencing sexual and physical abuse (Bryer, et al., 1987).

Although these figures present a challenge to psychotherapy, studies of women victims who have had psychoanalysis in adulthood indicate that clients respond well to treatment (Panken, 1991).

**Psychoanalytic View of Childhood Sexual Abuse**

*The Seduction Theory: Neurosis and its External Explanations*

Based on a sample of 18 cases, Freud (1896; cf. Joyce, 1995; Gardner, 1993) conceptualised neurosis in adults as the result of CSA: a buried traumatic memory, causing psychic pain, of sexual intrusion inflicted upon the child from an external source. Freud stated that this traumatic experience had taken place before puberty (see Rosenfeld, 1987) and involved mainly sexual relationships between siblings, and/or adults and children. The literature presents an ambiguous position regarding Freud's statements as to the seducing perpetrators. Garcia (1987) stated that although Freud acknowledged the role of adults in seducing children, he did not mention the child's parents as perpetrators. Others (Joyce, 1995; Rosenfeld, 1987) stated that assaults were traced to parents or caregivers. Garcia (1987) questions Freud's understanding of the sexual life and the mental capabilities of children, and highlights his limitations in exploring the dynamic processes responsible for the traumatic events.

Freud soon acknowledged that his seduction theory was implausible. It appears that a series of events contributed to Freud's shift from his seduction theory; his clientelle had fled from treatment (Krout Tabin, 1993), none of his cases had shown benefit from his interpretations, and confirmation of the abuse was obtained in only two of his cases (Garcia, 1987). In self-analysis, he found he had experienced sexual wishes for his mother, and stated that childhood fantasies had a predilection to seize upon the theme of parents (Rosenfeld, 1987). Freud realised that neurotic symptoms were present in men and women outside the therapeutic context (Joyce, 1995), and that this included
himself and his siblings (see Powell and Boer, 1994). Reality forced Freud to concentrate on inner processes of the unconscious in infantile sexuality, to the exclusion of recognising a history of childhood seduction. This shift marked the birth of his theory of psychosexual development.

*A Shift from the Seduction Theory. The Oedipus Complex: Neurosis and its Internal Explanations*

Freud's seduction theory acknowledged the existence of CSA (Krimendahl Wolf and Alpert, 1991). His shift from the seduction theory indicated a move from external explanations of childhood sexual abuse to internal explanations, in the child's inner fantasy (Sayers, 1996; Joyce, 1995; Gardner, 1993). The question was whether individual's reactions to sexual desires in childhood had been repressed or distorted (see Powell and Boer, 1994; Panken, 1991).

Freud (1916; cf. Garcia, 1987) stated that a fantasy of being seduced when no seduction occurred is usually employed by a child, in their puberty, to screen the autoerotic period of his sexual activity, the exploration of which led to the conception of the Oedipus complex. In other words, the child's erotic fantasies with the caregiver of the opposite sex are projected onto the adult in order to avoid guilt and fear of castration by the parental imaginary superego totem figure for his/her sexuality (see also Sayers, 1996). Erotic wishes were conceived as universal and a normalised pattern in the developmental cycle of the child, providing release of inner sexual tensions (Joyce, 1995) displayed in dreams, symptomatology and ambivalent feelings towards the desired object (Gardner, 1993). Gardner (1993) argues that in dealing with the tension of this unrealisable project, the child resolves the Oedipal tension, facilitating his/her evolution to independence. The parent provides a safe and protected space for the child to evolve into independence and form erotic relationships with other objects; the child needs the parent to remain in role in order to experience this stage of development without guilt. However, while acknowledging the sexual wishes of the child, Freud did not mention whether parents felt or corresponded these wishes (Rosenfeld, 1987).
Freud's shift from the seduction theory meant that instead of actual trauma, memories were seen as fantasy, and emphasis was moved from the adult perpetrator to the seductive behaviour of the child (Good, 1995). In further papers, Freud (1896b, 1896c; cf. Garcia, 1987) stressed that it is not the experiences themselves which act traumatically but their revival as a repressed memory; thus placing explanations of neurosis in the psychological realm rather than as an extrapsychic experience. Freud's understanding of the full power of the unconscious began only with his shift away from the seduction theory (Krout Tabin, 1993). Nevertheless, this shift did not preclude his awareness of the existence of sexual abuse in clinical practice (see Cohen, 1993; Rosenfeld, 1987).

**Criticism to Freud's Shift from the Seduction Theory to the Oedipus Complex**

Writers have severely criticised Freud for his shift from the seduction theory. Jortner (1985) states that Freud's abandonment of the seduction theory contributed to the minimisation and societal denial of CSA, and that one can no longer assume that all reports are fantasies based on unconscious sexual desires, given the evidence available.

Masson (1984) has accused Freud of abandoning his seduction theory as it was a professional liability to him (cf. Joyce, 1995; Rosenfeld, 1987) and states that his decision was based on corrupt subjective factors to protect colleagues from allegations of abuse (Sayers, 1996). Other critics also assert that personal factors contributed to Freud's rejection of the seduction theory. Rosenfeld (1987) suggests that personal conflicts with his dying father led Freud to abandon a theory which implicated fathers as perpetrators of seduction in childhood. Given data on Freud's self-analysis mentioned earlier, abandoning the seduction theory meant that the family and civilised men, including his father (Joyce, 1995) and himself in relation to his own children would not be at public risk of being perceived as perpetrators of CSA (McCarthy, 1982). Freud had to construct a psychology of neurosis which was psychologically acceptable for him in order to reduce his intrapsychic suffering that he and his siblings could have been abused by his father (Kupfersmid, 1992).
Powell and Boer (1994) argue that Freud’s recognition of his suggestive methods to interview clients may have contributed to his shift from the seduction theory, reinterpreting his clinical data as Oedipal material. While emphasising the importance of trauma, they warn us of the dangers of misdiagnosis.

Recently, the British Psychological Society (1995) published a document questioning the status of repressed memories before the age of 4. When abuse has occurred prior to age 4, memories of such experience might not be retrievable in adulthood in a narrative form, as early memories either cannot be accessed or do not exist in an accessible form. Many accounts of clinical cases illustrate the bodily sensations of adult victims of CSA and their difficulties in verbalising their memories (Holmes, 1996; Karasic, 1993; Bernstein, 1989).

**The Post-Freudians**

Freud had close relationships with two men who contributed to further developments regarding sexual abuse; Abraham and Firenczi. However, both men were harshly criticised by Freud for their work, thereby preventing their contributions from becoming publicly accepted.

Good (1995) gives a thorough description of Abraham’s (1907) contribution to the development of Freud’s theory of CSA. Abraham took Freud’s initial ideas of the actuality of sexual abuse, stating that the ‘traumatophilic diathesis’ was a determinant of the disorder later displayed and the content of the victim’s ideation. Abraham departed from Freud by focusing on the predisposition which some children have to developing neurosis or psychosis after a sexual trauma. While acknowledging the environmental conditions of trauma and their effects on the form of neurosis developed in later life, Freud corrected Abraham by stressing the fantasy aspects and by noting that the line between conscious and unconscious was not established. Abraham’s assertions ignored the developmental factors in children in terms of their cognitive and psychosexual stages, and also focused on the victim’s behaviour rather than on the perpetrator’s.
It was Firenczi (1933, 1955; cf. Krimendahl Wolf and Alpert, 1991) who furthered psychoanalytic views of childhood sexual abuse by focusing on the reality of sexual trauma. His contributions expanded to include an explanation of the dynamics of power relationships in abuse, drawing attention to the mirroring situation in the therapeutic relationship. Challenging the traditional psychoanalytical stance, Firenczi encouraged the analyst to adopt a warm maternal role, introducing humanistic measures to treat sexual trauma, moving away from the authoritarianism he felt repeated the trauma (Katz, 1988). Firenczi acknowledged the perpetrator’s predisposition to abuse the child’s needs for love and tenderness. He was a pioneer in mentioning the child’s introjection of the abuser’s guilt in their identification with the aggressor (Joyce, 1995). By this, he stressed the child’s efforts in maintaining the parent as the ‘good object’ despite the psychological cost (Krimendahl Wolf and Alpert, 1991). Firenczi (1924, 1933) has been much criticised for his ‘active therapy’ and his beliefs about touch between analyst and client; however, his advances in the notions of transference and countertransference as key resources in therapy, and conceiving the analyst as a new object are anticipations of contemporary concepts (cf. Katz, 1988). Freud’s criticism of his ideas mirror those he made of Abraham (Good, 1995), considering his advances an erroneous return to the seduction theory.

Good (1995) suggests that the psychoanalytic arena was affected unconsciously by these rejections, inhibiting reconsideration of CSA for many years. He interprets this as psychoanalysis being upgraded from its ‘latency’ phase to its ‘adolescence’ phase, leaving open the possibility for further learning.

**Current Psychoanalytic Views**

The past decade or two have seen changes in the psychoanalytic awareness of CSA. The focus has moved from fantasy to actual sexual abuse; that is from internal to

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The confused child gives the adult what they want in order to obtain the affection and love the child needs; raping the child’s body and soul and leaving lasting psychological wounds in which the adult is programmed to repeat the situation by recreating the victim role or victimising others (Rachman, 1995).
external traumatic factors (Good, 1994). Current psychoanalytical considerations of CSA do not question the veracity of reports of sexual abuse and acknowledge the experience’s traumatic consequences; and therefore have encompassed historical positions by both accepting the role of fantasy in psychosexual development (Joyce, 1995) while asserting that actual sexual trauma in childhood has different and more profound consequences than fantasies. There is an attempt to understand the impact of external trauma on the internal psychic world.

A further issue being discussed is whether actual experience or the subjective meaning put into the actual experience cause a difference in strength of impact on the victim of CSA (see Rosenfeld, 1987). Reports of victims of sexual abuse confirm both positions: that abuse has an impact on their lives and that this impact affects people differently (see Coffey, Leitenberg, Henning, Turner and Bennett, 1996; Holmes, 1996; Good, 1994; Karasic, 1993; Bernstein, 1989; Beck and Van Der Kolb, 1987; Bryer, et al., 1987). Ulman and Brothers (1988; cf. Joyce, 1995) add that the unconscious meaning of CSA causes trauma by shattering central organising fantasies. The risk, according to Rosenfeld (1987), is in approaching clients with an a priori conviction of the nature of their experiences and, as analysts, robbing the client of the chance to relate to their experiences.

Will (1990) describes the professional stance of many contemporary psychoanalytical views regarding Firenczi’s (1949) encouragement of the analyst to experience empathy with the reality of the analysand’s experiences. While some analysts reject reassuring the patient in order to facilitate transference, others acknowledge the effects of CSA transference on the therapist and advocate a position of compromise between the two.

Joyce (1995) mentions that theories which rely on social and cultural explanations of CSA are more likely to reject Freudian theory, while theories which address the

2 However, there are those who conceptualise some sexual experiences between siblings as exploratory and rewarding, almost like preparations for further object relations (Steele, 1980). It is those incestuous sibling relationships in search for love, acceptance and affection which are potentially dangerous and can lead to feeling betrayed, exploited and abandoned.

3 Bowlby, and his followers, feel that actual sexual abuse has an impact on the person who becomes the victim of the abuse. Klein, and her followers, argue that it is the subjective interpretation of the victim which distinguishes between strengths of impact for each individual (Rosenfeld, 1987).
abuse’s impact on the child’s developing personality structure are more likely to make use of psychoanalytic concepts.

Repercussions of Changes in the Abused Adult

It is currently accepted that CSA disturbs the developmental process in the child and leaves lasting consequences (Krout Tabin, 1993; Cohen, 1993), correlating significantly with various psychiatric disorders in adulthood (Coffrey, et al., 1996; Rachman, 1995; Powell and Boer, 1994; Morrison, 1989; Walker, et al., 1988; Bryer, et al., 1987). It is of clinical interest to note that similar symptoms can emanate from sources other than sexual abuse, and that victims of abuse present different strategies to survive their trauma (see BPS, 1995; Good, 1994; Panken, 1991; Krimendahl Wolf and Alpert, 1991).

Changes in the psychoanalytic views of CSA have had an impact on the recognition of long-lasting consequences for those adults who were victims of the abuse as well as for the dynamics the analyst will consider of importance in the therapeutic relationship for clinical improvements. First we consider the repercussions of CSA on victims. A vignette of a clinical experience (see Appendix 1) is presented to illustrate the points suggested in the literature. Second we focus on the usefulness of transference and countertransference as contemporary tools of communication in therapy.

Long-lasting Symptoms in Victims of Abuse

Abuse occurs within a relationship of unequal nature, where the parent is in the more powerful and controlling position and the child is in an emotionally and physically dependent role (Panken, 1991). Anna Freud (1981; cf. Joyce, 1995; Cohen, 1993) elaborated how molesting disrupts the normal developmental stages of childhood sexuality and prevents the overcoming of the Oedipus complex and subsequent moves into latency.

When the adult breaks the child’s sexual fantasy by turning it into reality, the adult assigns the child a role of the seductive and guilty child (see Gardner, 1993),
invalidating the child’s ability to play with infantile sexual fantasy. The child develops a distorted and suspicious view of the world, with difficulties in the separation and individuation phases of development, with isolation and difficulty in reaching out to others for help and trust (Steele, 1980; Panken, 1991). The younger the child, the more serious is the risk that the child will develop difficulties with ego developments and object relations in their confused world of fantasy and actuality; with younger children acting as ‘containers’, in Bion’s sense, for the adult’s loss of control during oral penetration (see McCarthy, 1982).

CSA contributes to disruptions in three related areas of self-development: self-integrity, self-regulation, and problems with object relations (see Christo, 1997). It is now well established that certain factors contribute to more damaging consequences in adulthood. These are extended periods of abuse, bodily penetration, using force or violence, and unsympathetic reactions from the adults to the child, particularly when disclosing (Coffrey et al., 1996; BPS, 1995; Panken, 1991; Stone, 1989). Cohen (1993) adds that it is the non-empathic environment in which such acts are permitted to occur, and the feeling of not being cared for (Steele, 1980), which are the most destructive, leaving “...pervasive effects on basic ego functions [the self]... and on sexual behaviour [how the self expresses itself sexually]” (p. 216-217).

In treatment, the most observed behaviours and symptoms have been frequently described. Stone (1989) provides an extensive list of symptoms, attitudes and traits, disturbances in object relations and other features commonly found in incest victims. Bernstein (1989) contributed criteria to distinguishing real experiences of CSA from fantasy. He distinguishes feelings of panic and depersonalisation in actual sexual abuse from feelings of anxiety and embarrassment when reporting fantasy. A major id resistance in victims of abuse is their need for a real relationship with the analyst, and their wish to be seduced by them (see also Cohen, 1993).
The literature mentions a variety of symptoms of CSA\(^4\) that clients bring into the therapy (see Gudjonsson, 1997; Holmes, 1996; BPS, 1995; Rachman, 1995; Powell and Boer, 1994; Cohen, 1993; Gardner, 1993; Panken, 1991; Krimendahl Wolf and Alpert, 1991; Bernstein, 1989; Stone, 1989; Walker, et al., 1988; Beck and Van Der Kolk, 1987; Steele, 1980). As a result of being abused in childhood, symptoms are the results of a damaged ego, superego and id, with repercussions on the quality of life, and on object relations which victims are able to achieve with others.

Transference and Countertransference

Freud (1910, 1959; cf. Jortner, 1985) considered countertransference to be a useless obstacle to therapy. Contemporary psychoanalysts have used transference and countertransference as valuable means of communication. Panken (1991) suggests that transference serves to resolve conflicts and fantasies so that the client can accomplish a more adult role. In countertransference, the analyst mirrors the parent role and enables growth, avoiding punitive reactions, to confirm the client’s sense of autonomy and mastery (Cohen, 1993). Gardner (1993) states the importance of the analytical space for victims of abuse to create order of meaning in their lives. In therapy there is a place for the creation of the historical narrative of the abuse and analysis of current relationships through transference interpretation. An externalisation of introjects occurs by projections and actualisation, and new opportunities develop to relate differently to external objects (see also Krause Prozan, 1987).

Nevertheless, in view of Firenczi’s acknowledgement of the power differential between analyst and analysand (see Krimendahl Wolf and Alpert, 1991), it is not surprising to find that female clients are also vulnerable to experiencing abuse by therapists and other health professionals\(^5\) (see Krause Prozan, 1987; Hare-Mustin, 1983).

\(^4\) These are to mention just a few: post-traumatic stress, dissociation, depression, eating disorders, castration fears, cognitive confusion, masochistic behaviour, feelings of fragmentation, need for punishment, low self-esteem, poor sense of identity, suspicious attitudes, poor trust, disturbing dreams, sexualised behaviour, a tendency to repeat the pattern of abuse, feeling different from others, phobias, identification with the abuser, splitting between the good and bad aspects of the caretaker, borderline personality disorder, difficulties in object relations, impairments in superego development, shame, guilt, suicide, castration and separation anxiety, self-mutilation and substance misuse.
The process of transference and countertransference in therapy is not a simple one. Gardner (1993) warns analysts about the risks associated with working with victims of abuse. Identifications as abusers, as experienced by the patient in transference, and therefore the patient's experience of the therapy as associated with molestation or intrusive attack need to be challenged by early interpretation. However, there is an understanding that the analyst needs to contain these feelings until they can be converted into manageable meanings by the client. Bernstein (1989) adds that on transference, there is a tendency first to deny the reality of the client's experiences and later to get caught up in the frightening aspects of the reality endured.

Conclusions

Psychoanalytical views of CSA began with Freud's proposal of the seduction theory. There is some debate as to whether he abandoned his theory in favour of the Oedipus complex, where memories of abuse were seen as a fantasy present in the developmental stages of children. Contemporary views of sexual abuse have managed to combined both aspects of this historical change. The present climate in which sexual abuse can be confronted is partly due to the cultural impact of Freud's ideas (Krout Tabin, 1993). While acknowledging the psychosexual stages of childhood, it is not possible to ignore the reality of CSA, given the evidence of its occurrence and the lasting consequences adults endure. Psychoanalytic psychotherapy, with the use of powerful tools of communication such as transference and countertransference, is able to facilitate the externalisation of the victim's introjected feelings that belong with the abuser, and provide a context for development and growth within the relationship between analyst and analysand which can then be transferred to other object relations.

Nevertheless, some (see Good, 1995) indicate that psychoanalytic views are still in their adolescent period and are still developing. Various aspects of the dynamics of abuse are still to be mentioned in the psychoanalytic literature (see Joyce, 1995;

Studies indicate that 5 to 13% of 460 physicians engaged in some type of eroticism with their patients and 5 to 7.2% had had sexual relations; while 1 in 20 male psychologists admitted having sexual intercourse with their female clients, 1 in 200 of the female psychologists reported such contact; and 5.5% of male PhD psychologists and 5% of male psychiatrists admit to having intercourse with female patients (see Hare-Mustin, 1983; Krause Prozan, 1987).
Krimendahl Wolf and Alpert, 1991), and in particular, social and political approaches. There has been little empirical research from a psychoanalytical perspective, and treatment outcomes vary widely.

The pervasiveness of sexual abuse is still unclear. Many contemporary studies of CSA fail to take normative development into account (see Joyce, 1995 for references). Studies indicate that a high percentage of women from non-clinical populations had experienced sexual activity with an older person as children. Studies also indicate that genital touch between parents and children is far from zero prevalence (Rosenfeld, 1987).

The recent report of Recovered Memories from the BPS (1995) recommends that therapists adopt a stance where all positions within the psychoanalytic view are promoted. The report states that the therapist should be alert to a range of possibilities; that a recovered memory may be literally true, metaphorically true or may derive from fantasy or dream material.
References


APPENDIX 1: A Clinical Case Study. An illustration of the Difficulties Clients bring to the Therapy from a Psychoanalytic Perspective.

A 30-year-old female client was referred to the Psychology Services to work on emotional difficulties with her husband. The client and I met for approximately ten sessions. Her husband was a key figure for the client who, at 18, had left her violent home and established a home with him. He had developed a cocaine addiction and was violent to her and their two daughters. He was lying and stealing from the house to finance his addiction. During sessions, the client spoke about the sexual abuse she endured from her step-father since age 9. Her English step-father engaged in sexual intercourse with her and invited her Indian mother to participate in the abuse. Her mother, who showed signs of submissiveness and depression, allowed for the abuse to occur until the client reached 16 years of age. It seemed that her mother had been like another child in the family. The client expressed in somatic ways her disgust for her step-father's smell of sweat and alcohol, and his weight over her during the rapes. After the abused had stopped she became sexually involved with several men and found it difficult to achieve pleasure with them.

In the sessions, she described the sexual abuse with poor affect. It was through supervision of my work that I began believing in the actuality of her experiences, and I was able to overcome her defences of disassociation from pain. She also appeared self-reliant and with difficulties trusting others. It took her several sessions before she was able to confide her experiences of abuse to me. With time, she described the anger she felt for her mother for abandoning her. She began to experience her feelings of loneliness and feelings of being different to other children. However, during her childhood, she had believed that all children endured this kind of treatment. This client grew up in an environment that encouraged the destruction of her fantasy world. She had not only been abused by her step-father but this had taken place in an atmosphere in which she had been abandoned by her mother and in which general reality testing was difficult.

During her childhood, the client had been able to experience strong attachments towards her maternal grandmother, who protected her from the abuse at times and
who finally broke contact with her own daughter in order to express her anger. Nevertheless, her mother had experienced abuse herself as a child and felt unable to break the cycle of abuse. The history of the client's grandmother was unclear. However, strong object relations, who were outside the abusive pattern, seemed to have helped the client to strengthen her ability to resist severe depression or even psychosis. In addition, the client developed rigid standards for herself which she kept and were discussed during therapy, and which helped her to ward off her self-hatred and her self-destructive impulses (see Karasic, 1993).

In the transference I began to experience the horror of her experiences and had to seek supervision in order to clarify my need to protect her from the pain of her memories. At other times I felt a sense of frustration and anger towards her for taking her husband in, time after time. Feelings of projective identification were used to give meaning to feelings that the client had introjected from her aggressor.

In the sessions, the client was able to explore her needs to remain with a man who abused her and made her feel unprotected. She also explored her identification with the aggressor in her fears of becoming an abuser of her two daughters. Her eldest daughter had just reached her ninth birthday; the age she began to experience abuse. She also began to acknowledge the split feelings (warmth and hostility) she had for her stepfather and mother. Her parents had made her feel special within the household, as her sister was excluded from the intimacy she shared with them, and they had also initiated her into feeling sexual pleasure. In addition, hostility at their use of power and their destruction of her fantasy world was also expressed. After restoration into consciousness of her anger and painful sensations, she began recovering some of her pleasurable feelings which allowed her to enrol in a course of further education for a master's degree. She realised that she did not need to maintain a life of decisions which kept her compulsively repeating her role as a victim of abuse.

By the end of therapy, the client had managed to put an ultimatum to her husband to seek rehabilitation for himself and she changed the locks in their home in an attempt to stop him from coming into the house. Nevertheless, the client felt concerned about not being able to trust men. Since her relationship with her husband had deteriorated, the
client expressed concerns that separation made her vulnerable to establish relationships with the potential risk of exposing her children to abusive step-fathers. She felt that many of the issues, which stem from her experiences with abuse - namely, her feelings towards her mother, towards her sister who was not abused, and towards feeling vulnerable - had not been fully resolved. She was referred to a group for women who had been sexually abused to begin sharing her experiences with others and to continue her work for a meaningful order in her life.
What is Entailed in the Provision of Person-Centred Dementia Care?

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Year II
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What is Dementia?

The two major mental health problems in industrialised societies in people age 65 and over are dementia and depression (Kitwood, 1997b; Woods, 1995d). These conditions create difficulties for individuals and for their families, and also make great demands on health and social services, with numbers in the over 75 age group growing (Holden and Woods, 1995; Hall, 1990).

Dementia is a progressive organic condition with deterioration of the brain (Sixsmith, Stilwell and Copeland, 1993), and with a difference of rate and presentation between normal ageing and dementia (Woods, 1996a). Its prevalence is growing, affecting between half and one million people in the UK (Kitwood, 1997b); with 4% to 7% rates in those over 65 and 20% rates in those over 80 years of age (Holden and Woods, 1995; Byrne, 1994). The prevalence into extreme old age is unclear (Jacques, 1992).

Diagnostic accuracy of dementia is confirmed at post-mortem (Woods, 1996b; Holden and Woods, 1995), although its progressive nature may be an important feature in distinguishing these conditions from static damage to a specific area of the brain. From autopsy data of people age 65 and over, it has been suggested that approximately 54% of cases of dementia are Alzheimer's (AD), 19% are combined AD and Multi-Infarct (MID) and 17% are MID (Byrne, 1994). The remaining cases are due to other causes and estimates vary from 4 to 23% (O'Brien, 1994; cf. Kitwood, 1997b). Efforts need to concentrate in distinguishing dementia from other conditions (Jacques, 1992) given that a diagnosis of depression leads to treatment, while one of dementia leads to predictions of deterioration (Woods, 1995a).

Symptoms of dementia include loss of previous cognitive and social abilities (Holden and Woods, 1995), with established habits and memories usually retained. Decline varies from person to person, affecting most functions (Jacques, 1992). Clinical features include difficulties with memory, abstract thinking, judgement, aphasia, apraxia, and agnosia (Byrne, 1994). Together with cognitive decline, changes in personality and presentation of behavioural disorders are present even in the early
stages (Garner, 1977), increasing dependency on others (Sixsmith, et al., 1993). Families play a great part in providing support, and the strain can be considerable (Holden and Woods, 1995). Given the irreversibility of dementia, it has been suggested that professionals' efforts should be focused on improving the quality of life of people with dementia and of their carers (Woods, 1995a; Woods, 1995b; Byrne, 1994). This is the challenge for clinical psychology.

The Growth of Positive Approaches to Dementia Care

The recognition of the psychological needs of people with dementia has brought a series of positive approaches to dementia care. These include Reality Orientation, Validation therapy, Resolution therapy, Reminiscence therapy, Life Review therapy, Snoezelen, and other behavioural techniques. Several authors give accounts of their use and effectiveness in dementia care (Woods, 1996b; 1995d; Holden and Woods, 1995; Orrell and Bebbington, 1995; Gillies and James, 1994; Kitwood, 1993; Coleman, 1992). These approaches provide cognitive stimulation and a less stressful and more predictable environment (Orrell and Bebbington, 1995), emphasising social and interpersonal factors (Holden and Woods, 1995), and meeting psychological and emotional, as well as physical needs (Woods, 1996b). However, some of these techniques share limitations with the medical model, making a divide between 'us', the cognitively intact, and 'them', the damaged and deficient (Kitwood, 1993). These limitations are incongruent with the philosophy of person-centred care.

Gillies and James (1994) indicate that, as many older adults have lost their friends and partners, formal carers take on the task of helping them to assess and validate their lives. Holden and Woods (1995) point out difficulties in that these approaches are dependent on staff's attitudes, and their understanding of individuality, dignity, self-respect, choice and independence in the person with dementia (see Woods, 1996b).
From a person-centred position, Kitwood (1997b) argues that the organic nature of dementia means that the medical model has been the most favoured approach. There has however been severe criticism of the contribution of the medical model to dementia, including its offering few solutions, but rather emphasising progressiveness (Stokes, 1997), managing the situation with medication (Watson, 1994), often with dangerous side-effects (Woods, 1995a), and only meeting people's basic physical needs (Kitwood, 1997a,b). The most critical attack on the medical model has been that it treats dementia technically, ignoring human issues (Kitwood, 1996; 1993; 1988; Kitwood and Bredin, 1992a), the effects of social and environmental factors (Orrell and Bebbington, 1995) and interpersonal issues with the caregivers in the dementing process (Homma, 1995). Yet, this type of criticism overlooks the multidisciplinary approach in the current NHS culture of care, as well as the influence of clinical psychology in raising awareness of psychological issues with assessment and treatment of mental health. It also ignores the contribution which diagnosis based on successful assessment, intervention and rehabilitation packages can make to mental illness (see Jaeger and Douglas, 1992).

Basing his findings on post-mortem investigations and computed tomography in the living person, Kitwood (1997b) argues that varying degrees of neuronal degeneration occur in dementia and that research does not support the hypothesis that causation is found in neuropathology (see also Kitwood, 1988). Further, he states that forms of neuropathology associated with dementia are also found in people with no cognitive impairment. It has been argued that as the brain is dynamic, and that changes occur according to environmental demands, even in dementia. Findings of a more psychological nature have shown that improvements in cognitive function (e.g. concentration and recent memory) can occur over time for some people with dementia in more stimulating environments (see Brooker, 1995). Equally, the reverse can occur. Cognitive disruptiveness, due to environmental circumstances, has the greatest impact on need for admission and deterioration (see Orrell and Bebbington, 1995 for details).
Anecdotal evidence indicates that only a proportion of behaviour in dementia can be attributed to neuropathology, and this places an emphasis on the quality of caregiving and the role of the environment in dementia care, which can decrease challenging behaviour (see Stokes, 1997). Kitwood and Bredin (1992a) suggest that these lines of investigation could prove hopeful and they conclude that dementia can be conceptualised in a manner different to that of the standard paradigm, and based on indications that 'rementing' (see Sixsmith et al., 1993) can be brought about through human interaction; that 'stabilisation' (Answer, 1997) can occur with a care environment that fosters activity and co-operation; and that an ageing and damaged brain is capable of some structural regeneration (Orrell and Bebbington, 1995) given a stimulating environment. Though these statements are based on evidence from environmental changes, the arguments favouring person-centred care over and above a standard model of care (Wilson and Powell, 1995; Lavander and Watts, 1995a; Lavander and Watts, 1995b; Ward and McIntosh, 1993; Jaeger and Douglas, 1992) are not yet proven and would require complex and controlled methodology with replication studies before being considered sufficient by the scientific community.

**Person-Centred Care**

With person-centred care, Kitwood's (1988-1997b) presents an approach to dementia care which challenges the view that dementia is solely about neurology. He focuses on maintaining clients' function by encouraging the use of systems which by-pass those that are neurologically impaired (Holden and Woods, 1995; Kitwood and Bredin, 1992a; Kitwood, 1990b). The argument suggests that, in addition to neurological impairments, the symptoms of dementia are due to difficulties in the care process. The philosophy of normalisation and social role valorisation are background influences on this approach which emphasises supporting people who live in the community and encouraging their participation as members of the community (Stirling, 1996). At the heart of person-centred care is the development of an ethical approach to 'personhood' and a social psychology of care (Kitwood, 1995b).
The Ethics of 'Personhood'

Kitwood (1997b) argues that much can be done to maintain identity, and therefore ‘personhood’ (see p.8), in the face of cognitive impairment, and emphasis is placed on the interpersonal context and the psychobiographical history of the person with dementia. Investigations of the client’s adapted and experiential self (Kitwood, 1993; 1988) become the tools of interpersonal interaction to maintain identity. In this way, a person with dementia is linked to feeling, emotion and the ability to live in relationships (see Kitwood, 1997b).

The Social Psychology in Dementia Care

In person-centred care, it is argued that the medical model, with its emphasis on cure, understands psychological behaviour as analogous to physical illness. With an understanding of physical rather than psychological causes, and hence offering medication and diagnosis, this model presents dementia in an inherited depersonalising tradition of care (see also Kitwood, 1997b; 1995a). Such ‘malignant social psychology’ is deeply damaging to ‘personhood’ and this damage increases with fear, anonymity and the differential of power (Kitwood, 1996; 1990a,b). A malignant environment excludes the person with dementia from a social circle and therefore their ‘personhood’ becomes threatened and their neurology affected. The process of dementia is seen as a dialectical process; an interplay between neuropathology and social psychology.

The scientific evidence that the concepts of ‘personhood’ and ‘social psychology of care’, borrowed from humanistic and social psychology approaches, contribute to a positive outcome measure in dementia care is poor and sometimes absent. Moreover, there is also a lack of quantification of these concepts and, as they stand, they are poor research measures.
Forms of Interaction

Based on Buber's (1922, 1937; cf. Kitwood, 1997b; 1996) ideas of relating between people, an 'I-Thou' way of relating is proposed to maintain people with dementia in the 'personhood club'; and types of positive interaction are suggested. The psychological task in dementia care is helping to generate positive interactions to create a benign social psychology that enables the interactions to continue. Relating is, however, a two-way system (see Woods, 1995c). Person-centred care ignores the progressive aspects of dementia and their role in social interaction; it encourages hope based on no evidence of success, and by-passes the difficulties of staff training and services' resources.

Miesen (1992) indicates the importance of attachment in dementia care and the need for active listening, followed by interactions in the 'I-Thou' form. Attachment behaviour is strongest in early stages of dementia as the need for security increases in an environment rendered increasingly unsafe due to neurological impairment. Requests for their parents, regularly made by people with dementia, can then be seen as cries of distress for security. Other authors have indicated that understanding is possible by interacting in the 'I-Thou' position in dementia (see Pool, 1997; Innes, 1996; Stokes, 1996) and that services have been provided which have made a difference (see Christian, 1997; Tibbs, 1996). Nevertheless, their outcome measures are vague and their methodology poor. The most encouraging study supporting the 'remontia' hypothesis (Sixsmith, et al., 1993) indicates improvements in areas of communication, social disturbance and self-care. Other studies (Brane, Karlsson, Kohlgren and Norberg, 1989; Karlsson, Brane, Melin, Nyth and Rybo, 1988) have also suggested improvements in both psychological and neurochemical variables. Kitwood (1997c) estimates that positive outcomes are observed in around 5 to 10% of all cases where the quality of care follows person-centred care standards. Though initially encouraging results, these studies are limited in their methodology. Mostly based on single-case studies, they are often of an anecdotal nature, lacking control treatment results which

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1 (i.e. openness, tenderness, presence and awareness).
would assess whether methods are useful and worth investigating further, and also lacking longitudinal data on their effectiveness.

**The Impact of Person-Centred Care: The Dynamics of Care**

Important dynamic issues are involved in the delivery of person-centred care at an organisational level, and at the carers' level.

**Organisations and their Staff**

Person-centred care argues that the way clients are treated by staff is a reflection of how employees are treated by the organisation (see Kitwood, 1997b). Although this is not always the case, organisational attitudes to staff can affect morale. Several factors have been suggested as those which can give value to staff (see also Bowe and Loveday, 1995; Jones and Miesen, 1992; Hall, 1990). A crucial factor in satisfactory employment is the 'psychological contract' which matches the employee's and the employer's requirements, and the real situation at work. Without an adequate match, the system becomes one of 'institutional maintenance' where priorities are the needs of the institution rather than those of clients, thus creating a malignant social psychology with damaging consequences for 'personhood'. The 'problem' of dementia lies in a combination of the individual's cognitive change and the inability of the organisation to cope adequately with the individual's needs (Sixsmith et al., 1993). Woods (1996b) states that an integrated approach must take account of the needs, strengths, perceptions, commitment and abilities of caregivers so that realistic care plans can develop.

**The Psychodynamics of Care**

A series of three studies of client-staff interaction (Jones, 1992) indicated (i) that communication was poorer with clients who had difficulties communicating themselves; (ii) that nursing staff often felt bewildered and helpless before the problems
of interacting with residents with dementia; and (iii) that once training in dealing with
dementia was provided, staff reported a more positive attitude towards those with
dementia and successful outcomes were obtained with difficult clients.

Caregiving has physical, social and psychological consequences for carers (Garner,
1997), and anxieties centre on two main issues: first ageing and frailty, and second
‘madness’ and loss of self, with the threat that ‘this might be me someday’ (Kitwood,
1997b; see also Holden and Woods, 1995). Feelings of anxiety in staff are controlled
by focusing on practical tasks while neglecting psychological care (see also Bredin and
Kitwood, 1995b). From a transactional analysis framework, the malignant social
psychology turns the caregiver into a controlling-critical parent and the person with
dementia into an adapted child (Kitwood, 1997b). However, little account, other than
a theoretical one of the evidence for his arguments is provided. Others have provided
some evidence of carers’ defensive attitudes towards people with dementia (Garner,
1997; Butterworth, 1995) but an association between patients experiencing these
feelings and a deterioration in neurology has not yet been established.

Person-centred care argues that carers need to be aware about their ‘scripts’, as some
of them emerge from the failure to meet psychological needs, and could therefore be
the start of co-dependency and of projective identification with their clients. These
arguments are speculative and no evidence is provided that such dynamics are in place.
Without denying that some individuals might bring some personal dynamics into their
work lives, it is argumentative to suggest that these issues are common in the current
culture of care. Some elements within this argument are nevertheless useful for any
type of care approach. For example, Hall (1990) argues for a work environment in
which feelings are experienced and expressed, and where people have permission to
ask for support when they feel they need it. Valuable theoretical arguments have been
put forward, but they remain in need of testing, with clear outcome measures devised.
For example, it has been suggested that effective workers will be those who have a
well-developed experiential self, who are familiar with the world of feelings, accepting
their own vulnerabilities and living with a low level of psychological defence (see

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2pay and conditions of service, induction, creation of a team, supervision, in-service training.
Woods, 1995a), allowing the relationship to be one of ‘empathic identification’ (Kitwood, 1995c). Various ways of bringing awareness to staff have been suggested (Moniz-Cook and Gill, 1996; Kitwood, 1994).

Assessing Care

In person-centred care, dementia is seen as occurring in an interpersonal milieu and it is therefore of great importance to improve the quality of interaction. Research shows that people with dementia in residential care spend as much as 80% of their time without human contact (Kitwood, 1997b; Brooker, 1995). Notorious behaviours by staff include being unresponsive (care staff ignoring verbal or expressive communication); speaking about clients in their presence; and putting clients down (Fox, 1995; Jones, 1992).

Aspects of the malignant social psychology in formal care settings have been operationalised in Dementia Care Mapping (DCM; see Kitwood and Bredin, 1992a). Brooker (1995) compared several methods of assessing quality of care and concludes that DCM is one of the most comprehensive in identifying and recognising excellent care. Kitwood and Bredin (1992b) state that “quality of care refers not simply to the care process as ... observed, but to its effects ... [on] ... signs of ‘personhood’ and whether communicative competence is maintained” (p. 44). The last two issues remain to be investigated.

Studies using DCM have shown successful results in identifying aspects of the malignant social psychology (see Bredin and Kitwood, 1995; Wilkinson, 1993); and have found positive reactions from nurses using the package which highlights awareness of positive interaction with clients (Packer, 1996). Based on these preliminary results, it has been suggested that DCM should be at the heart of care management for people with dementia (Mackie, 1997) as it is an instrument of consciousness-raising and attitude change (Barnett, 1995). DCM highlights the psychological and emotional needs of clients which must be fulfilled if they are to individual staff development, accreditation and promotion, effective quality assurance.
preserve their well-being as a person (Kitwood, 1997b). Nevertheless, conclusions based on DCM results are premature. Though a possible association has been suggested between institutional care and poor staff-client interaction, unlike in the learning disabilities field, little has been done with this method to suggest that results correlate with a poorer prognosis. Findings also need to be compared with environments where interaction is higher, and where differences between trained and untrained carers are assessed. Person-centred care arguments are at a stage where testing and replication is needed for hypothetical issues to become valuable and produce reliable scientific results.

Conclusions

Kitwood (1997b) suggests that in order to accomplish a better service of care for people with dementia, the strategic task is of cultural transformation in organisations, beliefs, and norms. While acknowledging the difficulty in dismantling psychological and economical resistance (see also Kitwood, 1995c; 1994) he argues for a well-trained workforce and organisational support to achieve this goal.

Jones and Miesen (1992) argue for a core curriculum in the training of those professionals working with people with dementia and draw attention to the poor training in this field for nurses, social workers and clinical psychologists. They conclude that such a training programme is essential in order to produce the shared care and the shared responsibility and objectives which are required by interdisciplinary work and research.

Person-centred care seems an ambitious and expensive proposal that would need strong scientific evidence of its effectiveness over other social and psychological approaches in order to generate funding to achieve its goals. It also seems to overlook the difficulties involved in introducing a new practice into an organisational setting which will require co-operation from staff (see Lavander and Watts, 1995a).

It is not denied that the quality of care makes a difference to the well-being of people with dementia (see Garner, 1997; Orrell and Bebbington, 1995) and that by supporting
formal and informal carers, the quality of care clients receive is maximised (Woods, 1997; 1995a). However, arguments of this kind need testing in dementia services. The experimental provision of evidence from person-centred care is mainly anecdotal and based on single case studies. Person-centred care needs to provide objective evaluation of change to empirical inquiry. A model of ‘old’ vs. ‘new’ care becomes a valuable structure in which to measure change. With this in mind, person-centred care could provide an ethical, useful and encouraging philosophy to maintaining ‘personhood’ in people with dementia by bringing ‘internal’ processes to the interpersonal milieu, and by improving the system of care by providing a benign social psychology of care which can be tested empirically. It has been suggested (Kitwood and Bredin, 1992a) that person-centred care offers a way of interacting with clients with dementia and that dementia is the outcome of a dialectical interplay between neurological impairment and personal and social psychology. Yet alone, this only provides hypothetical arguments with a serious lack of controlled studies and replication across settings.

Unlike a standard method of care this approach ignores (i) the need for a comprehensive assessment for the development of sensible and coherent intervention (Lavander and Watts, 1995b); (ii) the needs for a treatment program to be continually revised so that baseline changes can be reassessed and monitored (Ward and McIntosh, 1993); (iii) the fact that progressive neurological difficulties can impair, and in some cases prevent, people from achieving treatment goals (Lavander and Watts, 1995a); (iv) that neurological conditions are complex (e.g. deficits directly from lesions, deficits occurring after the insult, and deficits which predate or coexists with the neurological damage) (Wilson and Powell, 1995); (v) that social interaction is just one aspect in a model of care where people have much wider needs for community re-integration (Jaeger and Douglas, 1992); and (vi) that controlled studies with appropriate and well-designed methodological procedures and clear outcome measures are necessary to inform assessment and treatment for people that need mental health care. Finally, the approach does not provide evidence that its methods are better than those based on a scientist-practitioner model of care. Person-centred care argues that causation in dementia does not solely rest in neuropathology. However, its arguments
do not confirm that social interaction on its own can make qualitative and quantitative differences in prognosis.
References


Is Neuropsychological Rehabilitation Effective?

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Neurological Disorders

The need for neurological rehabilitation has been highlighted due to the numbers of people with neurological disorders and their complex needs. It has been suggested that in an average health district up to 2% of people will experience a neurological disorder, and up to a third of these will require daily support (Langton Hewer, 1993). The most common disorders are stroke, head injury, Parkinson's disease, multiple sclerosis, motor neurone disease, and epilepsy affecting all ages, causing physical disability (affecting mobility, self-care and everyday activities), disturbance of cognition and/or behaviour, pain, and disturbance of consciousness and/or neurological function. In the UK, the greatest prevalence of disabling neurological conditions is among the younger adult where few services are available (Barnes and Oliver, 1993).

In order to assess the effectiveness of rehabilitation, the focus here will be on head injury as: it is the most common reason for loss of brain function in children and younger adults; it demonstrates the process of loss and recovery of function; and it illustrates the diversity of consequence since people with head injuries may have long-term physical, cognitive, emotional, social and behavioural difficulties, often with a psychiatric presentation, affecting clients’ lives and their families (see Powell and Wilson, 1995; Lezak, 1995; Barnes and Oliver, 1993; Gordon and Hibbard, 1992; Mateer and Ruff, 1990).

In the USA, the numbers for head injury amount to half a million people a year (Hanlon, 1994; Ben-Yishay and Diller, 1993). McMillan and Greenwood (1993) warn us about epidemiological figures as they depend on criteria for classification and suggest conservative estimates of annual incidence of severe head injury of 8 per 100,000; and 18 per 100,000 for moderate head injury.

For mild head injury, natural recovery of cognitive function is most noticeable within 3 to 6 months after insult (Conboy, Barth and Boll, 1986), and during the first 2 to 3 years for more severe injuries (Benedict, 1989). The challenge in rehabilitation is to show that intervention differs from spontaneous recovery (Mateer and Ruff, 1990; Ruff, Niemann, Troster and Mateer, 1990). The need for rehabilitation seems obvious
with severe lesions. Mild head injuries often develop long-term difficulties because their effects are less noticeable and therefore go untreated (see Deaton, 1986; Conboy, et al., 1986).

What is Rehabilitation?

It has been suggested that rehabilitation should aim at protecting or restoring personal and social identity (Ward and McIntosh, 1993) so that clients can again take charge of their own lives (Gianutsos, 1991). Definitions of rehabilitation need to satisfy a variety of needs for clients' successful re-integration into their community, and also recognise the limitations of focusing on the departmentalisation of impairment. Recovery is measured by the degree of functional re-adaptation and the extent of re-integration (Alfano and Finlayson, 1987). It is necessary to work towards a systemic understanding of the person and their needs and provide services to meet those needs. Besides neurological impairment, rehabilitation services also need to provide residential, educational, employment and recreational opportunities.

The Goals of Rehabilitation Services

Hanlon (1994) recommends that the primary objective of rehabilitation is to improve the quality of life. This involves psychological (cognitive, behavioural and emotional), social and physical needs (see also Wood, 1993), reducing handicaps and working towards community re-integration. In this way, rehabilitation is concerned with 'normalisation', and rather than solely focusing on intra-individual objectives, it focuses on social interaction, requiring attention to the interaction between the individual and the environment (Lavander and Watts, 1995a). However, the complexities of deficits which people with brain injuries present may hinder community re-entry, making clinical recovery essential (Wood, 1993).

Not all would argue for 'community re-integration'. It is also suggested that 're-integration' to the dominant culture could be a damaging yardstick for people with head injuries (Barnes and Oliver, 1993). This argument warns us about the dynamics of choosing the dominant culture's goal of 'normality' for less powerful groups. Clients
have illustrated the debilitating psychological pressures they encounter as a result of social pressures to re-integrate their disability to the dominant culture and approximate to able-bodied standards (p. 38).

In addition to intra-individual and social objectives, rehabilitation needs to be concerned with effective interventions to minimise the cost of hospital and community care (Lezak, 1995; McMillan and Greenwood, 1993).

As rehabilitation covers a variety of skills, professionals and settings, Langton Hewer (1993) argues for a policy of generic provision and suggests that some of the success of rehabilitation relies on the availability of these services. Where responsibility for outcome is shared between disciplines involved (Wood, 1993), teams are able to assess, intervene and monitor individualised programmes of care, becoming a reflection of a high quality rehabilitation service (Lavander and Watts, 1995b).

The Effectiveness of Neuropsychological Examinations and the Role of the Psychologist

The focus of neuropsychology on research and treatment of head injury recognises the needs of patients and their families, and the need for the evaluation of interventions (Lezak, 1995). The role of the neuropsychologist in rehabilitation is that of an approach suggested by Luria where diagnosis and treatment are seen as intrinsically related (see Ho and Bennett, 1997; Christensen and Caetano, 1996; Hanlon, 1994; Barnes and Oliver, 1993; Sherr and Langenbahn, 1992; Conboy, et al., 1986). Objective assessment (cognitive, intellectual and emotional) of the relationship between deficits and lesion are performed in order to inform intervention (the formulation of the rehabilitation process and psychological adjustment to disability).

Lavander and Watts (1995a; see also Powell and Wilson, 1995) suggest areas for a comprehensive neuropsychological assessment: memory and orientation, language, motor behaviour, literacy and numeracy, spatial and visual awareness, self-care, home-management skills, use of community facilities, employment skills, and personality and social abilities. Gordon and Hibbard (1992) argue for functionally-based measures to
assess the impact of deficits on daily behaviour. The neuropsychological examination process (see Lavander and Watts, 1995a; Langton Hewer, 1993; Alfano and Finlayson, 1987) makes a qualitative and quantitative contribution to rehabilitation. It focuses on delineating cognitive strengths and weaknesses as a result of injury, predicting their influence on recovery, determining the management implications of an individual’s profile, and providing or offering consultancy to other disciplines regarding treatment of areas of deficit (see also McMillan and Greenwood, 1993).

Clients’ needs vary according to their stages of recovery. While early stages require nursing care and the reduction of physical disability, later stages require a focus on psychological and emotional as well as social and vocational difficulties (Wood, 1993; see also Barnes and Oliver, 1993). For a successful intervention, recommendations need to include the client’s aims, aspirations, personal difficulties, priorities, motivations and fears (Wilson and Powell, 1995). However, some deficits (e.g. receptive aphasia and high order perceptual deficits, as well as psychiatric aspects) may not only hinder the rehabilitation process but reduce therapeutic meaningfulness (see Ward and McIntosh, 1993; Mateer and Ruff, 1990).

Lezak (1995; see also Conboy, et al., 1986) states that clients with head injury present difficulties with meaningful co-operation in the first weeks or months post-injury. Therefore, the timing of examination has important social and legal implications for the clients, their rehabilitation package, and the emotional state of their families.

While a comprehensive assessment is vital to the development of intervention programmes, attention to the context of rehabilitation is essential as it affects outcome (Lavander and Watts, 1995a; Wood, 1993).

Staff-Patient Relationship

The active collaboration of professionals and clients, in an environment which encourages autonomy, independence and the exercise of skills (Lavander and Watts, 1995b), maximises the chances of achieving desired outcomes (Christensen and Caetano, 1996; Ward and McIntosh, 1993; McGlynn, 1990). Possl and Von Cramon
(1996) state that a major difficulty between clients and staff, which can affect progress and morale, is their different perceptions of rehabilitation outcome. While the clients' goal is to return to their status prior to injury, staff use the status at admission as their point of reference. This discrepancy is particularly difficult to resolve when clients have reduced insight into their difficulties (see Ward and McIntosh, 1993).

A further finding questions the competency of staff working in neuropsychological rehabilitation as it was noted that formal training and relevant background is not required (Parker and Chan, 1990).

Studies on the Efficacy of Rehabilitation Programmes

Numerous outcome studies have reported positive results in psychosocial status, neuropsychological functions, vocational outcome and performance in activities of daily living after neuropsychological rehabilitation (see Hanlon, 1994). However, controlled studies that examine the effects of rehabilitation programmes are uncommon (Prigatano, Fordyce, Zeiner, Roueche, Pepping and Wood; 1984) and randomised designs including a control group are rare (see Ruff, Baser, Johnston, Marshall, Klauber, Klauber and Minteer, 1989). There is an increasing demand for efficacy studies to demonstrate the effect of a specific intervention on functional performance (see Ho and Bennett, 1997; Ben-Yishay, 1993).

Outcomes of a Cognitive Nature

Cognitive rehabilitation should receive as much attention as physical disability in the management of rehabilitation services (see Wilson and Powell, 1995) on the grounds that cognitive deficits compromise quality of life (Alfano and Finlayson, 1987). However, few studies have shown that cognitive rehabilitation has a significant impact on the quality of life of brain-injured people (see Possl and Von Cramon, 1996; Hanlon, 1994). In addition, studies of cognitive remediation and memory deficits present methodological difficulties (see Ben-Yishay and Diller, 1993, for a list of criticism). Computer programs are not entirely convincing, and when they seem to
teach domain-specific skills rather than general functioning, difficulties arise with the generalisation of these skills (see Robertson, 1990; Wood and Fussey, 1987).

Results with clients with mild to moderate traumatic brain injury as a result of a motor vehicle accident indicated that cognitive functioning (attention and speed of processing, learning and memory, executive functions, conceptual skills and flexibility of thinking, general intellectual functioning) and activities of daily living improved after a cognitive remediation and compensation intervention (Ho and Bennett, 1997). However, factors allowing for the improvements in one of these measures were independent of the other as measures did not correlate (see also Wood and Fussey, 1987). Though quality of life seems to improve, findings need to be taken with caution as no control group was used to assess the effectiveness of methods. Further, findings need replication as the programme was individually tailored.

Group studies also show difficulties. In a single-blind comparative study (Ruff, et al., 1989), forty patients with moderate and severe brain injury were randomly assigned to a remediation group (attention, spatial integration, memory and problem solving), an alternative treatment (general activities and psychosocial issues), or a control group (general stimulation activities). Though improvements in cognitive functioning were suggested for all groups, the design lacked a ‘no-treatment’ condition in order to evaluate the interventions.

Memory difficulties were found to be the most frequently reported subjective complaints in head injury (Wilson, 1991). In a study which included a no-treatment condition (Berg, Koning-Haanstra and Deelman, 1991), positive effects on objective memory performance (word test, face-name learning and shopping list) were found in the treatment group (cognitive strategy), while subjective measures of improvement (see Jaeger, Berns, Tigner and Douglas, 1992, for details on the validity of clients’ subjective opinions) were found in both the treatment and pseudotraining group (drill and practice). Though patients were randomly assigned to groups, a main difficulty is that patients were paid to participate and it is possible that their positive subjective reports were due to this. Findings did not assess whether improvements in memory performance were generalised to areas which clients had not targeted.
Wilson (1991) explored the longitudinal memory functioning of head injury patients after memory therapy. A pattern of independent vs. dependent clients (measured by employment, education and living arrangements) emerged where independent clients used more than five memory aids, relying more on external than on internal strategies. Of those who stated they did not experience memory problems, three were amongst the most severely injured. This process of unawareness of deficit is reported in the literature (see Christensen and Caetano, 1996; Possl and Von Cramer, 1996; Ward and McIntosh, 1993; Sherr and Langenbahn, 1992; Gianutsos, 1991; Mateer and Ruff, 1990; McGlynn, 1990; Prigatano et al., 1984). The study did not give details of how long after discharge clients were interviewed and the sample included a differential in personal resources (out and in-patients) and in severity of head injury.

**Outcomes of a Behavioural Nature**

Behavioural difficulties also have a negative effect on the improvement of physical, social and occupational rehabilitation (Lavander and Watts, 1995b; Eames and Wood, 1985). Behaviour therapy seems to be valuable for controlling and modifying socially inappropriate behaviours, as it by-passes clients' co-operation (Mateer and Ruff, 1990), although success is dependent on providing meaningful reinforcement to the patient, and on environmental contingencies, comprehensive assessment, generalisation of training, and on the nature of the therapeutic relationship (McGlynn, 1990).

Behavioural modification (token economy) and a variety of physical, cognitive, occupational and social techniques were applied to head injured patients (Eames and Wood, 1985). The authors stated that subjects achieved lasting improvements in behaviour and in personal and social independence at follow-up. However, there were serious flaws in this study. The time limit of intervention for patients varied from six months to three years, and while some patients were on medication (see Jaeger et al., 1992 for effects of medication on functioning), others were receiving rehabilitation therapy or physical aid at follow-up. Hence, it is difficult to attribute any findings to a particular mode of intervention.
Outcomes of an Occupational Nature

According to Luria, the aim of rehabilitation is measured by productive lifestyle (Christensen and Caetano, 1996). There seems to be a wide range of variability in studies reporting return to work. Approximately one third of severe head injury patients may return to employment with traditional rehabilitation methods (Prigatano, et al., 1984); in most cases at a lower level than prior to injury (Barnes and Oliver, 1993; Berg, et al., 1991); but others never do (Eames and Wood, 1985). Variability in findings is due to sample differences of severity, absence of criteria for what constitutes work, lack of verification of work performance and status, and absence of follow-ups (Ben-Yishay, Silver, Piasetsky and Rattok, 1987). Further difficulties arise with confounding variables such as unemployment rates, housing availability, and changes in social service regulations (see Jaeger et al., 1992).

Prigatano, et al.'s (1984) rehabilitation programme for moderate to severe head injury patients included cognitive retraining of residual deficits and compensatory skills, and psychotherapy. Though including a control group, the blindness of the selection criteria was compromised due to familiarity with some of the participants. Findings showed a drop of up to 10% from the expected to the achieved level of those returning to work after the programme. The authors concluded that improving cognitive and personality skills are necessary but not sufficient for accomplishing a productive lifestyle.

Ben-Yishay, et al. (1987) reported on the vocational outcomes of a three phase programme (remedial interventions, vocational placements, and follow-up procedures) of holistic (cognitive, interpersonal and vocational) neuropsychological rehabilitation on head-injured clients who had not benefited from conventional rehabilitation approaches and remained unemployable. Findings are encouraging in that clients who were previously unemployed were able to engage in productive work and follow-up results indicated this remained the case for three years. However, the criteria for programme entry were tight so that subjects were already quite able. This casts doubt on the benefits of this programme for less able groups. It was also stated that 66% of the sample were engaged in therapy at time of entry. Difficulties arise when attributing positive outcome solely to the holistic programme.
Comprehensive Studies

In a comprehensive neuropsychological programme of cognitive remediation for outpatients with head injury (Sherr and Langenbahn, 1992), intervention occurred at an individual and group level. The programme contained cognitive and behavioural elements to achieve functional goals, and psychotherapy to facilitate adjustment to disability and the losses and changes resulting from brain injury (Gordon and Hibbard, 1992). Generalisation of learning was transferred to everyday life difficulties in order for it to be effective, focusing on awareness, self-monitoring and internalisation of the structure learnt. The programme also included family intervention, thereby acknowledging the need for education and support of family members in the recovery process (see Lezak, 1995).

Difficulties with this kind of programme centre on the lack of evaluation of the programme which, though comprehensive, is expensive, and which can overlook difficulties with outpatient attendance and their families. In addition, problems arise when measuring outcome in an heterogeneous population with a variety of needs and resources, and with a differential degree of brain injury.

The Difficulties with Methodology and Outcome

Positive outcome is a significant achievement in rehabilitation. However, it is essential to assess the process by which these outcomes have been achieved so that the limitations of rehabilitation programmes can be noted and improved on, and their gains generalised for the benefit of clients.

A major difficulty for assessing the effectiveness of rehabilitation is the lack of programme evaluation (Wilson, 1993; Deaton, 1986), poor group comparisons (Ruff et al., 1989), and poor longitudinal effects with short-term improvements and departmentalisation of skills (Ben-Yishay et al., 1987). Some (Ward and McIntosh, 1993; Gordon and Hibbard, 1992) argue for single-case studies on the grounds (i) that programmes need to be individually tailored, (ii) that the population is heterogeneous with differences in degrees of damage, of cognitive functioning, and of additional
motor, sensory, emotional and behavioural difficulties (see Hanlon, 1994; Wilson, 1993; Jaeger et al., 1992; Mateer and Ruff, 1990; Benedict, 1989), and (iii) that single-case studies are useful for rare syndromes and similar conditions (Caramazza and Hillis, 1993), and community follow-ups (Wilson, 1993). Though single-cases present a difficulty with generalisation of methods (Jaeger, et al., 1992; Mateer and Ruff, 1990), McGlynn (1990) argues that successes with single-case studies may inform group studies to increase generalisation of findings.

Robertson (1994) argues for the value of both single-case and group designs and outlines the disadvantages of both types. Single-case studies present difficulties with the failure to report negative findings, a lack of blind assessment, the reliability and validity of outcome measures, and other statistical problems. Group studies share the difficulties of validity and reliability with single-case designs. In addition, group studies need replication and need to find a balance between the treatment approach and the changes in clients' behavioural aspects. They also assume that all patients with similar conditions can receive the same intervention (see Caramazza and Hillis, 1993). Multiple replications of randomised group and single-case studies can provide confidence in a particular type of rehabilitation method (Robertson, 1994; Gianutsos, 1991; McGlynn, 1990; Mateer and Ruff, 1990). However, it has been suggested that the heterogeneity of such a population may hinder replication (Benedict, 1989).

Difficulties with findings may also result from patient-specific variables. These include clients' ability for spontaneous recovery (McGlynn, 1990; Alfano and Finlayson, 1987), differences in severity, nature of the damage, recovery curves and residual abilities (Caramazza and Hillis, 1993), and also differences in size of lesion, location, degrees of intracranial pressure, and extent of axonal shearing (Mateer and Ruff, 1990). Difficulties arising from intervention-specific variables include (i) ethical considerations regarding the random allocation to treatment groups or the withholding of treatment (Hanlon, 1994; McMillan and Greenwood, 1993), (ii) failure to allow sufficient time for treatment effects, (iii) inadequate criterion measures (Gianutsos, 1991), (iv) generalisation of training to real life settings (Gordon and Hibbard, 1992; Robertson, 1990; Mateer and Ruff, 1990), and (v) the use of holistic interventions
which confuse attribution of gains to single interventions (Ben-Yishay and Diller, 1993; McGlynn, 1990).

Efficacy of a rehabilitation programme can be determined through means available to neuropsychology (Caramazza and Hillis, 1993). However, the dynamics of change have not received much attention. It has been suggested that rehabilitation studies disregard theories of brain organisation (see Jaeger et al., 1992). The studies reviewed showed an understanding of neuropsychological processes as fragmented. References to models of rehabilitation of brain injury, such as that provided by Luria (Christensen and Caetano, 1996), involving an interplay of intra-subject characteristics and social processes for the success of rehabilitation, are rare. The complexity of the interaction between brain regions, in this model, allows for restructuring after injury; negating both 'localisationist’s' and the 'mass action/equipotentiality' positions (see Goldberger, 1974; cf. Alfano and Finlayson, 1987).

Conclusions

Successful rehabilitation depends on the good management of co-ordinated and goal-directed client-centred approaches (Ward and McIntosh, 1993), increasing awareness and understanding of the long-term impairments resulting from brain injury and the impact of these on quality of living (Hanlon, 1994). In addition, rehabilitation needs to consider clients' motivation for change, their awareness of deficits and the role of depression and anxiety after a neurological insult (see Gordon and Hibbard, 1992). Combined multidisciplinary efforts by health and social services, using multidimensional examinations (see Jaeger, et al., 1992), are needed given the variety of physical and psychosocial needs of people with head injuries and their families (see Ward and McIntosh, 1993; Deaton, 1986). Integrated models of acute and long-term rehabilitation which combine diagnosis and education and which target medical and psychosocial issues have been suggested (see McMillan and Greenwood, 1993; Barnes and Oliver, 1993; Conboy et al., 1986).

Cognitive and behavioural remediation are not the only parameters worthy of observation when assessing the effectiveness of rehabilitation. The difficulty of
focusing purely on these is that clients' needs become fragmented. The issues of accommodation, return to work, family support and a variety of psychosocial issues are also essential for re-entry into the community.

Promising neuropsychological rehabilitation seems time-intensive (see Glasgow, Zeiss, Barrera and Lewinsohn, 1977) as well as labour-intensive. In the UK, neuropsychological rehabilitation services are concerned with audit and cost accounting (McMillan and Greenwood, 1993). The critical issues are whether changes due to rehabilitation efforts can be generalised and, as stated by Mateer and Ruff (1990), whether treatments produce enough significant change to warrant the investment of staff, time and resources.

There seems to be an absence of consistent empirical evidence that neuropsychological rehabilitation works. However, studies have shown that without treatment many head injury individuals do not continue to progress, but develop psychiatric, behavioural and social complications and become an increasing burden on those around them (Gianutsos, 1991).

The question of whether rehabilitation is effective is a global one (see Ward and McIntosh, 1993; Robertson, 1990). Efforts need to focus on the 'specific' (Wilson, 1993). Given the heterogeneity of the sample, the range of different activities and needs involved in rehabilitation, and the impact of confounding factors on recovery, a more appropriate question is what type of rehabilitation is effective, with whom and under what conditions.
References


Are People with Psychotic Disorders at Increased Risk of Offending Behaviour? 
Discuss with Reference to Relevant Theories and Models of Treatment

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Year III 
February 1998
Introduction

The term ‘psychosis’ originated medically within a disease model (Tarnapolsky, Chesterman and Parshall, 1995). Psychological aspects were acknowledged initially and have increased over time. Yesavage (1983; cf. McNeil, 1994) indicated psychosis is characterised by hallucination, conceptual disorganisation, delusions and grandiosity. Although DSM-IV (APA, 1994) indicates that psychotic disorders comprise schizophrenia, delusional disorders, organic mental disorders and some mood disorders, other authors have reported that psychotic symptoms are present in a wider range of psychiatric disorders including personality disorders, substance abuse, morbid jealousy, hysteria, obsessive compulsive disorders, and neurological disorders (Tarnopolsky, et al., 1995; Blackburn, 1995; Westacott, 1995; Philibert and Winokur, 1994; Taylor, Garety, Buchanan, Reed, Wessely, Ray, Dunn and Grubin, 1994; Rehm, LePage and Bailey, 1994; McNeil, 1994; Benedetti, Furlan and Peciccia, 1993; Roberts, 1992; Davis, 1991). Psychosis can result from both established psychiatric conditions and biological difficulties (see Anderson, Vaulx-Smith and Keshavan, 1994).

The relationship between psychotic behaviour and offending is not obvious in all disorders where psychosis is present. Affective psychosis carries a lesser risk of violence than does schizophrenia (see Blackburn, 1995; Krakowski, Volavka and Brizer, 1986; Taylor and Gunn, 1984a). Individuals with mania retain their impulse control and their awareness of social norms, decreasing the likelihood of assaults, whilst those with psychosis as a result of substance abuse are more violent in the community, where substances are available (see Krakowski et al., 1986).

Psychosis and Offending

Pihl and Peterson (1993) suggest that violence has been the leading cause of death in the USA, affecting six million victims a year. In a survey, a third of Americans attributed this to mental illness (see Link and Stueve, 1994). In Britain, similarly,
mental disorder in offenders has been recognised in between 30% to 40% of homicides (Blackburn, 1995).

Research indicates that there is a link between mental illness and offending (Blackburn, 1995; Nestor, Haycock, Doiron, Kelly and Kelly, 1995) and that serious crimes are committed by mentally disordered people. Psychotic offenders appear in both health and criminal systems, with clinical studies indicating higher associations of violence in the mentally ill than in the general population (Wessely, 1997; Swanson, 1994; Teplin, McClelland and Abram, 1993; Taylor, 1993; Wessely and Taylor, 1991; Krakowski, et al., 1986).

One per cent of people in Western societies show the symptoms of schizophrenia (Bentall, 1995b), and of these, 40% to 60% have severe cognitive and social impairment (Anderson, et al., 1994). Those with schizophrenia appear more frequently in criminal or violent populations than do those without (Taylor, et al., 1994; Taylor, 1993; Klassen and O'Connor, 1988). In an epidemiological study (see Blackburn, 1995; Taylor, 1993) it was estimated that the risk of serious violence in schizophrenia was .05% while in affective disorders it was .006%. Although the risk of violence by someone with schizophrenia remains low, in a community longitudinal study (Wessely, 1997; Lindqvist and Allebeck, 1990a) it was found that while the rate of recorded criminal offences between men with schizophrenia and those without was similar, the rate of violent offences was four times higher in the former group.

People with paranoid schizophrenia have been found to be more violent than people with other types of schizophrenia (Krakowski, et al., 1986). The latter are more likely to engage in petty offences (Taylor, 1993) or property offences (Nestor et al., 1995). High incidence of violence occurs prior to admission or, if untreated, throughout the illness. This is known to decrease in hospital settings as people with paranoid schizophrenia have been found to respond well to medication and careful monitoring (Krakowski, et al., 1986). While they are impaired in reality testing, people with paranoid schizophrenia are sufficiently intact to retain a good ability to plan and execute violent acts consistent with their delusion. In contrast, violence from non-
paranoid people is less focused, less planned and often less dangerous (Tarnopolsky et al., 1995; Beck-Sander and Clark, 1997).

The Prevalence of Psychosis and Offending: Prison, Hospital and Community Samples

Prison Populations

Despite provision under the Mental Health Act (1983; cf. Bluglass, 1983) for offenders with mental illness to be treated in the mental health system, prisons continue to include them, often because despite a psychotic presentation, violent offenders are seen as antisocial and requiring a punitive prison sentence (Krakowski, et al., 1986; Taylor and Gunn, 1984b).

Studies indicate the prevalence of mental disorders amongst convicted offenders and rates of psychosis are higher than amongst community samples (Teplin, 1990). Blackburn (1995) states that while 2% of a population of 50,000 in English and Welsh prisons present serious mental disorders, only 2% of these met ICD criteria for psychosis. Earlier studies (Taylor and Gunn, 1984a) found rates of nearly 9%, with higher violence rates for schizophrenia. Nevertheless, most of the psychotic men were established as petty criminals (see also Ashford, 1989; Robertson, 1988) compared with the likelihood of violent behaviour among those with schizophrenia and in a control group. Though it has been found (Teplin, et al., 1993) that the likelihood of violence between groups with and without schizophrenia remains stable, when people with schizophrenia became violent, they did so repeatedly (Cirincione, Steadman, Clark Robbins and Monahan, 1992).

Generalisation of these findings to other populations is limited as the studies focus on prison samples, with some offenders having co-occurring difficulties such as depression, substance abuse and personality disorder.
Hospital Populations

Violence has been associated with the acute phase of psychosis, and some argue that the level of violence decreases with admission, medication, and response to the environmental milieu (Wessely, 1997; McNeil, 1994; Davis, 1991). Therefore, the timing of the recording of violent behaviour in in-patient studies is essential for interpreting the findings.

Many studies of hospital in-patients show that rates of violence in hospital wards are unacceptably high, and that people with schizophrenia seem to be disproportionately represented among those responsible for these incidents. However, it has also been suggested that violence during hospitalisation is qualitatively different from that outside the hospital (Wessely, 1997; Blackburn, 1995; Davis, 1991) and that data obtained from these studies may not be generalised to violence in the community (Krakowski, et al., 1986). Because of this, Davis (1991) indicates that in-patient violence also needs to be considered in the context of broader situational and structural factors.

Community Populations

Though expensive and relying on retrospective data and self-reports (Link and Stueve, 1994), community samples present a 'truer' picture of the prevalence of psychosis than the studies above which have samples whose representativeness is questionable (Wessely and Taylor, 1991). Recent studies (Swanson, 1994) found that 16% of 10,000 respondents across five cities in the USA reported having committed violent acts at some time in their adult lives. This increased to 18% when substance abuse was included. Findings suggested that people with a serious mental illness of affective psychosis or schizophrenia are on average more violent than the rest of the population. The report is unclear on the relative risk of violence among people with other psychoses (Taylor, et al., 1994). Alarmingly, only 16% with diagnoses of major disorder reported admission to a psychiatric hospital. There is little mention of the quality of community services.
Overall, these results and others (Wessely, 1997; Lindqvist and Allebeck, 1990a) indicate that the absolute risk of violent offending is low in psychosis. Data from the ECA study (Swanson, 1994) indicate that if schizophrenia were preventable in the USA, violent crime would decrease by only 3% (see Wessely, 1997). Moreover, those with psychosis seem to find it more difficult to conceal their offending behaviour. Two thirds of the offences committed by people with schizophrenia and nearly three quarters of those by people with an affective psychosis had been witnessed compared with less than a third of those committed by a control group (Robertson, 1988).

*Key Symptomatology*

Studies of prevalence tell us little about the relationship between symptoms of psychosis and offending. Though it has been argued above that schizophrenia is more present in violent offender populations, others (Bentall, 1995a; 1995b; Boyle, 1990) focus their inquiry on symptoms rather than diagnoses. Evidence of poor correlations between symptoms and diagnosis has been presented where the symptoms of schizophrenia are also present in other types of psychoses and also in the normal population (Bentall, 1995b; Andreasen and Flaum, 1991) with differences in intensity, persistence and belief strength (Tarnopolsky et al., 1995). While sympathetic to this view, much of the literature refers to interventions in the diagnostic criteria of schizophrenia. Whenever possible here, reference to symptomatology rather than diagnosis will be included, since it is this which is associated with violent offending.

*Positive and Negative Symptoms*

A distinction has been made between positive and negative symptoms in schizophrenia (Vasquez-Baquero, Lastra, Cuesta Nunez, Herrera Castanedo, and Dunn, 1996; Tarnopolsky et al., 1995; Westacott, 1995; Hemsley, 1995a; Slade, 1995; Slade and Bentall, 1989). Positive symptoms are not uncommon in other psychotic conditions, but are particularly indicative of schizophrenia when present in conjunction with negative symptoms (Anderson, et al., 1994). Delusions are a complex multidimensional phenomena and acting on them is characterised by belief strength, preoccupation, fear and anxiety, and seeking evidence in their support (Taylor, et al., 1994). Delusions are
most widely experienced among people with schizophrenia, with around 90% of patients experiencing them at some time during their condition.

The prevalence of hallucinations in schizophrenia has been reported to exist in around 35% to 50% of cases (Andreasen and Flaum, 1991). Hallucinations have also been associated with violent behaviour (McNeil, 1994; Taylor, 1993; 1983). McNeil (1994) reports that hallucinations occur as a result of biological factors (faults in filtering screening mechanisms), environmental factors (levels of stimuli, clarity, reinforcement) and cognitive factors (expectancy) as well as of an inability to discriminate between personal experience and consensual reality. However, he states that evidence associating hallucinations with violence is unclear as to whether they have been of a command nature.

Many studies have suggested links between psychotic symptomatology of delusions and hallucinations and violent behaviour (Blackburn, 1995; Bentall, 1995a; Link and Stueve, 1994; Taylor, 1993; Boyle, 1990; Taylor, 1985). Link, Andrews and Cullen (1992) suggested that elevated rates of violent behaviours among in-patients, compared to community samples, are directly tied to their experience of psychotic symptomatology. During a prison study (Taylor, 1993; 1985) with half of the sample presenting a psychotic condition, 20% of the offences of people with schizophrenia were motivated by positive symptoms of perceived provocation, delusional drive and hallucinations, with a further 6% probably so motivated. When comparing delusions between homicidal and non-homicidal psychotic groups (see Blackburn, 1995; Taylor, 1993), it was found that though delusions were present in both, 89% of those with schizophrenia had been deluded compared with 76% of non-violent patients at the time of the offence (see also Lindqvist and Allebeck, 1990a).

*Substance Abuse*

Within both prison samples (Abram and Teplin, 1991; Ashford, 1989) and community samples (Wessely, 1997; Lindqvist and Allebeck, 1990b), it has been found that substance abuse increases the likelihood of violence among psychotic offenders.
Recent studies (see Pihl and Peterson, 1993) indicate that 62% of a meta-analysis population of 9,304 violent offenders were drinking at the time of the offence. A community sample of 644 people with DSM-III criteria for schizophrenia (Lindqvist and Allebeck, 1990b) found that 37% of the violent sample were substance abusers and 18% probably so. However, the latter category was not defined. Higher rates were found in in-patient settings where in one study 98% of a sample of 85 males with DSM-III criteria for schizophrenia (Yesavage and Zarcone, 1983) were using alcohol at least once a week, although there were substantial methodological difficulties in this study and the amount of consumption was not specified. Pihl and Peterson (1993) indicate that alcohol inhibits cautious behaviour in situations where there is threat of danger. Thus, due to faulty information processing and lack of fear, psychotic individuals may continue to participate in dangerous situations.

In an attempt to differentiate the association with violence in different illicit drugs, Honer, Gewirtz and Turey (1987; see also Cirincione, et al., 1992) explored this in a sample of men and women, of whom some had a history of psychosis that was not drug-related. It was found that significantly more psychotic symptoms and thoughts or acts of violence occurred in those who took crack cocaine. Overall, studies indicate that dual diagnoses of psychosis and substance abuse present a poor prognosis than single diagnosis (Smith and Hucker, 1994). Such individuals are also vulnerable to arrest because of the few treatment alternatives available (Abram and Teplin, 1991; Teplin, 1990), thus inflating the prison statistics.

**Treatment**

In the light of evidence associating positive symptoms with serious offending, treatments to prevent re-offending need to be aimed primarily at modifying delusions and hallucinations. The use of anti-psychotic medication, blocking the D2 receptor (Anderson, et al., 1994), is based upon understanding behaviour as analogous to physical illness (Blackburn, 1995). Theories regard an excess of dopamine in the brain systems as interfering with executive processing and producing autonomous and unintended cognitive activity (Westacott, 1995). Though it improves the symptoms in approximately 70% of people with schizophrenia, medication rarely eliminates them
(Davis, 1991). Nevertheless, medication does seem effective with acute periods of psychosis (see Andreasen and Flaum, 1991), contributing to relapse prevention (see Dilks and Conning, 1995; Tarrier, Beckett, Harwood, Baker, Yusupoff, and Ugarteburu, 1993). Non-compliance to medication in schizophrenia occurs (see Alford and Correia, 1994; Lee, Liew-Mak, Yu, and Spinks, 1993) and it is reported at 40% (Kuipers, 1996).

Alongside medication, psychologically-based therapies help reduce and manage psychotic symptoms, particularly with relapse prevention programmes in rehabilitation encouraging individuals to take responsibility and gain control over their behaviour. Kuipers (1996) argues that acknowledging the feelings of staff involved in intervention programmes, as well as their need for training and support, is essential for successful outcomes.

**Analytical Explanations of Psychosis**

Analytical explanations of psychosis focus on early upbringing. The process is seen as a result of the interplay between biological and environmental factors, where parental figures were not able to contain the emotional experiences of the child nor fulfil their emotional needs (Hingley, 1992). Psychoses develop when serious damage to the self occurs and where, in contrast to personality disorders, defensive structures are not in place to cover the difficulties (Roberts, 1992; Kohut and Wolf, 1978). Violence, in psychosis, is seen as a defence mechanism for which displacement of aggression from primary objects is placed onto symbolic representations or substitutes for those objects (Davis, 1991). A lifelong pattern of maladjustment and poor social communication in paranoia results in attempts to change unbearable feelings of isolation and lack of relatedness which are then projected onto others through violence (Roberts, 1992).

Psychotic symptoms express inner conflicts (Freud, 1924; cf. Tarnopolwsky, et al., 1995; Jung, 1907; cf. Fowler, Garety and Kuipers, 1995) and analytic interventions aim at their unconscious meaning. Techniques such as listening skills, transference and countertransference, and interpretation of behaviour given a history, are used (Benedetti, et al., 1993). In this way, splitting, projective identification and denial of
features of the self and the object are weakened and a less fragmented and confused ego emerges (Tarnopolsky, et al., 1995) with a decreased need to retire from their reality with the object.

The richness of analytic thinking presents difficulties for scientific inquiry (see Tarnopolsky et al., 1995; Fowler, et al., 1995; Hemsley, 1995b; Tarrier, et al., 1993; Ritzler, 1981) since each theory focuses on different aspects of development. In addition, they evince poor evaluation, focusing on process rather than outcome, with results mostly based on single case studies which thus affect generalisation of findings. Attributing positive gains to psychotherapy alone also appears difficult. While some studies are successful without using medication, in others success is due to a combination of psychotherapy and neuroleptics (Bentall, 1995b).

**Behavioural Explanations of Psychosis**

The achievements of behaviour modification challenge the need for insight in psychosis (David, 1990) suggesting a disjunction between thought and action.

Operant methods, such as token-reinforcement and systematic desensitisation (Slade, 1995), have been found to have a positive effect on the frequency of delusional behaviour, delusional speech, and social functioning, particularly for paranoia and grandiose delusion (Ritzler, 1981). However, generalisation appears limited (Hemsley, 1995b). Non-operant procedures, such as functional analysis, have been shown to reduce auditory hallucinations (Slade, 1995; Slade and Bentall, 1989). Techniques of imaginal systematic desensitisation, distraction, aversion and punishment have also shown positive results managing hallucinations (Slade, 1995). However, the success of using punishment is limited since it teaches no alternative behaviours and therefore the unwanted behaviour returns as soon as punishment is withdrawn (LaVigna and Donnellan, 1995). Combined studies of behaviour therapy, psychoanalytically-oriented elements and cognitive orientation have achieved successful outcomes regarding the elimination or diminution of positive symptoms (Ritzler, 1981). However, attribution of treatment success to behavioural interventions alone is difficult. Finally, internal processes tend also to be ignored (Roberts, 1992).
Cognitive Explanations of Psychosis

Cognitive theory suggests that by challenging maladaptive cognitions verbally, alternative interpretations are generated and tested empirically (Beck, Rush, Shaw and Emery, 1979) to gain cognitive change (Chadwick et al., 1994). Cognitive models explore the impact of the person's belief on their life and investigate ways of minimising any negative effects in their functioning and well-being (Perkins and Dilks, 1992). Whilst beliefs can be delusional, the accompanying emotions are real. Thus, tackling the belief and its emotional content is essential for risk reduction.

Fowler, et al., (1995; Lee, et al., 1993; Hingley, 1992) discuss the benefits of the vulnerability-stress models in acknowledging biological, psychological and social factors in psychosis (Bentall, 1995a; Pilgrim, 1995) and this has guided interventions which promote active coping and reducing relapse. It is suggested that stress is an activator of psychosis (Bentall, 1995a; Hemsley, 1995a; Alford and Correia, 1994; Anderson, et al., 1994; Watts, Powell and Austin, 1973) due to patients' dysfunction in information processing and arousal regulations (Hemsley, 1995b).

Functionally, psychotic symptoms may serve several purposes (Boyle, 1990), and prior to interventions, a functional analysis may determine appropriate ways of intervening. Ignoring or diverting delusional belief may mean denying others' reality and can further isolate the client, preventing the formation of a good working relationship (Watts, et al., 1973). In addition, listening to the story from within is a potential source of insight (Claridge, 1993) and studies of the rationality-within-irrationality model (Link and Stueve, 1994) have been encouraging. Link and Stueve (1994) found that violence is likely to occur when a person feels personally threatened by interpersonal circumstances, and that this will occur more frequently when internal control mechanisms break down. Though encouraging, results need replication. In a replication study, Swanson, Borum, Swartz and Monahan (1996) confirmed Link and Stueve's (1994) findings. They found, in addition, that those who felt threatened by others were twice as likely as those who did not to have a history of violent behaviour. This likelihood increased sixfold when these symptoms co-existed with substance abuse. Boyle (1990) also suggests that psychotic symptoms are maintained through increased
social isolation, with self-generating processes being rehearsed over time, resisting reality checks.

Cognitive re-structuring, re-interpretation of symptoms, in vivo desensitisation, and relaxation techniques, accompanied by ratings of belief convictions, preoccupation, anxiety, and pervasiveness are used in reality testing. David (1990; see also Garety, 1991) argues that psychotic individuals are susceptible to confirmatory evidence for current beliefs and that change occurs through the acceptance of an alternative view which is then confirmed by experience (see also Chadwick et al., 1994; Buchanan, Reed, Wessely, Garety, Taylor, Grubin, and Dunn, 1993; Brett-Jones, Garety, and Hemsley, 1987). Watts et al. (1973) found reductions in the strength of the belief though these were not completely abandoned, indicating that treatment needs to focus on increasing coping skills rather than on the elimination of beliefs. Recent randomised controlled trials studies (Kuipers, Garety, Fowler, Dunn, Bebbington, Freeman and Hadley, 1997) showed 25% reduction in positive symptomatology as opposed to none obtained in the control group who received standard care, and that cognitive flexibility was essential for change (Garety, Fowler, Kuipers, Freeman, Dunn, Bebbington, Hadley and Jones, 1997).

Assessing coping skills systematically in order to observe their transferability is essential for successful treatment, with two factors particularly important: the presence of environmental cues (Lee et al., 1993), and the client’s cognitive, behavioural, and physiological reactions to psychotic symptoms (see Tarrier, et al., 1993). The aim is to train the client to cope with and control the environmental cues and emotional reactions that were maintaining the symptoms.

Studies of cognitive therapy present difficulties due to the demands treatment places on neuropsychological skills, including clients’ short attention span, poor concentration, perceptual disturbances and executive function deficits (see Westacott, 1995). The more useful interventions usually take the form of manipulation not just of cognitive factors, but also of the physical and social environment to enable the person to engage (Perkins and Dilks, 1992).
Preventing relapse is a key issue in managing psychosis successfully, and specific relapse plans should respond to early signs (Perkins and Dilks, 1992; Birchwood and Preston, 1991). However, this model risks interpreting all behaviours as symptoms of psychosis (Boyle, 1990), ignoring the contribution of environmental factors.

**Systemic Explanations of Psychosis**

The relationship between the psychotic person and their victim needs to be considered (Taylor, 1993). Murder victims of psychotic individuals are more likely to be blood relatives than strangers (Nestor et al., 1995). The interpersonal element is of great importance for the development of paranoia, as violence is directed at significant others who are seen as persecuting or sadistic, with a history of hostility and resentment (Harper, 1992; Krakowski et al., 1986). This interaction might explain the frequent occurrence of deluded interpersonal violence outside hospital settings.

Acknowledgement of environmental factors in psychosis and relapse have been put forward by supporters of a vulnerability-stress model (Hemsley, 1995a), and interventions aim at reducing exposure to aversive emotional states (Hingley, 1992). In a study of several psychotic groups (see Tarrier, et al., 1993), those with schizophrenia who return to live with spouses and families had a higher likelihood of relapse than those who went to live alone.

Studies which focus on ‘Expressed Emotions’ families and which have identified several dimensions of potential stress (see Kuipers, 1996; Anderson, et al., 1994; Tarrier, et al., 1993) suggest that living with a highly emotional family increases the chance of relapse by overloading the client’s limited capacity for information processing and response selection. Successful family therapy has been reported with psychotic symptoms (Ritzler, 1981), particularly when focusing on practical issues of daily living (Lee, et al., 1993), with results from holistic studies (Hemsley, 1995b) indicating success in reducing relapse in the short-term. Though helpful in reducing familial stress, studies of family interventions present difficulties with engagement and withdrawing of treatment, and with separating the effects of multi-component treatment.
At the wider level of psychotic individuals’ interaction with society, the challenge of psychologically-based interventions is to enable clients to establish genuinely valued roles and a sense of identity (Barham and Hayward, 1995). This is particularly difficult for an offending population coping not only with mental illness but also with the consequences of offending. However, understanding the interaction between symptomatology and labelling in social systems is essential for meaningful service delivery to people with psychosis.

**Conclusions**

The stereotype of the violent mentally ill patient is detrimental to those who have no choice but to live in the community (Teplin, McClelland and Abram, 1993). Research indicates that there is a link between psychosis and offending. Evidence suggests that this relationship is relative and not absolute. Most individuals with psychosis do not engage in offending behaviour. When they do, it is mostly petty offences or offences against property (see Cirincione et al., 1992; Wessely and Taylor, 1991; Ashford, 1989). However, a minority engage in violent offending and some do so repetitively. These latter are likely to comprise people with paranoid schizophrenia who are not medicated and those experiencing command-type hallucinations and delusions. By specifying who among the mentally ill is likely to be violent and why, and by specifying appropriate medication and psychosocial treatment, violence may be prevented (Link and Stueve, 1994).

Violence and psychosis can be seen as occurring due to an interactive process of several factors (Davis, 1991). Primarily, these are positive symptoms and the time and phase of the condition. The risk of violence among people with psychosis increases when combined with substance abuse and personality disorder. At an environmental level, violence can be affected by interpersonal and situational factors.

Although anti-psychotic medication has beneficial effects for some, social and occupational deficits (Hemsley, 1995b) remain and indicate a need for comprehensive and psychologically-minded models of psychosis (Pilgrim, 1995; Tarrier, et al., 1993). Due to the complexity of factors involved in psychosis, psychologically-based therapies
need to work with the individual and the environment in order to achieve more comprehensive results in recovery, as well as prevention.

Data suggests that psychotic symptoms are dynamic (Beck-Sander and Clark, 1997) and context-related and that environmental factors contribute to maintaining and increasing their intensity, suggesting the need to view psychotic symptoms according to their functional properties (Boyle, 1990), and in the light of a functional analysis framework. In other words, there is a need to connect cognitive organisation and environmental events.

Recently, psychologically-based interventions have suggested a variety of successful interventions. What still remains controversial is what form of psychological treatment may be superior to another and at what level of symptomatology (Pilgrim, 1995). Evidence suggests that cognitive models such as the rationality-within-irrationality and vulnerability-stress have contributed most to explaining and treating psychosis. However, their framework also acknowledges aspects put forward by analytic, systemic and behavioural theories and models.

Due to the complexity of psychosis, and its relationship with offending behaviour, a comprehensive assessment and treatment programme needs to integrate psychosocial, cognitive, cognitive-behavioural, and psychodynamic factors (Hingley, 1992). Additionally, the management of risk must also be considered.
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Clinical Section
Summary of the Clinical Section

This section contains the placement contracts for all clinical placements; four core and two specialist placements undertaken over three years. A selection of five out of seven case reports have been submitted in full in a separate confidential volume which contains in addition records of all clinical activity, log books, and supervisors' evaluations of the trainee on placement. This section contains a summary of the five case reports which have been chosen to reflect the variety of clinical work across placements, and examples of clinical interventions using different models.

The case reports presented in this section cover a brief systemic intervention with an adult client with memory difficulties and his wife, a behavioural plan for the challenging behaviour of a female client with a learning disability, an assessment and systemic management of a child with encopresis and enuresis, a psychometric assessment of a male client with dementia, and analytical interpretations within a behavioural plan for a forensic male client with personality disorder. All client names and other identifiers have been changed or removed in order to preserve confidentiality.
There is a delicate balance between our reliance on our theories and on our knowledge of human nature in many of its dimensions.

The balance, is between reliance and our willingness to be continually open to the emergence of the unexpected. There is a grim stage when we are learning when we are endangered by our own templates, our theories, and our teachers. We may detect the faint shuffle of the slouching beast, and be tempted to throw a set of grappling irons into the darkness, seize him, label him, hang him round with words, and haul him prematurely to birth. We may often be stuck with a deformed monster that we have largely created by our own precipitate verbosity; we may then proceed laboriously onwards with a sort of analytic mistake, while the true creature who is not yet ready for the light of day retreats backwards into the darkness again.

Patients teach us most vividly and memorably that there is always in our work a dimension that is beyond words. Some people suffer more from the ‘unthinkable’ than others, and for these we have to do all in our power to help towards the therapeutic transformation, to bring thoughts to the unthinkable and words to the inexpressible.

Gradually the rough beast may, within the framework of the analytic relationship, slouch towards being born, and the new creature emerging from the birth is the increased happiness and peace of mind of the patient. But in all of us there are some things which will never be within our reach; there is always a mystery at the heart of every person, and therefore in our job (Coltart¹, 1996).

Adult Mental Health Core Placement Summary

Location: Department of Clinical Psychology, Adult Mental Health, Kenley Extension, Kingston Hospital, Galsworthy Road, Kingston upon Thames, Surrey.

Dates: October 1995 - March 1996

Main Supervisor: Rhona Trotter

Additional Supervisors: Leo Estall, Frank Milton and Karin Ironside

Departmental Base: as above

Brief Summary of the Nature of the Placement:

The placement provided mainly out-patient primary and secondary counselling and psychology services and it facilitated the development of a rich combination of therapeutic models and skills such as cognitive-behavioural, analytic and systemic. Opportunities were available to observe a range of additional services concerned with the rehabilitation of clients with long-term needs and with complex and enduring mental health difficulties. The placement also provided opportunities to work multidisciplinarily, including home-visits with other professionals, observation of in-patient services, participation in the reflecting team of the Family Therapy service and the attendance of service delivery meetings. During the placement, it was possible to work with thirteen male and female clients, aged 21 to 51. The range of the difficulties presented included sexual functioning, memory difficulties, eating disorders, bereavement, depression, anxiety, obsessive compulsive behaviours, substance abuse, sexual abuse, interpersonal difficulties and phobias. Clients' difficulties allowed scope for psychometric testing.
Adult Mental Health Placement Contract
Kingston & District Community NHS Trust
Department of Clinical Psychology

Supervision Day and Time:

R.T. - fortnightly (Thursday 1.30 - 2.30)
L.E.- weekly (Wednesday 12.30 - 1.30)
F.M.- fortnightly (Wednesday 3.00 - 4.00)

Further informal supervision as necessary. Supervision on ad-hoc basis from clinicians with specialist interests/expertise by arrangement.

Study Time:

Friday pm.

Date of Mid Placement Review: 2 February, 1996.

Aims of Placement:

1. To provide an overview of the Adult Service (Primary Care and Mental Health).
2. To gain clinical experience (observation and direct experience) with a range of clients of different ages and both sexes (couples and families where possible) covering the ten main categories as specified.
3. To gain experience of a range of therapeutic models, with particular emphasis on two models: cognitive behavioural and psychodynamic.
4. To become familiar with a range of assessment techniques.
5. To become familiar with a range of psychometric assessment tools, rating scales, etc.
6. To see one client with long-term mental health problems.
7. To observe multi-disciplinary rehabilitation team meetings and reviews.
8. To be introduced to long-term mental health care (e.g. observe ward round on acute ward and joint CPN/Social Worker on visit).
9. To attend Family Systems group as part of the observing team.
10. To undertake one or two assessment and full treatment of clients in surgery-based primary care setting.
11. To observe supervisor in primary care surgery based assessment.
12. To gain a working knowledge of brief focused therapy.
13. To gain experience in formulation and planning of therapy, particularly in cognitive behavioural.
14. To gain a clear understanding of time management, network liaison, report writing in different settings/for different referrers.
15. Supervisor to provide time for discussion concerning non-client-related placement issues.
16. Supervisor to provide time for discussion concerning purchaser/fundholding, etc.
Brief Systemic Intervention with a 35-year-old male Client, present with Memory Difficulties, and his Wife

Paula Maggi
Year I
March 1996
A 29-year-old man was referred for a psychometric assessment after he reported memory difficulties for a year. He described these difficulties as ‘silly’ and gave as an example forgetting to deliver a simple message. Difficulties occurred up to three times a day and were affecting his work and his marital relationship. The Wechsler Memory Scale, revised version, (WMS-R) indicated Mr. R to be fully oriented in time and place. Results in the five subtests indicated scores within and above the norm. Mr. R attended a feedback session with his wife.

During the past year the couple had experienced tensions which were affecting their marriage. The perceived difficulties became wider than originally presented by Mr. R and they differed in describing the events which might have been contributing to the presenting difficulties. Since Mrs. R’s last pregnancy, Mr. R was working an additional ten hours per week to cover his wife’s cleaning jobs. Moreover, family difficulties between his wife and his family had been affecting their relationship. In addition, the couple had been waiting for a transfer to another country, where Mrs. R’s family resided and Mr. R felt to blame for this delay. While Mrs. R was able to express frustration and anger, Mr. R appeared quiet and laid-back.

A systemic intervention attempted to shift the cybernetics of the couple, and a systemic ‘ritualised prescription’ was suggested to allow work at three levels: allowing the couple to experience unusual experiences, exploiting their competitiveness in creating solutions, and collecting information about their ability to follow the prescription. The ‘Odd Days and Even Days’ ‘prescriptive ritual’ was suggested where on three days of the week Mrs. R would accept her husband’s memory difficulties and on other three days Mr. R would accept his wife’s reminders. Sundays became a day for spontaneous behaviour.

By the third session, Mr. and Mrs. R had followed the prescription with remarkable changes. Mr. R reported that he enjoyed being himself and indeed had been able to remember things more accurately. In addition, his wife reported that she had noticed she had been demanding and critical of her husband. The couple made a number of resolutions aimed at improving their relationship. In addition, they asked to be referred to Couple Counselling to work on their communication styles.
Learning Disabilities Core Placement Summary


Dates: April - September 1996

Main Supervisor: Derek Blackburn

Departmental Base: as above

Brief Summary of the Nature of the Placement:

The placement offered a general psychology service to out-patients and to residential settings (health, social services and private). In addition, it provided a consultancy service of excellence in the area of challenging behaviour. Opportunities for involvement in research, teaching and presentation of clinical material were encouraged. Staff training was of paramount importance and attendance at seminars, courses and familiarisation with the relevant literature was also promoted. Attendance at meetings of national and local service delivery provided a wide introduction to the service and the philosophy of care which the placement had adopted. Discussions took place of the role of the psychologist in forensic cases involving clients with learning disabilities. The placement provided a high standard of training in working with non-aversive behavioural techniques. Interventions included working with clients and carers. During the placement, the work concentrated on five clients aged 22 to 51, and involved both individual psychological interventions and consultancy work with carers. Group work on Anger Management occurred weekly for twelve weeks with nine clients aged 24 to 51. Clients presented difficulties with anger, sexual functioning, social functioning, sexual and psychological abuse, and severe challenging behaviour. Co-working with care staff and other members of the department was encouraged.
Learning Disabilities Core Placement Contract
Hastings and Rother NHS Trust
Department of Clinical Psychology

A Brief Description of the Placement

The placement involves working with adults with learning disabilities. The department operates by providing a wide range of clinical psychology services to all people with learning disabilities and also provides a specialised service to people with challenging behaviour based on an assessment of the severity of their behaviour. The trainee will work in a full range of settings including the hospital, health authority group homes, social services day centres, social services residential units, as well as facilities run by the private and voluntary sector.

Main Aims of the Placement:

1. To gain expertise with regard to a range of assessment and intervention with people with learning disabilities.
2. An introduction to the general planning of services for people with learning disabilities.
3. An introduction to a specialised service to people with challenging behaviours.
4. General familiarisation with issues regarding services for people with learning disabilities.

Outline of the Ways of Achieving the Aims:

The trainee will primarily work in three ways:

1. By directly observing the supervisor and colleagues.
2. Jointly working with the supervisor and colleagues.
3. Working with support only on the trainee’s own case loads.
The trainee will be expected to liaise with other professionals both in regard to individual clients and to issues surrounding service provision generally.

Specific visits will be arranged to various establishments both in regard to individual clients and general service orientation. These may include the University of Kent at Canterbury, Sussex Autistic Trust, and the Community Care Planning Group (Learning Disabilities).

Opportunities will be arranged for the trainee to engage in teaching staff groups.

*Any Special Experiences to be Offered:*

1. The trainee will participate in and observe the application of multi-element behavioural approaches to people with challenging behaviours. This will involve conducting an assessment and managing an intervention.
2. The trainee will run an Anger Management group with an aim determined by referrals at that time.
3. The trainee will attend a three-day course in London on a Non-Aversive Behavioural Approach to Challenging Behaviour by LaVigna and Willis.

*Case Reports:*

One case report will be completed by the trainee whilst on the placement.

*Details of Supervision:*

Two hours of supervision will be provided per week usually at 9.30 each Wednesday and Friday. Supervision on ad-hoc basis from clinicians with specialist interests/expertise by arrangement.
Study Time:

The trainee will have access to study time on Thursday afternoon.

What will be Achieved by the End of this Placement:

The trainee will have conducted formal assessments and some interventions with a range of people with learning disabilities. The trainee will be able to demonstrate competence in the assessment and initial application of multi-element treatment approaches for people with learning disabilities who exhibit challenging behaviour.

The trainee will have demonstrated competence in the provision (assessment, planning and intervention) of a social skills groups related to the needs of a selection of clients from the waiting list for such a group.

The trainee will have understanding of some of the issues pertinent to clinical psychologists when involved in planning services for people with learning disabilities and severe challenging behaviour.

The general level of knowledge and understanding with regard to remaining issues surrounding this client group will have increased.
PsychD in Clinical Psychology
University of Surrey
Learning Disabilities Core Placement Case Report Summary

Behavioural Analysis
of Challenging Behaviour
by a 29-year-old female Client
with Severe Learning Disabilities

Paula Maggi
Year I
September 1996
A 29-year-old woman with severe learning disabilities was referred by the Resource Officer at her residence for an assessment of her behavioural difficulties, with a view to providing recommendations to staff to assist in dealing with her challenging behaviour. The behaviour in question resulted in severe disruptions to her routines and her access to opportunities in the community. A functional analysis of the presenting challenging behaviour indicated that Ms. R. displayed two types of behaviour. A high frequency and low intensity behaviour and a low frequency but high intensity behaviour. Motivation Assessment Scale scores indicated that the behaviour could be further categorised into mild, moderate and severe.

Results suggested that Ms. R’s outbursts served general functions. While mild behaviours were used to gain attention, and to a lesser extent to avoid certain activities, the more severe behaviours were used to gain tangibles not granted. These were used in order to assert her claims with force.

A behavioural plan was devised based on the principles of Social Role Valorisation to enhance Ms. R’s competencies so she could be provided with opportunities for community participation. A series of competencies were assessed (e.g. language, self-help, personal and social skills, community participation) with indications of significant cognitive, intellectual and communication limitations. Direct observation of her challenging behaviour using a 20-second Momentary Time Sampling indicated that her levels of engagement in purposeful activity and social contact were poor and that challenging behaviour occurred most often when this engagement was absent. An intervention to manage the challenging behaviours, with short and long-term goals, was directed at service provision based on five themes: ecological strategies, positive programming, direct treatment strategies, reactive strategies and staff training.

With the full co-operation of staff, Ms. R’s challenging behaviour decreased to half the initially observed frequency. This meant that she was able to enhance her quality of life by increasing the opportunities offered to her with effects on the five Accomplishments. Recommendations were suggested to the service for the maintenance of the successful outcomes.
Children, Adolescents and Families

Core Placement Summary

**Location:**
Department of Psychology, Child and Adolescent Service, Princess Royal Hospital, East Wing, Lewes Road, Haywards Heath, West Sussex.

**Dates:**
September 1996 - March 1997

**Main Supervisor:**
Nick Kirby-Turner

**Departmental Base:**
as above

**Brief Summary of the Nature of the Placement:**

The placement offered both out and in-patient services to children, adolescents and families, as well as a Family Therapy service with a reflecting multidisciplinary team of social workers, nurse visitors, psychiatrists and psychologists. Visits to schools and home visits were encouraged, as was attendance at seminars where clinical material and other relevant issues regarding the welfare of children, the development of the service delivery and the purchase of clinical psychology services were all discussed. Joint work with supervisors and co-working with carers, parents, teachers, educational psychologists and paediatricians was promoted. Research into the behaviours of children in care across children's homes in the region took place. Psychological interventions occurred with twenty four clients, using developmental, cognitive-behavioural and systemic models. This involved a case load of sixteen children and adolescents aged 3 to 17, and eight families involving children from three months old and their parents. Clients presented difficulties with stealing, sexual abuse, sleeping, non-compliance, enuresis, encopresis, language and comprehension, eating, deafness, hyperactivity, underachieving at school, bereavement, semantic-pragmatic, agoraphobia, psychosis, inter-personal relationships, violence, substance abuse, depression and anxiety. Opportunities were available for psychometric testing.
Children, Adolescents and Families Core Placement Contract

Mid-Sussex NHS Trust
Child and Adolescent Psychology Department

Induction Process:

The aim is for the trainee to gain an understanding of the relationship of Child Psychology to services in Child Mental Health and also in Child Health and Child Protection Services. The induction will include:

1. Observation of Clinical Child Psychologists working in different settings.
2. Observation of an Educational Psychologist at work.
3. Attendance at a Juvenile court.
4. One session in a children’s playgroup and a visit to a primary school.
5. One case in the school at Colwood Adolescent Unit.
6. Observation of a Community Paediatrician during a Developmental Assessment.
7. Visiting Larchwood Children’s Unit.
8. One fortnightly session at a Family Therapy clinic.
9. Experience of multi-disciplinary team discussion.
10. Familiarity with issues surrounding Child Protection Assessment.
11. Meeting with other members of the Psychology Department.
12. Irregular sessions at the Child and Adolescent unit in Horsham.
13. Meeting other health professionals and members of Social Services.
14. Opportunity to attend seminars and educational workshops in the region.

Clinical Work:

The aim for the trainee is to become familiar with the range of assessment procedures and therapeutic techniques with children and their families. This will include:

1. Outpatient work at the Child Psychology Department and at the Child and Adolescent Unit at Horsham. A variety of cases, reflecting the full age range and
when possible, different ethnic background, to illustrate the breadth of the specialty in terms of reasons for referral and therapeutic approaches applicable. Clients will include children and adolescents with developmental, emotional and behavioural difficulties. This will also include a cognitive assessment. A suitable case will be available for the trainee to write up as a report of clinical activity. There will be opportunities for individual and family-centred work. There will be some joint work with Nick Kirby-Turner and Jenny Alvarez.

2. Outpatient work at the Family Therapy Service. Participation in the reflecting team, behind a one-way screen, will be undertaken on a fortnightly basis, for one afternoon.

**Teaching:**

The trainee will present in the Child Seminar Series to other Child Psychologists. As opportunities arise, the trainee will engage in formal teaching to other professionals, possibly through case-based teaching.

**Research:**

There will be discussion of on-going audit and research issues in child work. The trainee will undertake a research project with Children and Adolescents during her placement. For this, one half-day a week will be allocated to collect data and interview sample.

**Study Day:**

The trainee will have a full day on a fortnightly basis for study leave whilst on placement.

**Professional Development:**

The trainee will endeavour to gain a perspective of service delivery issues through
clinical work, and to explore issues of service development, by attending Department meetings and discussing issues as they arise.

**Supervision:**

The trainee will receive two hours of formal supervision a week. Further supervision will be obtained through informal meetings and via peer group supervision meetings. Informal or emergency supervision can be arranged at the trainee's request. There will also be some direct observation of the trainee's work through joint sessions and the use of the VCR.

**Other Experiences:**

1. The trainee will write psychological reports, letters and case notes, as required.
2. The trainee will keep administration records consistent with the requirements of the Department.
3. The trainee will keep a log book of experiences gained during placement.

**Goals of Placement:**

It is hoped that by the end of the placement, the trainee will have gained a broad experience of working with children and families and an understanding of appropriate therapeutic interventions. The level of knowledge and understanding with regard to these issues will be increased.

**Mid-Placement Review:**

Meetings between the trainee, the placement supervisor and the regional clinical tutor, at the middle of placement, will be used to review the trainee’s progress towards achieving these goals and to re-negotiate the contract if required. The meeting will take place on 15 January, 1997.
Assessment and Management of a 9-year-old Boy
with Enuresis and Encopresis

Paula Maggi
Year II
April 1997
A 9-year-old boy was referred by the local Consultant Paediatrician for an assessment and for management of his diurnal enuresis and encopresis. Medical examinations had discarded any physical causes for this behaviour. An initial assessment indicated that C. had recently been successfully adopted along with his three elder siblings. By the time he came to live with his adoptive parents, wetting and soiling were part of C’s behavioural repertoire. Enuresis occurred daily seemingly as a result of poor bladder control. Encopresis also occurred on a daily basis although C. seemed to have this under control. Soiling was used as a means of expressing anger and frustration. For C, these behaviours were not a problem. His adoptive mother was concerned for his welfare at school as she felt that his friends may bully him because he smelt of urine.

It was suggested that, due to his upbringing the necessary social reinforcement and inhibitory influences, indicating the social unacceptability of soiling and wetting, had not been available for C. As a result of a poor socialisation period, neglect and poor toilet training in his family of origin, C. learnt that it was not unacceptable to wet and soil. Interventions focused on co-ordinating his internal physical need to soil and urinate with the external and social requirement to do so appropriately. His adoptive parents were fully committed to his welfare and were very supportive of C’s achieve his goals.

The intervention plan combined systems theory with behavioural elements in a developmental context. A toilet training programme was devised in order to enhance C’s chances to be continent and he was positively reinforced for desired behaviours. Soiling was conceptualised as an expression of anger and therefore C. was supported in developing problem-solving skills with a system of teaching him how to think rather than what to think. The externalisation of the presenting difficulties contributed to the parents perceiving themselves, and indeed their child, in a non-problem-saturated system and to facilitating creative ways of coping. Both parents were encouraged to participate in these tasks with C.

In five months of intervention, charts indicated remarkable improvements and the disappearance of soiling. Due to continued night wetting, C. was referred to the school nurse for an enurectic alarm. The family dynamics are further discussed.
**Older Adults Core Placement Summary**

**Location:** Older Adults Service, Temple Ward, St. Martin’s Hospital, Littlebourne Road, Canterbury, Kent.

**Dates:** April - September 1997

**Main Supervisor:** Melanie Place

**Departmental Base:** Psychology Department, Gregory House, St. Martin’s Hospital, Littlebourne Road, Canterbury, Kent.

**Brief Summary of the Nature of the Placement:**

The placement offered a clinical psychology service to out and in-patients with both organic and functional difficulties. It focused mainly on organisational issues and groupwork. Home visits were encouraged. The placement promoted joint working and consultation with other disciplines such as nursing and psychiatry. Groupwork with clients, involving carers, were key strengths. There were opportunities for the transmission of skills to staff working in acute settings, the presentation of clinical material and the involvement in service development projects. Attendance at seminars on a range of geriatric issues was encouraged. During the placement, individual work focused on eleven clients aged 67 to 87 presenting difficulties with memory, depression, anxiety, interpersonal relationships, aggression, dementia, obsessive compulsive behaviour and arthritic pain. Neuropsychological testing was available with a wide range of difficulties. Groupwork involved a Reminiscence group of six clients, aged 43 to 90, from a private residential home, in which staff were encouraged to learn from the model and run sessions themselves with access to supervision. A similar model was applied in a Communications group of fifteen clients, aged 58 to 90, from an in-patient assessment ward for people with organic difficulties. Positive approaches and cognitive-behavioural models were mainly used in psychological interventions.
Paula is on placement with Melanie Place for three days a week, Wednesdays to Fridays, to gain experience of working as a Clinical Psychologist with Older Adults.

Melanie will aim to provide the following for Paula during that time:

**Direct Client Work:**

Experience of working individually with up to six clients. Paula wants clinical experience of psychometric neurological assessment with at least two people. Paula wants to sit in with Melanie if and when appropriate particularly individual clients for assessment. Co-working with Melanie in one of the following areas of Family, Marital and Groupwork will be arranged as opportunities arise. Paula will have contact with clients in in-patient, out-patient and community settings and with patients with functional and organic mental impairments. Paula will be involved in reminiscence groupwork, groupwork on the functional and organic admission's unit and in the Day Hospital to gain experience of running groups with older people. Evaluation of the groupwork will be an integral part of the work. Paula will be expected to feedback as appropriate to clients and carers (formally and informally) on the nature of her input.

**Teaching:**

Paula will be asked to make one input to either the Psychology Department seminars or the Multi-disciplinary team teaching sessions in conjunction with others or alone as appropriate. She will attend PSIGE meetings and workshops as necessary.
Service Development:

As a member of a very small Clinical Psychology service to Older Adults, Paula will be encouraged to voice her ideas about the development of the service. In one particular project of taking teaching and training into Residential homes, Paula will be asked to use her learning difficulties experience in the development of the assessment package for this pilot project.

Out and About:

Paula will be given the opportunity to visit facilities used by Older Adults with mental health problems. These should include:

1. In-patient acute wards.
2. A Day Hospital.
3. A Day Centre.
4. A Long stay ward.
5. A nursing home.
6. A residential home.
7. Sheltered accommodation.
8. Homes.

Watching a Psychiatrist or Geriatrician will be arranged as will an opportunity to attend MDT meetings. Contact with Social Services will be made if possible.

Paula will be a member of the District Psychology Department and will be encouraged to attend the staff meetings held on a three-monthly basis. Secretarial and other administrative support will be provided from the Older Adults Psychology Department based at St. Martin’s Hospital for placement work.

Paula will meet members of the community teams working with Older Adults and work with them as appropriate.
**Supervision:**

Melanie will aim to provide two hours’ regular supervision a week, and be available for informal discussions at other times.

Time will also be set aside for discussion of philosophies of care in Older Adult work and legal and national issues related to ageing policy.

**Research and Study:**

Paula will be encouraged to participate in research. Firstly, she will be expected to evaluate her groupwork and secondly she will be involved in the pilot project of teaching and training which is currently being put together. Half a day a week will be for study.
PsychD in Clinical Psychology
University of Surrey
Older Adults Core Placement Case Report Summary

Psychometric Assessment of a 71-year-old male Client with a Deterioration in Mental Functioning

Paula Maggi
Year II
September 1997
A 71-year-old man was referred by the local Consultant Psychologist for a psychometric assessment of his cognitive functioning. The referral letter indicated signs of depression. Mr. C.R. was seen at home and meetings took place with his wife present. They have been happily married for nearly forty years. It appeared that Mrs. R was finding it increasingly difficult to cope with the changes in her husband's cognitive, affective and behavioural functioning over the last six months. Changes were marked in their sexual intimacy and she was thinking of leaving him.

Over the past three years, Mr. R had experienced psychosocial stressors which had challenged him emotionally with important losses. He had shown poor ability to express his feelings openly. However, the contribution of these stressors to his behaviour and cognitive decline was difficult to determine. Over the past six months, Mr. R had experienced a considerable decline in mental functioning and disorientation in time and space. His abilities of daily living remained intact, although his instrumental abilities of daily living began to deteriorate, thereby increasing his dependency on others. Increasingly, his memory difficulties had presented in risky situations such as when he had left a cigarette alight near a newspaper. This meant that his wife no longer left him unattended.

A combination of psychometric assessments with elements of positive approaches to dementia care and practical advice was offered to the family. Moreover, an assessment of Mrs. R's needs and the resources of all the family was performed in order to suggest appropriate management strategies and community services. A range of psychometric assessments indicated significant deficits in memory, abstract thinking, and other frontal lobe difficulties. In addition, he showed difficulties with attention and copying. Scores were consistent with those from people with dementia. Mrs. R showed an indication of considerable personal disturbance.

During a feedback meeting with the entire family, a number of points were discussed in order to find realistic expectations of the current situation, to prepare the family to use external support and to involve their two adult children in supporting Mrs. R so that she found some respite. By the end of the six sessions, the family had already re-organised themselves and was in contact with local services for dementia care.
Forensic Specialist Placement Summary

**Location:**
Forensic Management Centre, Trevor Gibbens Unit,
Maidstone Hospital, Hermitage Lane, Maidstone, Kent.

**Dates:**
October 1997 - March 1998

**Main Supervisor:**
Dr. Lona Roberts

**Additional Supervisors:**
Grant Broad

**Departmental Base:**
Clinical Psychology and Psychotherapy Department,
The Courtyard, Pudding Lane, Maidstone, Kent.

**Brief Summary of the Nature of the Placement:**

The placement provided a Clinical Psychology Forensic service to out and in-patients in secure settings. Clients in need of psychiatric services were seen in prison. Outpatient work involved risk assessments required by the courts, solicitors and the probation service. There were ample opportunities for skills transmission, teaching, presentation of clinical material to multidisciplinary audiences, staff supervision and research. A research study was undertaken exploring a cumulative model of risk and the data compared to that from a Special Hospital. Psychometric testing was paramount for patients with neuropsychological difficulties and for those recently admitted. Interventions were of a cognitive-behavioural nature with an emphasis on schema-focused therapy. Co-working was encouraged and this occurred in three groups: a Relationships group for seven clients with sexual offences, a Social Skills group for five clients with difficulties in social functioning and a Self-Awareness group for seven clients for them to explore the dynamics of their offences. Eighteen clients were seen individually who had difficulties with sexual abuse, neurological problems, anger, substance abuse, anxiety, depression, psychosis, eating disorders and paedophile behaviour. For some of them, an assessment of risk had been requested.
Forensic Specialist Placement Contract
Invicta Community Care NHS Trust
Forensic Management Centre

The Service:

Individual Patient Contacts:

Paula will have the opportunity to work with a variety of patients on an individual basis. Work will include providing psychotherapy using a cognitive-behavioural and Schema-focused model. She will also consider aspects of psychodynamic models, such as transference and projection. Paula will observe a number of outpatient risk assessments. She will lead one risk assessment and draft a report on this. These assessments will be carried out jointly by Paula and another member of the clinical team, which includes psychologists, psychiatrists and nurses. Paula will complete an admission assessment on one of the inpatients. This will include neuropsychological and psychometric assessments and a functional analysis of the offence. Finally, Paula will have the opportunity to work with at least one offender detained in prison. This might involve risk assessment or psychotherapy.

With regard to the number of patients seen, Paula will take on a maximum of three patients for long-term individual work. She will be involved in a maximum of twelve outpatient assessments. She will carry out a psychometric assessment on at least one patient.

Group Work:

Paula will have the opportunity to facilitate or co-facilitate a variety of therapeutic groups. This will involve unstructured groups, such as the Self-Awareness group and semi-structured groups such as the Relationships and Communications groups. She will co-facilitate with either a psychologist (qualified or assistants) or another member
of the multidisciplinary team. Paula will have the opportunity to co-facilitate at least one group facilitated by her supervisor.

**Ward Rounds/Case Conferences:**

Paula will have the opportunity to attend ward rounds for both clinical teams, and participate in these. She will also attend case conferences for those patients she works with.

**Research:**

Paula will have the opportunity to participate in and discuss research occurring within the service. She will also have the opportunity to pursue her own research.

**Seminars/Teaching:**

Paula will have the opportunity to attend relevant seminars or training days as appropriate, if they arise. This will include the in-service education forum presentations. Paula will have the opportunity to present at this forum and carry out other teaching as appropriate, if it arises.

**Visits to other Services:**

Paula will have the opportunity to visit other forensic settings. This will include Broadmoor Hospital, prisons and locked wards in the local NHS hospitals, and local courts. She will also liaise with other services, such as Probation or Social Services, when appropriate.

**General Service Activities:**

Paula will have the opportunity to attend professional Psychology meetings. These fall on Tuesdays so it is expected she would attend on an occasional basis. Paula will also attend service development meetings within the KFPS, including the Policy, Research
and Therapy Planning Committees. It is planned that she will attend each of these committees on one occasion.

**Supervision:**

Paula will receive weekly supervision from her main supervisor for one and a half hours. She will also receive supervision from additional supervisors for any cases she takes on from their team. Supervision will include discussions of direct patient work, the planning and development of forensic services, policies, current national issues relating to forensic services, issues relating to the Mental Health Act, decision-making processes and the impact on Paula of working in a forensic setting.
Analytical Interpretations
of the Behaviour of a 27-year-old male Client
with Personality Disorder
in the Context of his Behavioural Plan

Paula Maggi
Year III
April 1998
A 27-year-old man was referred by the senior Clinical Psychologist for work on his
difficulties with anger. Mr. R was detained under section 37/41 of the Mental Health
Act (1983) for the Grievous Bodily Harm of a police officer and had spent three years
in a medium-secure unit following his assessment at a Special Hospital. Mr. R had a
long standing difficulty with substance abuse. Initial baseline behavioural recordings of
his behaviour over two weeks indicated one mild incident of anger. On exploration of
his daily activities, it appeared that Mr. R slept for most of the day and night and his
opportunities for angry outbursts were low.

It appeared that Mr. R had a history of aggression against those in authority. This
followed the loss of his step-father, through divorce, whom he was close to. As a child,
his distress had been expressed behaviourally and this contributed to the deterioration
of his relationship with his mother, which appeared abusive. In his attempts to find
parental affection outside the home, he began mixing with older children and soon
learned to avoid his feelings of anxiety and sadness through substance abuse. As a
result, Mr. R spent his adolescence in care, and later in prison for petty offences. He
had developed poor friendships and his sexual relationships had involved violence.
Due to the absence of drugs and alcohol at the unit, Mr. R began withdrawing until he
reached an almost catatonic state.

A behavioural plan using differential reinforcement was devised to ensure that Mr. R
remained outside his room during the day. As Mr. R was at a ‘contemplation’ stage of
change, individual sessions worked with his feelings in the transference and
countertransference. In sessions, personal-construct and object-relations theories were
used to re-formulate Mr. R’s apparent lack of relatedness, and connected his anger
with the offence.

After a four-month intervention plan, improvements were apparent. Mr. R’s charts
indicated that he remained out of his room during the day and that he was involved in a
series of activities. Staff noticed that his angry outburst had disappeared. In addition,
Mr. R had began thinking about investing in skills for the future and was exploring the
possibility of doing an NVQ. He was referred for further psychological therapy and for
substance abuse treatment.
Systemic Social Constructionist Consultation
Specialist Placement Summary

Location: The Maddison Centre, Church Road, Teddington, Middlesex.

Dates: April - September 1998

Main Supervisor: Dr. Karen Partridge

Additional Supervisors: Dr. Rupert Nieboer and Gloria Martin.

Departmental Base: Psychology Department, Roehampton Rehabilitation Centre, Queen Mary's University Hospital, Roehampton Lane, London.

Brief Summary of the Nature of the Placement:

The placement involved working with individuals, couples and families, aged 20 to 61. It concerned integrating systemic theory into working in Adult Mental Health. Analytic concepts were also used in supervision and in the reflecting team in order to formulate clients' difficulties. Opportunities for discussion and debate regarding the application of theoretical models were encouraged. Systemic models were applied to a variety of activities, including the format of the supervision sessions. Working in the reflecting team was used both to develop systemic techniques and consultation skills, and for supervision. Given that the Trust was in the process of merging, observation of organisational dynamics was paramount and attendance at both speciality and departmental meetings was strongly encouraged. Twenty one families were seen with the team, presenting difficulties with depression, anxiety, violence, sexual abuse, separation and individuation, substance abuse, obsessive compulsive behaviour, psychosis and inter-personal relationships. Three clients were seen jointly in an in-patient setting for acute difficulties. One client was seen for individual therapy.
Systemic Social Constructionist Consultation

Specialist Placement Contract

Kingston & District Community NHS Trust
Department of Clinical Psychology

Supervisors: Dr. Karen Partridge and Dr. Rupert Nieboer

Trainee: Paula Maggi

Aims

- to gain an understanding of working systemically as a Clinical Psychologist in the NHS;
- to develop consultation skills with clients and with other agencies and services of a multidisciplinary nature;
- to understand a number of systemic models and to provide theory-practice links in clinical and organisational work;
- to develop an ability to build links between systemic models and other models and approaches used in Clinical Psychology (e.g. analytical) and to apply these to the practice;
- to take the opportunities provided to learn about organisational issues (e.g. Trust merger process); and
- to develop an active role in the delivery of the service, in general psychology meetings, Special Interest groups, and other relevant meetings with other agencies and services.

Clinical Work

- to work as a solo therapist with up to 3 clients, couples or families;
- to observe/participate in group work as appropriate;
- to observe Karen and Rupert in clinical work and learn from their work;
• to be observed during clinical work by Karen and Rupert and use their comments as a learning experience;
• to make use of relevant tools (e.g. VCR/audiotape) to record sessions and adopt a meta-perspective when re-viewing the work;
• to understand a wide range of systemic models and their history;
• to provide theory-practice links in clinical interventions;
• to work jointly with Karen and Rupert in clinical work.
• to learn and practice systemic techniques (e.g. types of questions, note taking, developing and delivering therapeutic messages/tasks);
• to be an active member of the reflecting team; and
• to work multidisciplinarily with members of the QMUH psychiatric ward.

Organisational Work

• to observe and participate as appropriate in meetings as a result of the merger between Trusts;
• to understand the CPA process and its introduction to AMH, and to participate in multidisciplinary CPA meetings with relevant clients and professionals;
• to participate in discussions relevant to IPP with clients from the Day Hospital;
• to develop a linking role between the systemic team and the QMUH psychiatric ward teams through Karen and Rupert where consultation work can take place;
• to participate in discussions and become active with regard to the provision of staff support;
• to attend and participate in department meetings, policy and service meetings, and multidisciplinary meetings;
• to take responsibility for administrative tasks, the booking of rooms and other departmental and Trust requirements; and
• to observe the process of a CMHT team-building event.
Research

• to participate in discussions relevant to research and audit projects undertaken in the department.

Training and Teaching

• to attend and participate in seminars organised by the department once a month and take advantage of other training opportunities provided by the trust;
• to attend courses and workshops as appropriate and relevant to the work undertaken; and
• to take the opportunity to participate in any training or skills-sharing events with supervisors.

Visits

• to visit and observe other services providing similar NHS services; and
• to visit and observe the work undertaken in other places providing AMH services within the Trust (e.g. acute wards, CMHTs, resource centres, hostels and day hospitals).

Supervision

Paula will receive solo or joint supervision from Karen and Rupert for one and a half hours a week. These experiences are to encourage Paula to develop an identity as a therapist and as a Clinical Psychologist in the current NHS, working jointly and in collaboration with others, assist her understanding of multidisciplinary work, her skills in consultation and organisational work, and to explore the process where the ‘professional’ identity meets the ‘personal’ identity and the recursive nature of these.

Supervision will cover a variety of issues such as clinical and organisational work from a systemic-epistemological perspective, issues related to Psychology at a national level,
the trainee’s future in the profession, the merger process between Kingston District Community Trust and Richmond, Twickenham and Roehampton Healthcare NHS Trust, the difference in service roles in Clinical Psychology, etc. This time will also serve to guide Paula with reading material relevant to her clinical work. Paula will participate in discussions on a number of theoretical and service development issues and on the strengthening of the theory-practice links in AMH service delivery. In addition, discussions will focus on understanding the commonalities and dissimilarities between systemic and analytical models of working, as well as discussions around consultation and therapy.

Joint Supervision with Karen and the Child Systemic Service (Gloria Martin, Head of Child Services, Jo Stevenson and Wendy Pearse, Clinical Psychologists in Training at the University of Surrey and the Solomon’s Centre will occur fortnightly. These opportunities will strengthen theory-practice links in systemic work, will focus on relevant literature, and will develop an understanding, through in-vivo practice, of different techniques (e.g. reflecting teams, meta-team positions, etc.).

Mid-Placement Review

A mid-placement review will take place in mid-June between Karen, Rupert, Paul Davis and Paula to evaluate progress towards achieving these goals and to re-negotiate any needs and/or expectations of all concerned, if required.
Research Section
Summary of the Research Section

This section contains three pieces of work which were undertaken as part of the research component of the course and completed over three years. A literature review which was undertaken during the first year is presented first. This covers the topic of predicting the risk of violence amongst psychiatric patients, with particular reference to ‘dangerousness’. It explores a variety of factors that contribute to the association between mental illness and violence.

Broadly speaking, this topic continues to be addressed through both the small-scale/service-related study and the large-scale research study. The small-scale/service-related study was carried out in children’s homes while on clinical placement during the second year of training. It deals with the consistency of careworkers’ assessments when predicting aggression and withdrawal in children in care. The idea of this project was based on a developmental trend that suggests that aggression and withdrawal in children predict violence and other interpersonal difficulties in adulthood. The findings had implications for service development and service delivery.

The large-scale study was completed in the third year. It was carried out during a specialist clinical placement and collected data from two forensic settings: a Special Hospital and a Regional Medium-Secure Unit. The study explored the psychometric properties of a risk assessment schedule and suggested a psychometric cumulative model from item-response theory with which to conceptualise risk. While the small-scale/service-related study focused on the ability to assess behaviours of risk, the large-research study focused on clinical decision-making.
In order to understand a violent person's motives for violence,
we must thus step into his or her shoes
and we must reconstruct his or her unique perspective.
For not only are there many ways of being violent,
there are many different reasons for individuals to become violent (Toch\(^1\), 1992).

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Predicting the Risk of Violence Amongst Psychiatric Patients: 
Risk Assessment and Dangerousness 

Paula Maggi 
Year I 
August 1996
The opinion that a correlation exists between mental illness and violence remains a central issue in mental health (Mulvey, 1994; Fuller Torrey, 1994). When patients have been discharged and have engaged in an act of violence, the public, and indeed the professionals involved, are left asking themselves whether any evidence before discharge or while in treatment could have predicted the violent behaviour (see for example HMSO, 1994). In view of public and media attention, several government reports since the 1970s have highlighted the need for risk assessment (see HMSO, 1975).

An internal National Health Service market has resulted in competition to provide the best service and value for money. It is thus of increasing importance for competing psychiatric services to understand the issues surrounding the prediction of violence and assessment of risk through studies which focus on the patient, the family system, inter-agency and multidisciplinary opinion, as well as more universal societal rules and norms. These elements must be considered alongside issues of uncertainty, the need for predictability, and the clarification and justification of responsibility. An understanding of the inter-relationship between all these factors is necessary to understand the complexity of violent behaviour and its degrees of predictability.

Much of the research literature on prediction of risk applies to American populations. American studies have imposed a useful structure on wide range of findings. Little has been done in Britain comparable with the sophisticated research published in America, although attention to British studies is incorporated here whenever possible.

**Dangerousness: Concept and Definition**

Foucault (1978) suggests that in the early nineteenth century questions were raised as to the seriousness of some crimes and the possibility of release, leading the courts to turn to mental health professionals, mostly doctors, in order to assess 'dangerousness' and risk (cf. Pollock, McBain and Webster, 1989; Windsor Jackson, 1988). Yet it is now clear that neither training nor experience amongst mental health professions necessarily provides skills to maintain a position of scientific knowledge without their colluding with legal agendas (Monahan and Steadman, 1994).
A number of factors, including increased support for care in the community in Britain (HMSO, 1989a; 1989b; 1975) and in America (Davis, 1991), proposed changes in discharge procedures by governments, and increased public concern about the link between mental illness and dangerous behaviour have all encouraged the provision for crime prevention to become an issue of a clinical nature (McGovern, 1996; Monahan and Steadman, 1994; Levey and Howells, 1994; Link, Andrews and Cullen, 1992; Davis, 1991). However, it has been argued that assessing risk as well as managing risk is the priority of research (Steadman, Monahan, Appelbaum, Grisso, Mulvey, Roth, Clark Robbins, and Klassen, 1994). Commitments to hospitalisation under civil law are often issued due to paternalistic attitude that the mentally ill need care and this has also been responsible for the involvement of mental health professionals in predicting ‘dangerousness’ (Otto, 1994; Monahan, 1988).

Issues of prediction and treatability are central to discussions of violent behaviour. ‘Dangerousness’ describes an activity which causes serious psychical and/or psychological damage to others or to the self and is of lasting consequences (see Kroll and Mackenzie, 1983; HMSO, 1975). Its context, intensity, degree of harm, and fluctuation over time are measures which provide a framework for establishing prediction and treatability.

Although the concept of ‘dangerousness’ has been widely used over the 25 years of research into risk assessment, it is still a concept in need of operational definition. ‘Dangerousness’ affects the actor, the victim, and the observer, and has implications for society (Shostakovich, 1989). For the potential offender, ‘dangerousness’ applies when he or she becomes involved in activities which are presented as defiant from the controlling measures of society, thereby creating anxiety amongst others (Scott, 1977; HMSO, 1975). It is not only engagement per se that produces perceptions of ‘dangerousness’, but also lack of response or adaptation to social and legal rules, together with a tendency to repetition, incorrigibility (Scott, 1977), and irreversibility (HMSO, 1975).

However, due to moves from dichotomous judgements to continuous ones, and from dependent (violence) to separate independent variables (risk), more recent research on
risk assessment has challenged the earlier concept of ‘dangerousness’ in methodological terms and has replaced it with the concept of ‘risk of violence’ (Monahan, 1992).

The work of John Monahan and Henry Steadman in risk assessment and violence has clarified the definition of ‘dangerousness’ for research purposes. They have stated that ‘dangerousness’ needs to be seen as presenting three components: risk factors, the degree of seriousness of harm predicted, and the probability that such harm will occur, presented in a continuous probability statement considering changes over time and context to avoid fixed predictions (Monahan and Steadman, 1994).

First Generation Research into Risk Assessment

Initial research into risk assessment in the 1980s encountered serious methodological difficulties and produced contradictory findings (see Davis, 1991; Monahan, 1988). These difficulties had to be overcome in order to avoid erroneous predictions of false positives and false negatives.

Several researchers agreed on the defects of first generation research (see Otto, 1994; Monahan and Steadman, 1994; Davis, 1991; Monahan, 1988). These shortcomings included: (i) proxy measures of risk of violence, (ii) inadequate risk factors to predict violence, (iii) inadequate and unrepresentative samples, (iv) inadequate criteria for violence, (v) weak criterion variables, (vi) limited applicability of findings to validate risk, and (vii) unsynchronized research impeding proper replication. By examining the distribution of ‘predictees’ across all possible cells and not only across those of interest, the prediction resulted in a greater overall correct classification rate than would have been obtained through base rates (Otto, 1994). Thus, the methods used revealed flaws of predictive validity. This was one of the limitations of decision tables used in actuarial research in that there is occasionally insufficient data to allow for weighting of all the items which are necessarily involved (see Kroll and Mackenzie, 1983).
Designed to overcome first generation research methodological difficulties, the MacArthur study has provided the most comprehensive structure to the prediction of risk assessment (see Steadman et al., 1994; Steadman, Clark Robbins, Appelbaum, Grisso, Klassen, Mulvey, and Roth, 1993; Monahan, 1988). It identified a robust set of markers for risk prediction, and linked these in a synchronised piece of research in a multi-site setting of civil mental hospitals (Kansas City, Pittsburgh, and Worcester) with mentally ill subjects in the community after their release from these mental health facilities. The study comprises an instrumental battery (DSM-III-R checklist, MADS, and symptom inventories for delusions, hallucinations, BPRS, GAF, and neurology screen) in a total sample size of approximately 1000 patients, who were men and women aged 18-40, with a broad array of primary diagnoses. There was also a one-year follow-up programme. The criteria of violence included physical violence to others in the community (see Monahan, Appelbaum, Mulvey, Clark Robbins, and Lidz, 1993, for a discussion of the ethical and legal considerations to deal with violent subjects in research).

Research findings had previously indicated a link between mental illness and violence. The MacArthur study provided a useful structure within which risk assessment and the prediction of violence could be viewed. In this paper, the MacArthur structure is adopted to review the literature on the risk factors of violence, using its four aspects of risk assessment as predictors of risk: dispositional, historical, contextual, and clinical factors.

The Links between Mental Illness and Violent Behaviour

The media, through cases such as those of Christopher Clunis in London, Marc Dutroux in Belgium, Thomas Hamilton in Scotland, and Martin Bryant in Tasmania, have contributed to a stereotype that the mentally ill are prone to violence (see Fuller Torrey, 1994; Teplin, McClelland, and Abram, 1993).

It is not disputed that severe mental illness interferes with individual autonomy and compromises the ability of individuals to make rational decisions (Stone, 1975), but this does not establish a relationship between mental disorder and violent behaviour.
Establishing whether this relationship exists can determine to what extent civil involuntary commitment to hospitalisation is on the grounds of treatment needs, of protection of the public, or both.

Mental illness is not only a condition present in samples of health care, but also present in prison samples (Mulvey, 1994), particularly schizophrenia and affective disorders (Fuller Torrey, 1994; Teplin, et al., 1993). Rates of severe mental illness amongst jail detainee ranges from 4% to 12%, and even the lower estimate is 2 to 3 times higher than that amongst the general population (Teplin, et al., 1993).

Only recently has research (see Mulvey, 1994; Hodgins, 1993; Monahan, 1993; Monahan, 1992; Otto, 1992; Link, et al., 1992) suggested that links are robust enough to establish mental illness as a risk factor for violence on the grounds that: (i) violence amongst psychiatric patients is higher than among community individuals, (ii) higher rates of mental disorder are found in those who engage in violence, and (iii) mentally ill people are more likely to be arrested for violence than community subjects.

Studies linking mental illness and violence have focused on five groups (see Fuller Torrey, 1994): those arrested, psychiatric in-patients, psychiatric out-patients, families with a relative with mental illness, and those with mental illness amongst the general population. There are research difficulties connected with each of these groups.

Studies of inpatient violence do not necessarily consider the influences which commitment to hospital and relationships with personnel have on increases in violent behaviour. Incidence of violence in institutions should be interpreted such that all factors resulting from involuntary detention are present (Scott, 1977), including the mental disorder and the physical and psychological effects of ecological dynamics. Studies (see Monahan, 1993) comparing hospitalised patients with those unselected for treatment form a starting point from which research can begin to identify variables that lessen the risk of violence among those hospitalised (see Monahan, 1993; Hodgins, 1993; Link, et al., 1992).
Studies of violence and mental disorder in the community face, as a result of provision of discharge of the Mental Health Act (1983) the difficulty that those individuals released from detention are not representative of the population that engages in violent behaviour. Arrests for violent crimes among those released from hospital exceed those among the general population (Fuller Torrey, 1994). Studies that focus on release subjects assume that treatment has been given. Information about the meaning or details of ‘treatment’ is rarely available to form a comprehensive understanding of its contribution to altering violent behaviour (Reiss, Grubin, and Meux, 1996; Link and Stueve, 1994; Shah, 1993). Nevertheless, support for studies using released samples is strong on the basis that they provide “… essential base-rate information for use in the … assessment involved in release decision-making and in after-care planning” (see Monahan, 1993, p. 290).

Some writers explain the link between mental illness and violence by suggesting that the higher arrest and hospitalisation of those with mental illness may simply result from their being easier to catch (Davis, 1991). Individuals with schizophrenia are more likely than non-disordered people to be arrested at the scene of the crime (see Monahan, 1993; 1988). It has been found that bias in police officers leads to higher arrest rates of disordered than of non-disordered people (Hodgins, 1993).

In America, only a small proportion of crime (3%) can be attributed to mental disorder (see Monahan, et al., 1993). Thus, “... mental health status makes a ... trivial contribution to the overall level of violence in society” (Monahan, 1993, p. 300), and studies have shown that 90% of the sample of disordered offenders are not violent (see Link, et al., 1992). Nevertheless, it may be that those with mental illness, due to their status of reduced responsibility, commit additional crimes which remain uncharged (Hodgins, 1993) or that their levels of violence are minimised by staff and not systematically recorded (Davis, 1991).

Views that the psychiatric system may fail to recognise indicators of risk of violence have been suggested. The report of the Christopher Clunis inquiry (HMSO, 1994) mentions deficiencies in care, treatment, and aftercare. Evidence that Mr. Clunis’ behaviour was becoming aggressive was present since 1980, and two serious incidents
of violence to members of the public occurred prior to his killing Mr. Zito. Concerns included the lack of communication between the various services involved, disregard of his history of mental illness, failure to provide assertive care while he was in the community, failure to identify his particular needs on discharge or to provide qualified supervision. Serious tendencies to overlook violent incidents, acute episodes of psychosis, and of poor decision-making procedures such as postponing decisions of release were also identified. The report called for those with responsibilities for people showing disturbed behaviour to receive training in the skills of assessment of risk.

The findings below are analysed using the framework provided by Steadman and colleagues (1994; 1993) and the risk markers identified as predictors of violence are assessed.

**Dispositional Factors**

**Demographic**

Most research on gender and violence concentrates on male samples (Klassen and O'Connor, 1994; Steadman et al., 1993) since it is believed that violence by women outside the domestic sphere is small. However, in the MacArthur study (Steadman et al., 1993), 10.4% more women than men reported at least one violent incidence in the community after being released. In addition, clinicians predicted potential for violence in the emergency room for men to be higher than for women, when results showed the reverse (see Monahan and Steadman, 1994). A Swedish Metropolitan project (see Hodgins, 1993) found that there are two groups of offenders of violent crimes with major mental illnesses; those who offend prior to revealing symptoms of mental illness and those who offend when the disorder is already evident. This applies equally to men and women (see also Monahan, 1993). However, when demographic factors have been accounted for, findings indicate that violence is most likely to occur amongst young, lower-class males (Fuller Torrey, 1994; Kroll and Mackenzie, 1983).

Incidence of violence decreases with age (see Steadman et al., 1994; 1993; Kroll and Mackenzie, 1983), but not necessarily for those with major mental illness (Hodgins,
Theories of social cognition (see Pervin, 1993; Mischel, 1986) indicate that rehearsal and reinforcement increase the likelihood of violence in later life. Rehearsal of violent behaviour in adolescence is associated with the likelihood of violence in adulthood (see Klassen and O'Connor, 1994; Maughan, 1993; Robins, 1993).

In a review of more than 200 studies of the relationship between mental disorder and violence (Monahan, 1993), it was found that when demographic variables such as age, gender, race, and social class, and historical variables such as previous history of institutionalisation are controlled, the association between dependent variables disappears. Since the relationship between some of these variables is associative rather than causal, it becomes problematic to "... unlock the riddle... [between] ... cause or... consequence of psychopathology" (Monahan, 1993, p. 287). Thus demographic variables tend to improve the accuracy of measures rather than act as predictor variables themselves (see Klassen and O'Connor, 1994).

**Personality**

Anger has been considered a strong predictor of physical assault (McGovern, 1996) and is therefore key to the risk assessment equation (Novaco, 1986). There is some recent evidence of the prevalence of anger among British psychiatric patients and its association with violence (see McGovern, 1996; Novaco, 1994). However, interpretation of these results should consider the physical and social environments of the hospitals themselves and their associations with incidents of violence, as the findings may be the result of experiences in hospitals rather than indications of enduring personality qualities (Hampson, 1990).

Impulsivity has been associated with difficulties in information processing at the time of action in laboratory studies but not in clinical populations (McGovern, 1996; Barratt 1994). Impulsivity relates primarily to frontal lobe functioning and is common to learning and control problems. It is not surprising therefore that the higher the level of impulsivity, the wider the range of criminal acts by prisoners in a maximum security prison (Barratt, 1994). No association has yet been suggested between impulsiveness
and violence. Findings fit the typology of under-controlled offenders (Hampson, 1990) who engage in repetitive offending behaviour.

Whether personality disorder is considered a mental illness can be discussed in terms of treatability (Reiss, et al., 1996) and responsibility (Davis, 1991; Mitchell, 1986). Research on the 'dangerousness' of personality disorder continues despite concerns that with antisocial and borderline behaviour in particular, overestimation of violence could become a problem since people with these labels are violent by definition (see Davis, 1991). Studies suggest that those with personality disorders have a higher rate of recidivism that those with other diagnoses (Hart, Hare and Forth, 1994) and that they have long been considered to constitute a considerable proportion of the violent mentally disordered (Widiger and Trull, 1994). Findings amongst those with a borderline personality disorder suggest that violent, destructive acts towards self and an impulsivity and anger may result in violent acts towards others (see Widiger and Trull, 1994). Research on antisocial personality and psychopathy suggests that the presence of these personality disorders increases the likelihood that a person will at some time engage in a violent act (see McGovern, 1996; Steadman, Monahan, Appelbaum, Grisso, Mulvey, Roth, Clark Robbins and Klassen, 1994; Hart, et al., 1994; Hare and Hart, 1993). However, this does not imply that one can predict their occurrence within any given period, in particular because violence is unlikely to be predictable in the absence of an established pattern of violent behaviour (Widiger and Trull, 1994).

Research on social learning (see Klassen and O'Connor, 1994; Mischel, 1986) suggests that learning is a direct and major contributor to the occurrence of violence behaviour through modelling. Following developments in social cognitive theory (see Klassen and O'Connor, 1994; Pervin, 1993), cognitive behaviour theory (see Beck, Freeman, et al., 1990) and narrative social constructionist theory (see White, 1989), clinicians are more optimistic about the possibilities of change in those with a mental illness through the manipulation of external rewards, through changing cognitive beliefs, and through working on discourse in order to re-author their experiences (see also Pollock and Webster, 1990). These approaches suggest that creating different interpretations of and meanings for past events can influence future behaviour, and thus affecting what was
perceived as enduring personality constructs. Since cognitive processes are not publicly observable, the value of self-report data can be useful in learning about them, and this is known to increase predictive accuracy (see Klassen and O'Connor, 1994; Monahan and Steadman, 1994).

**Cognition**

Studies have suggested a number of cognitive deficits which contribute to a vulnerability to violent behaviour (see Klassen and O'Connor, 1994). Variables include low IQ, learning disabilities, neurological impairment, severe educational difficulties, cognitive impairment, and organic brain syndrome. Thus, cognitive difficulties should be seen as contributors to violence rather than predictors of it per se.

**Historical Factors**

**Early and Social History**

Childhood factors, such as the quality of parental care-giving and nurturance, supervision, parental loss, separation, disruptions in the family, parental psychiatric hospitalisation, parental involvement in crime, and the quality of home life are variables which have been used with results which indicate their contribution to violent behaviour in adulthood (see Klassen and O'Connor, 1994). Hyperactivity, impulsivity, and inattentiveness in early childhood have been considered as dispositions from which a series of aggressive conduct symptoms could develop as roots for later personality disordered adults (see Maughan, 1993). However, of all variables considered early involvement in delinquency seems the most promising predictor of violence in later life (see Robins, 1993).

**Mental Hospitalisation History**

Previous admissions to hospital on grounds of violence has been suggested as a predictor of future homicidal actions (Kroll and Mackenzie, 1983), and other violent acts (see Klassen and O'Connor, 1994). Kroll and Mackenzie (1983) recommend that
if the patient has received inappropriate treatment, or if the patient is unlikely to take medication in the community (Fuller Torrey, 1994) this would constitute sufficient grounds not to release the patient as these factors are essential for the reduction of violence.

*History of Crime and Violence*

Previous history of violent assaults has also been suggested as a reliable predictor of future homicide (Klassen and O’Connor, 1994; Kroll and Mackenzie, 1983) and other types of violence (Fuller Torrey, 1994). Settings in which violence has been present include the emergency room (Mulvey, 1994; Monahan and Steadman, 1994; Litwack, 1994). However, a study (Davis, 1991) found, among psychiatric patients arrested by the police, that half the cases presented at least one attempt at commitment for hospitalisation that failed prior to the arrest. This suggests a need to reform the hospital admission and treatment system for the psychiatric population. This need was revealed in the Clunis case in Britain (HMSO, 1994).

Most mentally ill jail detainees do not become violent (see Teplin, et al., 1993), but a few become repeatedly violent. This confirms that one of the best predictors of future violence is prior violence with those with schizophrenics showing the highest rates for violence (Reiss, et al., 1996). Diversity of degrees of violence within diagnosis suggests that psychotic symptoms may be more accurate predictors of violence than diagnosis per se (Link, et al., 1992).

*Contextual Factors*

Although symptomatological factors may contribute to violent behaviour, the form this behaviour takes is also related to the opportunities the offender has to carry them through. There are stages in mental illness during which tendencies to commit dangerous actions occur as a result of the individual’s inability to adapt to the transitory symptomatology of the condition, and thus the risk in dangerous situations is of a variable nature (Shostakovich, 1989) including mind-state, situation, and behaviour. Incidents of violence in hospitals are relatively common (Davis, 1991),
although violent behaviour during hospitalisation has not been shown to be a good predictor of violence in the community after release (McNeil, 1994). Settings for violent behaviour vary from the emergency room (Feinstein and Plutchik, 1990), to the ward, or the community (see Mulvey, 1994). Patients who are hospitalised after violent acts are at risk of continued violence in the hospital until their most acute symptoms are reduced by treatment (see McNiel, 1994).

The impact of the environment and physical settings depends on the interaction between them and those individuals in them (Mischell, 1986). Research using functional analysis and behaviour modification into challenging behaviour provides a meaningful way of measuring and quantifying factors associated with the occurrence of challenging behaviour (see Repp and Felce, 1990; Beasley, Hewson, and Mansell, 1990). Future research may consider the use of observational studies for in-patients’ occurrence of violence in order to determine the situational factors associated with violence and escalation of violence. However, situational factors are difficult to measure as stable predictors as they are, by definition, changeable over time (Klassen and O’Connor, 1994).

As an institution rarely provides opportunities for offenders to engage in dangerous offences, they rarely experience the same circumstances which they would have experienced in the context of the offence. Accurate predictions in the community require knowledge of the environment in which the patient would live; including details of employment, family support, friendships, etc.

**Stress**

Stress and coping skills prior to and following the offence are important factors in determining clinical issues of prediction and treatability. It is useful to consider the mechanisms by which an individual chooses to cope with the stress of a problem (see Scott, 1977). When they are not replaced with more appropriate problem-solving techniques, these coping skills become repetitive.
Variables such as the break-up of a relationship, problems at work, loss by death, low income, crowded physical environment, and unemployment have been suggested as being correlated with violence in psychiatric populations (see Klassen and O'Connor, 1994).

Social Support

The literature suggests that many behaviours improve as a result of a stable environment (Scott, 1977). Accessibility to appropriate and comprehensive after-care systems following release is amongst the essential situational factors for accurate assessment of risk (Monahan, 1988) as it provides continuity of care (Davis, 1991) and the necessary system to support identified needs. A system of case management is suggested as the key to reducing the risk of violence (see Dvoskin and Steadman, 1994).

Social systems can create the opportunity both to enhance or to prevent violent behaviour. Research on families of psychiatric patients suggests that particular family characteristics and communication styles (Davis, 1991) can increase the chances of the released patient engaging in violence (see also Scott, 1977). Family members are also more available as victims of violence (Fuller Torrey, 1994; Davis, 1991; Kroll and Mackenzie, 1983). In a study of psychiatric patients in the community (Estroff and Zimmer, 1994) women were found to be more likely than men to attack family members, although both groups engaged in threatening behaviour equally. Mothers were the most likely targets of both one-off and repeated acts of violence. Encouraging the development of community networks, through resource centres and therapeutic facilities, can help prevent some intrafamilial violence.

Response of the Victim

Availability of victims (Davis, 1991) is also a consideration of risk for release. The response of the victim during the incidence of violence also seems to play a role in the level of violence experienced (Klassen and O'Connor, 1994). However, Gunn and Minch (1988) indicate, with reference to violent sexual assaults, that no particular style
of victim reaction is predictive of a particular style of violence from the perpetrator. This indicates a need for individualised assessment of risk.

**Means for Violence**

The presence of weapons, particularly knives and firearms, dramatically increases the lethality of a violent encounter (Klassen and O'Connor, 1994). Studies also suggest that schizophrenic individuals in the community were 21.5 times more likely to use a weapon in a fight than people with no psychiatric condition (see Fuller Torrey, 1994). The importance of an effective social policy for the prediction of violence (see Hodgins, 1993; Davis, 1991) with regard to firearms was discussed nationally following the Dunblane massacre. Thomas Hamilton had a long history of concerning behaviour and was well-known to the authorities, yet his firearm permit was legitimate. In this particular case, it appears that possession of firearms, issues of anger, and personality traits all played a part in the act of violence, although had he not had access to a firearm, other means may have been used to commit the violent act. Although the literature suggests that health professionals' predictions of violence are poor (see Monahan, 1988), GPs have now been invited to join in the assessment of risk with regard to applications for possessions of firearms.

**Clinical Factors**

Caution must be taken with clinical results since axis I and II can easily coexist in those with chronic mental disabilities or major mental illness, making it difficult to determine the exact contribution of each to the prediction of risk (see Davis, 1991).

**Symptoms**

The most reliable studies are those which use community surveys (Swanson et al. 1990) with a lengthy follow-up (Hodgins, 1992) and those which rely on a combination of self-report and official statistics (Levey and Howells, 1994). Results, when combined, cohere, making it difficult to dismiss the connection between violence and mental illness as simply artifactual (Link and Stueve, 1994). Data from such
studies suggest that people which schizophrenia have an elevated risk of violence relative to the non-mentally disordered. However, there is a need to balance the seriousness of violent acts with the probability of their occurrence based on specific triggers or risk factors identified. Hodgins (1993) warns of unifying mental disorders as risk markers for violence since some disorders lessen the risk while others increase it, suggesting the need to find associations between specific disorders and violence. Alternatively, a focus on symptoms rather than mental labelling may be appropriate.

Among people with psychotic symptoms who have committed violence and irreparable damage to others, those with schizophrenia are the most likely to commit violence against other people (see Estroff and Zimmer, 1994), including homicide (see Taylor, 1993). However, it has been suggested that the likelihood of people with schizophrenia committing violent crime is as low as 5% (Levey and Howells, 1994; Taylor, 1993; Shostakovich, 1989; Scott, 1977). Studies suggest that schizophrenic inpatients are three to six times more likely to commit acts of violence than those without schizophrenia (Fuller Torrey, 1994; Taylor, Garety, Buchanan, Reed, Wessely, Ray, Dunn and Grubin, 1994; Hodgins, 1993). A remarkable finding (Swanson, 1994) suggests that only 16% of community respondents with a single diagnosis of major affective disorder or schizophrenia reported ever being admitted to a hospital for a mental health problem.

Many have suggested links between psychotic symptomatology of delusions and hallucinations and violent behaviour (see McGovern, 1996; Link and Stueve, 1994; Monahan, 1993; Taylor, 1993; Link, et al., 1992), especially with paranoid symptoms (Taylor, et al., 1994; Buchanan, Reed, Wessely, Garety, Taylor, Grubin, and Dunn, 1993; Kroll and Mackenzie, 1983; Hafner and Boker, 1973).

Studies indicate that when patients experience psychotic symptoms, the risk of violence increased when compared to there being a lack of positive symptoms, or to non-patients (see Monahan, 1993). Delusions were more prevalent at the time of killing or attempted killing compared with non-deluded patients (see Taylor, et al. 1994), and the severity of symptoms was associated with violent incidences, with symptomatology at first interview predicting occurrence of violence at two
subsequent interviews in a period of six months (Mulvey, 1994). Self-report studies have contributed convincing evidence of this (Link and Stueve, 1994; Mulvey, 1994; see Fuller Torrey, 1994, for British studies). Using the principle of rationality-within-irrationality (Link and Stueve, 1994), findings suggest that violence is more likely when psychotic symptoms cause a person to feel personally threatened or involve the intrusion of thoughts that can override self-controls.

Hallucinatory experiences, when they occur in the context of other personal (e.g. history of violence) and situational (e.g. medication) correlates of violence, can indicate increased risk of violent behaviour (see McNiel, 1994; Estroff and Zimmer, 1994). The association between delusions and hallucinations with violent acting appears to be stronger than chance, although a majority of patients, even if acting on their delusions and hallucinations, rarely do so violently.

**Substance Abuse**

For people with major mental disorders, substance abuse in childhood increases the chances of their committing violent offences more than substance abuse in adulthood (see Hodgins, 1993). There is now considerable evidence that amongst the mentally disordered, it is substance abusers who are most at risk of violent offending (Levey and Howells, 1994; Teplin, et al., 1993; Monahan, 1993; Davis, 1991; Kroll and Mackenzie, 1983). In one study, 85% of the sample were intoxicated at the time of the homicide (Pihl and Peterson, 1993; Hodgins, 1993). In a community study (see Swanson, 1994) mental illness alone was about twice as prevalent in the subgroups identified as violent, while substance abuse on its own was about five times more prevalent among those who reported violence than among those who did not. People with single diagnosis of alcohol or other drug dependence were even less likely to have received inpatient treatment. Having a major psychiatric illness with a concurrent substance abuse diagnosis increased the likelihood of hospitalisation to 38%. There are large cultural and gender variations within and between samples in aggression-linked intoxicated behaviour (see Pihl and Peterson, 1993). Perhaps for this
reason, other studies have found no association, and sometimes negative correlations between substance abuse intake and violence (Klassen and O'Connor, 1994).

Phil and Peterson (1993) suggest that violence is the leading cause of death in the USA for individuals under 45 years of age, and this is often attributed to drug abuse. However, there are few definite conclusions regarding violence and use of drugs, other than alcohol. Difficulties arise when co-occurring psychiatric problems are considered, in addition to those of drug abuse and aggression.

Only about 7% of all those with major mental disorders (but without substance abuse) engage in any assaultative behaviour in a given year, although having a substance abuse diagnosis has been associated with a much higher risk of violence in both absolute and relative terms (Swanson, 1994).

**Methods for Predicting ‘Dangerousness’**

Accurate prediction of risk becomes relevant as the consequences of errors (i.e. false positives and false negatives) have serious implications on those whose liberty is deprived, on the victim, and on the public at large. Discussions regarding prediction centre on the benefits of actuarial or clinical methods.

Approaches to decision-making in risk analysis come from strategies developed in logical analysis under conditions of uncertainty (Drury, 1992; Kroll and Mackenzie, 1983) and later successfully used in other fields (see Daellenbach, 1994; Baker and Kropp, 1985; Zagare, 1984). Acknowledgement that predicting violence is an imperfect exercise suggests the need to use information from existing theoretical explanations of violence and dangerous behaviour to construct a model of decision-making regarding ‘dangerousness’ (Pollock, et al., 1989). Here the validity of the clinical process in assessing ‘dangerousness’ is revalidated, though little is known about the mental processes which enable clinicians to make decisions regarding predictions of any type of risk (O’Neil, 1994). Models, in general, have not sufficiently focused on the situational factors which would trigger violence in some individuals. Studies using behavioural analysis in community and institutional settings (see LaVigna
and Donnellan, 1995) could lend valuable information to the understanding of triggers and maintenance of violent behaviour.

The relative accuracy of statistical versus clinical prediction has been a source of considerable debate suggesting the advantage of statistically-based over clinically-based approaches (see Steadman, Monahan, Clark Robbins, Appelbaum, Grisso, Klassen, Mulvey, Roth, 1993; Pollock and Webster, 1990; Pollock, et al., 1989). Monahan (1981) warns that the inappropriate use of clinical methods can create gross errors in overestimation of 'dangerousness', and views the clinical-actuarial approaches as "... ends of continua..." for transforming data into predictions (cf. Pollock, et al., 1989, p. 97). Using methods such as linear programming and decision tables to analyse data and produce probability values, actuarial research inserts cases into probability groups of low and high risk, leaving some individuals in residual groups with difficult predictions (Kroll and Mackenzie, 1983). For this, it has been suggested that the weight of the unpleasantness of the consequences for the individual against the harm to be done be considered (see HMSO, 1975; p. 60).

Arguments against an actuarial method have been made on the grounds that prediction of violent behaviour concerns the individual and not populations; that it raises serious ethical questions by categorising groups with the potential to create discrimination and violation of rights; that predictions become immutable; and that it ignores the context in which violence occurs (see Pollock and Webster, 1990; Pollock, et al., 1989).

When an individual belongs to a high base rate violent group, the need to complement actuarial with clinical research becomes essential (see Litwack, 1994). Mulvey (1994) recommends that the form of statistical associations between variables is also considered in order to observe strength of association for every individual. However, Monahan (1981) outlines clinical indicators which in actuarial research have been linked to violent behaviour, and he further indicates their application for individual cases (Pollock, et al., 1989). Pollock and Webster (1990) state that actuarial methods must also accept responsibility for determining when the person is no longer dangerous. Megargee (1976) suggests that the most accurate approach is to predict 'non-dangerousness' but that despite this, mental health professionals have a social
obligation to contribute to the predictive task of ‘dangerousness’ (cf. Pollock, et al., 1989).

Although the training of mental health professionals is based on theoretical and scientific models of behaviour which test derived hypotheses during the decision-making process, the clinical method has been considered intuitive and subjective (Pollock, et al., 1989). Pollock et al., (1989) argue that the hypotheses about violent behaviour depend on the clinician’s acumen and his experience of the interaction between the individual and situational factors and the client’s psychological organisation and capacity for self-regulation. In requesting an assessment of ‘dangerousness’, the court requires an explanation or prediction of the behaviour, whether conceptual, statistical or narrative, and this explanation defines the scientific contribution to the legal process. The authors conclude that while the statistical mode is well-suited to prediction, the narrative mode is of use in the psychotherapeutic process and well-suited to the task of individual explanations of motivation.

The Usefulness of the Role of the Expert Professional in the Prediction of Violence

When discussing ‘dangerousness’, it is necessary to separate legal from clinical and scientific aspects. Legally, ‘dangerousness’ is seen as “... stemming largely from within the person... as a stable and ... consistent characteristic of the individual” (Pollock and Webster, 1990, p. 489). Clinically, ‘dangerousness’ is seen as “... complex interactions between environmental ... and personal variables” (ibid, p. 489). A clinical opinion in court balances scientific integrity with the social responsibility of answering legal aspects (Pollock, et al., 1989). The question arises as to whether mental health professionals are able to predict both short and long-term events (Kroll and Mackenzie, 1983) and whether explanations can become fixed and limit access to alternative explanations (Pollock, et al., 1989), thereby creating potential cognitive biases on future evaluations of behaviour.

First generation research indicated that health professionals were not able accurately to predict ‘dangerousness’ (Otto, 1994; Monahan, 1988; Kroll and Mackenzie, 1983); and that their expertise was unreliable and unscientific since predictions were wrong
about 95% of the time (Litwack, 1994). Laypeople were able to arrive at the same
decisions as psychiatrists with respect to assessing ‘dangerousness’ (Windsor Jackson,
1988) with psychiatrists scoring significantly higher regarding their confidence in
making their decision.

In decision-making, confidence and consistency are often negatively correlated with
predictive accuracy (Windsor Jackson, 1988). However, confidence levels influence
testimony provided by ‘experts’. The dilemma is whether mental health professionals
or laypeople are more appropriate assessors of ‘dangerousness’. Findings would have
serious implications for the justice system which currently relies on the expert opinion.

Some researchers have suggested that accurate predictions of ‘dangerousness’ are
impossible (see Litwack, 1994), yet psychiatrists and psychologists are faced with the
responsibility of making predictions of violence with every discharge. The courts
acknowledge that there are disagreements about diagnosis and treatment (see Windsor
Jackson, 1988), yet the difficulties lie not in prediction per se, but in the failure of
health professionals to communicate, to follow established procedures (see Kroll and
Mackenzie, 1983), to use a non-linear process of thinking, and in their ignoring
situational factors and fluctuations across time. Second generation research in the risk
assessment of ‘dangerousness’ (Monahan, 1988) expanded on the research done in the
1980s and acknowledged the contribution of ecological factors. Predictions became
more sophisticated and one out of two people predicted to become violent did so
(Otto, 1994).

Despite more encouraging results, predictions of ‘dangerousness’ continue to contain
some degree of error, thus leaving the interests of some at risk. Although expert
testimony by health professionals is still demanded by the criminal justice system,
participating professionals may consider resisting the continuation of discriminatory
practices (Otto, 1994). There is a need to investigate the process of decision-making
that predicts some accurate results. The literature suggests necessary steps from
models based on clinicians’ predictions (see Gunn and Minch, 1988; Scott, 1977) and
the decision-making process (see Litwack, 1994; Steadman, et al., 1993; Pollock, et
Despite the unreliability of prediction, it has been recalled that one third of the time predictions *have* been accurate (see Litwack, 1994; author's italics). Thus, although the consequences of errors are serious, rather than criticising professionals' involvement in court procedures, research of the circumstances in which professionals do achieve some accuracy must be emphasised. Currently, Litwack (1994) argues, there is a gap in the literature of retrospective analyses of assessment of non- 'dangerousness' and the release decisions which have gone wrong.

**Conclusions**

Despite substantial methodological difficulties, accumulated evidence makes a convincing preliminary case for the association between mental illness and community and hospital violence, with a consistency of findings that "makes the denial of such an association difficult" (Mulvey, 1994, p. 664). Data suggest the problem of risk is relative but increasing (see Fuller Torrey, 1994; Monahan, 1992), particularly with patients being released into the community. Nevertheless, the associations are small and need to be understood in terms of relative rather than absolute risk. It is important that the association between mental disorder and violence is dropped in the absence of impaired functioning (Shah, 1993) and that emphasis is placed on the relationship of the symptoms and violence rather than on the mental disorder per se.

Research difficulties involving the difference between correlation versus causation, the need for base rates, and the need to have appropriate comparison groups (Monahan, 1992) all remain issues of concern. In addition, knowledge of mental disorder in the general population and other non-forensic samples remains limited.

Research on perceptions of risk (Shah, 1993) indicates that the majority of people, including 'experts', rely on intuitive risk judgements. Pollock, et al., (1989) suggest using an actuarial approach when prediction is the objective and when realistic and causal hypotheses cannot be established, and using clinical hypotheses when disinhibitory or situational factors are implicated.
When the patient is released into the community, he or she is exposed to changing circumstances and may encounter life circumstances similar to those existent at the time of the previous violent behaviour. The need to consider the context in which violence occurs is essential for a comprehensive understanding and a successful management of the risk of violence. Estroff and Zimmer (1994) suggest that research needs to focus on what kind of persons, in what kind of situations, and at what phase of their lives and illness, can exhibit greater levels of violence. Models which aid the evaluation of cognitive, affective and situational factors of are helpful in guiding clinical evaluation (see Novaco, 1994; Barratt, 1994; Hampson, 1990; Mischel, 1986). An assessment of both the offender's potential for change and of the availability of treatment resources also needs to be pursued (Pollock and Webster, 1990). Studies have suggested that good case management and medication compliance show low incidence of violence once individuals are released into the community (Fuller Torrey, 1994).

The meaning and use of the concept of 'risk' vary according to context and to the familiarity of the incident to those concerned. Thus any attempt to standardise risk requires a degree of sensitivity to these factors.

Poor assessment of 'dangerousness' is not unique to Britain, but wider failure (see HMSO, 1994; Webster and Menzies, 1993), particularly with regard to the delivery of appropriate treatment and the rehabilitation of patients. Evaluation of the subject is often wasted without the existence of a co-ordinated programme which links agencies and the patient's family in order to compile and utilise data. An interdepartmental authority has been proposed in an attempt to co-ordinate services more effectively (see Davis, 1991).

In order to both provide treatment and to assure the safety of the patient and the public, the outpatient clinician must continually re-evaluate and assess the patient's potential for 'dangerousness' (Wack, 1993). For this, there needs to be an organisational environment that provides training, guidance, consultation and review for clinicians working with these clients. The courts expect clinicians to access those records that are reasonably available and relevant to the issues at hand, and this has not
been always the case (see Reiss, et al., 1996). Factors that need to be taken into consideration when assessing risk involve the quality and range of information, the completeness and objectivity of analysis, any concrete evidence of progress, and a realistic forward plan of rehabilitation.

Research in the field of risk assessment presented some of the variables which are used as predictors of subsequent incidents of violence. Most of this research responds to frameworks of linear relationships. Research into risk assessment generally uses more scientific standards for prediction than those used by clinicians on a day-to-day decision-making basis. However, in order to inform decision-making regarding release and management of risk, it seems essential that assessments of risk do not rely solely upon actuarial methods but that these co-exist with individualised clinical assessments of risk markers. Issues of long-term prediction of violence in situations of uncertainty still need to be recognised openly and discussed in view of the seriousness of these acts, and of the pressures put upon professionals to become responsible agents of decision-making with respect to prediction of violence.
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The Consistency
of Careworkers' Assessments
of Aggression and Withdrawal in Children in Care

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Abstract

This study examines the two most frequently rated behavioural difficulties presented by children in care in response to distressing situations, as defined by senior staff: aggression and social withdrawal. The potentially serious consequences of these behaviours call for the accurate assessment of risk by staff. Studies on risk assessment have put into question the ability of mental health professionals to predict risk accurately in psychiatric services. This study aimed at observing non-health staff’s ability to predict aggression and withdrawal reliably. 153 care staff from 5 children’s homes were asked to rate children’s triggers of the behaviours of concern and the context in which they occur. 51 children were selected and three staff rated each child. Kappa’s agreement coefficients indicated poor consistency between raters. It was expected that results would help inform further practice and highlight the importance of staff participation for an early identification and management of aggression and social withdrawal in children in care.
Introduction

Previous Research

As provision for crime prevention becomes a clinical issue in mental health, prediction and treatability become central to the discussion of aggression and other behaviours of concern, particularly those present in children and which have a longitudinally severe impact on their development. Second generation research into risk assessment indicates a move from dichotomous to continuous judgements and from dependent variables (e.g. behaviour) to separate independent variables (e.g. risk) (see Monahan, 1992). In consequence, it is necessary to explore the reliability of those judgements (see Berk, 1979).

The literature on risk assessment questions the accuracy of predictions of risk behaviour by expert mental health professionals (Monahan and Steadman, 1994; Litwack, 1994; Otto, 1994; Davis, 1991; Monahan, 1988) as it seems to rely on intuitive methods (Shah, 1993). In order to assess risk, the exercise of prediction becomes imminent. One difficulty with past research is that it has looked at risk assessment protocols as predicting variables, assuming that there is consistency in the judgement of raters (see Gardner, Lidz, Mulvey and Shaw, 1996; Rubin, Stewart and Coplan, 1995; Steadman, Monahan, Appelbaum, Grisso, Mulvey, Roth, Clark Robbins and Klassen, 1994; Monahan, 1993; Steadman, Monahan, Clark Robbins, Appelbaum, Grisso, Klassen, Mulvey and Roth, 1993; Rubin, Chen and Hymel, 1993; Ramsey, Patterson and Walker, 1990).

Studies have indicated difficulties in experts' agreement in their judgement of risk. No difference was found in the decision-making between laypeople and mental health professionals (psychiatrists, forensic social workers, forensic psychiatric nurses, and lawyers) when assessing mental illness, dangerousness, treatability and criminal responsibility (Windsor Jackson, 1988). However, confidence levels did vary, indicating an 'illusion of validity' for health workers, particularly those in psychiatry. In a different study, mental health professionals within a team (psychiatrists,
psychologists, social workers, and nurses) disagreed on issues of dangerousness, treatability, disposition and treatment success for aggressive behaviour (Quinsey and Maguire, 1983; see also Kroll and Mackenzie, 1983). In this latter study it is particularly notable that judgements were recorded after extensive discussions of each case, highlighting the seriousness of error in their judgements. Quinsey and Maguire (1983) suggest that with lack of consensus within an organisation it is difficult to organise treatment programmes.

One would assume that, based on their scientific training, mental health professionals would be able to exercise their acumen and experience in order to achieve consistent predictions of risk. However, findings indicate unreliable judgements. This is concerning as those making judgements regarding children's levels of risk are in an important position to influence future behaviour. For example, it is known that problematic behaviour precedes delinquent acts by many years, and that the longer children are exposed to risk factors, the greater the risks that they will introject the behaviour they are exposed to (Loeber, 1990). It seems that it is vital that accurate risk assessment is performed in order to prevent children from entering, or indeed re-entering a health, social services or criminal system at a later date.

Aggression, which is both interpersonally destructive and longitudinally stable (Eron and Huesmann, 1990; Olweus, 1979) is one of the major reasons for treatment referral in childhood (Rubin, Chen, McDougall, Bowker and McKinnon, 1995). Accurate prediction of risk becomes relevant as the consequences of errors have implications, in the case of children in care, on those in caring roles affecting delivery of services (Rubin et al., 1995) and on the establishment of relationships for those children with peers, family and staff (see Patterson and Yoerger, 1993; Kohlberg, LaCrosse and Ricks, 1972).

In line with social learning theory (see Pervin, 1993; Eron and Huesmann, 1990; Mischel, 1986), rehearsal and reinforcement of aggression in childhood are important to the likelihood of antisocial and aggressive acts (see Patterson and Capaldi, 1991; Huesmann, Eron, Lefkowitz and Walder, 1984) and violence in later life (see Klassen and O'Connor, 1994). Childhood aggression is a strong predictor of adolescent
delinquency and criminality with implications for adult violence (Rubin, et al., 1995; Robins, 1993; Farrington, 1991; Loeber, 1990; Pulkkinen, 1982). As the frequency of antisocial acts increases, there is a move from trivial to severe acts (Gable, Hendrickson and Sasso, 1995; Patterson and Yoerger, 1993) and training for antisocial behaviours in a home or peer environment generalises to other settings and across time (Haapasalo and Tremblay, 1994; Ramsey, et al., 1990). Further, it has been suggested that recurrent adult violence appears to have been preceded by a pattern of aggressiveness in childhood (Farrington, 1991; Huesmann, et al., 1984) or early adolescence (Maughan, 1993).

A different form of behavioural expression of distress is social withdrawal. From a developmental perspective (Piaget, 1932; cf. Rubin, Hymel and Mills, 1989), withdrawal can be as destructive as aggression as it fosters social incompetence and rejection by peers. It also predicts feelings of loneliness, depression, and negative self-regard in later years of childhood. It has been argued that social withdrawal is also longitudinally stable, creating interpersonal difficulties with caregivers and peers (see Rubin, et al., 1995). However, it frequently goes unnoticed as there are no early warning signals similar to those present in aggressive behaviour. Continued withdrawal precludes the child from mastering social skills and, in time, the expression of solitude comes to be viewed by peers and adults as a marker of deviation from social norms of behaviour.

Aggression and social withdrawal have been known to relate to attachment difficulties. Nevertheless, it has been suggested that those in caregiving positions make a difference in the attachment difficulties of a child who has experienced early attachment disruptions, providing the children with an opportunity to break the cycle of deviation (see Bowlby, 1960; 1973; cf. Lyons-Ruth, 1996; Rubin et al., 1995; LaFreniere and Dumas, 1992; Kulik, Stein and Sarbin, 1968).

Research suggests that both aggression and social withdrawal in childhood predict externalising and internalising problems in adolescence and adulthood with complex interpersonal 'costs' (Rubin, et al., 1993). These results strengthen the rationale for providing early detection and intervention for children who engage in these behaviours.
It is therefore essential to consider the context in which a particular behaviour occurs for a comprehensive understanding and successful management of the risk of a behaviour (see Estroff and Zimmer, 1994; Klassen and O'Connor, 1988). Further, it has been indicated that identifying triggers of behaviour is important in determining when the behaviour may occur (Emerson, Barrett and Cummings, 1990). La Vigna, Willis, Shaull, Abedi and Sweitzer (1994) suggest strategies, such as the Periodic Service Review (PSR) to be used in order to monitor the quality of these services.

Given the findings of research presented above, it is relevant to explore issues of prediction in children in care, as the literature highlights the serious consequences of some behaviours when unattended, and to refer to opportunities in their management while in care. In the past, risk assessment has concentrated on the judgements of health workers. This study looks at the agreement of expert judgements within Social Services' settings. The aim was to observe the consistency of judgement in the assessment of difficult behaviours presented by children in care. Past research has assumed that raters' judgements are in agreement. By looking at the consistency of judgement, the study focuses on a step previous to using assessments to predicting behaviours. The main question addressed by this study was whether staff agree on the triggers and context in which aggression and social withdrawal occur. In addition, it was also considered whether a non-health group of workers' predictive ability differed from the model offered by health workers.

**Method**

**Context of the Study**

The study was motivated by two developments during a clinical placement. First, it was noted that none of the region's 13 Social Services' homes for young children and adolescents received psychiatric services. Meetings with senior staff at the homes indicated high levels of aggression and the presence of withdrawn behaviour in children as a means of coping with distress. Concerns were expressed about the impact of these behaviours on the rest of the children in care, and about staff's sense of helplessness
and low self-efficacy. Second, a bid for a Psychology post was made to provide services to these homes. The proposal to research incidences and triggers of behaviour in the homes, and staff's ability to recognise these, was then received with enthusiasm by senior staff in the homes and by the clinical placement as an initial liaison between the Psychology Department and the Children's homes in view of a new post becoming available.

**Aims and Hypotheses**

The study is a correlational design with the aim to explore the viability of using carers in children's homes as the informants in risk assessment. The present study is essentially exploratory and is concerned with whether the predictive abilities of Social Services' care staff compares with those found in Health Services. It asks the basic question of whether there is consistency in carers' judgements of the children's behaviours. A more specific hypothesis emerges in this explanation and this states that the higher the agreement between carers of a particular child, the lower the frequency and severity of the behaviours of concern. The study also observed the goodness of fit between expert knowledge of senior staff regarding triggers of aggression and withdrawal, (in line with Emerson, et al., 1990) and the ability of direct care staff to predict these triggers in the children they care for.

**The Homes**

Five children's homes, from a pool of 13 homes in the region, located within a 10 mile radius of the clinical placement, were selected to participate in the study. All five management staff teams were contacted and the project was well received. The homes were representative of other homes in the region, with the exclusion of those homes for children with learning disabilities, in terms of their aims and objectives and the type of service they offer to children in care. The sample did not include children with learning disabilities. Four of the homes were of medium to long-term care facilities, of which two had short-term reception facilities for those children where other forms of accommodation are inappropriate or unavailable; and one home was a secure unit.
The homes have provided a service for children in care for between 14 and 26 years. Their sizes varied from 5 to 24-bedded units, and included the short-term assessment and transfer, and medium to long term facilities. Managers described their aims for children, ages 7 to 17, as follows:

- to encourage young people to discover and develop to the full their talents and abilities;
- to provide a happy and friendly atmosphere of personal relationships and development;
- to improve the collaboration between social service and education staff through the development of clear, shared and consistently applied procedures;
- to meet the child's needs in order to prepare them for fostering or independent living;
- provide shelter, food, warmth and emotional support;
- to provide continuity of care and build links with other agencies involved in the care of the child and with their families;
- to allow the child to experience positive substitute parents or role models;
- to provide a safe and secure environment offering consistency of boundaries;
- to encourage children to maintain their participation in full-time education; and
- to provide realistic expectations of behaviour with sensitive methods of control encouraging child-centred work practice.

Managers indicated the type of service they offer is for:

- children who cannot be looked after by their own family or by a foster family;
- children with serious dysfunctional difficulties; and
- children who have often experienced a variety of placements prior to coming to the their homes, so that these are sometimes their last resorts.

It was suggested that none of the homes have access to a regular psychiatric specialised service. Children in distress have access to counselling via their GPs.
The Management

The running of the homes was provided by a management team, usually a Centre Manager and Principal Assistants according to the size of the homes, and teams of 2 to 4 care staff directed by a group leader. Those in management positions had obtained qualifications (Diploma in Counselling, Diploma in Management, Diploma in Social Work, Nursing Training, Teaching Certificate, Certificate in Social Service) and had been in managerial positions from 4 to 28 years. At an initial meeting all Centre Managers (except one who did not attend) made suggestions of typical antecedents to the behaviours of concern.

The Care Staff

Applicants for care staff employment did not need formal qualifications. All care staff were proficient in literacy and numeracy skills, and therefore were able to fill in the questionnaire without additional help.

Care staff were identified by their Centre Managers. Those in direct contact with the child, and in care staff roles (N = 153) were contacted. Their criterion for participation was that they had care duties with the child identified. 75.1% (N = 115) were Child Care Officers (of whom 7.8% were of a more senior position); 3.3% (N = 5) were Assistant Principals who also held care staff roles; 6.5% (N = 10) were Teachers; and 15% (N = 23) were Group Leaders (of whom one had a Social Worker's qualification). The mean age for staff was 36.4 years (range 22 to 54) with a standard deviation of 8.08. 50.3% (N = 77) were male and 49.7% (N = 76) were females. Carers had been working at the homes for an average of 3.5 years (range of 4 months to 16.6 years) with a standard deviation of 2.9 years. 22.6% (N = 21) had not previously held a job working with children or in caring positions, while 76.3 (N = 71) had. On a 5-point scale (1 = not at all; 5 = very much indeed), carers rated their experience in the field of children and adolescents as a mean of 4.1 (range between 2 and 5) with a standard deviation of .68.
Carers had worked with the child they rated for a mean of 6 months (range of one month to 5.6 years) and a standard deviation of 1.1 years. On a 5-point scale (1 = extremely confident; 5 = not at all confident) carers expressed their confidence of opinion about the child with a mean of 2.2 (range 1 to 5) and a standard deviation of .78. 7.1% (N = 7) indicated that they did not feel confident that their opinions were accurate. They also rated how well they felt they knew the child (1 = extremely well; 5 = not at all well) with a mean of 2.2 (range 1 to 5) and a standard deviation of .79. 6.1% (N = 6) expressed that they did not know the child well.

**The Children**

51 children participated in this study, through carers’ ratings. 62.7% (N = 32) were males and 37.3% (N = 19) were females. Children were of an age range between 7 and 16 years. The mean age was 14.1 years with a standard deviation of 1.6. 69% of the children had been admitted previously to children’s homes, while 31% had come straight from home. The average length of stay at the homes was 7 months (range up to 7 years) and a standard deviation of 1.3 years.

It was suggested by management that children had experienced abuse (sexual, emotional, and physical), violence at home, breakdown in relationships with others, delinquency, and that the most concerning features had been self-harm, sadistic fantasies, aggression and social withdrawal.

**Procedure**

**Initial Meeting with Managers**

Attendance at the Heads of Homes’ meeting served to present the project briefly to all Centre Managers and Provider Managers. As a result, a letter (see Appendix 1) was sent to the County’s Provider Manager explaining the rationale of the study. The response was positive (see Appendix 2) and contacts were initiated. This procedure replaced a presentation of the study to an Ethics Committee. During the Heads of
Homes' meeting it was confirmed that aggression and social withdrawal were the most concerning behaviours which staff had to deal with in the children in care. A further meeting followed with the managers of the five children's homes selected in order to discuss what, in their experience, were the triggers to aggression and withdrawal behaviours in the children attending their service. All five Centre Managers were later contacted (see Appendix 3) in order to collect additional information about the children they care for, their care staff and the history of the homes. All homes but one returned the forms.

Descriptions of Behaviours of Aggression and Social Withdrawal

Managers expressed that two of the most common behaviours their staff regularly encountered with difficulties were aggression and social withdrawal. Aggression was described as: verbal and/or physical stance with the aim to intimidate another person, or which threatens the safety and well-being of self and others. Examples of this type of behaviour given were: uncontrolled anger, damaging property and belongings, verbal abuse, physical abuse, personal insults, bullying and victimising others.

Social withdrawal was described as a response to a comment or action causing a child to achieve a stance of self-imposed non-communication and isolation from others and of opting out of contact with peers and staff. Examples given were: isolation from others, a poor response to talk, inability to listen or receive/request assistance, refusing or inability to communicate, being paralysed by fear, panic, insecurity or paranoia, and avoidance, a position of silence.

Collection of Baseline Behaviour

Records of difficult behaviours were recorded in a variety of forms in the children's homes. Most incidences of aggression were recorded in the Violence at Work forms. No formal records were kept for social withdrawal behaviour. Other record forms included the incidence reports, physical control and restraint book, sanctions control records, daily logs and individual logs. However, these other forms were not used across all homes consistently. It was acknowledged by all homes that records show an
understatement of occurrence and it was suggested that the Violence at Work form was the most widely used across the homes and one in which detail was covered. However, when asked to rate the frequency behaviours were recorded on this form on a 5-point scale (1 = always; 5 = never), only one home responded ‘always’ (1), two responded ‘sometimes’ (3), and one responded ‘often’ (2). A mean of 2.25 was obtained.

**Materials**

**The Questionnaire**

The questionnaire for carers was devised after all the meetings with management had been finalised and was derived from their opinions as experts in the field. The questionnaire was divided into 6 sections (see Appendix 4). The sections are described below.

Section 1: Demographic information about the child and carer. Information about respondents’ expertise and length of time in the field.

Section 2: Information about the carer’s perception of their relationship with the child.

Section 3: The carer’s perception of the severity of and frequency of the child’s aggressive and socially withdrawing behaviours. Ratings were on a 5-point scale (1 = never/behaviour absent; 5 = always/very severe).

Section 4: Antecedents to behaviours of concern. Ratings were presented on a categorical scale (YES/NO).

Section 5: Information about the child’s background, mental health status, delinquent behaviour, and substance abuse.
Section 6: The carer’s perceptions of their self-efficacy in dealing with the child’s behaviours of concern. Raters were also invited to express three strategies they found most helpful and three strategies they felt they lacked when dealing with the child’s behaviours.

Response Rate

A total of 153 questionnaires were distributed to managers. Three carers were allocated by managers per child. Carers’ names and the name of the child they were rating were printed on each questionnaire to ensure allocation of the material. Enclosed was a self-addressed stamped envelope to assure confidentiality of responses. 98 questionnaires were received; that is, a response rate of 64%. Response rates varied between the homes, from 33% to 100%. Only two homes completed all questionnaires.

From the 98 responses received, 16 children had all three carers questionnaires completed, 19 children had two carers questionnaires completed, and 12 single questionnaires were received. The sample was therefore reduced to 35 children about whom at least two questionnaires had been received. Paired or triple responses were available from all five homes and therefore findings can be generalised across all children’s homes. The Homes were contacted with a final letter (see Appendix 5) once responses had been received.

Results were expected to be informative of the system with the potential to assist in the development of a monitoring programme to identify triggers, of an awareness of the context in which behaviours occur, and of proposals for interventions.

Frequency and Severity of Behaviours of Concern

On a 5-point scale for frequency (1 = never; 5 = always) and for severity (1 = behaviour absent; 5 = very severe), carers were asked to rate their perception of the child’s aggressive and socially withdrawing behaviour as defined by their home managers. The mean obtained for frequency of aggression was 3.1 (range 1 to 5) with a standard deviation of .99; and for severity it was 2.9 (range 1 to 5) with a standard
deviation of .95. 73.4% of responses (N = 72) indicated a rating over three for frequency and 67.4% of responses (N = 66) rated over three for severity.

The mean obtained for the frequency of social withdrawal was 2.8 (range of 1 to 5) with a standard deviation of .94; and for severity it was 2.6 (range 1 to 5) with a standard deviation of 1.0. 66.7% (N = 64) of responses indicated ratings over three for frequency, and 17.4% (N = 53) rated over three for severity.

**Results**

The analysis of the data is reported below in the following four sections. Analyses were performed in SPSS 6.1 for Windows. The sections address the issue of how consistent carers are in their agreement regarding variables of risk assessment. In other words, they focus on the level of error produced by carers when predicting risk of aggression and withdrawal in children in care. The data were analysed by an index of agreement in carers' responses, using Cohen's Kappa for categorical variables (see Fleiss, 1971; Berk, 1979; Cohen, 1960). This coefficient indicates the proportion of joint judgements in which there is agreement after chance agreement is excluded. Greater than chance agreement leads to positive values of Kappa with an upper limit of +1.00; less than chance agreement leads to negative values with a lower limit range between 0 and -1.00. A relationship between carers' degree of consistency, and the frequency and severity of the behaviours of concerns was also explored. Kappas of .6 and above were considered acceptable (see Guildford, 1955) as anything below this figure would involve high amounts of error judgement. The implications of the results are important for the viability of assessments based upon carers' ratings.

**Section 1: Background Information**

This section records the agreement between carers on the background details of the child. Background details were divided into three categories: general background variables, mental health variables and delinquent history. No novel responses were received for the 'other' category in the questionnaire.
Table 1: Agreement between carers on the child’s background details.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PERCEIVED PROPORTION</th>
<th>AGREEMENT KAPPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents with mental illness</td>
<td>.28</td>
<td>.75</td>
</tr>
<tr>
<td>Using of drugs</td>
<td>.47</td>
<td>.69</td>
</tr>
<tr>
<td>Using alcohol</td>
<td>.55</td>
<td>.74</td>
</tr>
<tr>
<td>Caution by police</td>
<td>.59</td>
<td>.80</td>
</tr>
<tr>
<td>Parental loss</td>
<td>.83</td>
<td>.63</td>
</tr>
<tr>
<td>Homelessness</td>
<td>.14</td>
<td>-.13</td>
</tr>
<tr>
<td>Parental involvement in crime</td>
<td>.18</td>
<td>.76</td>
</tr>
<tr>
<td>Using weapons in delinquency</td>
<td>.15</td>
<td>-.05</td>
</tr>
<tr>
<td>Usually carrying weapons</td>
<td>.05</td>
<td>-.03</td>
</tr>
<tr>
<td>Experienced sexual abuse</td>
<td>.29</td>
<td>.49</td>
</tr>
<tr>
<td>Experienced physical abuse</td>
<td>.49</td>
<td>.46</td>
</tr>
<tr>
<td>Experienced emotional abuse/neglect</td>
<td>.84</td>
<td>.30</td>
</tr>
<tr>
<td>Bully others</td>
<td>.70</td>
<td>.43</td>
</tr>
<tr>
<td>Been bullied</td>
<td>.68</td>
<td>.49</td>
</tr>
<tr>
<td>Contact with psychiatric services</td>
<td>.66</td>
<td>.28</td>
</tr>
<tr>
<td>Sleeping difficulties</td>
<td>.33</td>
<td>.33</td>
</tr>
<tr>
<td>Difficulties settling at bedtime</td>
<td>.40</td>
<td>.25</td>
</tr>
<tr>
<td>Bedwetting</td>
<td>.04</td>
<td>1.0</td>
</tr>
<tr>
<td>Absconds from care</td>
<td>.51</td>
<td>.76</td>
</tr>
<tr>
<td>Plays truant from school</td>
<td>.54</td>
<td>.54</td>
</tr>
<tr>
<td>Excluded/expelled from school</td>
<td>.65</td>
<td>.79</td>
</tr>
<tr>
<td>Has been statemented</td>
<td>.44</td>
<td>.61</td>
</tr>
<tr>
<td>Tourette’s syndrome</td>
<td>.01</td>
<td>*</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>.01</td>
<td>*</td>
</tr>
</tbody>
</table>

* too few observations to produce a Kappa value.
Where there were more than two raters, the highest Kappa was taken in order to maximise the levels of the participants' judgements. Two trends can be observed in the findings. First, Kappa values indicated a wide range of agreement responses, indicating that some items are more easily agreed on than others. Second, there is a considerable level of inconsistency in the level of agreement, and this is particularly evident when the level of agreement is compared with the proportion of children scoring a positive rating in such categories. For example, on items such as the child experiencing emotional abuse or neglect, the proportion of children with that experience is as high as .84, however, the level of agreement between carers was as low as .30. While some categories indicate Kappa reliabilities over .7, this was not due to the size of perceived proportion of children in that particular category. It is noticeable that when rating factual information, such as background information, raters produced inconsistent information. This is particularly concerning since it is expected that from all information, the child's background would be that which most carers are expected to share.

Table 2: Agreement between carers on the child's mental health categories.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PERCEIVED PROPORTION</th>
<th>AGREEMENT KAPPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-harm/injury</td>
<td>.36</td>
<td>.43</td>
</tr>
<tr>
<td>Depression</td>
<td>.60</td>
<td>.50</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>.10</td>
<td>.63</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.71</td>
<td>.23</td>
</tr>
<tr>
<td>Obsessive behaviour</td>
<td>.34</td>
<td>.54</td>
</tr>
<tr>
<td>Psychosis</td>
<td>.06</td>
<td>-.04</td>
</tr>
<tr>
<td>Sadistic fantasies (violent)</td>
<td>.22</td>
<td>.29</td>
</tr>
<tr>
<td>Sadistic fantasies (sexual)</td>
<td>.10</td>
<td>1.0</td>
</tr>
<tr>
<td>Violent behaviour</td>
<td>.40</td>
<td>.57</td>
</tr>
<tr>
<td>Attention Deficit Hyperactive Disorder</td>
<td>.23</td>
<td>.76</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>.19</td>
<td>.45</td>
</tr>
<tr>
<td>Sexual behaviour with children</td>
<td>.18</td>
<td>1.0</td>
</tr>
<tr>
<td>VARIABLES (cont.)</td>
<td>PERCEIVED PROPORTION</td>
<td>AGREEMENT KAPPA</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Special learning needs</td>
<td>.32</td>
<td>.66</td>
</tr>
<tr>
<td>Psychopathic type behaviour</td>
<td>.09</td>
<td>-.04</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>.50</td>
<td>.74</td>
</tr>
<tr>
<td>Cruelty to animals</td>
<td>.11</td>
<td>.64</td>
</tr>
</tbody>
</table>

* too few observations to produce a Kappa value.

A similar pattern is observed in this table to that of Table 1. Reliability figures varied widely. It is possible to suggest that when identifying mental health difficulties, raters are even less consistent than when identifying background variables. Items of a sexual nature obtained the highest consistency levels. The proportion of children scoring positively on these was low and it is possible that size, in this case, was a significant contributor to agreement scores on such a high-profile behaviour. In other words, fewer children performing sexual behaviours may be particularly noticeable and concerning. Overall, raters were inconsistent at providing a high level of agreement regarding factual background information and also when rating the level of psychological difficulties the children were experiencing.

Table 3: Agreement between carers on the child’s delinquent behaviour.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PERCEIVED PROPORTION</th>
<th>AGREEMENT KAPPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved in delinquency prior to coming to the home</td>
<td>.61</td>
<td>.88</td>
</tr>
<tr>
<td>Involved in delinquency whilst in the home</td>
<td>.61</td>
<td>.73</td>
</tr>
</tbody>
</table>

Carers indicated a higher level of agreement when rating children on their involvement in delinquent acts, although it is concerning that a high proportion of children, aged 7 to 16, have already been and continue to be involved in delinquent behaviour.
Behaviours were coded according to ten categories of delinquent or potentially delinquent behaviours. These were: theft/shoplifting/robbery, sexual behaviour towards other children, public order, arson, harming animals, assault on people, TDA, threats of violence, consuming or selling drugs, and various (when a child scored on more than two of the above). The contingency tables below give an account of the use of those categories when comparing inter-rater agreement. Chi-square statistics are based on the sparse data the tables provide, and for which the estimate of the expected frequency is likely to be uncertain. Therefore, this is not a powerful inferential statistic but adds a sense of the strength of the relationship between carers' responses.

Table 4a: Contingency table indicating the level of association between carers 1 and 2 regarding the categories of delinquent behaviour mentioned above.

<table>
<thead>
<tr>
<th></th>
<th>THEFT</th>
<th>SEXUAL</th>
<th>VARIOUS</th>
<th>ARSON</th>
<th>THREATS</th>
<th>DRUGS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>4 (15.4)</td>
</tr>
<tr>
<td>Sexual</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2 (7.7)</td>
</tr>
<tr>
<td>Various</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>5 (9.2)</td>
</tr>
<tr>
<td>Arson</td>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>5 (9.2)</td>
</tr>
<tr>
<td>Threats</td>
<td>2</td>
<td></td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td>9 (34.6)</td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1 (3.8)</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>26 (100.0)</td>
</tr>
</tbody>
</table>

(19.2) (7.7) (34.6) (3.8) (30.8) (3.8)

The table indicates poor level of association between carers 1 and 2. The data can be seen to be distributed across the table indicating a qualitative measure of poor inter-rater association, with an exception of arson and drugs though there is only one subject in that cell. A chi-square statistic indicated a difference in association between the raters ($\chi^2 = 50.2; \text{df} = 25; p<.01$).
Table 4b: Contingency table indicating the level of association between carers 1 and 3 regarding the categories of delinquent behaviour mentioned above.

<table>
<thead>
<tr>
<th></th>
<th>THEFT</th>
<th>SEXUAL</th>
<th>PUBLIC ORDER</th>
<th>VARIOUS</th>
<th>ASSAULT</th>
<th>THREATS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 (20.8)</td>
</tr>
<tr>
<td>Sexual</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 (6.7)</td>
</tr>
<tr>
<td>Various</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 (13.3)</td>
</tr>
<tr>
<td>Assault</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>4 (26.7)</td>
</tr>
<tr>
<td>Threats</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>1</td>
<td>6</td>
<td>7 (46.7)</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>15 (100.0)</td>
</tr>
</tbody>
</table>

Comparisons between raters 1 and 3 also show a qualitative measure of poor inter-rater association. Though the data is spread across the table, it seems that there are a few more areas of association than the earlier table, as shown in three counts: theft, sexual, and assault. A chi-square statistic indicated a difference in association between the raters ($X^2 = 47.4; \text{df} = 20; p<.001$).

Table 4c: Contingency table indicating the level of association between carers 2 and 3 regarding the categories of delinquent behaviour mentioned above.

<table>
<thead>
<tr>
<th></th>
<th>THEFT</th>
<th>PUBLIC ORDER</th>
<th>VARIOUS</th>
<th>ASSAULT</th>
<th>THREATS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2 (13.3)</td>
</tr>
<tr>
<td>Various</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td>5 (33.3)</td>
</tr>
<tr>
<td>Threats</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>6</td>
<td>8 (53.3)</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>15 (100.0)</td>
</tr>
</tbody>
</table>
Comparisons between raters 2 and 3 indicates a less distributed organisation of the data. A chi-square statistic indicated no difference in association between the raters ($X^2 = 10.3; df = 8; p = ns$). Overall, it can be observed that raters are able to produce acceptable reliability Kappa coefficients regarding rating children in their involvement with delinquent behaviour. However, when this is extended to the categories of those behaviours, raters produce qualitative measures, in this case, which are less consistent with each other.

**Section 2: Carers’ Agreement in Assessment Variables**

This section looks at the agreement derived from the variables regarding the risk assessment aspects of the questionnaire. Triggers to aggression and withdrawal behaviour in children, derived from the expert opinions of those in management positions for longer than 4 years, were presented to the carers in the form of a checklist. Inter-rater agreements and the proportion of children scoring on each item is presented below.

Table 5: Kappa coefficients and perceived proportion (P.P.) of agreement between carers on the child’s antecedents to aggressive and socially withdrawing behaviours, as defined by managers.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>AGGRESSION</th>
<th></th>
<th>SOCIAL WITHDRAWAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P.P.</td>
<td>KAPPA</td>
<td>P.P.</td>
<td>KAPPA</td>
</tr>
<tr>
<td>Deny request from staff</td>
<td>.71</td>
<td>.59</td>
<td>.44</td>
<td>.53</td>
</tr>
<tr>
<td>Demands from staff</td>
<td>.54</td>
<td>.53</td>
<td>.32</td>
<td>.75</td>
</tr>
<tr>
<td>External influences</td>
<td>.46</td>
<td>.43</td>
<td>.62</td>
<td>.25</td>
</tr>
<tr>
<td>Not understanding demands/instructions</td>
<td>.38</td>
<td>.30</td>
<td>.29</td>
<td>.65</td>
</tr>
<tr>
<td>Not having staff’s attention</td>
<td>.39</td>
<td>.51</td>
<td>.42</td>
<td>.63</td>
</tr>
<tr>
<td>Being given an order</td>
<td>.67</td>
<td>.36</td>
<td>.35</td>
<td>.07</td>
</tr>
<tr>
<td>Staff requesting something</td>
<td>.27</td>
<td>.27</td>
<td>.10</td>
<td>.33</td>
</tr>
<tr>
<td>Internal factors</td>
<td>.15</td>
<td>.54</td>
<td>.20</td>
<td>.24</td>
</tr>
<tr>
<td>Others behaving aggressively</td>
<td>.67</td>
<td>.18</td>
<td>.48</td>
<td>.07</td>
</tr>
</tbody>
</table>
Data regarding inter-rater agreement of antecedents of children’s aggressive behaviour show very poor coefficients. Interestingly, although managers stated that ‘other children behaving aggressively’ had a strong influence on other children to behave aggressively, this trigger showed very poor agreement between carers. The level of error in sharing agreement when identifying triggers ranges from .36 to .85, with the exception of an acceptable Kappa coefficient of .81 for the item referring to children behaving aggressively when staff are spending time with other children. Although the perceived proportion of children scoring positively on a variety of items was considerable (higher than .50) agreement between carers was not strong. Similar findings also apply for antecedents of children’s socially withdrawing behaviour. The inter-rater coefficients of agreement showed poor consistency between raters, with an exception of a Kappa of .75 for the item referring to staff demands put on the child.
Given carers' poor agreement regarding antecedents, it was suggested that the same procedure should be performed for a context in which the behaviours occur most frequently. Carers' agreement is thus presented below regarding the context of the behaviours of concern.

Table 6: Agreement of carers regarding the context, as defined by the managers, in which aggressive and socially withdrawing behaviours occur.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>AGGRESSION</th>
<th>SOCIAL WITHDRAWAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P. P.</td>
<td>KAPPA</td>
</tr>
<tr>
<td>Mealtimes</td>
<td>.33</td>
<td>.24</td>
</tr>
<tr>
<td>Bathtime</td>
<td>.11</td>
<td>-.12</td>
</tr>
<tr>
<td>When using substances</td>
<td>.44</td>
<td>.71</td>
</tr>
<tr>
<td>Pre and/or post counselling</td>
<td>.29</td>
<td>.58</td>
</tr>
<tr>
<td>In a group setting</td>
<td>.64</td>
<td>.55</td>
</tr>
<tr>
<td>When alone</td>
<td>.15</td>
<td>.29</td>
</tr>
<tr>
<td>In a one to one situation</td>
<td>.25</td>
<td>.02</td>
</tr>
<tr>
<td>At bedtime</td>
<td>.34</td>
<td>.42</td>
</tr>
<tr>
<td>Preparing for school</td>
<td>.31</td>
<td>.33</td>
</tr>
<tr>
<td>At school</td>
<td>.41</td>
<td>.83</td>
</tr>
<tr>
<td>Doing homework</td>
<td>.13</td>
<td>.35</td>
</tr>
<tr>
<td>Doing house chores</td>
<td>.16</td>
<td>-.18</td>
</tr>
<tr>
<td>Whilst dressing</td>
<td>.01</td>
<td>*</td>
</tr>
<tr>
<td>Whilst undressing</td>
<td>.02</td>
<td>*</td>
</tr>
<tr>
<td>Whilst on a trip out</td>
<td>.21</td>
<td>.29</td>
</tr>
<tr>
<td>In the company of family</td>
<td>.35</td>
<td>.69</td>
</tr>
<tr>
<td>At family gatherings</td>
<td>.31</td>
<td>.66</td>
</tr>
</tbody>
</table>

* too few observations to produce a Kappa value.

Results from the table of context show more optimistic findings. With regard to aggressive behaviour, agreement between carers reached acceptable levels when children were perceived using substances and when at school. Given this finding, it is
unfortunate that the children's teachers were unable to participate in the study as their opinion of the expression of aggression at school would have been valuable. Results are also rather more encouraging with regards to social withdrawing behaviour. The checklist obtained perfect agreement Kappa coefficients of 1.0 in three items. Although the perceived proportion of children in those categories is small, carers nevertheless agreed that behaviours were present and that these might be presenting carers with particularly challenging difficulties in those contexts. Again, in contrast to managerial opinion, carers did not reach acceptable agreements when rating children's problematic behaviours in a group setting.

**Section 3: Measures of Carers' Consistency for each Child**

This section provides measures of carers' agreement for each child. Calculations for an agreement index between raters per child were performed. The question of where greater consistencies were achieved between raters for some children than for others was considered. For the purpose of the following analysis, a score was generated for each child representing the degree of agreement between carers. Using a formula to calculate the inverse normalised euclidean distance (see Hammond, 1995; Sokal and Sneatch, 1963), indices (d) for aggression and for social withdrawal were performed. The formula used is given below:

\[
d = 1 - \frac{\sum (x - y)^2}{N}
\]

By using the inverted form of this formula, the distance between raters becomes an agreement index. Values range from 0 to 1. The higher the value, the higher the agreement between carers. Details of the data obtained are given in the following table.
Table 7: Parameters of the agreement indices.

<table>
<thead>
<tr>
<th>INDICES</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>MINIMUM VALUE</th>
<th>MAXIMUM VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>.66</td>
<td>.62</td>
<td>.29</td>
<td>1.0</td>
</tr>
<tr>
<td>Social Withdrawal</td>
<td>.70</td>
<td>.75</td>
<td>.18</td>
<td>1.0</td>
</tr>
</tbody>
</table>

It is notable that the mean and median of the two indices are close. Though the means are acceptable, the median indicates that 50% of the raters scored below .62 for aggression and .75 for social withdrawal. The range of minimum and maximum values also indicate that raters were widely spread in achieving a measure of agreement. In order to test whether there were differences in ratings between the two indices, a t-test for paired samples was performed. Findings indicated a non-significant difference between the means of both indices (t = -.92; df = 29; p = ns). A correlation between the indices showed also poor association between these measures, with a statistically non-significant Pearson’s correlation coefficient of .19.

Given the results, it was thought that these measures could provide valuable information when compared against the settings in which they were obtained. An Analysis of Variance (ANOVA) was performed for each of the indices measures against the five settings. Results are presented in table 8.
Table 8: Differences between the settings (children's homes were coded 1 to 5) and agreement indices (mean and standard deviation, S.D.).

<table>
<thead>
<tr>
<th>SETTING</th>
<th>AGGRESSION MEAN</th>
<th>S.D.</th>
<th>SOCIAL WITHDRAWAL MEAN</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.50</td>
<td>.10</td>
<td>.75</td>
<td>.23</td>
</tr>
<tr>
<td>2</td>
<td>.68</td>
<td>.17</td>
<td>.83</td>
<td>.13</td>
</tr>
<tr>
<td>3</td>
<td>.75</td>
<td>.10</td>
<td>.73</td>
<td>.17</td>
</tr>
<tr>
<td>4</td>
<td>.73</td>
<td>.12</td>
<td>.84</td>
<td>.12</td>
</tr>
<tr>
<td>5</td>
<td>.58</td>
<td>.21</td>
<td>.49</td>
<td>.23</td>
</tr>
<tr>
<td>TOTAL</td>
<td>.66</td>
<td>.17</td>
<td>.70</td>
<td>.23</td>
</tr>
</tbody>
</table>

A one-way ANOVA indicated a statistically non-significant difference between the index of aggression and setting (F = 1.8; df = 4; p = ns). No groups were significantly different from each other as indicated by the Scheffe test of multiple comparisons.

Results nevertheless indicated a significant difference between the index of social withdrawal and setting (F = 5.17; df = 4; p < .05). The Scheffe test of multiple comparisons indicated a statistically significant difference between the means obtained for setting 2 and setting 5. This is particularly problematic since both homes share the same manager. In addition, setting 5 achieved the least consistent scores. This is particularly significant since this was a secure unit for children, and it is expected that carers would share more information between each other regarding the welfare of children than in other settings.

Measures from these indices were correlated with carers' perceived ratings of the severity and frequency of behaviours, and with statutory records of display of violence provided by the homes per child. Results are given below in table 9.
Table 9: Correlation matrix of correlates of agreement: (1) Violence at Work forms (VWF); (2) carers’ perceived ratings of frequency and (3) severity of aggressive, and (4, 5) socially withdrawing behaviours; and (6) indices of aggression, and (7) social withdrawal.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Aggression (2)</td>
<td></td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severity of Aggression (3)</td>
<td>-.05</td>
<td>.45*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Withdrawal (4)</td>
<td>.05</td>
<td></td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severity of Withdrawal (5)</td>
<td>-.27</td>
<td>-.01</td>
<td>.22</td>
<td>.68**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index of Aggression (6)</td>
<td>-.23</td>
<td>-.28</td>
<td>-.22</td>
<td>-.21</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index of Withdrawal (7)</td>
<td>-.14</td>
<td>.03</td>
<td>-.05</td>
<td>-.20</td>
<td>-.11</td>
<td>.19</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* two-tailed significance below .01; ** two-tailed significance below .001.

Results indicate that the only variables that correlate with each other are severity and frequency of both aggression and social withdrawal. The higher the scores on frequency of aggressive behaviour, the higher the scores on the severity of the behaviour. The same applies to social withdrawal. No other variables showed an association of this kind. Results indicate that the homes’ system of recording aggression and the carers’ consistency in their agreement to predict the behaviours of concern do not correlate. For variables other than severity and frequency of behaviours, error variance of the assessment of these behaviours correlates with error variance of the recordings of these behaviours.

Findings indicate that carers’ measurements in this study are unreliable. There are strong indications in this study that carers are in disagreement with regards to the prediction of behaviours in children. There is also little evidence that their perceived judgements of frequency and severity of the behaviours are indications of a representative picture. This is further strengthened by the difference in ratings provided by management about the use of the Violence at Work forms which are a measure all homes are requested to fill in for every episode of violence. Ratings of this kind did not correlate with any other measure. While there are differences in ratings between
children, there are also differences between the various aspects of risk assessments. In addition, none of the variables used correlated with each other. Findings indicate that measurements used in this section are also unreliable as the judgements in prior sections have been shown to be inconsistent.

**Section 4: Measures of Carers' Perception of Self-Efficacy**

This section provides a brief illustration of self-efficacy measures regarding the carers' perception of their efficacy in dealing with behaviours of concern. Carers also provided qualitative information about what they found most helpful in dealing with the child's behaviour, and what they would need in order to become better at dealing with the child. The following table presents descriptive statistics on a 5-point scale (1 = extremely confident; 5 = not at all confident) regarding carers' perceived ability at dealing with the child's behaviour.

Table 10: Descriptive statistics concerning carers' perceived self-efficacy; mean, standard deviation (S.D.), and number of responses (N).

<table>
<thead>
<tr>
<th>BEHAVIOURS</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>3.91</td>
<td>.80</td>
<td>96</td>
</tr>
<tr>
<td>Social Withdrawal</td>
<td>3.68</td>
<td>.88</td>
<td>90</td>
</tr>
</tbody>
</table>

A t-test for paired samples indicated significant differences between the means of the two groups (t = 3.96; df = 88; p < .001). This indicated that carers perceived themselves as more confident when dealing with children who are socially withdrawn than with children who are aggressive. A one-way Analysis of Variance for each measure and the setting in which they were recorded failed to identify a difference between the groups. For aggression, results were (F = .38; df = 4; p = ns) and for social withdrawal (F = 1.5; df = 4; p = ns). Results indicated that carers perceived themselves as fairly confident in dealing with the child's behaviours.
Carers also gave an indication of their perceived knowledge of the child and their perceived accuracy in rating the child they cared for. Ratings were on a 5-point scale (1 = extremely well/confident; 5 = not at all well/confident). Table 11 presents descriptive details of these measures.

Table 11: Descriptive statistics concerning carers’ perceived accuracy in their opinions and knowledge of the child; mean, standard deviation (S.D.), and number of responses (N).

<table>
<thead>
<tr>
<th>MEASURES</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of carers’ opinions about the child</td>
<td>2.20</td>
<td>.79</td>
<td>98</td>
</tr>
<tr>
<td>Knowledge about the child</td>
<td>2.27</td>
<td>.79</td>
<td>98</td>
</tr>
</tbody>
</table>

A t-test for paired samples indicated no significant mean differences between these two measures (T = -1.28; df = 97; p = ns). Mean scores indicated that carers rated themselves as fairly confident that their opinions about the child were accurate. In addition, they also rated themselves as knowing the child fairly well.

Carers were asked to volunteer three things that they found most helpful in stopping the child’s aggression or social withdrawal once it had occurred. In addition they were asked for three things that they thought would be helpful in making a difference to their confidence level in dealing with the child’s behaviour. There were a total of 459 responses. Examples of carers’ responses (see Appendix 6) were coded as:

1. Interpersonal and humanistic skills
2. Behavioural and cognitive skills
3. Organisational skills
4. Knowledge about the children and their background
5. Practical skills
6. Punishment and threats

7. Availability of psychiatric services to the child

Frequencies of responses are presented below.

Table 12: Measures of self-efficacy in dealing with the child’s behaviours; frequencies and percentages (%).

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>HELPFUL STRATEGIES</th>
<th>NEEDED STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREQUENCY</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>203</td>
<td>76.9</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>10.2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>5</td>
<td>13</td>
<td>4.9</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>5.3</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Missing values</td>
<td>195</td>
<td></td>
</tr>
</tbody>
</table>

Carers’ responses indicated that staff perceive interpersonal humanistic skills to be most helpful as a strategy in coping with the child’s behaviour. It is worth noting that 14 responses were associated with uses of punishment (restraining the child) and threats (‘I will tell your mother about your behaviour’). With regard to strategies that staff would find helpful, most responses concerned organisational changes. Only 52 responses were obtained for this category. It can perhaps be assumed from this that staff feel confident about their skills in dealing with the child’s behaviour. If this is the case, and in view of the results from previous sections, this is something that needs attention. Only eight responses indicated that training was needed for them to cope better when dealing with children’s behaviours of concern.


Discussion and Conclusions

This study explores the viability of using carers in children’s homes as the informants in risk assessment. Therefore, it focuses on the step previous to being able to use reliable informants’ assessments in order to predict behaviours of concern. Results are in line with previous research with health workers (Windsor Jackson, 1988; Quinsey and Maguire, 1983). Moreover, in line with previous researchers (Otto, 1994; Litwack, 1994; Monahan and Streadman, 1994; Monahan, 1993; 1988), findings in this study question the reliability of judgements to predict behaviours.

The study highlights the inconsistencies, and therefore the unreliability, of the risk assessment judgements of carers in five children’s homes when predicting the occurrence of aggression and social withdrawal in the children they care for. In areas of children’s background, mental health, triggers and context for the behaviours of concern, agreement was poor between carers. However, a few exceptions were observed. Particular behaviours such as bed wetting, behaviours of a sexual nature, and substance abuse obtained acceptable agreement coefficients. Other background or mental health categories, such as anxiety, being bullied, eating disorders did not achieve acceptable agreement between raters.

Acceptable reliability coefficients were found in areas of delinquency. Staff produced high agreement regarding children’s involvement in delinquent behaviour prior to coming into care and whilst in care. Occurrence of delinquent behaviour was also observed to be high and the perceived proportion of children who were involved in delinquent behaviours was above .60. Nevertheless, when carers were asked to give details of the child’s delinquent behaviour, inconsistencies in their judgements were notable.

Frequency and severity of aggression and social withdrawal indicated moderate means. However, over 50% of responses indicated ratings over a moderate figure for frequency and severity of aggression and for frequency of social withdrawal. Severity of social withdrawal was generally low. Only 17% of responses indicated that social
withdrawal was severe in this population of children. Correlations indicated that the higher the frequency was the higher the severity of this behaviour would be. Results are in agreement with management opinion that these two behaviours are of concern. When observing the level of association between: i) correlates of agreement for frequency and severity of aggression and withdrawal; ii) the homes’ recordings of aggressive behaviour; and iii) and staff’s indices of agreement for aggressive and withdrawing behaviours, correlations were poor. This led us to question judgements on the occurrence of behaviours, as it was noted that judgements in previous aspects of the assessments had been unreliable. In other words, correlations between unreliable measures are constituted of high levels of error variance and are thus unreliable themselves.

It is interesting that in an initial meeting with managers, concerns were expressed that the difficulties in managing the behaviours explored were in turn creating difficulties in the staff’s perception of their self-efficacy and that this was affecting morale. Staff responses were, however, not in line with management concerns. Staff indicated that they were confident in dealing with the behaviours presented, and more so with aggression than with withdrawal. This was perhaps because aggression was indicated as being more severe and therefore, despite the need for intervention, it was more difficult to manage it without training. Moreover, as Rubin et al. (1995) suggested, aggression is more noticeable than withdrawal. Further, staff indicated a high rating in their perception that their opinions about the child were accurate. These results are in line with previous findings in psychiatry (see Windsor Jackson, 1988) which indicated that confidence in opinions does not necessarily equate with accuracy of opinions and reliable judgements.

Findings call for staff training in risk assessment procedures. Concentrated efforts need to be invested in training. The issue of reliability of judgement in risk assessment is paramount in order to achieve accurate prediction. However, observations that are reliable are not necessarily valid (Berk, 1979). In order to assess reliability and validity of judgement, training in observational recordings, with a degree of objectivity which is replicable across observers, is also important.
There are indications that both awareness and monitoring of the antecedents and the context in which behaviours occur are important for predicting risk (Emerson, Barrett and Cummings, 1990) and for the management of behaviours (Estroff and Zimmer, 1994). Awareness of the contingencies the child gets for the behaviours are also important. In order to predict successfully, awareness of the antecedents of the behaviour are paramount; and in order to provide an appropriate intervention, an analysis of the consequences of the behaviour is also necessary. The usefulness of ecological and functional analyses is based on what is known as conditional probability, which refers to the ability to predict one event from knowledge of another event or variable. Treatment recommendations are then prepared for each class of behaviour. According to Gable et al. (1995; see also O’Neill, Horner, Albin, Storey and Sprague, 1990), functional analysis is based on the following three possibilities: the behaviour is part of its environmental context; the behaviour is a product of specific environmental factors; and the behaviour may consist of the co-variation of functionally interdependent acts and their relationship to other behaviours and environmental events. For many children, their behaviours are context-specific and serve identifiable functions. With appropriate skill building, supervision and support, implementing behaviour modification is well within the capacity of those in caregiving positions, with the purpose of eradicating behaviours of concern and teaching the skills and providing the opportunities for socially appropriate and productive behaviours which function as effectively as those eradicated. Within a setting of children in care, it is important that training involves all those directly involved in the execution of intervention programs (see Loeber, 1990), and that these include not only care workers, but also foster parents and teachers.

Kroll and Mackenzie (1983) suggest that a risk management approach can be divided into three components: risk analysis, risk evaluation and risk reduction. Further, they divide risk reduction into three important factors. One involves the need to train staff about risk assessment. The study indicated that few individuals (8 responses out of 52) were aware that training might be needed. Helpful strategies used to deal with children’s behaviours were mainly those at an interpersonal and humanistic level. Other psychological strategies of behaviour modification were hardly used. The other two factors mentioned by Kroll and Mackenzie (1983) refer to organisational issues. First,
they stress the importance of documentation. Results indicated that records available show an understatement of the occurrence of behaviours. Management responses also indicated that recordings are not used as consistently as expected, given the seriousness of the behaviours explored and the usefulness of recording in order to predict and manage behaviour. Second, they highlight the importance of those in the system accepting areas of vulnerability in the service and being clear about their catering potential. By having a clear admissions policy, homes avoid admitting individuals whom they are not equipped or staffed for. Staff indicated that changes at an organisational level would help to support them in dealing with the behaviours presented. The changes mentioned included more accurate and consistent record taking, support from more experienced staff, better communication, and clearer guidelines about dealing with their clientele. Despite being given the opportunity to make helpful changes, only 52 responses out of 459 did so. However, due to the high level of confidence by staff in their ability to deal with the children’s behaviours, it may be that respondents hoped to maintain the status quo of the organisation and their own skills.

In previous sections, it was suggested that the consequences of aggression and social withdrawal in children are to be taken seriously. Results indicated a high incidence of aggression and withdrawal in children in the sample. In addition, 69% of the responses indicated the children had already a history in care. Given the suggestions in the literature that peers have an effect on reinforcing aggression and criminal behaviour, newcomers to the system are bound to be affected and to display further involvement in delinquency and aggressive behaviour. It is desirable to tackle the factors surrounding early manifestations of antisocial and withdrawal tendencies. Early prevention programmes can be more effective in reducing these behaviours than later treatment or penal incarceration (see Farrington, 1991). Carers are in a privileged position in being able to make a difference in reverting the negative consequences of these behaviours, with significant implications for the child's future. It is unreasonable to expect this to occur without proper resources. Consultations with psychiatric services and training are needed to provide staff with the skills and the support to provide a quality service that makes a difference to the child.
Those who participated in this study had little difficulty in identifying the gaps in the service. Managers stated their concerns for the welfare of the children they cater for and for staff morale. Staff noted the organisational changes needed for them to feel more able to deal with challenging behaviours. Both groups appeared united in their concern to deliver a high quality service to children in care, and were receptive to suggestions and support in order to improve the service they deliver responsibly.

One way of achieving this is through a Periodic Service Review (PSR; see LaVigna, et al., 1994). This can be a helpful and proactive strategy to monitor the quality of the service when changes are being implemented. The PSR sees the acknowledgement of difficulties as a skill. It also sees difficulties as opportunities both to change and to improve the service. It attempts to unite management and staff in order to achieve a common goal, that of a quality service, taking on board the needs of all those involved in the delivery of care. In addition to training staff in assessment procedures, a strategy of this kind, or aspects of it, can be adopted in order to monitor and maintain high quality services for children in care.
References:


Appendix 1: Letter of initial contact with Social Services’ county provider manager.

Ms. Paula Maggi
Psychology Department
(address of hospital)

Mr. (name of Provider Manager)
Provider Manager
Children’s Services Unit
(address of Services)

27 January 1997

Dear Mr. (name of Provider Manager)

Following our telephone conversation on 24 January 1997, I am happy to enclose details of the Research Project we discussed. I would appreciate your opinion as to whether this research study might be of benefit to Social Services. It is my view that it has the potential to allow valuable data to be collected to inform further practice regarding intervention strategies for the early detection and management of distressing behaviours.

Please find enclosed:

a) an abstract and introduction to the topic; and

b) a structure of the methodology.

Let me assure you that all responses will be kept strictly confidential and that this will also apply to the location of the homes. Should you require further information please do not hesitate to contact me at the Psychology Department. Should you feel that this
study is of interest I would appreciate your contacting me as soon as possible since I will be here for another seven weeks before leaving the area. I look forward to your response.

Yours sincerely,

Paula Maggi
Clinical Psychologist in Training with

(name of supervisor)
Consultant Clinical Child Psychologist
_Provisional title:_ Carers' Predictions of Aggression and Withdrawal in Children Across Five Children’s Homes.

*Abstract*

Given the local need to establish initial contact with Social Services children’s homes, this study aims at working with the two mostly frequently rated behavioural difficulties presented by the children, according to senior staff, in response to distressing situations: aggression and social withdrawal.

The literature on aggression and withdrawal in children indicates that lack of intervention leads to further externalisation and internalisation of these behaviours, with adverse consequences for healthy development. Developmental research suggests aggression in childhood predicts adolescent delinquency, increasing the likelihood of adult criminal behaviour. Social withdrawal in childhood affects the socialisation process of the child in that it restricts peer contact. Further, both behaviours challenge service provision of education and group care.

The serious consequences of these behaviours call for accurate assessments. Studies on risk assessment in violent populations have put into question the ability of mental health professionals to predict risk accurately in psychiatric services. This study aims at identifying behaviours of concern and observe the goodness of fit between the ability of members of the care staff to predict these behaviours. It is expected that results will be helpful in informing further practice for the early identification and management of aggression and social withdrawal in children in care.

*Context of the Research Project*

This study has been motivated by two developments at the clinical placement. First, it was noted that none of the region’s 13 Social Services’ homes for young children and adolescents receive psychiatric services. Meetings with senior staff at the homes indicated high levels of aggression and the presence of withdrawn behaviour in
children, acting as a coping mechanism to distress. Concerns were expressed about the impact of these behaviours on the rest of the children in care, and about the staff’s sense of helplessness and low self-efficacy. Second, a bid for a Psychology post was made to provide services to these homes. The proposal to research incidents and triggers of these behaviours in the homes, and staff’s ability to recognise these, was then received with enthusiasm by senior staff in the homes and by the clinical placement as an initial means of liaison between the Psychology Department and the Children’s homes in view of a new post becoming available.

Introduction

The literature on risk assessment questions the validity of predictions of risk of violent behaviour by expert professionals as it relies on intuitive methods. Studies indicate no difference between laypeople and mental health professionals when assessing violent behaviour and further that within multidisciplinary teams, mental health professionals disagree on the diagnosis of and treatment success for aggressive behaviour.

Incidence of aggression decreases with age after 40. In line with social learning theory, rehearsal and reinforcement of aggression in childhood play important roles in the likelihood of violence in later life. Childhood aggression is a strong predictor of adolescent delinquency and criminality with implications for adult violence.

Disruptions in the family, poor quality of parental care-giving and nurturance, and poor parental supervision are some of the variables that when experienced in childhood have predicted a relationship with violent behaviour in adulthood. Some researchers suggest that antisocial behaviours emerge directly as a result of the reinforcement provided by family members and peers. As the frequency of antisocial acts increases, there is a move from trivial to severe acts and, in addition, training for antisocial behaviours at home generalises to other settings and across time.

To consider the context in which aggression occurs becomes essential for a comprehensive understanding and successful management of the risk of violence. It has
been indicated that the identification of triggers of behaviour is important in
determining when the behaviour may occur.

Aggression is one of the major reasons for treatment referral in childhood and is
interpersonally destructive and longitudinally stable. Accurate prediction of behaviours
of risk becomes relevant as the consequences of errors have implications, in the case of
children in care, on those in caring roles effecting delivery of services and on the
establishment of relationships for those children with peers and staff.

At the other end of the continuum is social withdrawal. From a developmental
perspective, withdrawal becomes equally destructive as it fosters social incompetence,
rejection by peers, and it predicts feelings of loneliness, depression, and negative self-
regard in later years of childhood.

Research suggests that aggression and social withdrawal in childhood predict
adolescent externalising and internalising problems. The results serve to strengthen the
rationale for providing early detection and intervention for children who engage in
these behaviours.

**Method and Subjects**

Five children’s homes located within a 10 mile radius from the clinical placement were
selected to participate in the study. All five teams of management staff were contacted
and the project was well received. The aim of the study is to observe the ability of
direct care staff to predict triggers in the children they care for.

Participants will include staff in senior positions and direct care staff. The Homes
provide a population of children who have experienced a variety of placement failures
due to behavioural difficulties. Data will involve responses by three carers per child,
providing a potential maximum total of 153 responses for analysis. Results are
expected to be informative of the system, with the potential to help develop a
monitoring programme to identify triggers, an awareness of context in which
behaviours occur, as well as proposals for interventions.
Appendix 2: Social Services' letter of acceptance for the research study to be carried out.

Ms. Paula Maggi
Clinical Psychologist in Training
Psychology Department
(address of Hospital)

3 February 1997

Dear Paula,

Thank you for forwarding additional details of your research project and for attending our Heads of Homes meeting. I have discussed the project with my colleague (name of County Provider Manager) and we feel that the study will benefit our department, particularly our residential staff. We look forward to receiving the final document once the project is completed.

Yours sincerely,

(name of sender)
Provider Manager
Children’s Services Unit
Appendix 3: Letter to the children homes' managers following an initial meeting. Questionnaire attached to the letter for the provision of information regarding each home.

Ms. Paula Maggi  
Psychology Department  
(address of hospital)

Mr./Ms. (Name of Home Manager)  
Service Manager  
(address of Children's Home)

31 January 1997

Dear (name of Manager)

Following our meeting on 30 January 1997 at (place of meeting), I am writing to thank you for attending what I felt was a very valuable meeting where I was able to collect some of your opinions and expert knowledge and experiences for this research project.

We were able to discuss many of the issues on the agenda for the day. Some were left unfinished, partly due to the seriousness and extensive information available on the topics we were discussing. It proved that a two-hour meeting was not long enough. As I am aware of your busy schedules, I would be grateful if you could answer the following items, which we were not able to discuss on Thursday, and send them to me by post at (address of Psychology Department) as soon as possible so that I can continue with the study.

I hope to meet you again soon when I visit your home with a view to collecting data from the files, and distributing a questionnaire for your direct care staff to fill in. Let me take this opportunity to thank you again for your commitment to this study. I am very grateful for your interest, contribution, and co-operation.
Yours sincerely,

Paula Maggi
Clinical Psychologist in Training with

(name of supervisor)
Consultant Clinical Child Psychologist
I would be grateful if you could complete the following information that we were not able to discuss in our last meeting. If you do not have this information, I would be grateful if you could suggest where I could find it or who to contact.

1. This section refers to information about your home. Please describe the following about your home:

   - years in service

   - aims

   - number of children in care and their ages

2. This section refers to information about your management team in your home, including yourself. Please describe the following about your management team:

   - how many people are there in your management team

   - management qualifications and backgrounds

   - years (or months) in Social Services settings

   - years (or months) in management positions

   - years (or months) in management positions in your home
3. This section refers to information about your direct care staff. Please describe the following about your staff:

- recruiting methods for direct care staff
- staff qualifications and backgrounds
- staffing levels per shift
- literacy and numeracy skills of direct care staff (please give detailed numbers of how many staff might need help with filling in a questionnaire)

4. This section refers to information about behaviours of concern in the children in your home.

- I understand from previous meetings that you mentioned aggression and social withdrawal as the most difficult behaviours you have to deal with. Could you please describe what you mean by these behaviours:

aggression

social withdrawal

5. In our last meeting we discussed what, in your expert opinion, were the triggers of aggressive and socially withdrawing behaviour. If you, or any of your managerial staff, have thought of other triggers not mentioned in the meeting please state them below.
6. I understand that your home formally records incidences of aggression and social withdrawal, using the Violence at Work Forms, Incidence Reports, Daily Logs, and Individual Logs.

- other methods of recording in use

- are all of these in place in your home?

- After an incident, are these methods of recording used in your home (please circle as appropriate):

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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>always</td>
<td>sometimes</td>
<td>never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please send this form to me at (address of Psychology Department) as soon as possible. Should you have any other comments please telephone me at the Psychology Department (extension numbers). Thank you for your co-operation.

Paula Maggi
Clinical Psychologist in Training with

(name of supervisor)
Consultant Clinical Child Psychologist
Appendix 4: Questionnaire for the collection of data of the behaviours of concern.

**RESEARCH STUDY: Information for Staff**

Dear Participant,

In view of the difficulties that children’s homes staff experience in managing difficult behaviours in children, this research study has been designed to look into what triggers two of the most concerning behaviours. While some children express distress aggressively, others do so by social withdrawal. Your home, together with four other children’s homes in (name of Region), has expressed an interest in researching the difficulties staff experience in managing children who behave in an aggressive manner and children who cope with distress by withdrawing from social contact.

Attached to this explanatory letter, there is a questionnaire for carers to fill in. Your opinion is most important as you deal directly with these behaviours and therefore hold the most detailed information as to what triggers children to behave in this manner.

I would be very grateful if you could complete the attached questionnaire in relation to the child you care for. I would like to stress and assure you that your response and the child’s identity you are responding for will be kept completely confidential. Your response will be assigned a code and therefore nobody will be able to identify you except me. I will keep the codes and names separately. The final analysis of the data will not include any names or other identifying information (for example, the location of the home you work in).

The aim of this study is to focus on prediction by staff and to understand the relationship between triggers of aggression and social withdrawal, and the frequency and severity of those behaviours. The findings, I hope, will be relevant to the work which psychologists carry out with children and also help identify the need for particular interventions to detect and manage these behaviours.
If you agree to the questionnaire being used in this study, I would be grateful if you could complete it and return it to me in the attached envelope. It will take you between 15 and 20 minutes to fill it in. I am interested in each carer’s views so please do not discuss the questionnaire with other colleagues before filling it out.

Your help in this study is very much appreciated.

Paula Maggi
Clinical Psychologist in Training with

(name of supervisor)
Consultant Clinical Child Psychologist
STAFF'S QUESTIONNAIRE

Code of Setting:

Name of Staff: Name of Child:

Code of Staff: Code of Child:

Gender: Gender:

Age: Age:

Position:

The Questionnaire has six sections. Some of the items would require you to circle the answer that best represents your opinion. Other items require you to state your answer. Please do not discuss your answers with anybody else. I am interested in your personal opinion. Whenever possible, give exact answers. Otherwise, give as close approximations as you can for each of the following items. Please answer all of the items.

1. The following items refer to yourself and your career as a carer.

a) State how long you have worked in this home.

.................................. years .................................. months

b) Prior to this job, state how long you have worked in a similar environment.

.................................. years .................................. months

state which environment ..................................................

state which position ......................................................
c) State your opinion as to how much experience you feel you have acquired in this field.

1 2 3 4 5
none at some very much
all indeed

2. The following items refer to your relationship with the child you care for. Please circle or state the answer that best represents your opinion for each of the following items.

a) State how long you have worked directly with this child.

................................... years ................................... months

b) State how confident you feel that your opinions about this child are accurate.

1 2 3 4 5
extremely a little not at all
confident

b) State how confident you feel that your opinions about this child are accurate.

1 2 3 4 5
extremely a little not at all
confident

3. The following items refer to the severity and frequency of the behaviour of the child you care for. Please circle the answer that best represents your opinion for each of the following items:

1 2 3 4 5
extremely a little not very
well
a) State your perception of the frequency of the aggressive behaviour that the child you care for presents in response to difficult situations.

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>never</td>
<td>sometimes</td>
<td>always</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) State your perception of the severity of the aggressive behaviour that the child you care for presents in response to difficult situations.

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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>behaviour absent</td>
<td>medium severity</td>
<td>very severe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) State your perception of the frequency of the socially withdrawing behaviour that the child you care for presents in response to difficult situations.

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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>never</td>
<td>sometimes</td>
<td>always</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

d) State your perception of the severity of the socially withdrawing behaviour that the child you care for presents in response to difficult situations.

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<tr>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>behaviour absent</td>
<td>medium severity</td>
<td>very severe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e) How long has the child you care for been in care in the home you work in?

................................................................................................................

f) How long has the child you care for been in care prior to coming to the home you work in?

................................................................................................................
4. The following categories refer to antecedents of aggressive and socially withdrawing behaviour in children. Please make a tick next to each category that, in your clinical experience, triggers aggressive or socially withdrawing behaviour in the child you care for.

<table>
<thead>
<tr>
<th></th>
<th>Aggression</th>
<th>Social Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>a) deny request from staff (e.g. staff saying 'no' after child requests his/her money, or to stay out till midnight)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>b) demands from staff (e.g. to change clothes, put on a longer skirt, eat properly)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>c) external influences (e.g. phone call from family, parents not turning up to meeting the child)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>d) not understanding demands and instructions</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>e) not having attention from staff</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>f) being told to do something, as in being given an order (e.g. turn the music off)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>g) requests (e.g. please, could you turn the music down a bit as others are asleep)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Aggression</td>
<td>Social Withdrawal</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

h) internal factors (e.g. staff reminds me of my mother)  
[ ] [ ] [ ] [ ]

i) others behaving aggressively  
[ ] [ ] [ ] [ ]

j) mistakes (e.g. child ordered a meal and got a different one)  
[ ] [ ] [ ] [ ]

k) being told he/she is moving to another home and not wanting to  
[ ] [ ] [ ] [ ]

l) arriving at the home without notice  
[ ] [ ] [ ] [ ]

m) others not listening to their requests  
[ ] [ ] [ ] [ ]

n) staff paying attention to other children  
[ ] [ ] [ ] [ ]

o) staff setting boundaries (e.g. you’ll have to be in bed by 10.00pm)  
[ ] [ ] [ ] [ ]

p) the boundary is not happening so the behaviour escalates  
[ ] [ ] [ ] [ ]
| q) being touched | [ ] | [ ] | [ ] | [ ] |
| r) rejection by peers | [ ] | [ ] | [ ] | [ ] |
| s) others intruding (into emotional or physical space) | [ ] | [ ] | [ ] | [ ] |
| t) receiving unexpected news | [ ] | [ ] | [ ] | [ ] |
| u) negative comments of a personal nature (e.g. you don’t look good in that shirt) | [ ] | [ ] | [ ] | [ ] |
| w) having to wait for a desired object or request | [ ] | [ ] | [ ] | [ ] |
| x) Other (please specify) | |

4i) In which context does the behaviour (aggression or social withdrawal) occur most frequently:
<table>
<thead>
<tr>
<th>Activity</th>
<th>Aggression</th>
<th>Social Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>mealtime</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>bathtime</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>when taking drugs or alcohol</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>pre and post-counselling</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>in a group setting</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>on being alone</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>in a one-to-one situation</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>at bedtime</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>preparing for school</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>at school</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>doing homework</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>doing house chores</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>whilst dressing</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>whilst undressing</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
### Aggression

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>whilst on a trip out</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>when in the company of family</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>at family gatherings</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>other (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Social Withdrawal

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ]</td>
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</table>

5. The following items refer to the child’s mental health and background information. Please tick either the ‘yes’ or ‘no’ box stating whether the child has shown any of the following:

- Mental Health Difficulties

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>Self-harm/injury</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Depression</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Attempted Suicide</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Anxiety</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Obsessive Behaviour</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Psychosis (e.g. hearing voices)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Condition/Behaviour</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
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<td>----</td>
</tr>
<tr>
<td>Sadistic Fantasies (violent)</td>
<td></td>
<td></td>
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<tr>
<td>Sadistic Fantasies (sexual)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent Behaviour (e.g. GBH, ABH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention Deficit Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating Disorders (bulimia, anorexia, overeating)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerning Sexual Behaviours with Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Learning Needs (e.g. reading, dyslexia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychopathic Type Behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance Abuse (alcohol, drugs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruelty to Animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background Information</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition/Behaviour</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents with a Diagnosis of Mental Illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>Use of Alcohol</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Been Cautioned by Police</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Parental loss (e.g. death, separation, abandonment)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Homelessness</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Parental involvement in Criminal Activity</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Use of Weapons in Delinquency</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>(e.g. gun, knife, machete, etc)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Usually Carries Weapons</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Experienced Sexual Abuse</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>Experienced Physical Abuse</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Experienced Emotional Abuse or Neglect</td>
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<tr>
<td>Bullies Others</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Been Bullied</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Has experienced psychiatric services</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>(e.g. Child and Family Services, Counselling, Group Therapy)</td>
<td>[ ]</td>
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</tbody>
</table>
Experiences sleeping difficulties [ ] [ ]
Experiences difficulties settling at bedtime [ ] [ ]
Bed Wetting [ ] [ ]
Absconds from Care [ ] [ ]
Plays truant from School [ ] [ ]
Has been excluded/ expelled from School [ ] [ ]
Has been Statemented [ ] [ ]
Tourette’s Syndrome [ ] [ ]
Epilepsy [ ] [ ]
Other (please specify)

- Delinquent Behaviour

State whether, in your opinion, the child you care for has been involved in delinquent behaviour (e.g. arson, theft, shoplifting, robbery, assault, public order, TDA, sexually molesting others) in the past or during his/her stay at the home you work in:
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>[ ]</td>
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<tr>
<td>[ ]</td>
<td>[ ]</td>
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</table>

If your answer is ‘yes’, please specify the behaviour.

..............................................................

..............................................................

..............................................................

6. This last item refers to your feelings about dealing with the aggressive or socially withdrawing behaviour the child presents in response to difficult situations. Please circle the answer that best represents your opinion:

a) State how confident you feel that you know how to cope in bringing round the child you care for once he/she is responding to difficult situations aggressively:

1  2  3  4  5
not at all a little extremely
confident              confident
socially withdrawing:

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<th>5</th>
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<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>a little</td>
<td>extremely</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>confident</td>
<td></td>
<td>confident</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you feel that you are confident about bringing round the child you care for, please state three things that have been most helpful in stopping the child’s aggressive or socially withdrawn response once they have occurred.

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

If you feel that you are not very confident about how to deal with the situation to bring the child round, please state what you would value having that would make a difference to your confidence level.

........................................................................................................................................
........................................................................................................................................
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Please put this form in the envelope provided and send it by post as soon as possible. Your views are much appreciated. Thank you for your co-operation.

Paula Maggi
Clinical Psychologist in Training
Appendix 5: Letter to the children's homes once responses were received.

Ms. Paula Maggi  
Psychology Department  
(address of hospital)

17 July 1997

Mr. /Ms. (name of Service Manager)  
Service Manager  
(address)

Dear (name of Service Manager)

RE: Research Study on Aggression and Social Withdrawal in Children in Care

I am writing to thank you for the positive response by you and your staff to the questionnaires distributed for this study. I am taking this opportunity to let you know that your home has been the first to respond in full.

I would be very grateful if you could pass my thanks to all your staff for taking the time to fill in the questionnaires and sending them to me. I am confident that their opinions will be helpful in understanding the behaviours researched in this study.

My thanks go also to you for allowing your home to participate in this study. I hope I am able to send you a report of the results by the end of the summer.

In the meantime, please do not hesitate to contact me through the Psychology Department at (name of hospital) should you wish to discuss any aspects of the study further. It has been a pleasure to work with you and with your staff.
Yours sincerely

Paula Maggi
Clinical Psychologist in Training with

(name of supervisor)
Consultant Child Clinical Psychologist
Appendix 6: Categories for carers' perceived self-efficacy in dealing with the child’s behaviour.

**Helpful Strategies**

*Interpersonal and Humanistic Skills*

discussions and conversations; listening; fair treatment; acceptance of feelings; empathy; making them feel safe; having a good relationship; talking problems through; talking about the future and growing up; being positive and caring; working on a one-to-one basis; showing care and concern; liking the child; setting boundaries in a caring way; being available; being calm; honest response to their behaviour; showing that their rejection of my concern and care are temporary; putting the incident in perspective; asking for an explanation of the behaviour; leaving them some space; using humour; respect; trust; not becoming angry; spending time together with the child; never asking too much from the child; physical contact, as in a hug; accepting their apology; being supportive; giving them confidence; explaining the benefits of not acting aggressively; not being judgemental; and encouraging the child to take responsibility.

*Behavioural and Cognitive Skills*

encouraging the child to use logical thinking; being consistent in working practices; recognising their triggers; diverting their attention to something of interest; creating situations to develop their self-esteem; ignoring the behaviour; and giving the child different coping skills to replace their behaviour.

*Organisational Skills*

working in a team of staff.
Knowledge about the Children and their Background

having information about the child; and knowing the child and their family.

Practical Skills

being able to remove the child from context; sorting the problem out straight away; having a solution or compromise; taking control of the situation; and being firm.

Punishment and Threats

using threats to deter the child from their behaviour; telling the child off; I am bigger than the child; pointing out that they are unreasonable; and restraining the child.

Strategies Needed

Interpersonal and Humanistic Skills

being able to offer quality time to the child; getting trust from the young person; and helping the young person to think reasonably about their behaviour.

Behavioural and Cognitive Skills

training about dealing with aggressive behaviour and violence, and about sexual abuse; and developing programmes for anger management.

Organisational Skills

professional back-up for staff; back-up from other staff; informative hand overs; staff to record information; involvement of other agencies; confidence from all levels of staff; time to engage in individual work; clear guidelines to deal with aggression; well structured teams; experienced leaders; experienced staff who I can turn to; and better communication between agencies.
Knowledge about the Children and their Background

child knowing staff well enough; and more background information about child’s parents.

Practical Skills

feeling confident at all times.

Punishment and Threats

None.

Availability of Psychiatric Services to the Child

professional back-up and support for the child.
An Evaluation of a Psychometric Model for Risk Assessment in a Forensic Population of Offenders in Two Secure Settings

Paula Maggi
Year III
August 1998
ABSTRACT

There is an established association between mental illness and violence, although the number of people with mental illness who pose a danger to themselves and the public remains low. Yet, there have been a series of reports investigating cases where, with the full agreement of multidisciplinary teams, patients have been released into the community only to soon harm themselves or others. Recent government proposals for reforms in the law and in Mental Health services to deal with these few, but serious, cases indicate the imperative nature of research in the area of multidisciplinary decision-making with regard to patients’ risk.

This study is a reliability analysis and aims to replicate results from a previous study indicating the cumulative nature of risk in a community and close-supervision setting (Hammond, in-press). Risk assessment is imperative not only in community settings but also in Special Hospitals and Regional Secure Units since it is in these settings that patients who have offended receive treatment. The Risk Assessment, Management and Audit System Checklist (O’Rourke, Hammond, Smith and Davies, 1996) was used to collect patients’ ratings on the following measures: Dangerousness, Mental Instability, Self-Harm/Suicide and Vulnerability. Ratings were collected from 122 patients as well as from 129 clinicians in two secure units: a Special Hospital and a Medium-Secure Unit in the South of England. Results indicated support for the cumulative nature of three of the RAMAS scales. The Self-Harm/Suicide scale indicated difficulties to fitting such a model. It appears that the RAMAS checklist has an impact on clinicians’ confidence in their clinical judgements. Clinicians indicated poor levels of agreement and indeed this result was also found in patient-clinician agreement. Results had implications for risk assessment research and clinical work. Findings indicated the need to highlight three areas in risk assessment. First, results indicated the need for staff training in risk assessment. Second, clinical concerns were raised with regard to the poor degree of consistency between patients’ and clinicians’ assessments. Third, and in the light of Mental Health services preparing to enter the millennium, the contributions of the RAMAS to these services are discussed.
INTRODUCTION

The Effects of Community Care

Recent movements towards care in the community have meant that some people with mental illness who had previously been in institutions began to move from locked wards into the community. O'Rourke, Hammond and Davies (1997) indicate that Britain used to keep approximately 150,000 people in psychiatric hospitals. Currently, only 25,000 hospital beds remain despite figures indicating a 45% rise of compulsory admissions under the Mental Health Act (1983) between 1991 and 1995 (Rose, 1998). The assumption inherent in these admission decisions is that services will be available in the community to provide appropriate support for people in need.

In addition to individuals with mental illness present and discharged from psychiatric settings, studies indicate that prison populations also contain large numbers of individuals with mental illness who have committed criminal acts. For example, Taylor (1993) indicated that 60% of a population of 203 inmates from Brixton prison had a psychiatric disorder, which included schizophrenia, affective psychoses, psychosis, paranoid psychosis and depression. Later, these people may require community care.

Admissions under the Mental Health Act (1983)

The Mental Health Act (1983; Blugglass, 1983) provides a legal initiative to acknowledge the rights of patients with mental illness and attempts to limit the previous paternalistic attitudes towards this population with regard to hospitalisation (Appelbaum, 1984). It also provides a legal structure for the civil and criminal commitment of those with mental illness who pose a danger to themselves and to the public with protection from harm being the paramount requirement.

The Mental Health Act (1983; Blugglass, 1983; Blackburn, 1996; 1995) legalised policies for the compulsory detention and treatment of mentally disordered people, and
gave considerable discretionary powers to psychiatrists in this matter. The Act distinguishes between four legal classifications for compulsory admissions: mental disorder, mental impairment, severe mental impairment and psychopathic disorder.

The Act defines *mental disorder* as ‘mental illness, arrested or incomplete development of mind, psychopathic disorder and any other disorder or disability of mind’. Although mental illness is not defined in legislation, it is generally assumed that it covers major diagnosed disorders such as schizophrenia, other psychotic disorders and affective disorders and excludes, though not explicitly, other disorders such as neurotic disorders and alcohol or drug abuse (Blackburn, 1996). Therefore this is an arbitrarily defined group which excludes many psychologically disabling difficulties. Given the legal ambiguity surrounding the definition of ‘mental illness’, this study will rely on clinical diagnostic criteria, such as those in DSM-IV (APA, 1994; Hodgins, 1993). In addition, the Act defines *mental impairment* as ‘a state of arrested or incomplete development of mind which includes significant impairment of intelligence and social functioning and is associated with abnormally aggressive or seriously irresponsible conduct on the past of the person concerned’. *Severe mental impairment* is similarly defined, with a ‘severe’ rather than a ‘significant’ impairment. *Psychopathic disorder* is defined as ‘a persistent disorder or disability of mind, whether or not including significant impairment of intelligence, which results in abnormally aggressive or seriously irresponsible conduct on the part of the person concerned’. This category includes mostly those with personality disorder (Roberts, 1995).

*Mental Illness and Violence*

It has been argued that prejudice and biased arrest figures of the mentally ill, and accounts of these in the mass media, have contributed to belief in the association between mental illness and violence (Torrey, 1994), with public fear therefore ideologically rather than factually derived (Link, Andrews and Cullen, 1992). Data from research studies do not entirely support this view.
Research indicates that there is an association between mental illness and violence (Gardner, Lidz, Mulvey and Shaw, 1996; Monahan, 1993), with those with a mental illness more likely to commit a violent crime than those without (Hodgins, 1993). Nevertheless, data from the Epidemiological Catchment Area Survey (Swanson, Holzer, Ganju and Jono, 1990) indicated that the association of absolute risk between serious mental illness and violence is small, ranging from between 3% to 5.3% (see also Mulvey, 1994) and that the association increases when there is co-morbidity with substance misuse (see also Swanson, 1994; Torrey, 1994; Pihl and Peterson, 1993).

A number of inquiries have taken place following incidents of violence in the community by people with mental illness who have been discharged from locked wards (Richie, Dick and Lingham, 1994; DoH/HO, 1975). Yet, whilst it is the case that studies indicate that half of discharged mentally disordered offenders re-offend, with 20% of that figure doing so violently (Blackburn, 1995), only 39 of the 600 to 700 homicides per year in England and Wales have been committed by people with mental illness since April 1996 (Appleby, 1997; Reed, 1997) although this refers only to the most serious violent offences.

Mentally disordered people are diagnostically heterogeneous (Walker, 1991), and studies show that it is not mental illness per se that is associated with a likelihood of committing crime but specific aspects of mental illness that have been associated with violent crimes, such as active symptomatology (Teplin, McClelland and Abram, 1993) in the form of delusions (Taylor, Garety, Buchanan, Reed, Wessely, Ray, Dunn and Grubin, 1994) and hallucinations, particularly when they occur in the context of other personal and situational correlates of violence (McNeil, 1994), whether in the community or whilst in hospital (Link et al., 1992; Hodgins, 1993). Moreover, the focus of this investigation has also been on the interpretations of actions by those with mental illness themselves, in particular when they feel threatened or experience intrusion of thoughts that affect self-control (Link and Stueve, 1994). Here, results point to a significant finding. The number of people with mental illness who are involved in violent behaviour is small, yet this subgroup is involved in the most violent crimes (Torrey, 1994; Swanson, 1994; Monahan, Appelbaum, Mulvey, Clark Robbins...
and Lidz, 1993; Steadman, Monahan, Clark Robbins, Applebaum, Grisso, Klassen, Mulvey and Roth, 1993).

Against this, it has been argued that association does not imply causality and no study has yet found that mental illness causes violence. Some authors have argued for the possibility that they could simply co-exist (Mulvey, 1994) and have suggested that research needs to look at the form of this relationship, rather than at its strength, and also at the variability between and within patients.

**Psychopathic Disorder and Violence**

The debate continues as to whether psychopathic disorder qualifies as a mental illness (Davis, 1991), although psychopathic traits have been associated with correlates of mental illness (Pihl and Peterson, 1993). Difficulties arise when the question of treatability is applied to the legal categories of the Mental Health Act (1983) as if they were clinical categories. This tension is highlighted with the category of psychopathic disorder which is believed by clinicians to be untreatable (Bacon, 1997), although 'treatment' needs to focus on 'changing' rather than 'curing' the patient (Blackburn, 1995). The resistance to treating psychopathic disordered individuals is reflected in admission figures; in 1985 the percentage of hospital orders for these individuals was only 2.5%, compared to 95% for offenders with mental illness in general (Verdun-Jones, 1989). Currently, psychopathic disordered individuals make up around a quarter of those committed in Special Hospitals (Blackburn, 1996); and male rates of 45% in prison and estimates of 7% in the general population have been reported (Maughan, 1993). High rates for their violent re-offending when discharged have also been noted (Blackburn, 1996; Ogloff, 1995).

Patients legally classified as suffering from psychopathic disorder include the more serious violent offenders without a major mental illness. Given the legal ambiguity surrounding the category of 'psychopathic disorder', this usually includes those with a clinical diagnosis of personality disorder, as defined by DSM-IV (APA, 1994). Although the prospect of their treatability may be low (Harris and Rice, 1994; Verdun-Jones, 1989), these patients are detained for treatment in England and Wales if
psychiatrists judge that, according to the Mental Health Act (1983), this is 'likely to alleviate or prevent a deterioration' of their condition (Reiss, Grubin and Meux, 1996; Bluglass, 1983). In practice, of course, psychopathic disordered individuals present with multiple clinical difficulties (Davis, 1991).

Clinically, psychopathy has been defined in terms of antisocial (Hare and Hart, 1993), borderline and schizoid personality disorders (Blackburn, 1996). Research on these types of personality disorders and psychopathy (see Widiger and Trull, 1994; Harris and Rice, 1994) suggest that the presence of these disorders increases the likelihood that a person will commit an act of violence towards the self or others. Hart (1995; see also Harris, Rice and Cormier, 1991) indicated that psychopaths have a high risk of instrumental violence, both in the community and in institutions, compared to non-psychopathic offenders as measured by the Psychopathy Checklist (PCL-R). Research using this instrument has shown promising results (Hare and Hart, 1993), with encouraging replications during 4-year (Zamble and Pahner, 1995) and 10-year follow-ups (Wong, 1995). However, Ogloff (1995) draws attention to the numbers of false positive predictions using psychopathy assessments.

**The Gaps in the System**

A number of episodes of violent behaviour in the community from people with mental illness who had been discharged from psychiatric care indicate that the community care approach continues to allow serious gaps to occur in the system. Studies have indicated that discharged mental patients are more often arrested than the general public for violent crimes against other people (see Link, et al., 1992), often committing a violent offence within 4 months of discharge (Monahan, 1993). In a 15-year follow-up of offender patients who had been in hospital in England and Wales under the Mental Health Act (1959), Gibbens and Robertson (1983) showed that half of all reconvictions occurred within 12 months of release. Environmental factors such as the availability, accessibility and continuity of care services when discharged, family and peer support, the availability of employment, and compliance with treatment are some factors also associated a reduced precipitation of violent behaviour by people with mental illness in the community (Reiss et al., 1996; Davis, 1991). Yet, difficulties occur
not only in the community but also while people with mental illness are in the care of those providing hospitalisation and treatment prior to discharge. Hafner and Boker (1982) found that the vast majority of the violent offenders in their sample who had been in treatment had been discharged from care with the full agreement of the treating staff. However, there being clear difficulties prior to discharge, most debate focuses solely on community care services.

Serious gaps in community care with regard to the management of violence of community patients have prompted new approaches from the Department of Health, such as the multidisciplinary involvement in decision-making of the Care Programme Approach (CPA), and making legislative changes affecting the supervision registers, supervised discharged programmes and restrictions on home and rehabilitation leave (Rose, 1998; Bacon, 1997; Harris, 1997; Harrison, 1997; Reed, 1997). The introduction of Assertive Outreach Teams will soon continue the development of Mental Health Services for the millennium (Dobson, 1998).

Recent debate about community support for sex offenders who have been discharged from hospital or prison has put pressure on community care services to deliver not only quality treatment to the patient or inmate, but also protection to the public. Although sex offenders, particularly those who rape and those who offend against children, are amongst the most likely recidivists, rates are hard to establish due to the poor reporting of sexual offences (Quinsey, Rice and Harris, 1995; Rice, Harris and Quinsey, 1990; Furby, Weinrott and Blackshaw, 1989). Nevertheless, evidence suggests that community-based rehabilitation programmes for sex offenders are much more promising than alternative approaches (Rice, Quinsey and Harris, 1991; Perkins, 1991; Laws, 1989), with supervision and treatment being the most profitably administered to high risk cases (Quinsey et al., 1995).

Inquiries into the Mistakes of Community Care

Several reports have highlighted the risk some mentally ill patients pose to those in the community (Richie, et al., 1994; DoH/HO, 1975; see also Wack, 1993). These reports
identified flaws with the community care system which, with their deficient risk management, continued to fail those in their care and protect those in the community from violence (see Sheppard, 1996). Between 1994 and 1997, there have been over 14 reports of inquiry into murders committed by mentally ill people who had been discharged from psychiatric care (Snowden, 1997). There are at least another 24 inquiries yet to report (O'Rourke et al., 1997).

Perhaps one of the most notorious cases in the media was that of Christopher Clunis who killed Jonathan Zito at a tube station. The Clunis Report (Richie et al., 1994) highlighted a number of areas of concern which had already been highlighted in previous reports from the Home Office (see DoH/HO, 1975) and reinforced the association between mental illness and risk to violence. The areas of concern applied both to in-patient and community services, and included:

- paucity of actuarial systems to measure risk (i.e. empirically and objectively established relations between risk factors and a violent event);
- limited psychometric assessments of risk factors;
- limited multidisciplinary input to assessments of risk;
- lack of effective collaboration and information sharing between professionals and agencies (particularly after discharge); and
- limited implementation and audit of risk management procedures.

Those connected with the Zito trust state that the Clunis report and other previous studies (see Snowden, 1997) indicate flaws in the system and conclude that the community care system continues to fail to protect those in care and those in the community from the violence of some individuals with mental illness (Shepperd, 1996). This kind of statement, however, focuses only on part of the problem. Difficulties are also present when decisions are made pre-discharge and while managing risk in the community. The evidence so far supports the need to develop and enforce communications among staff and monitor the proper recording of violent incidents (Kroll and Mackenzie, 1983). Reed (1997) adds that the information about risk that should be shared must also include the circumstances in which violence occurs and
how these can be avoided. Therefore, the development of ways of assessing, predicting and monitoring risk while in hospital and as well as when discharged is also important.

**The Need for Risk Assessment**

The recent White Paper 'The New NHS: Modern and Dependable' (DoH, 1997) indicates that a modern NHS needs to focus on improvements in quality and efficiency. Research into risk assessment has never been more relevant to this aim as when facing the difficulties of working with those detained under the Mental Health Act (1983). Blackburn (1995) suggests three purposes of risk assessment: the identification of high risk groups, the identification of causal factors and the derivation of predictive information to use in clinical decision-making. This paper is concerned with the last of these.

In view of existing evidence and of the continued inquiries into the failing of care and the 'dangerousness' of some individuals with mental illness, risk assessment and management are essential components of mental health services. O’Rourke, et al., (1997; see also Steadman, Monahan, Appelbaum, Grisso, Mulvey, Roth, Clark Robbins and Klassen, 1994) stress the importance of differentiating between assessment and management of risk. O’Rourke et al. (1997) describe risk assessment as ‘the systematic collection of information to determine the degree to which the identified risk is present, or is likely to pose problems at some point in the future’, and risk management as ‘information, communication and control of the process for patients with complex needs and vulnerabilities’. Snowden (1997) suggests that the recent focus on risk management has resulted from the acknowledgement of error in risk assessment, and proposes an alternative model of risk management which includes risk identification, risk assessment and risk management with the last of these referring to the treatment strategies to reduce the severity and frequency of the identified risk factors. Reed (1997) in addition stresses the importance of review procedures within risk management.
Dangerousness

'Dangerousness' is a term which has been difficult to quantify. Montandon and Harding (1984; see also Roberts, Mock, Johnstone, 1981) suggest that the concept of 'dangerousness' is used in a unitary fashion without explicit or clear definitions. For Scott (1977) the context, nature and degree of 'destructiveness' is important in assessing 'dangerousness' and he attempts quantification, albeit with negative prospects for treatability, by defining 'dangerousness' as "an unpredictable and untreatable tendency to inflict or risk serious irreversible injury or destruction, or to induce others to do so" (p. 128). The Butler Committee's report (/DoH/HO, 1975) indicates that besides physical harm 'dangerousness' can also involve lasting psychological harm. However, none of these definitions has yet been quantified or measured.

The importance of factors other than those internal to the individual in an interactional model of violence has also been recognised and some have referred to this as the 'social ecology of violence' (Steadman, 1981). A commonality in the literature to the concept of 'dangerousness' has been described as "a relative, context bound behaviour with multiple definitions", and attributable to "a complex interaction of individual predispositional and situational factors" (Pollock, McBain and Webster, 1989, p. 101; see also The Royal College of Psychiatrists, 1998; Meloy, 1987; Shah, 1981; Mullen and Dudley, 1981). Unable to suggest specific aspects of 'dangerousness', various authors have acknowledged the wider context of this concept. Research needs to focus not only on the offender's mental and emotional functioning, but on the contributions of the environment (Quinsey et al., 1995; Otto, 1994; Mulvey and Lidz, 1993). Litwack, Kirschner and Wack (1993) suggest that although situational factors may be to an extent unpredictable, they are not necessarily beyond influence. Thus, Reed (1997; see also Wack, 1993; Mulvey and Lidz, 1984) recommends that, since behaviours are an interaction of environment, situational and internal variables, ongoing assessments of risk are particularly relevant.
Despite using of the term ‘untreated’ in his definition, Scott (1977; see also Towl and Crighton, 1996) suggests that ‘dangerousness’ is not static and that key components include adaptiveness, resistance to change and intentionality. Shostakovich (1989) argues that it is essential for a patient’s ‘dangerousness’ to be viewed over time, and describes ‘dangerousness’ as “a mental state in which psychopathological manifestations determine the patient’s behaviour which is inappropriate to the patient’s circumstances and may pose a danger to the society or to the patient himself”. However, he adds that the form such danger takes is related to the personal attributes of the patient and to the microsocial environment. Scott (1977), also argues for the assessment of the offence, of pre and post behaviours, personal data and social circumstances (see also Beck-Sander and Clarke, in-press). Due to these dynamic aspects to the risk of violent behaviour, Shostakovich (1989) concludes that a situation that may lead to a violent action involves a lack of understanding of the patient’s state and his experience by those in the patient’s immediate environment. ‘Dangerousness’ is therefore seen as an interaction of psychopathology, environmental stimuli and the personality of the patient.

In addition to situational factors, social cognitive theory stresses the importance of cognition and its contribution to ‘dangerousness’. Pervin (1993; see also Shah, 1981) states that it is how a person interprets stimuli, their learnt strategies of response and their awareness of the consequences that would draw light into why some engage in violent behaviour while others do not. This elaboration was best illustrated in the Clunis case (see Ritchie et al., 1994) where there were several warnings prior to the attack that Mr. Clunis was experiencing a paranoid psychotic episode in which he maintained a conviction that the environment was hostile to him.

Given the vast literature on ‘dangerousness’, it is clear that other risk factors, such as self-harm and suicide (Appleby, 1997) and the links between mental deterioration and impending breakdown and violence (see Hammond, in-press), cannot be ignored when assessing risk. Statistics indicate that suicide rates have increased in forensic populations in England and Wales, with 387 deaths in the years 1984 to 1994 (Towl and Crighton, 1996). Towl and Crighton (1996) further argue that 1% of those who
commit an act of self-harm kill themselves the following year and that in 80% of cases, the clues of potential suicidal behaviour were apparent.

*The Quantification of ‘Dangerousness’: Risk of Violence*

Initially, the study of risk was pertinent to logical analysis and was applied mainly to economics and later to management science and public policy (Towl and Crighton, 1996; Kroll and Mackenzie, 1983; Edwards, 1954). These applications of the study of risk brought to psychology and psychiatry a series of techniques which contributed to the organisation and integration of clinical information.

An example of this thinking is that the risk of an individual engaging in an act of ‘dangerousness’ is not described as a static factor that is either absent or present. Indeed, Monahan (1992; 1991) suggests a move from dichotomous variables of ‘dangerousness’ to continuous judgements of ‘risk of violence’. In this way, the probabilities of the independent variables of risk (e.g. fantasies, statements of anger, psychopathologies) can be calculated for the dependent variables of an event of violence (e.g. assault, rape, murder). Rose (1998) suggests that this shift indicates the replacement of a unscientific with a scientific concept; where measurement of frequency, severity and target are the objectives (Snowden, 1997). This clarification of the confusion in the earlier literature with the term ‘dangerousness’ thus gave rise to many authors discussing the need to measure risk.

Litwack (1990) distinguishes between the assessment and prediction of violence, where an assessment indicates a ‘sufficient risk’ of serious harm, and a prediction indicates a probability that a patient will engage in an act of violence given particular circumstances. With this in mind, he argues that clinicians’ assessment of ‘dangerousness’ needs to be viewed as risk assessments rather than as predictions of violence. However, Blackburn (1996) acknowledges that while clinicians may be competent in assessments of risk, they regularly need to make decisions about forecasts of future violence. Litwack (1995; Mulvey and Lidz, 1993) acknowledges this and argues for the need to quantify the probability of serious harm in places such
as Special Hospitals and Regional Secure Units, where it is expected that treatment will make a difference to the level of 'dangerousness' of patients.

Scott (1977) suggests that it is the quality of the violence that is a better indicator of 'dangerousness' than its quantity, as the nature of the violent behaviour can indicate either mental illness or severe personality disorder. Qualitative aspects of violence have at times been relied on for decision-making. Quinsey and Maguire (1986; see also Litwack, et al., 1993) found that the severity of the offence and the frequency of aggression while an in-patient were both significant variables which affected clinicians' decision-making with regard to degrees of 'dangerousness'. Similarly, associations between the seriousness of the offence and the perception of future risk have been found, with more severe recommendations enforced on those who committed more severe offences (Cocozza and Steadman, 1978).

Monahan and Steadman's (1994) model of risk assessment suggests the need to see risk in three component parts: a) risk factors, b) harm (amount and type of violence predicted, rated in terms of seriousness), and c) risk level (a continuous probability statement that harm will occur). This model served as the basis for one of the most comprehensive and sophisticated studies of risk assessment, funded by the MacArthur foundation in the USA. The MacArthur Risk Assessment study (Steadman, et al., 1994; Monahan, et al., 1993) focused on the association between risk factors and the criterion of violent behaviour towards others. As an interdisciplinary and multisite study of risk factors for community violence in 1000 people released from mental hospitals in the States, the prime focus of the study was to identify risk markers for violence. Risk factors were chosen for both theoretical coherence and clinical utility and were grouped into four areas: dispositional (demographics, personality, cognitive functioning), historical (social and family history, mental hospitalisation history, history of crime and violence), contextual (perceived stress, social support, social networks, means for violence, accessibility of victims) and clinical (substance abuse, fantasies, psychosis, personality disorders).

Given that the above model for risk assessment has been adopted here and that the evidence supports the need for ongoing assessment and management of risk, it is thus
important to explore the literature on decision-making and its relationship with accuracy and reliability.

**Issues of Accuracy and Reliability in Mental Health Professionals**

Legal developments in the hospitalisation of the mentally ill meant that the opinions of health professionals about patients' risk of violence in a variety of circumstances were increasingly sought. Psychiatrists have been those mostly responsible for decision-making pertinent to psychiatric populations (Towery and Sederer, 1987), although social workers' decision-making with regard to release also carry substantial weight (Hassin, 1986). Yet, Steadman (1983) suggests that clinicians have been put into this decision-making role without their empirical skills as risk experts having been demonstrated.

The discharge and aftercare process became central to the discussions of the Aarvold Committee (HMSO, 1973) which examined the factors involved in the prediction of 'dangerousness' among patients at Special Hospitals. Roberts (1995) comments on the three routes of discharge discussed in the report, and particularly on the importance attached to the opinions of the Responsible Medical Officer (RMO), as the designated expert in the prediction of 'dangerousness' due to their expertise treating mental illness and to the recognised association between mental illness and violence. Similarly, Cocozza and Steadman (1978) showed that medical opinion was highly influential in the court, where in 86.7% of 257 cases recommended for a therapeutic-oriented or a secure correctional setting, the court accepted the medical recommendations.

The highest risk factors for violent behaviour include history of past violence, being male, being young, a history of substance abuse, personality disorders and paranoid ideation (Towl and Crighton, 1996; Walker, 1991; Kroll and Mackenzie, 1983; Farrington and Tarling, 1982; Meffred, Lennon and Dawson, 1981). Indeed, research has shown that past history of violence is one the strongest predictors of subsequent violent behaviour. However, this risk factor poses difficulties for the identification of all offenders as a recent Department of Health report into homicides by people with mental illness (Appleby, 1997) indicated that 48% of the 238 individuals convicted of
homicides (murder, manslaughter and infanticide) in England and Wales in the past 33 months had no previous convictions. Beck-Sander and Clark (in-press) point to the imprecise scientific aspects of risk assessment where there is a-priori knowledge of outcome in that it overemphasises factors related to the known outcome and underestimates those that are not. The danger with this process in decision-making is that it limits patients' opportunities to explore ordinary human processes (e.g. the development of sexual feelings by sex offenders) in safe therapeutic settings free of pathologising.

Other factors seem more promising predictors. For example, it was found that substance misuse is a strong predictor of violent behaviour whether it co-exists with mental illness or not (Swanson, 1994; Swanson and Holzer, 1991; Swanson et al., 1990). In a recent study across a sample of three Special Hospitals (Quayle, Clark, Renwick, Hodge and Spencer, 1998), 55% of the sample had been identified as drinking in excess of 50 units of alcohol per week, and 42% admitted drinking at the time of the offence. Furthermore, women's consumption was higher than men's. Additional factors associated with an increased risk of recidivism include noncompliance with medication, longer duration of the illness, premorbid personality and previous admissions (Polk-Walker, Chan, Meltzer, Goldapp and Williams, 1993). Recent research has included neurophysiological predictors of re-offending (Howard and Lumsden, 1997; 1996).

Some (see Wack, 1993) have argued that static factors such as gender are unhelpful to the understanding of an offence. Yet it is part of the clinical practice to assess in what way being male contributes to becoming violent in each particular case. Clinicians can only protect patients and others in the community when they are aware of the combination of factors which triggers each individual's violent behaviour. Therefore, violence has to be assessed in context. Situational factors include the quality of family relationships, friendships and work environments (Klassen and O'Connor, 1988) and findings support the arguments for a social learning model of violence. Thus, the circumstances outside the hospital setting also need to enter the equation (Otto, 1994; Monahan, 1981).
An increased fear of liability on the part of some clinicians has led some to prefer not to engage in issues of ‘dangerousness’ (Mossman, 1994; Mulvey and Lidz, 1993; Werner, Rose and Yesavage, 1983). The poor standards of care set for those working therapeutically with violent populations have also contributed to feelings of uncertainty (Truscott, Evans and Mansell, 1995; Appelbaum, Zonana, Bonnie and Roth, 1989). Appelbaum (1984) highlights the impact of these deficiencies on patients and argues that declaring clinicians responsible for violent behaviour has led to their tendency to detain rather than discharge patients. Others (see Litwack, 1993) have affirmed this tendency to overpredict violence. Nevertheless, this pressure on clinicians seems to be an attempt by society to identify a ‘container’ for the anxieties provoked by the uncertainties of risk. Clinicians’ documentation of decision-making processes, with debate of those processes at a multidisciplinary level, including inter-agency communication and the appropriate gathering of information, thus becomes essential. Truscott et al. (1995) argue that liability should be considered for failing to follow appropriate procedures and not for errors in judgement in the light of known facts. However, the protection of the community should not be overlooked (Lidz, Mulvey, Appelbaum and Cleveland, 1989) and when making decisions, clinicians need to maintain a balance between knowledge of the case and an understanding of the almost infinite number of possible variables which could affect the decision (Bingley, 1997). The following discussions in the literature have centred on maximising the potential for accuracy and minimising error during recommendations for commitment and discharge.

**Clinical vs. Actuarial Decision-Making**

Discussion has frequently focused on the greater validity of statistical over clinical predictions or vice versa (see Holt, 1958; Meehl, 1954; Sarbin, 1943). In Ennis and Litwack’s (1974) terms, validity refers to the accuracy of judgements or the degree of correlation between the judgements and a particular fact. One of the central concerns in clinical assessment is the effect of human judgement on the accuracy or otherwise of clinical decision-making; that is, whether a clinician given certain information arrives at judgements (clinical prediction) that are more accurate than those predictions obtained using methods where there is an association between case factors and later violence (actuarial prediction).
Although some research on the relative benefits of clinical and actuarial methods appeared before the mid-fifties (e.g. Sarbin, 1943), it was Meehl (1954) who introduced this tension to the social sciences by stating that it was the combination of classification strategies and empirically-determined frequencies which characterised the actuarial method. Meehl (1954) examined 20 studies, comparing the accuracy of clinical and statistical predictions. Findings indicated that statistical methods produced predictions that were either approximately equal or superior to clinical predictions and that actuarial methods were often more accurate than the judgements of trained professionals.

Later papers (e.g. Holt, 1958) questioned Meehl’s (1954) suggestions and concluded that the study had been artificial in that it had not replicated the clinician’s day-to-day process when making decisions. As a result, it was argued that Meehl’s studies were based on naive rather than on sophisticated clinicians’ judgements. The difference noted was that the naive clinician used data in a qualitative way with no attempt at objectification, that their process was intuitive, and lacked a relationship between the criterion and the data collected. The sophisticated clinician, on the other hand, objectified the quantitative data and combined actuarial with scientifically-obtained data collection in each individual case.

Several other researchers have argued for the use of actuarial methods over clinical methods when predicting violent behaviour. Arguments are based on their higher accuracy power and their avoidance of confusing relationships that do not make exceptions to the rule salient (Mossman, 1994; Steadman, et al., 1993; Dawes, Faust and Meehl, 1989; Sarbin, 1943). For example, Hassin (1986) compared decision-making with regard to recidivism by clinicians using statistical predictions with discriminant analysis programmes, and found that error rate by clinicians was 1.4 times higher than that by the computers. Despite evidence that the programme presented a 30% error rate towards false positive predictions, Hassin (1986) concluded that clinical predictions pay little attention to facts known about the population from which the prediction is made, thereby raising the probability of error. A difficulty with these methods is that although they have practical utility, particularly when releasing offenders, the relatively low base rate of violent recidivism in this population makes
their use restricted (Grubin, 1997; Harris and Rice, 1994; Litwack, 1993; Klassen and O'Connor, 1988; Quinsey and Maguire, 1986; Black and Spinks, 1982).

Clinical judgement has been defined as ‘a balanced summary of prediction derived from knowledge of the individual, the present circumstances and what is known about the disorder from which he/she suffers’ (Bingley, 1997; p. 28). The value of this ‘idiographic’ clinical approach has been recognised by its supporters (see Pollock, et al., 1989; Monahan, 1981) on the grounds that clinical assessment is about the individual and not populations (Beck-Sander and Clark, in-press; Andrews, 1997; Snowden, 1997; Towl and Crighton, 1996; Pollock and Webster, 1990; Megargee, 1981). The benefit of focusing on individual cases has recently been acknowledged in a document by the Royal College of Psychiatrists (1998) where a functional analysis approach to dealing with violence in the workplace is recommended. Bingley (1997) questions the generalisation of actuarial methods and argues that if all decisions were made on the basis of actuarial information which assumes factors are immutable, nobody detained under the Mental Health Act (1983) would ever be discharged from psychiatric settings. Pollock et al. (1989) argue for greater accuracy and accountability in the clinician’s decision-making process and suggest a clinical-research paradigm which emphasises the theoretical underpinnings of the clinical decision-making process, as well as the cognitive bias involved in overestimation or underestimation of clinical probability of risk which may affect accuracy. Therefore, against those that accuse the clinical method of being intuitive (Kroll and Mackenzie, 1983), the authors respond that the method involves a process of decision-making which poses then tests clinical hypotheses derived from a theoretical model of human behaviour (see also Pollock and Webster, 1990).

A valuable outcome of the tension between statistical and clinical decision-making is the recognition that clinical judgement can be broken down into tasks, and that some of these tasks may be better done using statistical methods (Murphy and Davidshofer, 1994). Thus, statistical tools improve clinical decision-making rather than replace it. Other papers (Sawyers, 1966) suggest that rather than decide which method is best, research efforts should concentrate on how best to use each method to improve the accuracy of clinical decision-making. These authors conclude that predictions are most
accurate when both clinical and statistical methods are used, and where objective clinical judgements can be used statistically (see also Kroll and Mackenzie, 1983; Monahan, 1981). Harris and Rice (1994; Truscott et al., 1995) indicate that in view of the dynamic nature of risk factors as well as the contribution of situational factors to violent behaviour, assessments of risk will always be dependent on clinical decision-making as well as actuarial methods. Others indicate that in clinical settings, the importance of variables with clinical meaning needs to override those with actuarial relevance (Grubin, 1997). Yet, Pollock, et al. (1989) conclude that when the objective is prediction, the actuarial approach is superior; when disinhibitory or situational factors are implicated, the clinical hypothesis testing method is recommended.

**Decision-Making and Accuracy**

Steadman et al. (1993) identify three strategies for the study of risk assessment: the relationship between risk indicators and clinical judgement; the relationship between clinical judgement and outcome criterion; and the relationship between risk indicators and outcome criterion. The study proposed here is concerned with the first of these strategies, although it should be remembered that research concerned with the latter two should also be explored.

Given the variety of personality and situational factors involved in the prediction of violent behaviour, Megargee (1981) suggests that the identification of violence with precision is an impossible task. Yet, the reality of health professionals working with violent patients is that they need to make predictions with every decision they make to discharge or allow unescorted leave. This is a difficult position, particularly for psychiatrist who have been held liable for their patient's actions outside the hospital (see Davis, 1991; Klassen and O'Connor, 1988; Kroll and Mackenzie, 1983; Appelbaum, 1984), and given that there may be uncertainty about diagnosis or treatment outcome (Corliss, 1995). Due to the dynamic nature of these factors, it has been widely agreed that whatever the method of decision-making there is higher validity and accuracy when predictions are made for the short-term (Truscott et al., 1995; Faust and Ziskin, 1988).
In what was called a first generation of Risk Assessment in the late 70s and early 80s, the consensus was that when predicting risk, mental health professionals were generally inaccurate. Contemporary research showed that predictions of future violence by mental health professionals were not reliable one third of the time (Monahan, 1984; Megargee, 1981). Steadman (1983; see also Rice and Harris, 1995) suggested that these studies showed that the base rates for violence were low and selection ratios inaccurate and that under those conditions the greatest accuracy could be obtained by predicting that no one would be violent (see Monahan and Steadman, 1994; Otto, 1994; Harris and Rice, 1994; Monahan, 1988 for further details of methodological difficulties). Following corrections of the methodological difficulties previously identified, second generation research began to suggest more optimistic results. Research indicated that mental health professionals were accurate between 50% (Otto, 1994) and 66% of the time (Rice and Harris, 1995; Litwack, 1995; Kroll and Mackenzie, 1983; Cocozza and Steadman, 1978).

Encouraging results were also obtained with more sophisticated methodologies. Using a ‘relative operation characteristic’ (ROC) method, which describes accuracy with indices of performance that are unaffected by base rates, selection ratios, clinician’s biases in prediction errors or favoured outcomes, Mossman (1994; see also Rice and Harris, 1995; Rice, Harris and Quinsey, 1990; Farrington and Tarling, 1982) re-evaluated representative data from the previous two decades and found that clinicians are able to distinguish violent from non-violent patients with a modest but better-than-chance degree of accuracy. Nevertheless, rates of error, and thus inaccuracy, remain considerable, with a tendency towards the overprediction of violence overall (Prins, 1990; Verdun-Jones, 1989; Cocozza and Steadman, 1978; Ennis and Litwack, 1974), although among women clinicians tend to underestimate the prevalence of violence (Lidz, Mulvey and Gardner, 1993).

A final difficulty is that there is currently no consensus amongst researchers about the appropriate measure of predictive accuracy (Rice and Harris, 1995). Several methods to aid accuracy in the decision-making process have been suggested on the grounds that clinicians have difficulties with actuarial methods due to their poor knowledge of numerical formulations (Garner, et al., 1996). Some have argued for the validity of
decision tables (Roberts, 1978) in order to minimise the illusion of knowledge when
data are unknown. Others (Garner et al., 1996) have found that up to 90% of 357
patients in an emergency room could be pre-screened out for violence with no
detectable loss of accuracy using a simple regression tree of questions.

**Decision-Making and Reliability**

Although the work of Monahan and Steadman (1994) has addressed whether particular
factors in an offender are associated with an increased risk of violence, their research
does not address the issue of the reliability of the raters' responses. Reliability refers to
the frequency of agreement when two or more observers answer the same question
similarly or to the degree of correlation between the judgements (Ennis and Litwack,
1974). Farrington and Tarling (1982; see also Blackburn, 1995) suggest that the
gathering of information from sources collateral to the patient will strengthen the
reliability of the information (see also Werner, et al., 1983). Several studies have
suggested that agreement between raters is essential to the accuracy of prediction, yet
reliability amongst mental health professionals has been questioned between
professionals themselves (Steadman, 1981), within a multidisciplinary team (Quinsey
and Maguire, 1983), and also when compared to laypeople (Quinsey and Ambtman,
1979).

Reliability studies using pairs of clinicians from a psychiatric emergency department
(Lidz, et al., 1993) and from a psychiatric hospital (Lidz, et al., 1989) indicated a
variety of errors in staff ratings of sensitivity and specificity (the number of true
positives and negatives). In the first study, 357 individuals with high scores of potential
violence were followed for six months, with 53% of predicted cases reporting violent
incidences. In addition, 36% of those in the matched group who had low scores also
engaged in violent behaviour. During the second study, 96 different clinicians
evaluated 411 cases on 'dangerousness' to others, inability to care for self, suicidality
and committability. 7-point scale results indicated fair to good levels of reliability
between raters for each judgements and an acceptable log linear inter-relationship
between the variables with r values ranging from .44 to .68. Disagreement was noted
in 17 cases, and this was due to differing interpretations of the law with regard to self-
referred patients and due to fear of legal liability or blame from colleagues in the event of a tragedy.

Studies comparing multidisciplinary opinions suggest similar results with regards to poor reliability between raters. Quinsey and Maguire (1983) examined the assessments of treatability of mentally disordered offenders by psychiatrists, psychologists, social worker assistants, social workers, nurses and physicians in a study of 200 male remand offenders. Agreement between clinicians was moderate on ‘dangerousness’, and low on treatment. Interestingly, although agreement scores on mental illness were high, the scores on treatability were low. This result may have occurred due to training differences, with some more inclined to recommend drugs and some therapy.

Nor are studies comparing the ability of health professionals and laypeople more encouraging with regard to error. Windsor Jackson (1988) examined the degree of agreement between psychiatrists, nurses, forensic social workers, lawyers and laypeople on a series of measures, including ‘dangerousness’ and mental illness. Raters were exposed to videotapes of actual psychiatrist-patient interviews and a full range of possible outcomes were depicted: clearly fit, clearly unfit and ambiguous cases. A high level of disagreement between raters’ means was found using Analysis of Variance. Yet, laypeople’s ratings did not differ significantly from psychiatrists, although the latter indicated a greater degree of confidence in their opinions. Disagreement between these two groups was nevertheless found in a transcultural study across six countries (Montandon and Harding, 1984), where psychiatrists gave the highest ratings and laypeople the lowest on measures of ‘dangerousness’ and treatment on 16 cases depicting numerous combinations of violence and mental illness. Although psychiatrists presented lower inter-rater agreement of ‘dangerousness’ than other groups in this study, they showed high agreement on treatment. It should, however, be noted that several methodological problems were present, including texts in translation and the overrepresentation of some professionals in one country and the underepresentation in another. Quinsey and Ambtman (1979; see also Webster, Sepejak, Manzies, Slomen, Jensen and Butler, 1984) also compared psychiatrists’ assessments of 30 patients (child molesters, serious offences against people and against property) in a maximum security unit with those by teachers. No differences were found between the two groups of
assessors after their exposure to file summaries (description of the offence, description of patient’s history, psychometric assessment data and progress notes).

Given this research about issues of reliability in mental health workers, a further study queried whether these findings were also applicable to social service staff working with aggressive and socially withdrawn children in care (Maggi, Hammond and Kirby-Turner, unpublished). Detailed findings from this study can be found in the research section of this portfolio under the small-scale/service-related research section. Staff revealed high levels of inconsistency when assessing the children’s background and mental health issues. High agreement was achieved on delinquent and substance abuse behaviour. It was suggested that poor agreement was obtained as a result of lack of training. The need for training when working with people who pose a degree of risk has been repeatedly emphasised (Reid and Bromley, 1998; Harris, 1997; Harrison, 1997; McDougall, 1996; Geczy and Sultenfuss, 1994; Wack, 1993; Cooke, 1990; Dawes et al., 1989; Mulvey and Lidz, 1984). It is important to note that opinions were sought in isolation from a multidisciplinary discussion, although results can be used to support the value of multidisciplinary debate (Rose, 1998; Harris, 1997; Bacon, 1997; Corliss, 1995; Litwack, et al., 1993; Steadman, 1981). The inclusion in the study of the child’s opinions on their ratings would have been valuable in order to explore their views, and their fitness in the decision-making process.

Hospital Settings and Risk Assessment

The Special Hospitals

There are four maximum security Special Hospitals in the UK: Broadmoor, Rampton and Ashworth in England, and Carstairs State Hospital in Scotland. With a population of about 2,000, a fifth of them females (Blackburn, 1995), Special Hospitals detain patients under the Mental Health Act (1983) who pose a ‘grave and immediate danger’ to the public (Epps, 1996; Blackburn, 1995; Litwack, 1995; Monahan, 1988; Bluglass, 1983). These patients require therapeutic interventions (Perkins, 1991) under conditions of special security as a result of their ‘dangerousness’, and their violent or
criminal propensities. Patients arrive from the courts, prisons, the police or are transferred from other Special Hospitals (see Blackburn, 1996; Hamilton, 1985).

Clinical decisions concerning the patient’s ‘dangerousness’ are made on entry and again on discharge. Prior to discharge, Home Office guidelines suggest that, along with personal and environmental variables, the views of the patients’ clinical team also need to be considered (see Roberts, 1995). Each of the Special Hospital’s wards is led by a consultant psychiatrist who works with a number of clinicians from psychology, social work, nursing, and other therapies, forming the multidisciplinary team.

Although most of the patients in these hospitals have committed an offence, Blackburn (1996) indicates that populations of mentally disordered offenders are a heterogeneous group; some have not been tried or found guilty of an offence and are therefore not ‘offenders’ in the proper sense. Moreover, he draws attention to the ‘benign warehousing’ role of these hospitals, in that they may simply hold patients who are not being offered a bed in another institution, despite their need for lesser security. The unpopularity of these patients, due to their history, means that they become long-term residents and, although they have been removed from the community context which contributed to their offending, they continue to carry a label of ‘dangerousness’.

The Regional Medium-Secure Unit

In 1974, the Butler Committee report highlighted gaps in the service for mentally disordered offenders (DoH/HO, 1975). A year later, Regional Health Authorities were urged by the Labour Government to look at drawing up plans for the development of medium-secure units for those who were not so ill as to require care in a special maximum-security hospital, but who were too disruptive for the ordinary wards of psychiatric hospitals. A report by the South Thames Regional Health Authority (1979) indicated that these services needed to care for those who posed ‘hazards’ to the public if left unsupervised. Over the past decade, these services have been delivered in Regional Secure Units (RSUs) which are small psychiatric settings offering medium-secure confinement for this identified population.
The philosophy adopted was one of a comprehensive service, with a network of in-patient and out-patient facilities, together with community services linked closely to social services, probation and after-care services. These units were to provide assessment and intensive treatment and the length of stay was set at no longer than 18 months (see also Verdun-Jones, 1989). The South East Thames Regional Health Authority report (1986), evaluating the organisational and building structure of the units, and the joint report by the Department of Health and the Home Office (1992) into the academic input of services in forensic settings, both indicated a serious commitment to expanding and equipping these services with high-quality structures and trained staff.

The unit in this study was officially opened in 1986 and offered medium security to 15 patients. Currently a 26-bedded unit (10 on Acute and 16 on Rehabilitation), it provides in and out-patient services. In-patients are referred from Special Hospitals, prisons, courts and locked wards which experience difficulties managing the patient’s behaviour. Risk assessment is provided to out-patients referred by the health and legal systems. The unit’s clinical structure is similar to that of a Special Hospital with two medically-led multidisciplinary teams.

**The Present Study: A Cumulative Model of Risk Assessment**

In view of the continued inquiries into failing mental health care and the ‘dangerousness’ of patients (Sheppard, 1996), risk assessment and management are essential to mental health services. Reports of these inquiries (Ritchie, et al., 1994; DoH/HO, 1975) highlight the failure of health services due to poor communication and sharing of information, and recommend the increased use of risk assessments, with an emphasis on multidisciplinary input. It has also been suggested that risk assessment should take place not only in community settings, but in Special Hospitals and Regional Secure Units, since patients are provided there with treatment to reduce the level of risk they pose to others and to themselves (Litwack, 1995).

Several studies (Lidz, et al., 1993; Mulvey and Lidz, 1993) suggest the importance of collateral reports in risk assessment, particularly among those who are well aware of
the patient's behaviour. In addition, collateral interviews add to the reliability of patients' reports (Breakwell, 1995). However, many collateral interviewees may provide only indirect impressions of events. Mulvey and Lidz (1993) have produced guidelines for those faced with discrepancies, and advise on the assumption that any report of violence is correct and, when in doubt, to err in the direction of overinclusiveness, and to believe a clinician before a non-clinician.

The clinical importance of accessing patients' thoughts about their own risk has also been highlighted. Monahan (1993; Towl and Crighton, 1996; Roberts, et al., 1981) has indicated that asking patients about their violent behaviour is the easiest and quickest way of gaining clinical information, and of receiving a substantial explanation of the events (see Pollock and Webster, 1990), although clinicians need to consider the truthfulness of self-reports (Mulvey and Lidz, 1993) since violent patients tend to minimise and deny responsibility for their offences (Harris and Rice, 1994). Nevertheless, although some patients may distort their account, they are often quite forthcoming about violence, and questioning them about discrepancies may provide useful knowledge. Others add that the patient has a substantial explanation of the events (see Pollock and Webster, 1990) and that their view provides 'specificity' (Mulvey and Lidz, 1993). It has further been suggested that assessing the reasons for any discrepancy between patients' and staff's views is of clinical importance as the unwillingness or inability to evoke the intrapsychic experience concurrent with violent behaviour is an indicator of poor prognosis, thereby indicating difficulties with organisation present in personality disordered offenders (see Meloy, 1987). The opposite - i.e. the ability to identify aggressive thoughts and affect in the absence of violent behaviour - may also be characteristic of false positives.

Given the longitudinal stability and consequences in adulthood of aggressive behaviour in children (Maggi et al., unpublished), a model to assess the cumulative aspects of risk was sought. Hammond (in-press) explored the fitness of such a model in a community and in a close-supervision setting. Community psychiatric nurses, clinical psychologists and psychiatrists, who had been trained in the use of the assessment tool, provided data from 258 cases. The underlying psychometric model of risk was tested using the 66-item checklist from the Risk Assessment Management and Audit System (RAMAS;
O'Rourke, Hammond, Smith and Davies, 1996) which included three scales: Dangerousness, Mental Instability and Self-Harm/Suicide, including dispositional, historical, contextual and clinical cues. Findings indicated that the most frequent indicators in the sample were the existence of psychiatric medication (65.5%), followed by history of mental illness (65.1%) and current mental illness (64%). Other common indicators of risk included threats to injure (30%), threats to kill (19%), predatory behaviour (13%), suicidal ideation (36%) and risk to self (41%). Inter-judgement agreement achieved a Kappa of .75. Following these results, the checklist was revised and currently includes 83 items and an additional scale of Vulnerability.

Brenda (1987) suggests the importance of confirmatory analysis when a particular model or actuarial approach is applied to different populations in order to test the model’s validity (see also Dawes, et al., 1989; Farrington and Tarling, 1982). Davis (1995) adds that the most common technique for establishing reliability is by replication. Based on these recommendations, and given that the cumulative model of the RAMAS has already been demonstrated empirically, this study is concerned with fitting this same model to a sample of patients from a Regional Secure Unit and a Special Hospital. In addition, this study is concerned with whether actuarial methods can improve the consistency of clinicians’ clinical judgements.

Actuarial approaches are objective measurements based on empirical evidence and tend to search for consistencies (Murphy and Davidshofer, 1994). These methods have been considered by some as more appropriate measurements of risk as they provide the rater with a structure of consistent markers. Yet, the nature of the data clinicians work with (i.e. small samples in clinical settings) limits their abilities to make actuarial judgements. Thus, in practice actuarial and clinical judgements are combined. Clinicians can use actuarial methods to increase the consistency of their clinical judgements. Indeed, actuarial instruments for risk assessment can be used to test this hypothesis. The Risk Assessment, Management and Audit System (RAMAS; O'Rourke, et al., 1996) is an instrument which permits the exploration of this issue. Having operationalised each marker in their risk assessment checklist, the RAMAS provides a standardised procedure of actuarial assessment of risk, within the process of clinical multidisciplinary judgement.
Health regulation requires that health care be based not solely on ethical principles, but on principles that can be defended in cases of malpractice (Kroll and Mackenzie, 1983). Thus, for there to be clear clinical and legal guidelines on ‘dangerousness’, the measurement of risk is an essential precursor.

It is disputed in the literature whether psychological attributes are measurable or not (Michell, 1997; Kline, 1997; Laming, 1997; Luce, 1997; Lovie, 1997). The debate on the scientific nature of measurement in psychology has recently resurfaced, with Michell (1997) accusing psychology of being more concerned with assigning numbers to items according to rules, than with the pursuit of answers to fundamental scientific questions about hypothesised structures. In doing this, Michell (1997) argues that the profession suffers from ‘methodological thought disorder’ - a sustained failure to recognise obvious methodological facts, which is spread further through an ‘ideological support structure’ of publications and teaching. With the exception of a few commentators (see Lovie, 1997), this view has been widely acknowledged and developed. Kline (1997) has argued, for example, for the valuable contribution of the ‘true score’ model as applied in psychometrics. This allows psychological variables, which are generally hard to fit into the scientific model, to produce scores which can be used as means of investigation. Luce (1997) indicates that views which state the dichotomous split of psychological attributes to be quantifiable or not quantifiable are unhelpful. He argues instead for an interlocking distribution where there is a concatenation structure, forming a continuum, which has additive representations and by which attributes can be quantified.

**A Cumulative Model of Risk**

In the field of risk assessment, an interlocking distribution can be appreciated using a cumulative scaling technique (see Hammond, 1996) which indicates that the likelihood of carrying out a behaviour is the result of an accumulation of factors, and that the order of these factors is predictable.
The order of these risk factors in the prediction equation can be defined by using a procedure from item-response theory which identifies subscales amongst the risk markers using the assumption of cumulative scales. Item-response theory (see Murphy and Davidshofer, 1994) contributes to the explanation and analysis of the relationship between characteristics of an individual (e.g. risk) and their responses to items measuring that characteristic. In other words, the more a person has of a particular attribute a test measures, the more likely it is that the person will answer each test item correctly. Inferences can therefore be made about attributes and observed behaviour. Models from item-response theory have been widely applied to areas of education (see Rust and Golombok, 1989) and psychology (Hammond, 1995c).

Based on the concept of an item-characteristic curve which plots the probability of answering the item correctly against a person’s attribute, it can be seen that as a patient’s risk increases, the probability also increases that this patient will score on items measuring attributes of risk (Rust and Golombok, 1989). In this way, item-response theory explores the test’s discriminating power in respect of a unidimensional model (Hammond, 1995c); that is, it tests the relationship between item responses and the construct the test is designed to measure. In sum, item-response theory suggests that items measuring a particular attribute vary in difficulty. Cumulative scaling indicates that the order of these items is predictable. Thus, together they provide the underlying basis for the measurement of a ‘trait’ (i.e. risk to violence) which indicates a tendency or potential for violent behaviour.

Hammond (in-press) states that the classical actuarial method, with its dominant prediction/classification approach, focuses on building relationships based on linear or logistic regression models, and less commonly on non-linear models or artificial neural networks. In a cumulative model of risk, there is a move away from prediction/classification to the structural measurement of harmful behaviour. Risk is thus perceived as a function of the measurement of this harmful behaviour. The cumulative approach tests, rather than assumes, the relationship between indicators of harmful behaviours, on the one hand, and the criteria in question, on the other. However, in risk assessment there is generally a lack of reliable criteria for validation because if the assessment suggests a risk the clinician will inevitably attempt to
minimise it. Thus, the act of assessment is always integrated with the act of management which does not provide the basis for clear independent outcome criteria. One solution to this predicament is to develop assessment procedures where the internal structure serves as the principal validity focus (Hammond, in-press).

A stochastic cumulative scaling procedure (Hammond, in-press) is recommended in situations where the criterion is a series of events occurring at different times (Farrington and Tarling, 1982). This model does not assume an underlying distribution of the latent harmful behaviour and it is cumulative insofar as the items of measurement do not overlap.

A cumulative model of risk assumes that there is a historical aspect to ‘dangerousness’. For example, when committing an offence (e.g. using a weapon such as a knife), it is assumed that the patient has also shown lesser acts of aggression (e.g. verbal abuse). The more severe the violent act, the more cumulative the risk factors. The model therefore suggests that risk builds on past behaviour. This is in line with suggestions in the literature that a previous history of violence is the strongest predictor of future violence (Mulvey and Lidz, 1993; Prins, 1990).

In addition, a cumulative scale is one on which the items (in this case risk indicators) are arranged in a hierarchical order. Thus, for example, risk of violence may include the two indicators ‘Threats of Violence’ (A) and ‘Carries Weapons’ (B). In fact ‘Threats of Violence’ is likely to be a fundamental indicator while ‘Carries Weapons’ is a more specific and higher level indicator. The hierarchical order of the indicators is identified empirically by using one of a number of specific parameter estimation programmes. The probability (p) of an indicator being present as a function of the patient’s overall risk of violence is the basis of the cumulative model and this is expressed in the figure below.
As risk increases so does the probability of the indicators being present. This is known as the 'monotonicity' assumption of the cumulative model. Indicator A is also revealed to be more common than indicator B. The fact that the two characteristic curves do not intersect is an essential part of the model, known as the assumption of 'double monotony'. This places the emphasis on the incidence of a particular risk indicator, so that low risk indicators present a lower probability of occurring than do high risk indicators. The risk indicators are ordered according to their incidence.

Of course, risk is not known a-priori and it is treated as an underlying latency, the strength of which is unknown. However, the use of multiple indicators allows for the estimation of the degree of risk assigned to each patient by using the parameter estimation procedures proposed by the specific model. The model tests the specified structure of a cumulative model of risk by generating a homogeneity index for each item in a scale (i.e. the degree to which each risk marker fits the model) and a statistical test of fit, thereby providing a high degree of objectivity in the interpretation of the risk scales.
The practical implications of being able to develop such a model are vast, as it then becomes possible to create models for the development of risk and observe its modification over time. It also becomes possible to identify the degree of misfit of any individual patient, which thereby serves to highlight idiosyncratic and unusual risk profiles.

This study acknowledges the relevance of a prospective study, although its current aims are less ambitious. It is the evaluation of the model (i.e. the underlying measurement model proposed by the RAMAS developers) that this study wishes to focus on. Given this limited aim, the accuracy of the risk prediction through a follow-up study is not necessary.
METHOD

**Design**

The present thesis reports a field study looking at the utility of the RAMAS approach to risk assessment. This includes a preliminary evaluation of inter-rater reliability as well as a replication of the internal structure of the RAMAS Risk Assessment checklist using a slightly different cumulative model. The study utilises the models and procedures of Item Response Theory. In this way, the methodology explores issues directly relevant to the recent debate on the scientific nature of measurement in psychology.

Following recommendations of early reports by inquiries into mental illness and violence, this study explores a model of risk within multidisciplinary opinion in professionals working with violent patients detained under the Mental Health Act. A repeated-measures design was employed to explore the validity of the checklist's scales and the relationship between clinical and actuarial judgement.

Using a correlational design the study explores the level of agreement between patients and staff. This is of interest in light of the work of Meloy (1987), who argues that clinical tools for therapeutic intervention should include the patient in the decision making (see also Monahan, 1993).

**Hypotheses**

Three hypotheses were suggested:

- the use of an actuarial procedure will affect clinical decision-making with regard to assessment of risk;
- in line with previous research, it would be expected that raters would not find perfect consistency in their ratings, and that lower levels of consistency would be expected when the patient is not well-known by a rater; and
given the cumulative structure of the RAMAS risk checklist an examination which links well with the idea of an appropriate and scientific tool for measurement, is suggested of whether raters confirm the structure that has been put forward in previous research.

Participants

Patients and staff for this study were drawn from a Special Hospital and a Regional Medium-Secure Unit in the south of England. It is necessary to acknowledge that this is a population with a high base rate of risk and therefore the generalisation of results is to these settings and not necessarily to other populations with lower base rates of violence (Mulvey and Lidz, 1993) or in other settings (Blackburn, 1995).

Three groups of patients were selected, with up to 30 patients (males and females) in each. The groups were:

- patients on the Special Hospital’s admissions wards (high security needs);
- patients at the Special Hospital’s wards who have been identified for transfer to a setting of lesser security (lower security needs); and
- patients on the two wards (acute and rehabilitation) at the Medium-Secure Unit (medium security needs).

Patients

This study comprises 122 patients of whom 91 were in a Special Hospital and 31 in a Medium-Secure Unit.

Special Hospital Patients

A total of 91 Special Hospital patients were selected for an interview. 31 of them were unable to participate. Of these, 6 had already been transferred to other settings and 26 refused to participate. As patients in the admissions wards were recent arrivals, it was
assumed that their mental state was vulnerable. It was expected that a number of patients would decline an interview due to their mental state or their anger with the system given that patients in these wards are regularly interviewed following arrival. 29 patients, out of a total of 40, from the two admissions wards agreed to be interviewed.

Medical Records were reviewed for patients awaiting discharge. A list of approximately 150 patients was provided. This included patients who had been recommended for discharge and were awaiting a bed elsewhere. One patient in every three was selected to take part in this study. This methodology provided 51 patients. These were contacted through the wards. When a patient was not available for health reasons, the next patient in the list was interviewed instead. 31 patients from the discharge list (from 14 different wards) agreed to be interviewed.

The total sample thus involved 60 patients who were interviewed (an interview rate of 66%), supplemented by information collected from members of their team. In addition, information was also sought from those 31 patients unable or unwilling to be interviewed, and therefore opinions by staff on their patients' risk level were included in the data analyses. Overall, the Special Hospital sample comprised of 40 patients from the admissions wards and 51 patients awaiting discharge.

**Regional Medium-Secure Unit Patients**

All patients at the medium-secure unit were contacted, making a total of 31 patients selected for an interview (10 from the Acute and 21 from the Rehabilitation wards). A total of 22 (8 from Acute and 14 from Rehabilitation) agreed to give their opinions on risk. An interview rate of 71% was achieved. 4 patients had been transferred to other settings and 5 declined an invitation to participate in the study. Team members' opinions about the patients' level of risk was sought for all 31 patients.

Information on demographics for the sample on both settings is given below.
**Gender**

Of the 91 patients in the Special Hospital sample, 57% were male and 43% were female patients. Of the 29 patients interviewed from the admissions wards, 55% were male and 45% female. Of the 31 patients interviewed from the discharge list, 52% were male and 48% were female. The Medium-Secure Unit had only one female patient at the time. The remaining 30 (97% of the sample) were male patients.

**Age**

Overall, patients in the Special Hospital showed a mean age of 37.8 with a standard deviation of 10.3. Those on the admissions wards were younger (mean of 32.1, standard deviation of 8.7) than those on the discharge group (mean of 43.6, standard deviation of 11.9). The mean age for patients in medium security was similar, at 34 (with a standard deviation of 10.7) to that of those recently admitted to a Special Hospital.

**Mental Health Diagnosis**

Diagnostic criteria were extracted from psychiatrists' reports in patients' files. Some authors question the reliability of psychiatric diagnosis (Faust and Ziskin, 1988; Ennis and Litwack, 1974) and this was observed in this sample. While most psychiatrists in the Special Hospital used a DSM-IV (APA, 1994) diagnostic criteria, a few made reference to ICD-10 (WHO, 1992) which give rise to some discrepancies. Diagnostic criteria can be observed in the following figure.
Files indicated the following criteria for patients from the admissions group: 40% had a diagnosis of schizophrenia, 37.5% personality disorder, 10% schizoaffective disorder, 10% psychotic disorder and 2.5% affective disorder. A similar pattern was observed in patients awaiting discharge. 43.1% had a diagnosis of schizophrenia, 39.2% personality disorder, 11.8% psychotic disorder and 5.9% affective disorder. No patients with schizoaffective disorder were presently awaiting discharge.

The majority of patients in the medium-secure unit had an ICD-10 (WHO, 1992) diagnosis of schizophrenia (48.4%). Other diagnoses involved personality disorder (22.5%), schizoaffective disorder (3.2%), psychotic disorder (22.5%) and affective disorder (3.2%).

**Legal Classification**

Most patients in the Special Hospital had a Mental Health Act (1983) legal classification of *Mental Illness* (60% of patients from admissions and 58.8% from the discharge list). Many were also under the classification of *Psychopathic Disorder* (32.5% of patients from admissions and 27.4% of those awaiting discharge). A small number of patients fitted into both classifications (7.5% of admissions and 13.7% from
the discharge list). Patients in medium security were mostly detained under a legal classification of *Mental Illness* (90.3%) and only 9.7% were under *Psychopathic Disorder*. None of the patients had dual classification.

**Section**

Patients were detained under a variety of Sections of the Mental Health Act (1983; Bluglass, 1983). These Sections are presented in the graph below.

Graph 2: Sections of the Mental Health Act (1983) under which patients were detained, expressed in percentages.

3 = compulsory admission for treatment of mental disorder; 35 = remand to hospital by the courts for a report on mental condition; 36 = remand to hospital for treatment; 37 = hospital or guardianship order; 38 = interim hospital order; 41 = hospital order with restrictions; 47 = transfer to hospital of a sentenced prisoner; 48 = transfer to hospital of prisoners other than those serving a sentence; 49 = transfer to hospital of prisoner with restrictions.

In the Special Hospital, most patients from the admissions wards were detained under Section 37/41 (37.5%). Other Sections included: 3 (17.5%), 35 (2.5%), 37 (10%), 38 (12.5%), 47/49 (7.5%), and 48/49 (12.5%). A similar pattern was presented by patients awaiting discharge. Most patients were detained under Section 37/41 (54.9%), while the rest of the sample were distributed under other Sections: 3 (17.6%), 37 (9.8%), 47/49 (13.7%), 48 (2%), and 48/49 (2%).
In medium security, patients were mostly detained under Section 37/41 (41.9%). This was followed by Sections 3 (19.3%), 37 (6.5%), 37/48 (3.2%), 38 (6.5%), 41 (3.2%), 48 (9.7%), and 48/49 (9.7%).

**Length of Stay in Hospital**

As expected, patients from the Special Hospital admissions wards had been detained for a shorter period than those patients awaiting discharge. On average, the former group had been in hospital for slightly over two years (mean of 25.9 months, standard deviation of 34.3), and the latter for over ten (mean of 121.7 months, standard deviation of 105.4).

Patients in the Medium-Secure Unit stayed an average of over a year in the unit (mean of 14.5 months and a standard deviation of 10.4). Group differences (F=29.8; df=2; p=.0001) were found in the length of stay using one-way Analysis of Variance (ANOVA). A Sheffe test of significance indicated statistically significant differences in the length of stay between those recently admitted and those awaiting discharge. The latter group was shown also to differ from those requiring medium security.

**Index Offence**

The literature suggests that simple systems of nominal categories be developed for patient’s index offences. Some (Harris and Rice, 1994; Mulvey and Lidz, 1993) suggest focusing on offences against person (assault, sexual assault, armed robbery, murder, manslaughter, arson) and property. These two categories were considered limited. The wide range of offences found in patients’ files were condensed in the following categories: manslaughter/murder, attempted murder, sexual crime, arson, assault, robbery, burglary, possession of firearms, and affray. Categories are presented in the graph below.
27.5% of the Special Hospital sample had committed manslaughter or murder, 2.2% attempted murder, 11% sexual crime (indecent assault, attempted rape, rape, and paedophilic behaviour), 18.7% arson, 19.8% assault (GBH, ABH, common assault, wounding with intent and unlawful wounding), 2.2% robbery, 2.2% burglary, 1.1% affray and 14.3% had committed no official offence. This latter group was considered to require maximum security following unmanageable aggressive/violent behaviour in previous settings, thoughts of killing children, sadistic fantasies, aggressive/violent behaviour directed at other patients and staff, and threats to kill.

The medium-secure sample had committed the following offences: manslaughter or murder (12.9%), attempted murder (12.9%), sexual crime (12.9%), arson (16.1%), assault (25.8%), robbery (6.4%) and possession of firearms with the intent to endanger life (12.9%). 6.4% of patients had committed no offence and this group also included immigration detainees who had become difficult to manage in previous detention centres.

Clinical Team Members

In addition to patients, 129 members of staff (99 from the Special Hospital and 30 from the regional secure unit) were approached to participate in this study. This
involved 182 questionnaires being sent. From the Special Hospital sample, the following professional opinions were sought: psychiatry (16.5%), psychology (18.7%), nurse therapy (4.4%), primary and associate nursing (49.4%), and social work (11%). An overall response rate of 43% was achieved (36% from the admissions wards and 48% from other wards).

Team members' professional opinions from the regional secure unit included: psychiatry (21%), psychology (12.9%), primary and associate nursing (46.8%) and social work (19.3%). An 87% response rate was obtained.

Measures

Demographics and General Information

The following information was sought from patients' records:

Demographics (gender and age)
Clinical Diagnosis
Legal Classification
Section
Length of Stay
Index Offence

Measures of Disclosure and Trust

In addition to the above information, the following questions were asked to patients as an additional measure of the reliability and validity of staff opinions. The implications were that the level of disclosure of information to staff could have an effect on staff knowledge of the patient, which might compromise therapeutic change and the management of risk factors.
1. Who in the Clinical Team do you feel understands you most?

2. Who in the Clinical Team do you tell most things to?

3. How much about you and your experiences do you tell them? (ratings from 0% to 100%)

4. Is there anybody outside the Clinical Team that you feel understands you more?

5. Is there anybody outside the Clinical Team that you tell most things to?

6. How much about you and your experiences do you tell them? (ratings from 0% to 100%)

**The Risk Assessment Management and Audit System (RAMAS)**

The RAMAS (see O’Rourke, Hammond and Davies, 1997) has been constructed as a decision support system in order to help clinicians and practitioners assess, manage and audit risk both in hospital and in community settings (O’Rourke, Hammond, Smith and Davies, 1996). It is to date the most comprehensive empirical tool of risk assessment, and is based on risk assessment research (Monahan and Steadman, 1994), statistical modelling and practical reviews (Hammond, 1998).

Recent research (Hammond, in-press) suggests that a previous RAMAS 66-item checklist fitted a cumulative risk model. Conclusions indicated that this is a tool of sound psychometric qualities with good internal indices of reliability and validity, based on data from patients in crisis response services, forensic outpatients, forensic inpatients, and patients seen by a Community Mental Health Team.

The RAMAS collects multidisciplinary information on risk, demographics, risk management, need assessment and skill assessment of the patient. This study aims to use one aspect of the RAMAS: the risk assessment checklist, a 83-item checklist of risk factors based on the clinical and research literature, which provides information on
four dimensions of risk: Dangerousness (likelihood of the patient harming others), Mental Instability (likelihood of the patient becoming or remaining mentally unstable), Self-Harm/Suicide (likelihood of the patient causing self-injury) and Vulnerability (likelihood of the patient being taken advantage of or exploited by others). Sample questions for the four dimensions of risk are: Threats to Kill, Psychotic Symptoms, Considered Risk to Self, and Susceptible/Easily Led. The RAMAS is a standardised procedure with operationalised concepts which minimise the subjectivity of ratings and can only be used by practitioners who have attended a detailed training course. This training is essential in order for the practitioner to become acquainted with the importance of standardised procedures, understand the operationalisation of concepts and minimise the subjectivity of ratings (Hammond, 1996). In the full RAMAS, this actuarial element is used in addition to inform clinical judgements of risk (see Dawes et al., 1978). The information is further integrated and multidisciplinarily evaluated and acknowledged, thereby taking on board the recommendations of reports with regard to the failure of community care due to poor communication and sharing of information.

**Main Outcome Measure**

Clinicians’ and patients’ ratings on the RAMAS scales (Dangerousness, Mental Instability, Self-Harm/Suicide and Vulnerability) were taken to be measures of clinical judgement, and ratings on the risk assessment checklist to be a tool of actuarial measurement of risk.

**Procedures**

A proposal for this study was presented to the Ethics Committee of both settings to be considered in each of their December 1997 meeting. After discussion, encouraging responses were received from the Special Hospital (see Appendix 1) and from the Medium-Secure Unit (see Appendix 2). Prior to data collection, the researcher attended a training course at the Farnham Unit (FCPU) at Heathlands NHS Trust. This was a requirement for the use of the relevant checklist. Data collection began in February 1998.
In the Special Hospital, patients' information was collected from Medical Records. In the secure unit, a list of patients was provided by the Medical Director's secretary. Once patients were selected, the ward's Consultant Psychiatrist (RMO) and the clinical team were contacted (see Appendix 3) to negotiate permission and clinical advice prior to interviewing each patient. The researcher attended ward meetings in order to explain the methodology of the study to staff.

Assessment of Patients

A brief structured interview, lasting between 15 and 30 minutes depending on the patient's degree of concentration, was undertaken with each patient. During this, the purpose of the study was explained and patients were asked to give a series of ratings regarding their own perception of risk. Patients were informed that their clinical team had been approached and that permission had been given to see them. One patient from the admissions ward at the Special Hospital was deaf and an interpreter translated the interview.

Although this type of interview provides quantifiable information and ensures comparability of responses, it nevertheless limits the gathering of information which is relevant but does not fit the schedule (see Breakwell, 1995). Barrett (1995) indicates that when researchers tell their participants all there is to know about a study, may alter critical aspects of the behaviour which are of interest. For this reason, the word 'change' was used instead of words such as 'risk' or 'dangerousness' during the interviews. Nevertheless, in agreement with BPS guidelines (1993) regarding informed consent, it was explained to patients that the interview was part of a research study that explored how patients perceived their own changes since admission. It was stressed that ratings had to illustrate the 'here and now' and that it was best to think of themselves as they had been in the past couple of months. It was also stressed that their participation had no relevance to decisions being made by their clinical team on their length of stay. A summary of their responses was given to patients as the interview drew to a close. Those patients who agreed to participate were asked to sign a consent form (see Appendix 4). Despite the confidentiality clause in this form,
patients were given the option of having their ratings photocopied and placed in their files.

In order for patients to provide their perceived level of risk along the four dimensions of Dangerousness, Mental Stability, Self-harm/Suicide and Vulnerability, ratings were provided through a card-sorting task where an ordinal 10-point scale was printed (see Appendix 5). Patients were asked either to point at or to verbalise the number that best represented their opinions about the particular criterion in question, according to levels of risk (1 = no risk; 10 = very significant risk) and seriousness (1 = minor consequences; 10 = very severe consequences). Ratings on the risk levels of each scale were explained as: ‘the chance that you will harm other people’ (Dangerousness); ‘the chance that you will harm yourself or attempt to commit suicide’ (Self-Harm/Suicide); ‘the chance of your head becoming confused, mixed up or not being able to think straight’ (Mental Instability); and ‘the chance of other people being able to exploit you, make you do things you don’t want to do, picking on you or walking all over you’ (Vulnerability). Similarly, examples were given for ratings on the seriousness of the patients’ actions. For example, for Dangerousness, patients were asked ‘in the event of you harming other people, how far would you go in harming them?’.

This exercise was followed by the patients’ own ratings (a nominal scale of yes/no answers) on the RAMAS risk assessment checklist (see Appendix 6). All dimensions and items in the checklist were operationalised (see Appendix 7) and definitions were explained to the patient with examples. For example, for the item which refers to ‘Personality Disorders’, patients were given an explanation of the various types of disorders and a description of some of their features as described by DSM-IV (APA, 1994), and were told that these disorders involved long-standing experiences which affected the way they thought and felt about the world and their relationship with others.

Questions on disclosure and trust were given to patients in different order. That is, while some patients attended to these at the beginning of the interview, others did so in the middle and others at the end. This was done to avoid order and boredom effects (Harris, 1986).
Assessment by Staff

Collateral perceived ratings of the patient’s risk (level of risk and seriousness, and checklist ratings) were also sought from two identified clinicians from the patient’s multidisciplinary team. The two clinicians were selected from four professionals in each ward’s clinical team, comprising a psychiatrist, a psychologist, the patient’s primary nurse, and a social worker. As in the procedure described for each patient, combinations of paired clinicians were asked individually to rate an identified patient on the dimensions of risk already described. In order to minimise the number of patients each professional had to rate, six possible combinations of paired professionals were identified (psychiatrist and psychologist; psychiatrist and primary nurse; psychiatrist and social worker; psychologist and primary nurse; psychologist and social worker; and primary nurse and social worker). It was anticipated that as patients were selected from different wards, each combination of paired team raters would have a maximum number of 8 patients to rate. Whenever possible, this number was kept even lower.

In order to control for learning effects, clinicians were asked to produce the first stage of the procedure (clinical judgements on the RAMAS four dimensions of risk) for all identified patients prior to their ratings on the checklist (see Appendix 8). In addition, staff were asked to repeat their ratings on the four dimensions of risk after completing their ratings on the checklist (see Appendix 9). It was acknowledged that this test-retest design assumed that the characteristics measured were stable over time and that this invited measurement errors (Hammond, 1995). The time taken to rate each patient was 2-3 minutes for the first stage on the four criterion of risk, and 10 minutes for the second stage of ratings on the risk assessment checklist. A list of operationalised features for the risk assessment checklist was included in order to maximise raters’ consistency of responses. An internal self-addressed envelope was included to protect the confidentiality of responses. Staff who completed all rating forms were sent a letter (see Appendix 10a, b).
Ethical Considerations

Ethical reasoning and decision-making in clinical settings have been highlighted as important issues to consider when working with patients (Myser, Kerridge and Mitchell, 1995). The ethical position of this study was therefore considered. The study does not identify risks to the patients interviewed. During the interview, no details about traumatic experiences or details of the offence were sought. However, it was acknowledged that due to their mental state, those patients who had been recently admitted were more sensitive to experiencing distress during the interview than were long-stay patients. Research has indicated that the structured milieu of the ward and the effects of medication tends to suppress the base-rate of violence and that this decreases drastically within 2 days after admission (McNiel and Binder, 1987; Werner, et al., 1983). This was an important point to consider in relation to recently admitted patients and, as a consequence, the clinical teams were consulted with regard to the timing of the interview.

In cases where there was an indication of distress, patients were given the opportunity to end or postpone the interview. Reactions to any of the items provided in the checklist were dealt with sensitively and the primary nurse (or another nurse in charge if the primary nurse was not on duty) was notified immediately.

All information received from patients and staff was anonymised (see Barratt, 1995) and entered into a computer data base file. Informants' responses were assigned a code. Codes and personalised information were kept separately. Only the researcher had access to combined information.

The research procedures did not diverge from ordinary clinical standards of care. The researcher was bound to respect standards adopted by the clinical setting and also adopt responsibilities set by the 'Tarasoff duty' (Blackburn, 1995) and guidelines set by the Department of Health (1996) and the BPS (1993). Ethical and potential legal duties to protect subjects and third parties were balanced against the ethical and legal obligations to maintain subjects' confidentiality. For this reason, any information
was considered to be passed on with the patient’s consent and strictly on a ‘need to know’ basis (Reed, 1997).

In addition, the researcher was undergoing clinical training and, in this capacity, was sensitive to issues of conduct and potential harm as well as to issues of a clinical nature provoked by the interview. Finally, the researcher was personally insured against liability in clinical settings.
RESULTS

The data analysis was conducted using SPSS 6.1 for Windows and the Special Hospital Decision-Making Support Unit scaling package. The results will be presented in a number of sub-sections. First, analyses are performed on clinical ratings on the four areas of risk: Dangerousness, Mental Instability, Self-Harm/Suicide and Vulnerability. Second the degree of agreement between raters is explored. Third, the analysis focuses on exploring the structure of the RAMAS scales. Fourth, the relationships between scale scores and clinicians' judgement is explored and finally, group differences are examined according to patients' degree of security, gender and diagnostic criteria.

Clinical Judgement on Areas of Risk

During the first stage of the study, staff were asked to rate their opinions on a 10 point scale for patients' levels of risk (1 = no risk; 10 = very significant risk) and for the seriousness of the consequences (1 = minor consequences; 10 = very severe consequences) when engaged in four areas of risk: Dangerousness, Mental Instability, Self-Harm/Suicide and Vulnerability. Staff were also asked to rate their confidence in their responses (1 = not at all confident; 10 = extremely confident).

Descriptive statistics explored the four areas of risk. In addition, ratings were obtained for clinicians' confidence in their responses. The tables below indicate results regarding degrees of risk, and seriousness of the consequences in the event of high endorsement on the areas of risk.
Table 1a: Descriptive statistics of staff ratings (N=211) on patients' degree of risk according to the four areas defined. Confidence in responses are included.

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skew z Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>5.46</td>
<td>2.45</td>
<td>2.07</td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>3.92</td>
<td>2.43</td>
<td>6.72</td>
</tr>
<tr>
<td>Mental Instability</td>
<td>6.04</td>
<td>2.28</td>
<td>-0.23</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>5.16</td>
<td>2.41</td>
<td>1.61</td>
</tr>
<tr>
<td>Confidence in Responses</td>
<td>7.08</td>
<td>1.45</td>
<td>-5.30</td>
</tr>
</tbody>
</table>

Table 1b: Descriptive Statistics of staff ratings (N = 211) on the seriousness of the consequences if engaged in the areas defined. Confidence in responses are included.

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skew z Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>7.17</td>
<td>2.38</td>
<td>-2.42</td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>5.23</td>
<td>2.76</td>
<td>2.52</td>
</tr>
<tr>
<td>Mental Instability</td>
<td>7.01</td>
<td>2.14</td>
<td>-3.29</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>5.55</td>
<td>2.49</td>
<td>1.42</td>
</tr>
<tr>
<td>Confidence in Responses</td>
<td>6.88</td>
<td>1.55</td>
<td>-4.32</td>
</tr>
</tbody>
</table>

Clinicians' mean scores indicated that this population presents with mid-point levels of risk in the continuum provided. Mid-point ratings were also obtained for the consequences involved if engaged in the areas defined. Overall, staff indicated confidence in their responses above the mid-point. However, it is clear from the skewness parameters that the ratings are not normally distributed (Tabachnick and Fidell, 1996; Murphy and Davidshofer, 1994; Rust and Golombok, 1989; Howell, 1987). For this reason it was felt necessary to utilise distribution-free or non-parametric analyses on these data (see Fife-Schaw, 1995).

One-way Analysis of Variance (ANOVA) design on non-parametric data was used to explore the differences in the mean scores of the areas of risk according to the raters' profession. Statistical differences were observed using Kruskal-Wallis H test. 34 responses were from psychiatry, 37 from psychology, 8 from nurse therapy, 102 from
primary/associate nursing and 30 from social work. These analyses are summarised in
the tables below for degree and seriousness of risk respectively.

Table 2a: Mean rank scores of risk level according to raters’ profession.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Dangerousness</th>
<th>Self-Harm /Suicide</th>
<th>Mental Instability</th>
<th>Vulnerability</th>
<th>Confidence in Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry</td>
<td>99.8</td>
<td>118.5</td>
<td>98.3</td>
<td>93.3</td>
<td>100.2</td>
</tr>
<tr>
<td>Psychology</td>
<td>105.9</td>
<td>111.8</td>
<td>123.0</td>
<td>89.6</td>
<td>84.7</td>
</tr>
<tr>
<td>Nurse Therapy</td>
<td>92.2</td>
<td>123.8</td>
<td>109.5</td>
<td>169.8</td>
<td>120.6</td>
</tr>
<tr>
<td>Primary Nurse</td>
<td>103.3</td>
<td>95.2</td>
<td>97.5</td>
<td>109.8</td>
<td>119.9</td>
</tr>
<tr>
<td>Social Work</td>
<td>125.8</td>
<td>116.5</td>
<td>121.7</td>
<td>110.5</td>
<td>87.7</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>4.2</td>
<td>6.7</td>
<td>7.5</td>
<td>13.6**</td>
<td>14.1**</td>
</tr>
</tbody>
</table>

**p<.01

Table 2b: Mean rank scores of seriousness of risk according to raters’ profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>Dangerousness</th>
<th>Self-Harm /Suicide</th>
<th>Mental Instability</th>
<th>Vulnerability</th>
<th>Confidence in Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry</td>
<td>121.1</td>
<td>131.5</td>
<td>112.7</td>
<td>94.9</td>
<td>103.1</td>
</tr>
<tr>
<td>Psychology</td>
<td>118.2</td>
<td>116.8</td>
<td>113.1</td>
<td>84.9</td>
<td>77.3</td>
</tr>
<tr>
<td>Nurse Therapy</td>
<td>89.5</td>
<td>149.6</td>
<td>154.2</td>
<td>176.3</td>
<td>122.6</td>
</tr>
<tr>
<td>Primary Nurse</td>
<td>99.6</td>
<td>91.3</td>
<td>101.8</td>
<td>113.1</td>
<td>121.9</td>
</tr>
<tr>
<td>Social Work</td>
<td>99.8</td>
<td>102.2</td>
<td>91.1</td>
<td>101.5</td>
<td>86.1</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>5.7</td>
<td>7.4**</td>
<td>8.4</td>
<td>17.9**</td>
<td>19.8**</td>
</tr>
</tbody>
</table>

** p<.01

Chi-square statistics indicate significant differences between clinicians’ mean ranks
when rating patients’ level of risk. These differences were found for ratings in the
Vulnerability scale and in their confidence levels. Nurses and social workers indicated
higher scores than scores from psychologists and psychiatrists. Nurses appeared as the
most confident profession when rating patients according to risk level. No differences
were obtained between professionals’ ratings on areas of Dangerousness, Self-
Harm/Suicide and Mental Instability.
Statistical differences between clinicians ratings were also found when rating the seriousness of patients actions in the event of risk. Differences were found for ratings in the Self-Harm/Suicide scale and the Vulnerability scale. Primary nurses indicated the lowest scores in Self-Harm/Suicide. Nurse therapists were the highest scorers in both scales. Clinicians also differ in the level of confidence they indicated for their responses. Again, nurses were more confident than any other profession, with psychologists the least confident. No differences in mean scores were obtained for the different professions in areas of Dangerousness and Mental Instability.

**Pre and Post Checklist Ratings on Areas of Risk: the Impact of RAMAS**

After ratings on the RAMAS checklist scales, staff were asked to repeat their ratings on the four areas of risk initially provided. The time difference between the first and second administration ranged between four and six weeks (Hammond, 1995a). This repeated measures (test - re-test) methodology explored whether the use of the checklist had made an impact on clinical judgements by staff. The Wilcoxon matched-pairs signed-ranks test was used to examine changes in judgement (see Fife-Shaw, 1995). In addition, a Spearman's rho coefficient (Hammond, 1995b; Norusis, 1992) was also calculated in order to examine the degree of test - re-test consistency (Rust and Golombok, 1989). The squared correlation ($r^2$) represents the proportion of covariance between the first and second rating, suggesting that the proportion of variance unaccounted for ($1-r^2$) must approximate the effect of filling out the checklist between ratings. The results are presented below.
Table 3a: Mean rank differences between clinicians’ pre and post checklist scores on the four areas according to level of risk (N = 211).

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Time 1 Mean Rank</th>
<th>Time 2 Mean Rank</th>
<th>Wilcoxon z Score</th>
<th>Spearman’s Rho</th>
<th>r² %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>38.5</td>
<td>41.2</td>
<td>-1.7</td>
<td>.72**</td>
<td>52</td>
</tr>
<tr>
<td>Mental Instability</td>
<td>38.3</td>
<td>44.7</td>
<td>-0.7</td>
<td>.71**</td>
<td>50</td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>34.8</td>
<td>36.9</td>
<td>-1.1</td>
<td>.73**</td>
<td>53</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>45.4</td>
<td>46.6</td>
<td>-0.2</td>
<td>.61**</td>
<td>37</td>
</tr>
<tr>
<td>Confidence in</td>
<td>42.9</td>
<td>29.3</td>
<td>-3.3**</td>
<td>.61**</td>
<td>37</td>
</tr>
<tr>
<td>Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Proportion of Variance Accounted For
** p<.0001

Table 3b: Mean rank differences between clinicians’ pre and post checklist scores according to patients’ level of seriousness of consequences if engaged in the four areas of risk (N = 211).

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Time 1 Mean Rank</th>
<th>Time 2 Mean Rank</th>
<th>Wilcoxon z Score</th>
<th>Spearman’s Rho</th>
<th>r² %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>32.6</td>
<td>38.6</td>
<td>-0.8</td>
<td>.77**</td>
<td>59</td>
</tr>
<tr>
<td>Mental Instability</td>
<td>46.3</td>
<td>53.9</td>
<td>-0.4</td>
<td>.58**</td>
<td>34</td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>49.7</td>
<td>45.2</td>
<td>-1.3</td>
<td>.71**</td>
<td>50</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>46.8</td>
<td>52.2</td>
<td>-0.5</td>
<td>.50**</td>
<td>25</td>
</tr>
<tr>
<td>Confidence in</td>
<td>38.5</td>
<td>34.7</td>
<td>-1.9</td>
<td>.61**</td>
<td>37</td>
</tr>
<tr>
<td>Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Proportion of Variance Accounted For
** p<.0001

With an exception of clinicians’ confidence in their responses regarding patients’ level of risk on the four areas of risk, the checklist made little difference to staff ratings.
However, clinicians became significantly less confident after the checklist when compared with ratings prior to the checklist. It is suggested that after considering the features of the RAMAS checklist, clinicians became less confident when predicting levels of risk. These findings support views that clinicians tend to over-predict violent behaviour. It appears that the use of some kind of checklist may contribute to their focusing on the main points when considering risk, and this may reduce over-prediction.

The stability of ratings before and after the checklist is relatively weak, with correlations ranging from .50 to .77. The percentage overlap between the first and second administration ranges from 25% to 59% of error variance as shown by \( r^2 \). A substantial proportion of this error variance may be due to the simple error of raters or the poor stability of patients' behaviour. However, since the only consistent variable between ratings was the reading of the checklist, it is suggested that this error variance could also be due to the intervention of the checklist, indicating a potential effect which is not easy to quantify.

**The Agreement of Raters**

In order to explore the reliability of the items in the checklist, Cohen's Kappa was used to observe the consistency of clinicians' agreements in their dichotomous ratings on each item. The Kappa coefficient is an index of agreement, or consistency, for nominal data (Cohen, 1960) and has become the most widely-used index of inter-rater reliability for recorded material where two raters rate each subject (Wilkinson, 1995; Fleiss, 1971). As Kappa assumes nothing about a 'true' score, it has been recommended that the term 'agreement' is used instead of 'reliability' (Light, 1971). Cohen (1960) describes Kappa as the proportion of agreement after chance agreement is removed. This is expressed as:

\[
K = \frac{\rho_o - \rho_c}{1 - \rho_c}
\]
where 'p,' is the proportion of units in which raters agree and 'p_c' is the proportion of units for which agreement is expected by chance. This formula takes into account the maximum difference for the marginal totals of non-chance agreement for the pairs in each category (Norusis, 1992). Berk (1979) indicates that the reliability index reflects the effectiveness of observer training and the degree of objectivity with which a particular characteristic is measured. He adds that replication is essential to avoid idiosyncratic interpretations in judgments. This is an important point since the proper use of the RAMAS involves substantial training to tighten up agreement on the items. Such training was not offered to the participants in this study; rather, their general training and experience was assumed to provide a general level of agreement.

This agreement coefficient ranges between an upper limit of +1 indicating perfect agreement and a lower limit which itself ranges from 0 to -1 (Hammond, 1995a; Cohen, 1960). Positive coefficients above 0 indicate greater than chance agreement. Coefficients of 0 indicate that agreement equals chance level and negative coefficients indicate less than chance agreement. Reliability coefficients are expected above .7 (Rust and Golombok, 1989; Nunnally, 1978) for a research tool although in cases of diagnosis coefficients above .9 should be considered (Hammond, 1995a). Kappa coefficients for each of the 83 items are presented below in rank order according to the degree of agreement shown by each pair of raters.
Table 4: Clinicians' level of agreement for each item on the RAMAS checklist presented in rank order (N=38 pairs). Probability values for each Spearman's rho correlation between raters is also given.

<table>
<thead>
<tr>
<th>Item</th>
<th>Kappa</th>
<th>p (Spearman's rho)</th>
<th>Item</th>
<th>Kappa</th>
<th>p (Spearman's rho)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>.71</td>
<td>.001</td>
<td>12</td>
<td>.23</td>
<td>.17</td>
</tr>
<tr>
<td>37</td>
<td>.71</td>
<td>.001</td>
<td>51</td>
<td>.23</td>
<td>.15</td>
</tr>
<tr>
<td>48</td>
<td>.68</td>
<td>.001</td>
<td>15</td>
<td>.23</td>
<td>.19</td>
</tr>
<tr>
<td>1</td>
<td>.65</td>
<td>.001</td>
<td>17</td>
<td>.21</td>
<td>.20</td>
</tr>
<tr>
<td>80</td>
<td>.59</td>
<td>.001</td>
<td>30</td>
<td>.18</td>
<td>.23</td>
</tr>
<tr>
<td>79</td>
<td>.54</td>
<td>.001</td>
<td>25</td>
<td>.17</td>
<td>.28</td>
</tr>
<tr>
<td>78</td>
<td>.53</td>
<td>.001</td>
<td>33</td>
<td>.17</td>
<td>.29</td>
</tr>
<tr>
<td>13</td>
<td>.51</td>
<td>.001</td>
<td>45</td>
<td>.17</td>
<td>.32</td>
</tr>
<tr>
<td>65</td>
<td>.51</td>
<td>.001</td>
<td>46</td>
<td>.17</td>
<td>.32</td>
</tr>
<tr>
<td>3</td>
<td>.48</td>
<td>.001</td>
<td>16</td>
<td>.16</td>
<td>.32</td>
</tr>
<tr>
<td>8</td>
<td>.48</td>
<td>.01</td>
<td>50</td>
<td>.16</td>
<td>.33</td>
</tr>
<tr>
<td>20</td>
<td>.47</td>
<td>.002</td>
<td>56</td>
<td>.16</td>
<td>.32</td>
</tr>
<tr>
<td>26</td>
<td>.47</td>
<td>.002</td>
<td>18</td>
<td>.15</td>
<td>.36</td>
</tr>
<tr>
<td>7</td>
<td>.46</td>
<td>.003</td>
<td>27</td>
<td>.15</td>
<td>.35</td>
</tr>
<tr>
<td>36</td>
<td>.45</td>
<td>.004</td>
<td>68</td>
<td>.10</td>
<td>.48</td>
</tr>
<tr>
<td>11</td>
<td>.44</td>
<td>.006</td>
<td>76</td>
<td>.09</td>
<td>.57</td>
</tr>
<tr>
<td>2</td>
<td>.43</td>
<td>.003</td>
<td>47</td>
<td>.08</td>
<td>.58</td>
</tr>
<tr>
<td>52</td>
<td>.42</td>
<td>.008</td>
<td>14</td>
<td>.06</td>
<td>.73</td>
</tr>
<tr>
<td>81</td>
<td>.42</td>
<td>.006</td>
<td>72</td>
<td>.06</td>
<td>.70</td>
</tr>
<tr>
<td>10</td>
<td>.41</td>
<td>.01</td>
<td>75</td>
<td>.06</td>
<td>.74</td>
</tr>
<tr>
<td>59</td>
<td>.41</td>
<td>.009</td>
<td>83</td>
<td>.06</td>
<td>.67</td>
</tr>
<tr>
<td>22</td>
<td>.40</td>
<td>.009</td>
<td>49</td>
<td>.05</td>
<td>.33</td>
</tr>
<tr>
<td>28</td>
<td>.39</td>
<td>.01</td>
<td>57</td>
<td>.04</td>
<td>.81</td>
</tr>
<tr>
<td>24</td>
<td>.38</td>
<td>.01</td>
<td>70</td>
<td>.04</td>
<td>.78</td>
</tr>
<tr>
<td>38</td>
<td>.38</td>
<td>.01</td>
<td>71</td>
<td>.03</td>
<td>.84</td>
</tr>
<tr>
<td>82</td>
<td>.37</td>
<td>.02</td>
<td>77</td>
<td>.02</td>
<td>.92</td>
</tr>
<tr>
<td>29</td>
<td>.35</td>
<td>.03</td>
<td>32</td>
<td>-.02</td>
<td>.90</td>
</tr>
</tbody>
</table>
The findings above indicate poor consistency between pairs of clinicians when rating each item on the checklist for a single patient. Only 31 of the 83 items manifested a Kappa statistically significantly greater than zero.

Items with reliability coefficients below .7 indicate that at least 30% of the overlap between the ‘true’ and ‘observed’ variance of scores constitute error. Kappa coefficients suggest that only two items achieved acceptable levels of agreement: 4) history of fire setting; and 37) frequent admissions to psychiatric hospital. A further two items obtained a near to acceptable levels of consistency: 48) substance misuse; and 1) history of violence. Items that made particular reference to risk, such as 25) risk to self; 26) risk to known others; 27) risk to unknown others; 28) risk to staff; and 29) risk to family/friends achieved low Kappa’s ranging from .47 for ‘risk to known others’ to .15 for ‘risk to unknown others’. 
Results indicated the need for staff training. Training is needed to increase the reliability of clinicians' decision-making with regard to relevant items in the checklist. As definitions for each item were provided, it is difficult to conclude that clinicians were making risk judgements on different criteria. Nevertheless, it is possible that if definitions were not attended to, clinicians were making subjective and unreliable judgements. In addition, it is also possible that patients may be less well-known in forensic settings than was expected. Findings support the relevance of multidisciplinary decision-making. Given the findings, and particularly in these kind of settings, it is suggested that decisions need to rely on a variety of clinicians, as each of them would contribute to a wider understanding of the patients. It should be noted that the RAMAS approach is to encourage the use of the system within teams rather than rely on individual judgements (O'Rourke et al., 1997).

**Exploring the Cumulative Structure of the Scales**

The cumulative underlying structure of the RAMAS four scales in the checklist - that is, the way the items in the checklist organise themselves - was explored in order to replicate its proposed cumulative model of risk.

It is typical in research on psychometric structure to rely on the inter-item matrix of correlations from which a Principal Component Analysis or Factor Analysis is derived (see Tabachnick and Fidell, 1996; Hammond, 1995b; Rust and Golombok, 1989). Hammond (in-press) has argued that this type of checklist data is not appropriate for these analytic techniques. The problem is largely due to the acknowledged skew of the items which militate against the use of linear latent-trait models. The incidence or endorsement of risk features is not normally distributed and it needs to be acknowledged that while some items are very common, others are rare. Principal Component Analysis would produce a distorted solution of this data, as the skew on the items would differentially truncate the correlation range in the basic correlation matrix leading to non-linear loadings on the resulting component matrix (Hammond, 1995c).
As a result, Hammond (1995a) suggests an item-response model for risk assessment which was used by the RAMAS. Item-response theory (IRT) focuses first on individuals’ endorsement of a particular item, and second on how these items then correlate with one another. This is based on the principle of unidimensionality in which there is an order to the items which also reflects the order, in terms of the underlying trait, of the respondents.

In previous studies, the data were analysed using Mokken’s (1971) non-parametric model (cf. Hammond, in-press). The present study extends this idea by using the more powerful one parameter ITR model of Rasch’s (1960), provided by the Special Hospital’s Decision-Making Support Unit’s scaling package. This model treats data similarly to the Mokken model but holds the promise of greater accuracy in the person-score estimation. Rasch (1960) suggests that the model is applicable to situations in which a number of subjects are exposed to a number of items which have two response categories which are stochastically independent. This is the case for the RAMAS checklist.

The important issue with both the Rasch (1960) and Mokken (1971) models is the cumulative nature of the scales that they describe. Risk level is conceptualised as an accumulation of risk features with the order of the accumulation relatively constant. The degree of fit to this cumulative model of risk was explored for each of the RAMAS scales. The hierarchical order of the underlying structure, known as the ‘item prevalence’, is observed by the mean (proportion of individuals endorsing that particular item) attached to items in each scale. A difficulty of endorsement index (d) with a mean of 0 and a standard deviation of 1 indicates that “d” indexes below the mean refer to very common items, while items with indexes above the mean are rare (Rust and Golombok, 1989). The Special Hospital scaling package provides a statistical index of fit expressed in a ‘z’ score form and, as is typical in IRT analyses, a probability less than 0.01 signifies serious misfit to the model.

The present analysis involved 244 cases. The table below indicates the underlying structure for the Dangerousness scale, using items in the checklist.
Table 5: Rasch model indicating the underlying structure of the Dangerousness scale, ordered by mean.

<table>
<thead>
<tr>
<th>Item</th>
<th>Indicator</th>
<th>Mean</th>
<th>d</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>History of aggression/violence</td>
<td>.87</td>
<td>-3.00</td>
<td>-1.07</td>
</tr>
<tr>
<td>2</td>
<td>Prior arrests for violent crimes</td>
<td>.61</td>
<td>-1.27</td>
<td>.82</td>
</tr>
<tr>
<td>25</td>
<td>Considered risk to known others</td>
<td>.56</td>
<td>-1.02</td>
<td>-.33</td>
</tr>
<tr>
<td>50</td>
<td>Impulsivity</td>
<td>.54</td>
<td>-.90</td>
<td>-.15</td>
</tr>
<tr>
<td>26</td>
<td>Considered risk to unknown others</td>
<td>.53</td>
<td>-.86</td>
<td>.33</td>
</tr>
<tr>
<td>29</td>
<td>Emotional control problems</td>
<td>.51</td>
<td>-.78</td>
<td>-.01</td>
</tr>
<tr>
<td>20</td>
<td>Use of force/Weapons</td>
<td>.50</td>
<td>-.70</td>
<td>.94</td>
</tr>
<tr>
<td>48</td>
<td>Substance misuse</td>
<td>.50</td>
<td>-.70</td>
<td>.85</td>
</tr>
<tr>
<td>16</td>
<td>Threats to injure</td>
<td>.48</td>
<td>-.63</td>
<td>-1.54</td>
</tr>
<tr>
<td>22</td>
<td>Personality disorder</td>
<td>.47</td>
<td>-.59</td>
<td>.31</td>
</tr>
<tr>
<td>49</td>
<td>Unpredictability</td>
<td>.45</td>
<td>-.47</td>
<td>-2.17</td>
</tr>
<tr>
<td>7</td>
<td>Conduct disorder in childhood</td>
<td>.40</td>
<td>-.22</td>
<td>.20</td>
</tr>
<tr>
<td>28</td>
<td>Considered risk to family/friends</td>
<td>.37</td>
<td>-.10</td>
<td>1.52</td>
</tr>
<tr>
<td>17</td>
<td>Threats to kill</td>
<td>.30</td>
<td>.34</td>
<td>-.84</td>
</tr>
<tr>
<td>27</td>
<td>Considered risk to staff</td>
<td>.29</td>
<td>.34</td>
<td>-.73</td>
</tr>
<tr>
<td>80</td>
<td>Evidence of aggression/violence (last 3 months)</td>
<td>.28</td>
<td>.43</td>
<td>-.74</td>
</tr>
<tr>
<td>19</td>
<td>Carried weapons</td>
<td>.27</td>
<td>.48</td>
<td>.27</td>
</tr>
<tr>
<td>31</td>
<td>Considers the clinical team as a threat</td>
<td>.25</td>
<td>.58</td>
<td>.44</td>
</tr>
<tr>
<td>60</td>
<td>Predatory behaviour/stalking</td>
<td>.22</td>
<td>.79</td>
<td>-.53</td>
</tr>
<tr>
<td>14</td>
<td>History of threatening phone calls/letters</td>
<td>.16</td>
<td>1.21</td>
<td>-.11</td>
</tr>
<tr>
<td>61</td>
<td>Criminal lifestyle preference</td>
<td>.16</td>
<td>1.21</td>
<td>.23</td>
</tr>
<tr>
<td>3</td>
<td>History of hostage taking</td>
<td>.11</td>
<td>1.77</td>
<td>-.46</td>
</tr>
<tr>
<td>40</td>
<td>Preoccupation with violent videos/Weapons/Books</td>
<td>.11</td>
<td>1.77</td>
<td>.31</td>
</tr>
<tr>
<td>15</td>
<td>History of cruelty to pets/animals</td>
<td>.07</td>
<td>2.33</td>
<td>-.11</td>
</tr>
</tbody>
</table>

All items fit the cumulative model for the Dangerousness scale. Although item 49 produces a misfit statistic of 2.17, which is significant at the 5% level (Rust and Golombok, 1989; Howell, 1987), it is more typical in IRT analyses to utilise the 1% level for item misfit (Hammond, in-press). This is because of the inflated chance of a
significant result when using multiple items. Therefore this analysis confirms the cumulative nature of the RAMAS Dangerousness scale.

Howell (1987) suggests that the chi-squared distribution is a mathematical distribution that exists independently of any particular set of statistical procedures. This distribution is relevant to the RAMAS scales. Howell (1987) refers to the chi-squared statistic:

\[ \sum x^2 \]

which indicates the strength of the reliability against the event of data randomly fitting a specific model. This study has specified that the data should fit a cumulative model. A chi-squared statistic may therefore be readily obtained which gives an overall index of the fit of a given item set to the model. In the case of Dangerousness a chi-squared value of 15.9, with 23 df, was observed which reinforces our conclusion that the data in the Dangerousness scale fits the cumulative model well.

A variety of items were endorsed by more than 50% of the population interviewed. These were: history of aggression and violence (87%), prior arrests for violent behaviour (61%), considered a risk to known (56%) and unknown others (53%), impulsivity (54%), difficulties controlling emotions (51%), use of force and/or weapons on others (50%) and substance misuse (drugs and alcohol) (50%).

Results for the remaining three scales: Self-Harm/Suicide, Mental Instability and Vulnerability are reported below.
Table 6: Rasch model indicating the underlying structure of the Self-Harm/Suicide scale, ordered by mean.

<table>
<thead>
<tr>
<th>Item</th>
<th>Indicator</th>
<th>Mean</th>
<th>d</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Considered risk to self</td>
<td>.59</td>
<td>-1.46</td>
<td>-3.76</td>
</tr>
<tr>
<td>10</td>
<td>History of self-harm</td>
<td>.53</td>
<td>-1.17</td>
<td>-1.99</td>
</tr>
<tr>
<td>8</td>
<td>Parasuicide history</td>
<td>.44</td>
<td>-.70</td>
<td>-.79</td>
</tr>
<tr>
<td>30</td>
<td>Refuses treatment/interventions</td>
<td>.36</td>
<td>-.30</td>
<td>4.07</td>
</tr>
<tr>
<td>77</td>
<td>Feels undervalued/put down by family/friends</td>
<td>.31</td>
<td>-.03</td>
<td>1.55</td>
</tr>
<tr>
<td>62</td>
<td>Sense of hopelessness/futility</td>
<td>.31</td>
<td>.02</td>
<td>-.92</td>
</tr>
<tr>
<td>46</td>
<td>Suicidal ideation/planning</td>
<td>.23</td>
<td>.50</td>
<td>-2.06</td>
</tr>
<tr>
<td>73</td>
<td>Insomnia/sleep problems</td>
<td>.17</td>
<td>.94</td>
<td>-.75</td>
</tr>
<tr>
<td>82</td>
<td>Evidence of self-harm (past 3 months)</td>
<td>.16</td>
<td>1.02</td>
<td>-.56</td>
</tr>
<tr>
<td>35</td>
<td>Currently clinically depressed</td>
<td>.14</td>
<td>1.19</td>
<td>-1.11</td>
</tr>
</tbody>
</table>

The Self-Harm/Suicide scale is more problematic, with two items (24 and 30) of the 10 showing significant misfit. It is also clear that a number of the other items (46 and 10) are also veering towards the problematic. A significant chi-squared value of 44.76 at the 1% level, with 9 df, indicates that the scale has not been fitted to the cumulative model. The difficulty lies with the two items mentioned above. Both z scores are outside the confident interval parameters of the distribution. It is possible that the unidimensionality of the scale might improve with the exclusion of both these items, or that the chosen features in this scale do not conform a cumulative model.

More than 50% of the population were considered a risk to themselves (59%) and presented with a history of self-harm (53%).
Table 7: Rasch model indicating the underlying structure of the Mental Instability scale, ordered by mean.

<table>
<thead>
<tr>
<th>Item</th>
<th>Indicator</th>
<th>Mean</th>
<th>d</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>On psychiatric medication</td>
<td>.98</td>
<td>-4.33</td>
<td>1.98</td>
</tr>
<tr>
<td>5</td>
<td>History of Mental illness</td>
<td>.90</td>
<td>-2.06</td>
<td>.94</td>
</tr>
<tr>
<td>34</td>
<td>Current mental illness</td>
<td>.84</td>
<td>-1.40</td>
<td>-2.17</td>
</tr>
<tr>
<td>21</td>
<td>Paranoia/persecutory ideation</td>
<td>.67</td>
<td>1.23</td>
<td>.67</td>
</tr>
<tr>
<td>38</td>
<td>Psychotic symptoms</td>
<td>.59</td>
<td>.18</td>
<td>.31</td>
</tr>
<tr>
<td>81</td>
<td>Evidence of mental instability (past 3 months)</td>
<td>.54</td>
<td>.68</td>
<td>.54</td>
</tr>
<tr>
<td>36</td>
<td>Unstable medical condition</td>
<td>.50</td>
<td>-1.83</td>
<td>.50</td>
</tr>
<tr>
<td>23</td>
<td>Treatment unstable</td>
<td>.40</td>
<td>-1.86</td>
<td>.40</td>
</tr>
<tr>
<td>37</td>
<td>Frequent admissions to psychiatric hospital</td>
<td>.36</td>
<td>1.70</td>
<td>.36</td>
</tr>
<tr>
<td>39</td>
<td>non-compliance with medication</td>
<td>.29</td>
<td>.90</td>
<td>.29</td>
</tr>
</tbody>
</table>

The data indicated that all items fit the model well. Items 33 and 34 indicated weak fit but an overall chi-squared of 21.24 with 9 df indicated a borderline fit for this scale.

A number of items were endorsed by over 50% of patients. Popularly endorsed items were: currently on psychiatric medication (98%), history of mental illness (90%), currently diagnosed with a mental illness (84%), experiencing paranoid and persecutory ideation (67%), history of psychotic symptoms (59%), evidence of mental instability over the past three months (54%) and presenting with an atypical phenomena of an unstable mental state (50%).
Table 8: Rasch model indicating the underlying structure of the Vulnerability scale, ordered by mean.

<table>
<thead>
<tr>
<th>Item</th>
<th>Indicator</th>
<th>Mean</th>
<th>d</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>Multiple problems/Complex Needs</td>
<td>.57</td>
<td>-.18</td>
<td>.57</td>
</tr>
<tr>
<td>72</td>
<td>Interpersonal conflicts/relationship problems</td>
<td>.56</td>
<td>-.14</td>
<td>.27</td>
</tr>
<tr>
<td>29</td>
<td>Emotional control problems</td>
<td>.53</td>
<td>-.99</td>
<td>-.28</td>
</tr>
<tr>
<td>55</td>
<td>Low self-esteem</td>
<td>.53</td>
<td>-.99</td>
<td>-.22</td>
</tr>
<tr>
<td>68</td>
<td>Needy/isolated/disconnected</td>
<td>.40</td>
<td>-.41</td>
<td>-2.17</td>
</tr>
<tr>
<td>76</td>
<td>No close/confiding relationships</td>
<td>.39</td>
<td>-.33</td>
<td>.49</td>
</tr>
<tr>
<td>59</td>
<td>Self-image sensitivity</td>
<td>.37</td>
<td>-.25</td>
<td>-1.17</td>
</tr>
<tr>
<td>9</td>
<td>History of self-neglect</td>
<td>.35</td>
<td>-.17</td>
<td>.14</td>
</tr>
<tr>
<td>37</td>
<td>Frequent admissions to psychiatric hospital</td>
<td>.35</td>
<td>-.13</td>
<td>.42</td>
</tr>
<tr>
<td>11</td>
<td>History of childhood abuse</td>
<td>.33</td>
<td>-.04</td>
<td>.65</td>
</tr>
<tr>
<td>65</td>
<td>Susceptible/easily led</td>
<td>.30</td>
<td>.09</td>
<td>-.04</td>
</tr>
<tr>
<td>12</td>
<td>Bullied in childhood/adolescence</td>
<td>.29</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>13</td>
<td>History of Victimisation in adulthood</td>
<td>.28</td>
<td>.23</td>
<td>-1.07</td>
</tr>
<tr>
<td>69</td>
<td>Naïve</td>
<td>.25</td>
<td>.37</td>
<td>-.27</td>
</tr>
<tr>
<td>70</td>
<td>Facing high levels of stress</td>
<td>.19</td>
<td>.75</td>
<td>-.14</td>
</tr>
<tr>
<td>71</td>
<td>History of unstable environment</td>
<td>.18</td>
<td>.87</td>
<td>1.06</td>
</tr>
<tr>
<td>67</td>
<td>Unwarranted trust of strangers</td>
<td>.12</td>
<td>1.39</td>
<td>-.79</td>
</tr>
<tr>
<td>66</td>
<td>Overdisclosing of intimate/personal information</td>
<td>.08</td>
<td>1.78</td>
<td>-.65</td>
</tr>
</tbody>
</table>

All items fitted the model with item 68 manifesting a sizeable misfit. A non-significant chi-squared value of 10.87, with 17 df, suggests the data fits the proposed model well.

It can be observed that particular items are endorsed by over 50% of the population. These are: having experienced multiple problems in a variety of areas of patients’ lives (57%), a tendency for interpersonal conflict and relationship difficulties (56%), experiencing difficulties with emotional control (53%) and low-self-esteem (53%).
The Internal Reliability of the RAMAS Scales

In order to complement these Rasch analyses, classical test statistics were also performed. Unlike the Rasch analyses in which only clinicians' ratings were used, these analyses explored patients' own ratings of themselves on each of the scales. Cronbach's alpha (α) was used to assess the internal consistency of the scales. This explored whether the scales are homogeneous enough to measure a common characteristic (see Hammond, 1995a; c). Results are presented in the table below.

Table 9: Descriptive Statistics and Cronbach's alpha for Clinicians' and Patients' scores in each of the four RAMAS scales.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Patient Mean</th>
<th>Patient sd*</th>
<th>Patient α**</th>
<th>Clinician 1 Mean</th>
<th>Clinician 1 sd*</th>
<th>Clinician 1 α**</th>
<th>Clinician 2 Mean</th>
<th>Clinician 2 sd*</th>
<th>Clinician 2 α**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness (0-24)</td>
<td>8.68</td>
<td>4.60</td>
<td>.83</td>
<td>9.38</td>
<td>4.79</td>
<td>.82</td>
<td>8.38</td>
<td>4.25</td>
<td>.77</td>
</tr>
<tr>
<td>Mental Instability (0-10)</td>
<td>5.05</td>
<td>2.27</td>
<td>.68</td>
<td>5.72</td>
<td>2.54</td>
<td>.76</td>
<td>5.41</td>
<td>2.57</td>
<td>.76</td>
</tr>
<tr>
<td>Self-Harm/Suicide (0-10)</td>
<td>3.30</td>
<td>2.13</td>
<td>.66</td>
<td>2.81</td>
<td>2.26</td>
<td>.70</td>
<td>2.64</td>
<td>2.48</td>
<td>.79</td>
</tr>
<tr>
<td>Vulnerability (0-18)</td>
<td>7.96</td>
<td>3.91</td>
<td>.77</td>
<td>5.82</td>
<td>3.52</td>
<td>.76</td>
<td>5.74</td>
<td>3.38</td>
<td>.71</td>
</tr>
</tbody>
</table>

* Standard Deviation
**Cronbach's Alpha

Descriptive statistics indicated similar mean scores between patients and clinicians, with an exception of the Vulnerability scale which showed higher mean scores by patients. The mean scores of three scales are shown to be below the mid-point. Mean scores on Mental Instability indicate that both patients and raters scored around the mid-point of the scale. Alpha reliability coefficients are mostly within acceptable ranges. More error was found in patients' reliability scores regarding their own behaviour with self-harm and attempted suicide. Results indicated that the internal structure of the scales revealed inter-item homogeneity. However, it appears that
overall clinicians achieved higher coefficients than patients on two scales: Mental Instability and Self-Harm/Suicide.

The Relationship between Clinical Judgement and Scales' Scores

The relationship between staff and patients' initial judgements on the four areas of risk assessment (for levels of risk and seriousness of the actions), and their subsequent responses on the RAMAS checklist scales, was analysed using Spearman's rho correlation coefficients. Ratings from the first clinician in the pair are considered since numbers are larger (N = 67) than for second clinicians (N = 57). The tables below indicate the findings.

Table 10a: Correlations between patients' initial judgements on the four areas of risk and later ratings on the RAMAS checklist scales (N=82).

<table>
<thead>
<tr>
<th>Scales</th>
<th>Dangerousness</th>
<th>Mental Instability</th>
<th>Self-Harm/Suicide</th>
<th>Vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
<td>.3371**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>.5326**</td>
<td>.4487**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td>.5366**</td>
<td>.6313**</td>
<td>.5131**</td>
<td></td>
</tr>
<tr>
<td>Initial Judgements on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>.3033**</td>
<td>.3791**</td>
<td>.5253**</td>
<td>.3542**</td>
</tr>
<tr>
<td>Initial Judgements on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seriousness</td>
<td>.3567**</td>
<td>.2786</td>
<td>.5118**</td>
<td>.3740**</td>
</tr>
</tbody>
</table>

*p<.05

** p<.01
Table 10b: Correlations between clinicians' initial judgements on the four areas of risk and later ratings on the RAMAS checklist scales (N=67).

<table>
<thead>
<tr>
<th>Scales</th>
<th>Dangerousness</th>
<th>Mental Instability</th>
<th>Self-Harm Suicide</th>
<th>Vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
<td>.3571**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>.4383**</td>
<td>.2499*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td>.3397**</td>
<td>.1650</td>
<td>.4903**</td>
<td></td>
</tr>
<tr>
<td>Initial Judgements on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>.3823**</td>
<td>.4025**</td>
<td>.6400**</td>
<td>.5199**</td>
</tr>
<tr>
<td>Initial Judgements on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seriousness</td>
<td>.2288</td>
<td>.2597*</td>
<td>.4829**</td>
<td>.4823**</td>
</tr>
</tbody>
</table>

*p<.05

** p<.01

Findings indicated a positive association between initial ratings on the scales and the further confirmation of those opinions on the checklist. In addition, scales appeared significantly correlated with each other. The association between initial and later judgements was strongest for patients' judgements of the Self-Harm/Suicide scale, while for clinicians, this was most present in both the Self-Harm/Suicide and the Vulnerability scales. Nevertheless, a high proportion of the first variables remains unexplained by ratings on the other. This indicates a degree of unreliability between clinical judgements on the four areas of risk and actuarial judgements in the scales provided by the RAMAS checklist for both patients and staff.
The Relationship between Levels of Agreement and Ratings on the Scales

The level of agreement on the checklist ratings between patients and clinicians (PC) and between pairs of clinicians per patient (CC) was also explored. As the data were not normally distributed, median ratings are used to described the data. Where two clinicians had contributed with ratings per patient, Light's (1971) Kappa was taken and compared with the patient's ratings. For more accurate reliability estimates, Light (1971) extended Cohen's Kappa coefficients to take account of more than one pair of raters, and allow them to be compared to a standard which is not necessarily considered 'correct' in an absolute sense. Kappa coefficients, indicating level of agreement between pairs and according to patients' degree of security requirements, are given below.

Table 11: Median Kappa coefficients to illustrate the level of ratings agreement on the scales between patients and clinicians (PC) and between clinicians themselves (CC), according to security requirements. Minimum and maximum Kappa coefficients are also given.

<table>
<thead>
<tr>
<th>Level of Security</th>
<th>PC</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Min</td>
<td>Max</td>
<td>N</td>
<td>Median</td>
<td>Min</td>
</tr>
<tr>
<td>Group 1*</td>
<td>.30</td>
<td>-.11</td>
<td>.60</td>
<td>19</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Group 2**</td>
<td>.34</td>
<td>.07</td>
<td>.73</td>
<td>22</td>
<td>.40</td>
<td>.20</td>
</tr>
<tr>
<td>Group 3***</td>
<td>.33</td>
<td>.05</td>
<td>.60</td>
<td>21</td>
<td>.35</td>
<td>.00</td>
</tr>
<tr>
<td>Total</td>
<td>.32</td>
<td>-.11</td>
<td>.73</td>
<td>37</td>
<td>.40</td>
<td>.00</td>
</tr>
</tbody>
</table>

*Admission wards (Special Hospital maximum security)
** Considered for discharge (Special Hospital maximum security)
*** Medium-secure unit (medium security)
Figures indicated that overall, median levels of agreement between clinicians and between patients and clinicians are low. The highest Kappa coefficient obtained, in the group of patients awaiting discharge while in maximum security, just reached an acceptable level of .73. This level of disagreement between clinicians has implications for attempts to achieve a comprehensive and reliable decision-making process, and has the potential for damaging consequences after discharge in cases of error. Disagreement of this kind between clinicians and patients can hinder the process of initiating and achieving therapeutic change prior to discharge.

Agreement differences between groups were analysed using a one-way Analysis of Variance (ANOVA) design on non-parametric data. Statistical differences were observed using Kruskal-Wallis test. The Kruskal-Wallis H statistic has approximately a chi-square distribution (Norusis, 1992; Howell, 1987). A chi-square value of 2.7 (df=2; p=.26) indicated no differences in mean ranks (group 1=25.8; group 2=34.0; group 3=33.9) across all three groups.

Given the low participation of pairs of clinicians in group 1 (Special Hospital admissions wards) with only two pairs of raters, a further comparison was done which excluded this group. A Mann-Whitney U test for non-parametric data to test mean differences in independent groups (Fife-Schaw, 1995) indicated statistical mean rank differences (z = -2.1; p = .04) in pairs of clinicians between groups 2 and 3. Findings suggested that pairs of clinicians in maximum security working with patients awaiting discharge achieved a higher mean rank (23.2) than those working in medium security (15.6).

Spearman’s rho correlation coefficients, exploring the relationship between agreement and rating scales, indicated an association of an inverse nature. The table below shows these results.
Results indicated that the higher the agreement between patients and clinicians (PC) the lower the scores in the scales. No association was found between clinicians' level of agreement and patients' ratings on the scales. A pattern of negative association was found for clinicians' agreement and their ratings on the scales. The higher the agreement, the lower the ratings. This pattern was not found for the Vulnerability scale which indicated that high scale scores are associated with high agreement. Overall, agreement between clinicians and patients is stronger when patients present low scores on these scales, and viceversa. The findings have implications for therapeutic change and readiness for discharge. In addition, it strengthens the rationale for multidisciplinary discussion on patients scoring high on these measures.
Scale Scores and Group Differences

Differences in scale scores were explored for a number of variables. The question of whether differences were found in scale scores according to patients' degree of security, gender and diagnostic criteria was explored. Unlike previous work on the ratings, there is no reason not to assume normality for the scale scores. For this reason the more powerful parametric procedures are used.

Degrees of Security and Gender

The mean ratings for the scales were explored further with the aim of observing whether differences existed between raters' and patients' groups (i.e. degree of security). Mean scores for patients are presented below, followed by a one-way Analysis of Variance (ANOVA) to estimate mean differences according to level of security.
Table 13: Patients’ mean scores in ratings on scales according to level of security.

<table>
<thead>
<tr>
<th>Degrees of Security</th>
<th>Dangerousness</th>
<th>Mental Instability</th>
<th>Self-Harm/Suicide</th>
<th>Vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>sd</td>
<td>Mean</td>
<td>sd</td>
</tr>
<tr>
<td>Group 1** (N=29)</td>
<td>10.17</td>
<td>5.52</td>
<td>5.00</td>
<td>2.25</td>
</tr>
<tr>
<td>Group 2*** (N=31)</td>
<td>7.90</td>
<td>4.15</td>
<td>5.03</td>
<td>2.34</td>
</tr>
<tr>
<td>Group 3**** (N=22)</td>
<td>7.81</td>
<td>3.40</td>
<td>5.14</td>
<td>2.29</td>
</tr>
</tbody>
</table>

F-ratio 2.4  .02  3.4*  .04

*p<.05

**Admission wards (Special Hospital maximum security)

*** Considered for discharge (Special Hospital maximum security)

**** Medium-secure unit (medium security)

One-way Analysis of Variance (ANOVA) indicated no differences in patients’ mean scores for three of the scales: Dangerousness, Mental Instability and Vulnerability. Differences were observed in mean scores for the Self-Harm/Suicide scale at the 5% level of significance, indicating a higher score of self-harm and attempted suicide in those recently admitted to a maximum security hospital. A post-hoc Scheffe test did not locate the difference within groups. A less conservative test, the Least-significant difference test, was used although it does not protect the data for multiple t-test comparisons (Norusis, 1992). Findings indicated mean differences between those recently admitted (mean=4.1; standard deviation=2.5) and those in the same setting awaiting discharge (mean=2.8; standard deviation=1.7).

Analysis of Variance (ANOVA) for two independent variables (Hammond, 1995b; Norusis, 1992; Howell, 1987) was used to explore scales’ mean differences according to gender across the groups. The group requiring medium security had only one
woman. Except for ratings in the Vulnerability scale ($F = 5.3; df = 1; p = .02$), findings indicated no significant main effects on scale scores of two-way interactions between groups of different degrees of security and gender. Using a one-way ANOVA, a difference in gender for the Vulnerability scale indicated that women ($N = 27$) scored higher (mean = 9.2; standard deviation = 3.8) than men ($N = 55$; mean = 7.4; standard deviation = 3.7). Similarly, differences were obtained for the Self-Harm/Suicide scale ($F = 4.1; df = 1; p = .04$) with women ($N = 27$) scoring higher (mean = 9.2; standard deviation = 3.8) than men ($N = 55$; mean = 7.4; standard deviation = 3.9).

The analysis was repeated for clinicians' mean ratings on the four scales. Group and gender differences were explored. As the first rater presented with a higher response rate ($N = 67$) than the second rater ($N = 58$), it was the mean ratings of the former that were entered in this analysis. Findings are presented below.

Table 14: First clinicians' mean scores on scales' ratings according to patients' level of security.

<table>
<thead>
<tr>
<th>Degrees of Security</th>
<th>Scales' Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dangerousness</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Group 1** (N=15)</td>
<td>10.73</td>
</tr>
<tr>
<td>Group 2*** (N=24)</td>
<td>9.33</td>
</tr>
<tr>
<td>Group 3**** (N=28)</td>
<td>8.64</td>
</tr>
</tbody>
</table>

| F-ratio | .94 | 5.70* | 2.94 | 5.2* |

* $p < .01$

**Admission wards (Special Hospital maximum security); *** Considered for discharge (Special Hospital maximum security); **** Medium-secure unit (medium security)
One-way Analysis of Variance (ANOVA) indicated differences in mean ratings for the Mental Instability and the Vulnerability scales. A Scheffe test of significance indicated that within the Mental Instability scale, differences were present between mean scores of groups 1 and 2. Higher scores for Mental Instability were found in those recently admitted to a maximum security Special Hospital (mean = 7.2; standard deviation = 1.9), and that these scores differed significantly from those obtained by clinicians rating patients who were ready for discharge in the same setting (mean = 4.6; standard deviation = 2.9). Those in medium security scored halfway between these two groups (mean = 5.9; standard deviation = 2.0). With regards to clinicians’ rating on the Vulnerability scale, a Scheffe test of significance showed that mean differences for this scale lay between groups 1 and 3. Patients in the admissions wards at the Special Hospital scored higher (mean = 8.1; standard deviation = 3.8) than those in medium security (mean = 4.6; standard deviation = 2.9). Those in maximum security and awaiting discharge scored above (mean = 5.79; standard deviation = 3.4) those in medium security, but the difference was not significant.

Mean ratings were also explored in order to observe differences in clinicians’ ratings according to gender. Analysis of Variance (ANOVA) indicated gender differences for ratings on the Self-Harm/Suicide scale (F=6.2; df=1; p=.02) and the Vulnerability scale (F=4.0; df=1; p=.05). No main effects or two-way interactions were found between gender and degrees of security. One-way Analysis of Variance (ANOVA) indicated that on the Self-Harm/Suicide scale, differences (F=12.7; df=1; p=.01) were larger for women (N=14; mean=4.6; standard deviation=2.5) than for men (N=53; mean=2.3; standard deviation=1.9). Differences on the Vulnerability scale (F=11.2; df=1; p=.001) repeated this pattern, suggesting women scored higher (mean=8.4; standard deviation=3.9) than men (mean=5.1; standard deviation=3.1).

In sum, patients’ mean scores on the four RAMAS scales do not differ according to their level of security. However, women tended to score statistically significantly higher in the Vulnerability and the Self-Harm/Suicide scales. Clinicians’ ratings indicate that while levels of Self-Harm and Dangerousness do not differ according to setting, levels of Mental Instability and Vulnerability do. It appears that those recently admitted
to a Special Hospital scored higher on Mental Instability than those in the same setting but ready to leave, and also scored higher in their degree of Vulnerability compared to those in medium security. Women were perceived as significantly more vulnerable and with a higher tendency to self-harm than were men.

**Diagnostic Criteria**

One-way Analysis of Variance (ANOVA) was used to observe whether differences were found between ratings on the four RAMAS scales and diagnosis. There were five types of diagnosis: (i) schizophrenia; (ii) personality disorder; (iii) schizoaffective disorder; (iv) psychotic states; and (v) affective disorders. Diagnostic criteria were taken from patients’ files and in agreement with DSM-IV (APA, 1994) and ICD-10 (WHO, 1992) classifications.

Findings indicated differences between patients’ ratings on the Dangerousness scale and diagnosis (F = 8.3; df = 4; p = .01). A Scheffe test of significance indicated statistically significant differences in patients with schizophrenia (mean = 6.6; standard deviation = 3.3) compared to those with personality disorder (mean = 10.8; standard deviation = 4.8) and those with affective disorders (mean = 16.3; standard deviation = 3.5). Differences between those with affective disorders and those with psychotic states (mean = 6.8; standard deviation = 3.5) were also found. Near differences were only observed between staff ratings on this scale and diagnosis (F = 2.4; df = 4; p = .056). A pictorial relationship between raters’ scores on each of the RAMAS scales and patients’ diagnoses is presented below.
Graph 4: The relationship between diagnosis and mean scores on the Dangerousness scale (0-24).

No differences were found for patients' ratings in the Mental Instability scale (F = .53; df = 4; p = .72). The analysis indicated mean differences in staff ratings, where statistically significant differences were found between those with schizophrenia (mean=6.6; standard deviation=2.2) and those with personality disorders (mean=4.3; standard deviation=2.8). The following graph indicates mean scores for all raters and their relationship with diagnosis.
Graph 5: The relationship between diagnosis and mean scores on the Mental Instability scale (0-10).

Patients’ ratings in the Self-Harm/Suicide scale indicated mean differences (F=3.7; df=4; p=.008). These differences were located between patients with schizophrenia (mean=2.7; standard deviation=1.7) and those with personality disorder (mean=4.4; standard deviation=2.4). Statistical differences were also observed in staff ratings (F=2.8; df=4; p=.03). However, the Scheffe post-hoc analysis did not specify in which groups this difference could be observed. The Least-significant difference test indicated mean differences between those patients with a diagnosis of schizophrenia (mean=2.2; standard deviation=2.1) and those with personality disorder (mean=4.1; standard deviation=2.4). In addition, differences were also noted between patients with a diagnosis of personality disorder and psychotic disorder (mean=2.0; standard deviation=1.9).
Graph 6: The relationship between diagnosis and mean scores on the Self-Harm/Suicide scale (0-10).

Differences were observed in both patients' (F=3.6; df=4; p=.009) and staff (F=4.6; df=4; p=.003) Vulnerability scale mean scores. The analysis of patients' data showed that diagnostic differences were statistically significant between those with schizophrenia (mean=6.8; standard deviation=4.1) and those with personality disorder (mean=9.7; standard deviation=3.4). Staff data showed similarly statistically significant differences between those with schizophrenia (mean=4.6; standard deviation=3.0) and those with personality disorders (mean=8.0; standard deviation=4.0). In addition, differences were also significant between those with personality disorder and those with a psychotic state (mean=3.9; standard deviation=1.4).
In sum, marked differences were observed between patients with a personality disorder and those with schizophrenia. Patients indicated that this was the case with regard to ‘dangerousness’, a tendency to harm themselves and attempt suicide, and their degree of vulnerability for others to take advantage of them. In all examples, those with a personality disorder indicated higher scores on these measures. Staff agreed on the differences between these two diagnostic groups regarding their degree of vulnerability. However, they felt that, with regard to mental stability, those with schizophrenia were perceived as less stable than those with personality disorder.

**Patients’ Trust and Disclosure of Personal Information to Staff: Incorporating Opinions from Patients’ Relatives and Friends’ in Decision-Making.**

Patients were asked questions regarding who they felt understood them most, and who they disclosed information to and trusted most often. These open-ended questions aimed at obtaining information from both in-patient and community settings. Responses regarding disclosure about personal information (thoughts and feelings, including details of their offence) were obtained in percentages (0-100).
In-patient categories were obtained from 77 patients who stated that the following people from the clinical team understood them most: doctors (14%), primary nurses (27%), other nurses (23%), psychologists (4%), social workers (3%) and occupational therapists (3%). 8% of the sample (N = 6) also included ‘everybody in the team’ as a category. Community categories included: parents (32%), siblings (10%), partner (12%), friend (18%), other relatives (5%), and clinicians from previously attended community institutions (3%). One patient indicated she told everything to ‘the devil’. A number of patients felt that nobody understood them inside their hospital/unit (13%) or in the community (18%). Likewise, some patients stated that they had nobody to tell their conflicts to inside their secure settings (1%) or outside them (1%). 5% of the sample were unable to say who they felt understood them most and 3% stated that they did not know who they told most of their conflicts to.

The tables below indicate the frequencies for each of the categories selected. Next to each category, the amount confided is expressed in mean percentages. Findings indicated the importance of including, in the decision-making process, information held by the patients’ family and friends, as well as that held by particular members of their clinical team.
Table 15a: Those confided in by patients inside the hospital/unit, and the amount confided (expressed in mean percentages).

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage of Frequency</th>
<th>Amount Mean %</th>
<th>Disclosed sd*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>6</td>
<td>7.8</td>
<td>71.7</td>
<td>27.9</td>
</tr>
<tr>
<td>Primary Nurses</td>
<td>41</td>
<td>53.2</td>
<td>71.5</td>
<td>26.0</td>
</tr>
<tr>
<td>Other Nurses</td>
<td>16</td>
<td>20.8</td>
<td>89.7</td>
<td>15.7</td>
</tr>
<tr>
<td>Psychologists</td>
<td>4</td>
<td>5.2</td>
<td>100.0</td>
<td>.0</td>
</tr>
<tr>
<td>Social Workers</td>
<td>3</td>
<td>3.9</td>
<td>76.7</td>
<td>25.2</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>2</td>
<td>2.6</td>
<td>100.0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>93.5</td>
<td>77.97</td>
<td>25.48</td>
</tr>
</tbody>
</table>

*standard deviation

A chi-square indicated no differences between categories according to the security groups patients belonged to (chi-square=24.0; df=16; p=.09). A one-way Analysis of Variance (ANOVA) indicated mean differences with regard to the amounts told to different clinicians (F=3.4; df=7; p=.004). Results indicated that 74% of the sample confide their internal conflicts in nurses. A number of patients confide in other members of the clinical team. 8% of the sample indicated that they were able to tell psychologists and occupational therapists all their conflicts. A total mean disclosure of 78% indicates that on average, and despite high levels of security, some patients continue to process information about their internal conflicts away from the clinical team.
Table 15b: Those confided in by patients outside the hospital/unit, and the amount confided (expressed in mean percentages).

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage of Frequency</th>
<th>Amount Mean %</th>
<th>Disclosed sd*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>22</td>
<td>28.6</td>
<td>84.6</td>
<td>16.0</td>
</tr>
<tr>
<td>Siblings</td>
<td>8</td>
<td>10.4</td>
<td>76.2</td>
<td>20.0</td>
</tr>
<tr>
<td>Partners</td>
<td>11</td>
<td>14.3</td>
<td>77.3</td>
<td>26.9</td>
</tr>
<tr>
<td>Friends</td>
<td>16</td>
<td>20.8</td>
<td>88.1</td>
<td>20.4</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>9</td>
<td>11.7</td>
<td>86.7</td>
<td>24.0</td>
</tr>
<tr>
<td>Clinicians in Previous Settings</td>
<td>1</td>
<td>2.6</td>
<td>70.0</td>
<td>42.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67</strong></td>
<td><strong>88.4</strong></td>
<td><strong>82.16</strong></td>
<td><strong>22.5</strong></td>
</tr>
</tbody>
</table>

* standard deviation

A chi-square statistic indicated differences between categories that patients selected for disclosing their personal information (chi-square=28.5; df=16; p=.03). A one-way Analysis of Variance (ANOVA) indicated mean differences with regard to the amount of information disclosed to different people in the community (F=2.16; df=7; p=.05). Findings indicated that 51% of the sample tells most of their conflicts to their family. This category was followed by friends and partners. A total mean disclosure of 82% indicated that patients keep a small proportion of information about themselves from those they trust the most.
DISCUSSION

The literature suggests that the strongest indication of reliability is replication (Davis, 1995; Brenda, 1987). A previous study (Hammond, in-press) explored the psychometric properties of the RAMAS risk assessment checklist in a population of community and close-supervision patients and suggested that the RAMAS had an internal structure of sound psychometric qualities. The present study is, in part, an attempt to replicate and confirm the cumulative properties of the RAMAS checklist in a population of offenders in two secure settings.

In agreement with previous recommendations from reports on incidents of violence in the community by people with a mental illness released from hospital (Snowden, 1997; O'Rourke et al., 1997; Sheppard, 1996; Richie et al., 1994; DoH/HO, 1975), the data was derived from multidisciplinary opinion. In addition to patients' perceptions of their own risk (Monahan, 1993; Pollock and Webster, 1990; Meloy, 1987), collateral information was sought to add reliability to self-reports (Lidz et al., 1993; Mulvey and Lidz, 1993). Three questions were suggested and these will be explored further. The questions were (a) whether the RAMAS checklist makes a difference to clinical judgement, (b) whether the agreement among clinicians, and between clinicians and patients, varies according to degrees of security, and (c) whether risk can be conceptualised as cumulative.

The Impact of the RAMAS Checklist on Clinical Decision-Making

Based on Monahan and Steadman's (1994) model of risk, the RAMAS contains a list of risk factors and is interested in patients' risk level and the seriousness of the harm. In the original RAMAS, the underlying facets of risk identified include Dangerousness, Mental Instability, and Self-Harm. An additional, measure has since been added for assessment of Vulnerability. This is entirely in agreement with previous research indicating that when correlates of violence (i.e. risk factors) are combined with mental illness, the seriousness of harm to patients themselves as well as to others will increase (Appleby, 1997; Towl and Crighton, 1996; Quayle et al., 1998; Steadman et al., 1993; Swanson et al., 1990).
In the continuum provided for each measure of risk, clinicians indicated that this was a mentally unstable population which was dangerous, vulnerable and which engaged in significant self-harm with events of attempted suicide. Clinicians also indicated that the impact of these behaviours would have serious consequences of harm for patients themselves and other people.

The present study found that clinicians' exposure to the checklist made a difference in the confidence of their clinical judgements. In spite of clinicians indicating no differences in pre and post-checklist ratings with regard to the measures of risk, they became less confident in their judgements of risk. The literature might suggest that clinicians have a tendency to overpredict risk (Litwack, 1993; Appelbaum, 1984), particularly if violent behaviour is known a-priori (Beck-Sanders and Clark, in-press). It is possible that the use of the checklist provides a structure that forces clinicians to focus on objective criteria for risk. Thus, the checklist may have a direct impact on any biases present during subjective clinical judgement (Tversky and Kahneman, 1981; Kahneman and Tversky, 1973).

Scores on measures of risk differed according to clinicians' professions. This indicates that clinicians are not unanimously in agreement when rating either levels or seriousness of risk. Furthermore, this variation may be greater between disciplines. This also applies to clinicians' confidence levels with regards to decision-making. Overall, nurses indicated the highest levels of confidence in their ratings of patients' risk and in their perceptions of the seriousness of harm, when compared to other professions. This continued to be higher than other professions despite nurses' exposure to objective measures of risk as in the RAMAS checklist. It is possible that this is due to nurses’ being in daily contact with patients and therefore feeling that they know the patients well.

Seventy-four percent of the patients interviewed indicated that they disclose on average 81% of their intimate thoughts and feelings to nurses. Some patients indicated that they share everything with psychologists and occupational therapists but this was endorsed by only 8% of the sample. Nevertheless, it suggests that some professionals have access to different information about patients' thoughts and feelings. Findings like
this have implications for the decision-making process with regard to therapeutic change and discharge. If, indeed, there is a group of professionals who are in a privileged position with regard to the trust of their patients, the multidisciplinary sharing of relevant aspects of this information becomes essential in order to encourage therapeutic engagement and thus minimise errors at times of discharge.

It would be of interest to explore further the reasons for this trust and the interactions between professionals’ empathic skills, and also explore whether it is the length of time spent with patients or the fact that clinicians share the same location with patients that makes a difference to patients’ degrees of trust and disclosure. It might be that trust increases as a result of professionals’ skills or that it develops on the grounds of geography, so that those in more contact with the patients have access to more information about them. These are questions for further research.

**The Internal Structure of the RAMAS Checklist**

Previously, the data from the RAMAS checklist had been analysed using Mokken’s (1971) cumulative model of risk (cf. Hammond, in-press). This study used a more statistically powerful model by Rasch (1960) to test the same structure. The advantage of the Rasch model over that of Mokken is that, if a reasonable fit is found, the scaling parameters will provide a better and more accurate measure of the risk level. A disadvantage is that the power of the model depends upon assumptions about the distribution of the latent risk being measured. Therefore, lack of fit does not imply that there is no cumulative structure but rather, that measurement of the latency in question is less accurate.

Overall, the cumulative model of risk proposed in previous studies has received some support which has itself been equivocal. Findings indicated that items fitted the cumulative model for the Dangerousness, Mental Instability and Vulnerability scales. Items in the Self-Harm/Suicide scale did not conform to this model. This is despite the fact that the Mokken model provides grounds for optimism (Hammond in-press). Results suggest an opportunity for the improvement of this scale either by the
exclusion of problematic items or by exploring its internal structure with a different, non-parametric model.

Choosing a Rasch (1960) model to analyse the results may have proved too demanding on the self-harm data with its assumptions on the distribution of the underlying trait. Perhaps further studies could concentrate on the difference between these two models and their treatment of the data. It may also be necessary to consider the possibility that a cumulative model may not make sense for self-harming behaviour.

Agreement between Raters

As indicated in previous research which explored the reliability of collateral information (Maggi et al., unpublished; Lidz et al., 1993; Windsor Jackson, 1988; Montandon and Hardin, 1984; Webster et al., 1984; Quinsey and Maguire, 1983; Quinsey and Ambtman, 1979), agreement levels among clinicians taking part in this study indicated inconsistencies. Poor consistency between pairs of clinicians were found when rating each item on the checklist for a single patient. Since definitions for each item were provided, results support the need for training and for multidisciplinary debate. This should not be interpreted as a limitation of the RAMAS checklist in particular since the proper use of the system emphasises the training of individuals and the consensual group process for arriving at clinical judgement. In fact, this study serves to strongly support that approach.

Low levels of agreement were also found between pairs of clinicians and patients. This trend of inconsistent opinions was present across settings. It was expected that the lowest level of agreement would be found in the admissions group where patients are less-known to clinicians and less willing to participate in treatment. It was predicted that those in medium security would achieve the highest level of agreement since it was expected that these patients would be less disturbed and therefore more easily engaged both in conversations with staff and in treatment. Nevertheless, the data did not support this hypothesis. It appears that, if staff's opinions are taken to be more certain than patients' (Mulvey and Lidz, 1993), the level of patients' insight does not differ
according to their levels of security as indicated by the low levels of agreement between staff and patients.

Nevertheless, some measures of risk were found to differ according to levels of security. Although no group differences were found in patients’ degree of ‘dangerousness’ or self-harm, clinicians rated those in the Special Hospital admissions wards as more mentally unstable and vulnerable than those awaiting discharge or those in medium-secure. Women were perceived as more vulnerable and with a higher tendency to self-harm than men. Although some quantitative differences were found between patients in the three groups, the level of agreement between these patients and staff continues to be poor in spite of certain similarities. Interesting as these results may be, it is difficult to achieve agreement with staff who are in disagreement themselves.

**Differences in Diagnostic Criteria**

Differences in clinicians’ ratings of risk were found with regard to patients’ diagnosis. It needs to be acknowledged that discrepancies may be present in diagnostic categories since both DSM-IV (APA, 1994) and ICD-10 (WHO, 1992) were used. Nevertheless, results present a consistent trend that differentiates between patients with schizophrenia and those with a personality disorder. Findings give some support to the view that violent and disturbed behaviour exists more prevalently in some groups in psychiatric populations than in others (Walker, 1991).

Patients with a personality disorder were perceived as more dangerous, more vulnerable and with a higher tendency to self-harm than patients with schizophrenia. The literature indicates that patients with a personality disorder present multiple clinical difficulties (Pihl and Peterson, 1993; Davis, 1991) and are more violent towards themselves and others (Hart, 1995; Harris et al., 1991). The fact that those with schizophrenia were perceived as more mentally disturbed is also in line with previous research which has established an association between active symptomatology and violence (McNeil, 1994; Taylor et al., 1994; Teplin et al., 1993; Hodgins, 1993; Link et al., 1992). Findings regarding the differentiation between these
diagnostic groups were also supported by patients' self-reports. However, this study did not differentiate between types of personality disorders or schizophrenia and this may be an issue to explore in further risk assessment research.

Results have implications for the quality of services delivered to patients of different diagnosis. It seems that while patients with a mental illness could be stabilised with medication, those with a personality disorder require more sophisticated services in order to make a difference to their well-being.

The Need for Staff Training

Wack (1993) argues for the introduction and development of a 'holding environment' in clinical settings where training, guidance, consultation and review are provided for clinicians working with violent offenders. It appears that staff training requires the commitment of an organisation to deliver quality services.

Quinsey and Maguire (1983) highlight the difficulties in organising treatment programmes in institutions where there is a team of clinicians working together but lacking consensus. Not only is this damaging to patients' continuity of care, with difficulties in ensuring that there is staff commitment to delivering prescribed treatments, but it also has implications for reaching consensus regarding the safe discharge of patients into the community.

One of the flaws in the system highlighted by reports of incidence of violence in the community after the discharge of patients with mental illness (e.g. Richie et al., 1994; HMSO, 1975) has been the faulty means of gathering relevant information, sharing it with other agencies involved in the case, and the seeking of consensus. The lack of acceptable reliability between professionals puts their clinical predictions in question (Murphy and Davidshofer, 1994).

Poor reliability findings between staff in this study continue to support the importance of team, as opposed to solo, decision-making (Rose, 1998; Harris, 1997; Litwack, et al., 1993; Steadman, 1981). Access to training in risk assessment could improve the
reliability of both clinicians' ratings and their collective decision-making. This was shown by Hammond's (in-press) study where acceptable levels of agreement between clinicians were found after training. Nevertheless, Corliss (1995) acknowledges that no two clinicians would make exactly the same clinical judgement, and he praises the value of flexibility in thinking cyclicly rather than linearly as a result of patients' individual differences. If this model can be accepted, it is imperative that differences are discussed openly and in a multidisciplinary setting.

Geczy and Sultenfuss (1994; Ennis and Litwack, 1974) indicate that academia fails to prepare many mental health professionals for treating patients with chronic mental health difficulties, although others argue that expert competence and opinion is based on academic training and experience (Cooke, 1990; Dawes et al., 1989; Mulvey and Lidz, 1984). Yet clinicians' heuristic bias when making clinical judgements, including illusions of validity, seeking out confirmatory evidence, and ignoring base rates (Faust and Ziskin, 1988; Quinsey and Maguire, 1986; Tversky and Kahneman, 1981; Kahneman and Tversky, 1973), will not necessarily disappear through greater clinical experience. However, awareness of these issues through training might certainly help to reduce discrepancies.

It has been suggested that clinical psychologists can contribute towards the solution of this problem by providing training and supervision in areas such as the identification, monitoring, treatment and outcome measures of risk (Geczy and Sultenfuss, 1994). More specifically, it has been argued that, in secure settings, psychologists have a role as risk educators, assisting colleagues in the prediction of violence (Reid and Bromley, 1998). In-service staff training is an effective and cost-effective way to improve services, and is an area where clinical psychologists can make a meaningful contribution, given their training as scientist-practitioners, combining both research and clinical services. This argument has found widespread support with regard to continuing professional education of all staff working in psychiatric services, although Harris (1997) argues for seminar-type teaching of decision-making at a trainee level (see also Snowden, 1997).
Research indicates positive results following training in risk assessment. Prison officers who were trained in this area showed that they were able to identify similar risk factors when compared to clinical psychologists and as assessed by independent raters (McDougall, 1996). Harrison (1997) has, however, noted that given the uncertainties of predicting risk, training in risk assessment should also include a recognition of the positive role of risk-taking by staff within a framework of acceptable practice.

Although training can increase reliability, Bacon (1997) notes that reliability might also be increased when the responsibility for the decision-making is shared across professions and within those in the team concerned with the care of a particular patient.

New Directions in Government Strategies for Mental Health Services

Given research findings indicating that those with a mental illness are particularly vulnerable to re-offending in the first year of discharge in the community (Monahan, 1993; Gibbens and Robertson, 1983), communication between agencies and the monitoring of behaviour become the key to high quality services in mental health.

In a recent speech by the Secretary of State for Health, Frank Dobson (1998) has stressed that information is the cornerstone of effective service delivery. In addition to recent changes in legislation (Rose, 1998; Harris, 1997; Harrison, 1997; Reed, 1997; Bacon, 1997), new proposals for mental health services include protocols for the joint working of public, independent and voluntary sectors of health, social, and criminal services.

Modifications to the Mental Health Act (1983) in order to accommodate the needs of this population have been recognised by this government. Mr. Dobson states that care in the community has failed as it has left many vulnerable patients to cope on their own. It is acknowledged that a small but significant minority have become a danger to the public and to themselves. In order to provide security and support to both patients and the public, the government has suggested the following new measures:
• extra funding to the current £3 billion a year spent by the NHS and social services on mental health;
• a review of the law so that clinicians can respond promptly and effectively to the needs of those with mental illness with supervised care;
• specialist secure units;
• 24-hour crisis teams and helplines;
• more acute hospital beds; and
• assertive outreach teams to monitor those who have been discharged in cases of emergency.

This latter provision is directly relevant to the 11,500 people detained under the Mental Health Act (1983) in England and Wales (see Dobson, 1998).

Studies have indicated that intensive community support for people with mental illness who are at risk of injuring themselves or others can be successful in maintaining good service contact (Chadda, 1998; Bond, 1998; Ford, Beadsmoor, Ryan and Repper, 1995). This is particularly important for continuity of care and in order to increase compliance with treatment outside the security walls of confinement (Reiss et al., 1996; Davis, 1991). However, stress is put on the need for the multidisciplinary nature of these teams and good training skills (Geoff, 1998).

The Contribution of the RAMAS to Mental Health Services

This study’s findings are particularly important for the support of the Care Programme Approach (CPA) and the recent development of Assertive Outreach Teams. The integration of information between agencies, and the need to review this information on an ongoing basis, are essential to monitor the risk patients present to themselves and others. The integration of ideographic information in this process is recognised. While there can be similarities in risk factors between groups of offenders, the literature supports the differences between gender and the contribution of situational factors pertinent to the heterogeneity of offenders. With its additional factors of
specific risk indicators, need and skill assessment, the full RAMAS provides a structure in which actuarial and clinical judgement are combined to provide a comprehensive and multidisciplinary assessment of risk.

This study indicates that the RAMAS checklist is a short and effective tool in which relevant information with regard to the risk level and the seriousness of harm of patients detained under the Mental Health Act (1983) can be summarised. The full RAMAS includes circumstances in which the behaviour occurs (Reed, 1997) and qualitative information with regard to the violent behaviour (Scott, 1977), thereby providing an interactional model of risk (Reed, 1997; Wack, 1993; Mulvey and Lidz, 1984). Since the most essential information about the risk of the patient is summarised, this can easily travel across services with the patient and is easy and quick to read.

The study suggests that while patients disclose information to staff, their immediate family and friends are also carriers of their personal information and therefore these need to be involved in the decision-making process. Patients indicated that their immediate family and friends have a significant amount of information about them. It is this information, together with that of the multidisciplinary team, which might make a difference to the understanding of the dynamics of risk in individual cases. The multidisciplinary nature of the RAMAS (O'Rourke et al., 1996) allows it to include not only information from clinicians and patients but also information from those outside the system who have known the patients prior to their being detained.

Although this study has considered risk levels and severity (Monahan and Steadman, 1994), one of the difficulties with measures of violence is that they do not assess the severity or frequency of specific violent acts (Swanson, 1994). This comment applies equally to the RAMAS checklist. For example, a person with a positive response to three items (e.g. history of aggression or violence, use of weapon, and substance misuse) might report only a single episode when these three features were present. Conversely, a respondent who scored positive on only one item might have committed multiple acts of brutal violence. In these cases, what is available is a general, and rather blunt, index of the presence or absence of any violent behaviour, which includes only
certain features. For this reason, it is recommended that the full RAMAS, which provides a comprehensive picture of the risk, is used.

Monahan and Steadman (1994) indicate that risk levels often fluctuate over time and are context-dependent. They further argue that risk management (which focuses on contextual and clinical cues) as well as risk assessment (which focuses on dispositional, historical, contextual and clinical cues) should be the goal of research. Further studies might consider whether the checklist is equally helpful in prospective studies, and whether the environmental factors, which are also acknowledged by the full RAMAS, make a difference to the quality of the risk management.

It is essential prior to this that the issue of training is addressed and that there is further exploration of how to increase the degree of agreement between clinicians. It is also essential to consider the need to increase agreement between clinicians and patients. This latter issue is one of a clinical nature, yet important given results suggesting that degrees of security are not influencing patient-clinician agreement rates and that this agreement does not increase as patients approach discharge.

Differences may well be due to patients’ lack of insight of the risk they pose. Nevertheless, disagreements may also be influenced by clinicians’ pre-judgements and assumptions of patients’ risk, particularly since their background in these settings is known a priori. The gap between clinicians’ and patients’ perceptions of the degree of risk to violence, self-harm and potential for suicide, vulnerability and mental illness needs to be addressed. Although it is essential that clinicians are aware and maintain their clinical judgements in these settings, it is also important that their conceptualisation of patients retains therapeutic flexibility in order to help patients change. It is through the understanding of the patient’s world and working with it that change can be achieved. This is particularly the case since results indicate that in these Special Hospital and Medium-Secure Unit settings patients and clinicians often do not share the same perceptions with regard to ‘dangerousness’, self-harm and suicide, mental illness and vulnerability. Given that in many of these cases it is risk of violence to others that is posed when patients are discharged, it is in the interest of all that
resources are focused not only on assessment and management of risk, but also on therapeutic change and the understanding of the world of the patients themselves.
Conclusion

The present findings have implications both for research and for clinical work. A cumulative model of risk has the potential to create models for (a) describing the development of risk, (b) observing changes over time, and (c) focusing on the objective nature of risk factors involved. In addition, it provides the opportunity to observe the degree of misfit of unusual or idiosyncratic risk profiles and this holds the promise of identifying the unpredictable individual at an early stage rather than simply aggregating risk factors to produce a meaningless score.

The scores derived from the checklist, together with misfit parameters, are designed to inform the clinical judgement of the assessor. The scale score indicates how far along the risk continuum the patient is, and the assessor must then make a clinical judgement of the best action for managing the patient. The misfit parameter allows the clinical team an objective index of confidence for the patient in question. Thus, using a cumulative model contributes to the possibility of identifying those patients who fit into the additive qualities of risk and those who present unpredictable profiles and a degree of misfit (Hammond, in-press).

Risk assessment is not simple and the more objective it can be made, the more defensible the resulting decisions will be. The use of a checklist is only useful if all the users are clear about what each item means. This involves a burden of training. However, use of the checklist does appear to focus the mind in practice. Indeed, results indicate that clinicians become more cautious when assessing risk following exposure to the risk factors the RAMAS checklist. The cumulative model of risk at the heart of the RAMAS methodology is compelling due to its simplicity and applicability. The results in this study, while generally supporting the model, do nevertheless raise some doubts in the self-harm domain. External variables such as the clinicians’ role and the diagnostic category of the patient appear to have a complex influence upon risk assessment judgements.
References


BLACK, T. and SPINKS, P. (1982). ‘Predicting Outcomes of Mentally Disordered and Dangerous Offenders’. In J. Gunn and D.P. Farrington (Eds.), *Abnormal Offenders, Delinquency and the Criminal Justice System*. Chichester: Wiley.


Appendix 1: Special Hospital Ethics Committee letter after proposal for the study had been presented.

Paula Maggi
Clinical Psychologist in Training
Psychology Department
(address)

20 January 1998

Dear Paula

At their meeting on 12 January 1998, the (Special Hospital) Ethics Committee approved your proposal entitled:


You should inform us of any changes to the protocol or any ethical problems which arise during the course of the study. You may also be asked to provide us with further progress reports.

The committee wish you well with the project and look forward to hearing from you in due course.

Yours sincerely

(name of secretary)
Ethics Committee Secretary
Appendix 2: The (name of town) Local Ethics Committee letter, after proposal for the study had been presented.

Paula Maggi
Clinical Psychologist in Training
(address of Medium-Secure Unit)
(name of town)

23 December 1997

Dear Ms. Maggi


At the meeting on Wednesday 17 December 1997, the (name of town) Local Research Ethics Committee reviewed your application form, together with the protocol for the project and Patient Information Sheet and Consent Form.

The members of the Committee present agreed that there is no objection on ethical grounds to the proposed study whose title is given at the head of this letter. I am therefore happy to give you our approval on the understanding that you will follow the protocol as agreed.

It is your responsibility as the researcher who made the application to notify the Local Research Ethics Committee immediately you become aware of any information which could cast doubt upon the conduct, safety or an unintended outcome of the study for which approval was given.

If there are amendments which, in your opinion or opinion of your colleagues, could alter radically the nature of the study for which approval was originally given, a revised protocol should be submitted to the Committee.
Members of the Committee would like to know the outcome of the study and therefore ask that a report or copy of results is sent to the Secretary in due course.

Yours sincerely

Mr. (name of Chairman)
Chairman
(name of town) Local Research Ethics Committee
Appendix 3: Letter to the Consultant Psychiatrists responsible for the wards/units in both forensic settings.

12 March 1998

Dr. (name of Consultant Psychiatrist)
Consultant Psychiatrist
(name of ward/unit)

Dear Dr. (name of Consultant Psychiatrist)


The Ethics Committee has given approval for a research study investigating the cumulative aspects of risk. In your capacity as Consultant Psychiatrist in the ward/unit, I am writing to ask you whether I can begin collecting data from your patients. I hope that you would allow me to interview patients and also to approach a variety of clinicians from your team (psychiatrists, psychologists, social workers and primary nurses) for their opinions on patients’ level of risk.

Existing research on risk assessment has left important questions unanswered. First, a central concern in risk assessment is the effect of human judgement on the accuracy of clinical assessment and decision-making. It would be useful to determine whether clinicians achieve similar judgements to those obtained using statistical methods. Second, the important issue of the validity and reliability of assessment of risk by mental health professionals and by social services’ workers has not been addressed. Third, risk has been considered in dichotomous terms, ignoring its cumulative potential. In order to explore these issues, this study has three objectives: to assess whether an actuarial intervention (the Risk Assessment, Management and Audit System checklist) affects clinical decision-making; to assess the differences between clinicians’ and patients’ ratings of risk; and to explore the cumulative structure of the RAMAS checklist.
Subjects for this study will be drawn from two forensic settings: (name of the Special Hospital) and (name of the Medium-Secure Unit). Three groups of patients will be selected with at least 30 patients (male and females) in each group. The groups will be:

- patients in (name of Special Hospital) admissions wards;
- patients at (name of Special Hospital) who have been identified for leave; and
- patients in the two wards (acute and rehabilitation) at the (name of Medium-Secure Unit)

Patients will be identified through files and in consultation with the Consultant Psychiatrist and their clinical team. Each patient will then be seen by the researcher for 20-30 minutes and will be asked to complete the RAMAS scales which refer to four areas of risk: dangerousness, mental stability, self-harm, and vulnerability. Following this, patients will be asked to rate themselves on the RAMAS risk assessment checklist. Similarly, two clinicians per patient will be contacted and taken through the same procedure. It is expected that clinicians will need between 10 to 15 minutes to complete the ratings given that they will be more familiar with the terminology of the scales.

I feel that the usefulness of patients' perceptions of their risk factors for their clinical treatment is vast.

I would be grateful for your views on your clinical team's willingness to participate in this study and on whether I am able to approach them and your patients for consent. Should you wish to discuss the practicalities of this study further, please do not hesitate to contact me at the (Psychology Department) on extension (number).

I look forward to your reply.

Yours sincerely

Paula Maggi
Clinical Psychologist in Training
Appendix 4: Consent Form.

**Consent Form**

This study is interested in looking at patients' views about how much they feel they have changed since coming into (name of Special Hospital or Medium-Secure Unit). Besides the opinions of the clinical team, it is also important that patients' views are considered when assessing change. Therefore, I am interested in your own ideas about your changes in the unit and what you feel you may still need to change to help you in the future when you leave (name of Special Hospital or Medium-Secure Unit).

If you agree to give your views on this matter, a brief interview of 20-30 minutes will be required and some questions will be put to you. The same procedure will occur with many patients in the ward/unit. There is no obligation on you to participate in this study at all, but if you agree to take part, your co-operation will be very valuable and appreciated. Since your participation is entirely voluntary, you are free to withdraw from the study at any time you wish to do so without affecting your future medical care.

During this study, your responses will be confidential. This means that nobody outside your clinical team will be able to link your responses with your name. Together with the opinions of many other patients, your co-operation will be essential to understanding change in this ward/unit. If you agree to take part in this study, please print your name below and then add your signature.

Name ...........................................................................................................

Signature ......................................................................................................

Ward/Unit ....................................................................................................

Date .............................................................................................................
Appendix 5: Patients' ratings form for perceptions of risk.

The Risk Assessment Checklist component of the Risk Assessment, Management and Audit System (RAMAS; O'Rourke, Hammond, Smith and Davies, 1996) with permission from the authors.

**DEMOGRAPHICS**

Patient: ..........................................................................................

Date of Birth: ................................ Gender .............................................

Mental Health/Diagnosis: ........................................................................

Legal Diagnosis: ...................................................................................

Section: .................................. Date of Admission: ..................................

Index Offence: ......................................................................................

Date of Assessment: .............................................................. Ward/Unit: ................................

Psychiatrist .......... Psychologist .......... Primary Nurse .......... Social Worker ..........

**DIMENSIONS OF RISK ASSESSMENT**

Please ask the patient's views on the following dimensions of risk. The four dimensions of risk in this section have been operationalised. Please follow these definitions when interviewing the patient and do not use any other definition. The four dimensions must be understood as follows:
Dangerousness: the likelihood of harm to others.

Mental Instability: the likelihood of the patient becoming or remaining mentally unstable.

Self-Harm/Suicide: the likelihood of the patient self-injuring/ self-harming or attempting suicide.

Vulnerability: the likelihood of the patient being taken advantage of or exploited by others.

1. Risk Level. Please ask the patient’s views on their level of risk. Circle the rating that best describes his/her assessment of risk level (i.e. the level of immediate risk the patient feels/she poses for each of the risk areas in question). When asking the patient’s views, please make no assumption of the patient’s status of detention. Do not assume that because the patient is in hospital that immediate risk will not apply.

<table>
<thead>
<tr>
<th></th>
<th>(no risk)</th>
<th>(very significant risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Self-Harm/Suicide</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

How confident is the patient in his/her responses? Please circle as appropriate.

<table>
<thead>
<tr>
<th></th>
<th>1 2 3 4 5 6 7 8 9 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>(not at all confident)</td>
<td>(extremely confident)</td>
</tr>
</tbody>
</table>
2. **Seriousness.** Please circle the rating that best describes the patient's assessment of his/her **seriousness of the likely consequences if s/he were to become dangerous, mentally unstable, self-harming or vulnerable.** When asking the patient's views, please make no assumption of the patient's status of detention. Do not assume that because the patient is in hospital that serious consequences will not apply.

<table>
<thead>
<tr>
<th></th>
<th>(minor consequences)</th>
<th>(very severe consequences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Self-Harm/ Suicide</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
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</tbody>
</table>

How confident is the patient in his/her responses? Please circle as appropriate.

<table>
<thead>
<tr>
<th>1 2 3 4 5 6 7 8 9 10</th>
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</table>

(not at all confident) (extremely confident)

Please tick as appropriate whether each item is relevant to the patient in question. It is important that all factors are considered and that no item is left unticked. When rating the patient, please make no assumption from your patient’s status of detention. Do not assume that because your patient is in hospital that a particular item will not apply. A list of operationalised definitions for each item is given in an appendix. Do not use any other interpretations for the items in this list when rating your patient. It is essential that, in order to achieve consistency when assessing risk, all professionals use the same definitions for each factor considered.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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1. History of Aggression/Violence [ ] [ ]
2. Prior Arrest for Violent Crime [ ] [ ]
3. History of Hostage Taking [ ] [ ]
4. History of Fire Setting [ ] [ ]
5. History of Mental Illness [ ] [ ]
6. History of Absconding [ ] [ ]
7. Conduct Disorder in Childhood [ ] [ ]
8. Parasuicide History [ ] [ ]
9. History of Self Neglect [ ] [ ]
10. History of Self-Injury/Self-Harm [ ] [ ]
11. History of Childhood Abuse [ ] [ ]
12. Bullied [ ] [ ]
13. History of Being Victimised [ ] [ ]
14. History of Threatening/Menacing Phone Calls/Letters [ ] [ ]
15. History of Violence/Aggression towards Pets/Animals [ ] [ ]
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<tr>
<th></th>
<th>YES</th>
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<tbody>
<tr>
<td>16. Threats to Injure</td>
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<td>[ ]</td>
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<tr>
<td>17. Threats to Kill</td>
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<td>[ ]</td>
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<tr>
<td>18. Legal Problems</td>
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<tr>
<td>19. Carries/Carried Weapon</td>
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<td>[ ]</td>
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<tr>
<td>20. Use of Force/Weapons</td>
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<tr>
<td>21. Paranoia/Persecutory Ideation</td>
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<tr>
<td>22. Personality Disorder</td>
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<td>[ ]</td>
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<tr>
<td>23. Treatment Unstable</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>24. Considered Risk to Self</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>25. Considered risk to others (unknown)</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>26. Considered risk to others (known)</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>27. Considered risk to Staff</td>
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<tr>
<td>28. Considered risk to Family/Friends</td>
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<tr>
<td>29. Emotional Control Problem</td>
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<tr>
<td>30. Refuses Treatment/Interventions</td>
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<tr>
<td>31. Considers Clinical Team a Threat/Feel Cornered/Trapped</td>
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<tr>
<td>32. Considers Clinical Team Wilfully Unhelpful</td>
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<tr>
<td>33. On Psychiatric Medication</td>
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<tr>
<td>34. Current Mental Illness</td>
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<tr>
<td>35. Currently Clinically Depressed</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>36. Unstable Medical Condition</td>
<td>[ ]</td>
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<td>37. Frequent Admissions</td>
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<td>YES</td>
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<tr>
<td>38. Psychotic Symptoms (hallucinations/delusions)</td>
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<td>39. Non-compliance with Medication(s)</td>
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<tr>
<td>40. Preoccupation/Obsession with Violent Videos/Written Material/Weapons</td>
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<tr>
<td>41. Recent Trauma</td>
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<tr>
<td>42. Clinical Concern re: Diary Entries/Written Material</td>
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<tr>
<td>43. Medical/Physiological Problems</td>
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<td>44. Neurological Features</td>
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<tr>
<td>45. Atypical Excitement/Passivity</td>
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<tr>
<td>46. Suicidal Ideation</td>
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<td>47. Disinhibited</td>
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<tr>
<td>48. Substance Misuse</td>
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<td>49. Unpredictable</td>
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<td>50. Impulsive</td>
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<td>51. Unreliable</td>
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<tr>
<td>52. Unrealistic Expectations</td>
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<tr>
<td>53. Plotting/Planning</td>
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<tr>
<td>54. Low Insight</td>
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<td>55. Low Self Esteem</td>
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<tr>
<td>56. Non Reflective</td>
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<tr>
<td>57. Does not profit from experience</td>
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<tr>
<td>58. Low Empathy</td>
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<tr>
<td>59. Self Image Sensitivity</td>
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<tr>
<td>60. Predatory Behaviour/Stalking/Threatening Behaviour</td>
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<td>YES</td>
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<tr>
<td>61. Criminal Lifestyle Preference</td>
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<tr>
<td>62. Sense of Hopelessness/Futility</td>
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<tr>
<td>63. Problems with Negotiation</td>
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<tr>
<td>64. Oversensitive to Advice/Suggestions</td>
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<tr>
<td>65. Susceptible/Easily Led</td>
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<tr>
<td>66. Overdisclosing</td>
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<tr>
<td>67. Unwarranted Trust of Strangers</td>
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<tr>
<td>68. Needy/Isolated/Disconnected</td>
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<td>69. Naïve</td>
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<tr>
<td>70. Facing High Levels of Stress</td>
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<tr>
<td>71. Unstable Environment</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>72. Interpersonal Conflicts/Relationship Problems</td>
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<td>[ ]</td>
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<tr>
<td>73. Insomnia/Sleep Problems</td>
<td>[ ]</td>
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<tr>
<td>74. Recent Hospital Admission</td>
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<tr>
<td>75. Multiple Problems/Complex Needs</td>
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<td>[ ]</td>
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<tr>
<td>76. No Close/Confiding Relationships</td>
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<tr>
<td>77. Feels Undervalued/Put Down by Family/Friends</td>
<td>[ ]</td>
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<tr>
<td>78. Children on ‘At Risk’ Register</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>79. Recent Discharge</td>
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In the past three months or since the last risk assessment (whichever is the shortest) has the person:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>80) shown evidence of aggression/violence</td>
<td>[ ]</td>
</tr>
<tr>
<td>81) shown evidence of mental instability</td>
<td>[ ]</td>
</tr>
<tr>
<td>82) shown evidence of self-harm</td>
<td>[ ]</td>
</tr>
<tr>
<td>83) shown evidence of vulnerability</td>
<td>[ ]</td>
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</tbody>
</table>
Appendix 7: RAMAS operational definitions.

**Risk Assessment Checklist: Operational Definitions**

The Risk Assessment Checklist has been designed to enable assessors to consider the full range of possible risk behaviours and indicators. The general aim of the checklist is to open the decision-making process around risk criteria for scientific, clinical and legal challenge.

The checklist consists of risk markers from the four risk categories identified namely: **Dangerousness** (relates to the likelihood of the patient harming others), **Mental Instability** (relates to the likelihood of the patient becoming or remaining mentally unstable), **Risk to Self** (relates to the likelihood of the patient self-injuring or self-harming), and **Vulnerability** (relates to the likelihood of the patient being taken advantage of or exploited by others). Each risk marker has been derived from evidence based research and clinical practice.

Risk markers have been clustered into four facets: **Historical** (static risk markers which record whether or not the event or behaviour has occurred at any point in the past), **Clinical** (static and dynamic risk markers which are associated with behaviours, experiences and beliefs linked to physical or mental illness, neurological or medical conditions), **Dispositional** (static and dynamic risk markers that relate to patterns of behaviour or thinking, demographic, personality and cognitive features which form a characteristic way or responding in the individual) and **Contextual** (dynamic risk markers which refer to situational and environmental features). Each risk marker has been assigned to only one facet although some arguably belong to more than one.

*In order to ensure clinically effective and consistent assessment and understanding of the risk markers, a brief operational definition is offered for each. It is these definitions which should be used when deciding whether the risk marker is present or not.*
1. History of aggression/violence (any known history of hostility, aggression or past assault to any person at any time in the past, including domestic violence).

2. Prior arrest for violent crime (previous detection/allegation of violent behaviour at any time in the past. It is the behaviour that matters and not whether the patient was arrested or convicted).

3. History of hostage taking (history of seizing or holding another person (s) against their will in the past, with or without conditions or demands being made or set).

4. History of fire setting (history of deliberate act(s) of setting fire to property or persons at any time in the past. It is the behaviour that matters and not whether the patient was arrested or convicted).

5. History of mental illness (history of mental health problems at any time in the past).

6. History of absconding (history of ‘escaping’ or ‘leaving’ a place of programme of care without the agreed prior knowledge of those professionals responsible for the individual’s care).

7. Conduct disorder in childhood (a previous diagnosis of, or a pervasive pattern of symptoms characteristic of conduct disorder in childhood as defined by the current edition of ICD or DSM).

8. Parasuicide history (history of any serious or high risk suicide threats, gestures or attempts at any time in the past).

9. History of self neglect (history of poor self care skills which may include poor management of own safety, poor personal hygiene, poor or inadequate diet, or lack of interest or care for own welfare).
10. **History of self-harm** (history of intentional deliberate self-injury or harm not including any attempts at taking own life).

11. **History of childhood abuse** (history of physical or sexual abuse by other(s) while the patient was a child or adolescent).

12. **Bullied** (history of verbal, emotional, physical or psychological oppression or threats from others during childhood or adolescence).

13. **History of Victimisation** (history of being picked on - verbally, emotionally or psychologically -, assaulted or taken advantage of during adulthood).

14. **History of threatening/menacing phone calls or letters** (history of making or sending phone calls or letters with the intent of harassing or threatening the recipient).

15. **History of cruelty towards pets/animals** (history of cruelty or harm towards pets or animals, or history of a disturbing interest or fascination with injured or dead animals).

16. **Threats to injure** (any statement of intent to deliberately injure or harm anyone, including warnings of intention to punish or injure).

17. **Threats to kill** (any statement or intent to kill, including warnings of intention to murder).

18. **Legal problems** (history of legal problems and/or is currently in trouble with the law, including cases pending, currently in litigation, or on probation).

19. **Carries/carryed weapon** (known to carry heavy or sharp objects, knives, guns or any offensive weapon).
20. **Use of force/Weapons** (known to have used any form of weapon or physical force against another).

21. **Paranoia/persecutory ideation** (feelings that there is a conspiracy against them or that they are being followed or watched).

22. **Personality disorder** (previous or current diagnosis of a personality disorder, or a pervasive pattern of symptoms characteristic of a personality disorder as defined by the current edition of ICD or DSM).

23. **Treatment unstable** (irregular attendance at treatment. Resistance to engage in, or benefit from therapeutic inputs and sabotaging own treatment).

24. **Considered risk to self** (a previous history of self-harm greatly increases the risk of subsequent suicide. Any history or propensity towards self-injury, self-destructive, mutilating or damaging behaviours which constitute a risk to self).

25. **Considered risk to known others** (patient considered a risk to others known to him/her).

26. **Considered risk to unknown others** (patient considered a risk to others unknown to him/her).

27. **Considered risk to staff** (patient considered a risk to hospital staff).

28. **Considered risk to family/friends** (patient considered a risk to family and friends).

29. **Emotional control problems** (evidence of mood disturbance, unstable emotions, or extreme emotional behaviour).

30. **Refuses treatment/interventions** (refuses contact or drops out of treatment or care while still requiring risk assessment, management or review).
31. Considers the clinical team a threat/feels cornered/trapped (feeling emotionally, physically or psychologically threatened, or restricted by the clinical team or practitioners, or by their actions).

32. Considers the clinical team wilfully unhelpful (beliefs that the clinical team is deliberately thwarting or withholding resources or support which the patient feels they need or are entitled to).

33. On psychiatric medication (whether the patient is taking/been prescribed medication).

34. Current Mental Illness (whether the patient has been diagnosed with a mental illness).

35. Currently clinically depressed (a diagnosis of, or a pervasive pattern of symptoms characteristics of a depressive illness as defined by the current edition of ICD or DSM).

36. Unstable medical condition (mental state is a crucial factor in predicting dangerous or self-harming behaviour. Any history of atypical phenomena of an unstable mental state).

37. Frequent admissions (any history of re-admission to a psychiatric hospital, often within three months of discharge).

38. Psychotic symptoms (violence and/or self-harm often occurs when clients have active - hallucinations/delusions - symptoms of psychosis. Any history that the patient has experienced command delusions or delusions of a sexual nature).

39. Non-compliance with medication (non-compliance with medication is often a precursor to relapse. Any history that the patient refuses or stops taking medication).
40. Preoccupation/obsession with violent videos/written material/weapons (evidence of a disproportionate amount of time spent watching violent films, writing, reading or collecting violent material or weapons).

41. Recent trauma (any history of recent severe physical injury or wound or psychological shock which has had a dramatic effect on the patient’s functioning such as a traffic accident or bereavement).

42. Clinical concern (evidence of written material that suggests disturb sinister thought or behaviour pattern).

43. Medical/physiological problems (any history of current physical or physiological problems).

44. Neurological features (any history of known organic brain dysfunction or disorder which may include mental handicap, epilepsy, Parkinson’s disease, stroke or brain injury).

45. Atypical excitement/passivity (any high degree of excitement or overactivity and/or passivity or inactivity out of proportion with the patient’s circumstances).

46. Suicidal ideation/planning (any active or passive mental planning of suicide, or expressed wish to die).

47. Disinhibition (any expression of thoughts, emotions and behaviours outside normal cultural and social constraint).

48. Substance misuse (any history of previous or current misuse of alcohol, non-prescribed or illicit drugs).
49. **Unpredictability** (behaviour or emotions which are not what might be expected in the given situation, or appear to follow no regular or predictable pattern).

50. **Impulsivity** (a tendency to act without thinking or planning, or without consideration for the consequences of their behaviour or actions).

51. **Unreliable** (a tendency not to adhere to agreed plans, objectives, agreements or appointments, even if the patient has stated that they will do so).

52. **Unrealistic expectations** (expectations based on ideals rather than on fact or probable outcome. A tendency to set unachievable goals or aims personally or to make unreasonable/unachievable demands on others).

53. **Plotting/planning** (systematic or organised plan(s) of action with malicious or harmful intent against self or others).

54. **Low insight** (uncritical or unaware of own behaviour. The patient denies that current symptoms or problems are important and does not have an internalised view of own problem and rather ‘externalises’ blame for any past or current difficulties).

55. **Low self-esteem** (low regard of self. Self-denigratory beliefs and/or feelings of inferiority or self-depreciation).

56. **Non reflective** (does not think things over and does not review or evaluate personal thoughts or behaviours).

57. **Does not profit from experience** (repeats old mistakes in behaviour and fails to understand or learn about the relationship between behaviours and consequences).

58. **Low empathy** (poor perspective taking and little or no ability to emotionally identify with others).
59. **Self-image sensitivity** (oversensitive to comments from others relating to physical, social or psychological self).

60. **Predatory behaviour/stalking** (there is a well recognised association of violence/threatening behaviour with delusional belief, as in the ‘pathologies of passion’ such as morbid jealousy and erotomania. Any history of a pattern of harassing, exploitative or menacing behaviours).

62. **Criminal lifestyle preference** (a criminal record has been shown to have predictive value in relation to aggressive behaviours. Any history of opting into a lifestyle dominated by criminal behaviour, making little or no attempt to avoid criminal activity).

63. **Sense of hopelessness/futility** (helplessness and hopelessness are known precursors of self-harm, suicidal and violent behaviours. Any history regarding the patient’s sense of pessimism, anhedonia, despair or defeat. Expectations that desirable and/or positive outcomes will not occur, and that the individual has no options available to change their situation can lead to extremes of self-injurious and violent behaviour).

64. **Problems with negotiation** (limited ability to compromise in interpersonal communications or arrangements. Can also include failure to establish working alliances or collaborative relationships with helping agencies).

65. **Oversensitive to advice** (a tendency to be acutely affected by suggestions or advice. The patient shows to be easily offended or emotionally hurt by advice or suggestions from others, whether this sensitivity is general or specific to certain people or issues).

66. **Susceptible/ easily led** (impressionable or easily moved by emotion; open or vulnerable to exploitation by others; easily encouraged and/or manipulated to do things by others; finds it hard to resist peer pressure).
66. Overdisclosing (reveals intimate or highly personal information inappropriately to others).

67. Unwarranted trust of strangers (places undue trust and/or indiscriminate faith in others. Trusts others without concern for own safety, security or needs and without considering the motivations and intentions of others).

68. Needy/isolated/disconnected (requires high levels of support from services. 'Resource hungry' - requires a great deal of input and/or places much need and reliance on professionals. Lonely and separated from other people such as friends and family).

69. Naïve (straightforward in style or 'wordly innocent'. Unaware of the intentions of other people. Takes people at 'face value').

70. Facing high levels of stress (recent or current difficult life events, for example exit events - bereavement, divorce, separation, loss of job -, financial worries, legal problems, social or medical strains or burdens).

71. Unstable environment (any history of frequent problems or changes in social, financial, accommodation or employment situation or circumstances).

72. Interpersonal conflicts/relationship problems (a tendency or pattern of irritability, hostility or disagreement with others. Low tolerance of others' needs or opinions).

73. Insomnia/sleep problems (difficulty with getting to sleep and or waking during the night. Wakes very early or has trouble waking in the morning. Unstable sleep patterns).

74. Recent hospital admission (the period shortly after admission carries a high risk of self-harm. Any history of recent need to be admitted to psychiatric services during the past three months).
75. **Multiple problems** (problems in more than one area of the patient’s life, for example social, health, financial, legal, etc.).

76. **No close/confiding relationships** (no family, friends or confidants apart from helping or statutory agencies).

77. **Feels undervalued/put down by family/friends** (perception that others do not take them seriously and perception of lack of respect from others).

78. **Children on ‘At Risk’ register** (any history of previous records or concerns of children being at risk).

79. **Recent discharge** (the first few weeks after discharge have been shown to be particularly risky. Any discharge from hospital, prison, or social care in the past three months).

Since either the last risk assessment was completed, or during the last 8-12 weeks, whichever is the shortest period, evaluate any changes in the patient’s or the context as follows:

80. **Shown evidence of aggression/violence** (has the patient been aggressive or violent towards anyone, or has aggression or violence been brought to the team’s attention).

81. **Shown evidence of mental instability** (has the patient displayed any behaviour or made any comments which may indicate that the patient is currently mentally unstable).

82. **Shown evidence of self-harm** (has the patient tried to harm him/herself in any way or have they spoken about doing so).

83. **Shown evidence of vulnerability** (has anything been brought to the team’s attention which indicates that the individual is vulnerable in their current situation).
Appendix 8: Staff rating form for perceptions of risk.

**RESEARCH STUDY: Risk Assessment**

Dear (Name of Staff)

The Ethics Committee has given approval for this research study to take place in your ward/unit. Dr. (Name of Consultant Psychiatrist), the Responsible Medical Officer in your ward (or unit), has also been contacted and given approval for data collection. I would be grateful for your participation.

This study is interested in exploring the cumulative aspects of risk. A cumulative model of risk states that the probability of risk occurring is the result of an accumulation of risk factors. This means that there is a historical and hierarchical aspect to dangerousness. For example, when committing an action in which there is a major risk factor (e.g. using a weapon), it is assumed that the patient has also been involved in other minor risk factors (e.g. using verbal abuse). In other words, the more severe the violent act, the more cumulative the risk factors. Therefore, it is suggested that risk builds on behaviour that has occurred previously. The findings, I hope, will be relevant not only to clinical applications but also to inform prevention policy.

Attached to this explanatory letter, there is a questionnaire for you to fill in. Your opinion is most important as you hold information about the risk factors pertinent to the identified patient. Other clinicians in your ward will be contacted and therefore I would appreciate it if your opinions reflect your own views and not those of others.

I would be very grateful if you could complete the attached questionnaire in relation to the identified patient and return it to me in the envelope provided. It will take you only a few minutes. In some weeks' time I would like to contact you again and ask you to fill in a risk assessment checklist for the same patient. Again, I would be grateful for your co-operation and estimate it would only take you approximately 10 minutes to fill it in.
I would like to stress and assure you that your ratings will be kept completely confidential. Your response will be assigned a code and therefore nobody, except myself, will be able to identify you. The final analysis of the data will not include any names or other identifying information (for example, the ward/unit you work in).

Your help in this study is very much appreciated. Thank you.

Paula Maggi
Clinical Psychologist in Training
Psychology Department
(Name of Special Hospital/Medium-Secure Unit)
**DEMOGRAPHICS**

Patient: ..........................................................................................

Date of Birth: ................................ Gender: .............................................

Mental Health/Diagnosis: ........................................................................

Legal Diagnosis ....................................................................................

Section .................................. Date of Admission ..................................

Index Offence: ......................................................................................

Date of Assessment: ............................................................................. Ward/Unit: ....................

Psychiatrist .......... Psychologist .......... Primary Nurse .......... Social Worker ........

**DIMENSIONS OF RISK ASSESSMENT**

Please rate your patient on the following dimensions of risk. The four dimensions of risk in this section have been operationalised. Please follow these definitions when rating your patient and do not use any other definition. The four dimensions must be understood as follows:

*Dangerousness:* the likelihood of harm to others.
Mental Instability: the likelihood of the patient becoming or remaining mentally unstable.

Self-Harm/Suicide: the likelihood of the patient self-injuring/ self-harming or attempting suicide.

Vulnerability: the likelihood of the patient being taken advantage of or exploited by others.

1. Risk Level. Please rate your patient according to their level of risk. Circle the rating that best describes your assessment of risk level (i.e. the level of immediate risk the client is felt by you to pose for each of the risk areas in question). When rating the patient, please make no assumption of your patient’s status of detention. Do not assume that because your patient is in hospital that immediate risk will not apply.

<table>
<thead>
<tr>
<th>Risk Area</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
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<tr>
<td>Self-Harm/ Suicide</td>
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<tr>
<td>Vulnerability</td>
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</tbody>
</table>

How confident do you feel that your opinions are accurate? Please circle as appropriate.

1 2 3 4 5 6 7 8 9 10

(not at all confident) (extremely confident)
2. **Seriousness.** Please circle the rating that best describes your assessment of the seriousness of the likely consequences if your patient were to become dangerous, mentally unstable, self-harming or vulnerable. When rating the patient, please make no assumption of your patient’s status of detention. Do not assume that because your patient is in hospital that serious consequences will not apply.

<table>
<thead>
<tr>
<th></th>
<th>(minor consequences)</th>
<th>(very severe consequences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Mental Instability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Self-Harm/ Suicide</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

How confident do you feel that your opinions are accurate? Please circle as appropriate.

| 1 2 3 4 5 6 7 8 9 10 |

(not at all confident)  (extremely confident)
Appendix 9: Letter to staff to accompany the checklist and the repeated measures of perception of risk.

**RESEARCH STUDY: Risk Assessment**

Dear (name of staff)

Thank you for sending me your ratings on the questionnaire previously provided. As I stated previously, in the second and last stage of this study I needed to contact you again for your opinions of (name of patient)’s risk factors. For this, I have attached a risk assessment checklist. I am only interested in your present knowledge of the patient and it is not necessary to look for any information in the patient’s file.

I would be grateful if you could fill it in and send it to me as soon as possible. In order to minimise the time you spend on this exercise, I have provided nominal (yes or no) rather than ordinal ratings (10-point scales). Please tick next to each item if ‘yes’ applies. If the answer is ‘no’ or ‘don’t know’, leave it blank. Also attached is a list of definitions for each item on the checklist. Please use only these definitions when rating your patient. I understand that you might be very familiar with some or with all of the items. However, it is essential that, in order to achieve consistency when assessing risk, all clinicians use the same definitions for each factor considered.

You will notice that the final pages contain the same exercise you did before. I would like to ask you after rating the checklist, to rate the identified patient again on the four dimensions of risk you provided last time.

Again, I would like to thank you for your participation.

Thank you.

Paula Maggi
Clinical Psychologist in Training
Appendix 10a: Letter to Consultant Psychiatrists following the completion of rating forms.

Dr. (name of Consultant Psychiatrist)
Consultant Psychiatrist
(name of ward/unit)
(Special Hospital/Medium-Secure Unit)

22 June 1998

Dear Dr. (name of Consultant Psychiatrist)

RE: Research Study on Risk Assessment

I am writing to thank you for your support during the data collection for my study at (Special Hospital/Medium-Secure Unit). I am also very grateful for your participation.

I would like to take this opportunity to thank all the staff in your ward/unit for their participation and for filling in the forms in time for the data analysis. I would appreciate it if you could mention this in your next multidisciplinary meeting.

It has been a very enjoyable and valuable experience to have had contact with your patients and worked with the staff in your ward/unit. Thank you for this opportunity.

Yours sincerely

Paula Maggi
Clinical Psychologist in Training
University of Surrey
Appendix 10b: Letter to staff following the completion of rating forms.

Dr./Mr./Ms. (name of clinician)
(profession of clinician)
(location of clinician)
(Special Hospital/Medium-Secure Unit)

22 June 1998

Dear (name of clinician)

RE: Research Study on Risk Assessment

I am writing to thank you for your participation in my study, and for filling in the forms in time for the data analysis. Without your help data collection would have been very difficult. Thank you very much.

A copy of the study would be available by the end of August if you wish to review the results.

Yours sincerely

Paula Maggi
Clinical Psychologist in Training
University of Surrey