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A study of Reactive Attachment Disorder symptoms in the  
youth justice population.

AND CLINICAL RESEARCH PORTFOLIO

Volume 1

(Volume 2 bound separately)

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Clinical Psychology (D.Clin.Psy)*



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## CHAPTER 1: SYSTEMATIC LITERATURE REVIEW

### Friendship and Social Participation after Brain Injury in Children: A Systematic Review

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Prepared in accordance with the guidelines for Brain Injury (Appendix 1.1)



## **Abstract**

**Aim:** To provide a systematic review of the evidence regarding the impact of paediatric brain injury on friendship and social participation.

**Method:** The search used Ovid MEDLINE, Embase, PsychINFO and Web of Science databases and hand searched a key journal. Ten papers met inclusion criteria, five relating to friendship and five to social participation. The methodological quality of the articles was rated using set criteria.

**Results:** Four of the ten papers were rated as high quality. The main results showed that social participation decreased following brain injury and greater injury severity was associated with less participation. Three studies found that friendship networks remained the same; however two papers noted there were changes in friendship quality.

**Conclusions:** Brain injury has a negative impact on social participation in children and young people. Although the results on friendship are mixed, emotional problems amongst the brain injury group may cause difficulties in developing relationships over time. Further longitudinal studies may provide a greater understanding of this issue.

**Keywords:** *Friendship, social participation, brain injury, children*

## **Introduction**

The importance of developing and maintaining friendships and positive peer relationships during childhood and adolescence is well-understood; social skills and positive peer relationships have been linked to well-being [1]. Guralnick [2] found that increased social isolation from peers poses a significant threat to children's mental health in the short and long-term. Peer relationships during adolescence were seen to be more protective of depressive symptoms than parental relationships [3]. The development of friendship can be regarded as inextricably linked to the contact and time that children spend together. This personal and social interaction is directly connected to the concept of social participation, where the focus is on the child's functioning in social situations as outlined in Beauchamp and Anderson's [4] social model.

Participation is defined by the World Health Organisation as involvement in life situations [5] and it is linked to improved quality of life (QoL) for children with and without disabilities [6]. Participation happens in a variety of settings, including school, play, and learning. Increasing participation is an important part of the rehabilitation process following an acquired brain injury (ABI) [7].

ABI can be defined as any form of injury that is sustained by the brain after birth. It is relatively common with a prevalence rate of approximately one in 30 school aged children in the UK [8]. ABI can result from a traumatic or non traumatic event. A Traumatic Brain Injury (TBI) could be due to falls or road traffic accidents and non traumatic causes could be due to a stroke or tumour. TBI is the most common

form of ABI in children [9] and is the primary cause of death and disability in young people [10].

Many changes in functioning are evident following ABI in children. Significant changes in emotional and social behaviour have been noted [11]. In Fletcher et al.'s [12] longitudinal study, changes in adaptive behaviour and a decrease in social participation were found amongst 45 children with mild, moderate or severe brain injuries at six and 12 month follow-up. However, the results were solely based on parental reports. Beyond this a variety of cognitive deficits, following more severe injuries have been reported [13]. Problems of adapting behaviour in different situations were noted for boys; however here there was a gender imbalance in the cohort (70% male), and severe injuries were more common amongst the youngest children [14].

Many brain regions may be damaged after paediatric ABI; likely damage to a network of mainly frontal and temporal brain areas [15] have been implicated in two reviews of the literature on social cognition [16,17]. Social cognition is required when interacting in relationships. It is based on the ability to process others' behaviours, intentions and beliefs [17] and relies on the integrated activity of a network of brain regions. For example in perceiving faces the fusiformgyrus [18], the superior temporal sulcus [19] and the amygdala [20] are implicated. The processing of emotional stimuli [21], error monitoring and selecting from competing responses [22] involve areas of the frontal region of the brain, the anterior singulate. Lastly three pre frontal regions are involved in decision making in emotional situations [23], responding to rewards [24] and theory of mind [25].

Given the likely injury to key brain areas involved in social cognition, the importance of considering the child's social relationships following ABI is clear. This is paramount when taking into account that competence in the social domain is a main predictor of several outcomes such as health status, academic performance and psychological adjustment [26, 27]. The link between poor social functioning and potential reductions in QoL among children after TBI have also been noted in a systematic review [28]. This review focused specifically on the QoL indicators following TBI in children and adolescent groups.

Severe TBI in children and adults can also lead to social isolation [29]. Kozloff [30] interviewed 37 severely head injured individuals ranging from 12 to 60 years, and 39 of their significant others, with a focus on social support systems. Results highlighted a decrease in recreational interactions and a feeling of isolation. This lack of participation may impede the opportunities to learn new skills. Many skills are acquired through involvement in leisure and recreational activities [31]. Anderson and Catroppa's review [32] noted that the rate of acquisition of new skills could be slower than average for children after ABI and the delay in acquiring skills could have a long term deleterious effect impacting on a variety of developmental areas. In a longitudinal study of 40 children with mild, moderate and severe TBI and matched controls, a significant negative correlation between the overall rate of recovery of skills and injury severity was found [33]. In light of these findings the objective of enhancing and supporting participation for children after ABI is paramount [7].

A systematic review by Rosema et al looking at paediatric TBI has shown that such poor social adjustment persists over time [34]. This review examined the nature of social dysfunction in children with TBI, including their friendships and recreational interactions with different groups. It was noted that emotional distress may result from disrupted relationships due to impaired social skills following TBI. However the focus of the review was social dysfunction, not social participation or friendship. Social dysfunction refers to problems operating in a social environment when relying on social skills. Social participation refers to the social activities that a child engages in. Although the study refers to friendship it did not conduct an in depth review of this literature, which the current review endeavours to do.

Given the long term consequences of childhood ABI, the importance of researching the friendship quality and social participation of children following ABI is clear and as such a systematic review is warranted. This will include children who sustained an ABI due to traumatic and non traumatic causes; both are considered as the research solely on TBI was limited and it is possible that the sequelae for TBI as a subset of ABI, is similar. It will specifically examine friendship networks and social participation for children after ABI. Both are linked in so far as friendship involves interactions with others, as does social participation. This is highly relevant as it can inform care and perhaps lead to more of a focus on the psycho-social aspects post injury, which are essential to the child's QoL and longer term outcomes.

## **Research question**

What is the evidence that ABI has an impact on children's friendships and social participation?

## **Method**

### *Search strategy*

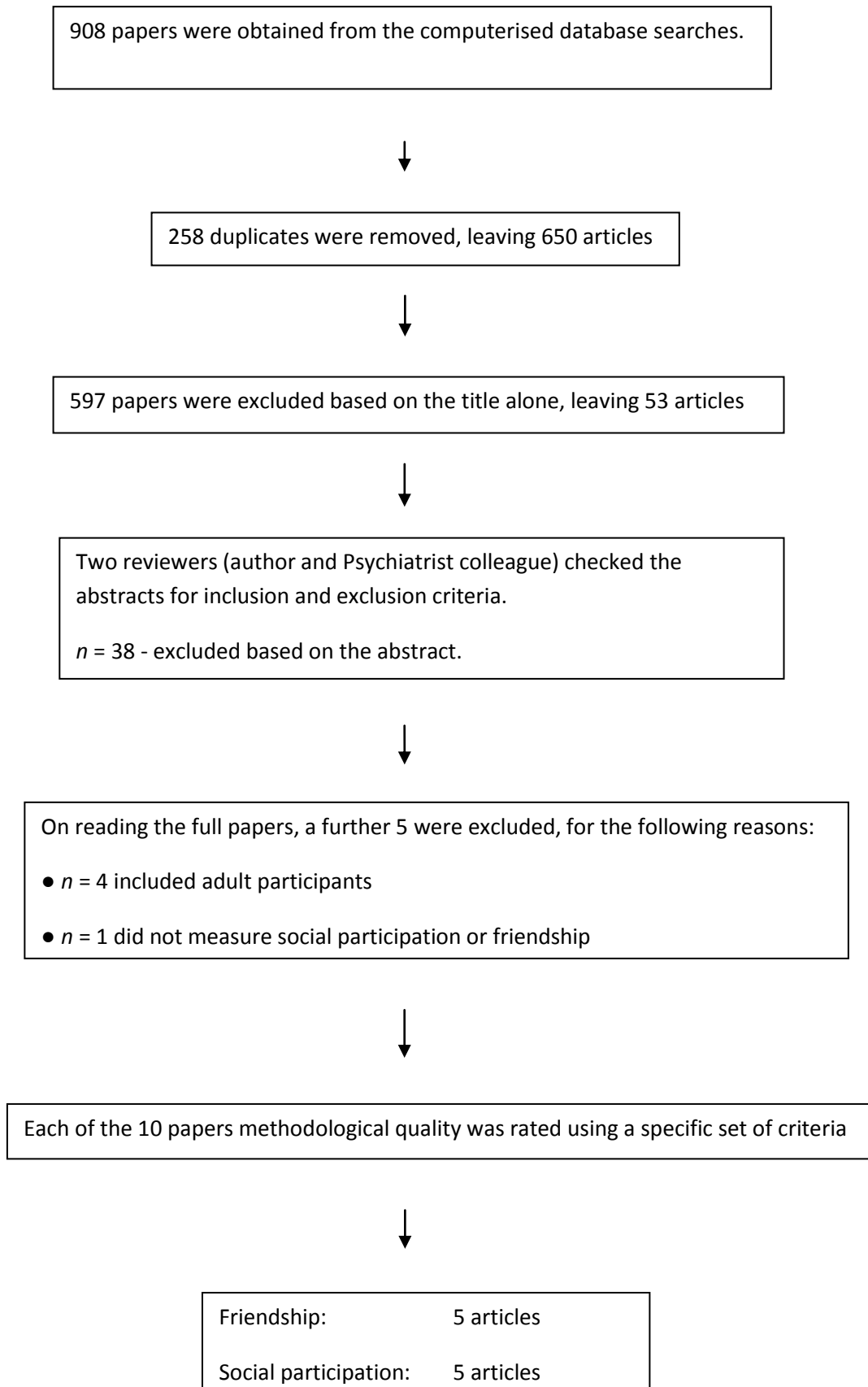
Ovid MEDLINE, Embase, PsychINFO and Web of Science were searched for relevant studies in January 2014. The terms 'brain injury' and 'friends' were mapped and exploded. Specific key words were used: (1) (acquired brain injur\* or acquired head injur\* or traumatic brain injur\* or traumatic head injur\*), (2) (friend\* or friendship or peer\* or peer group or social interaction or social participation or social integration or social reintegration). When there was not an option to limit the search to under 18 years, the following keywords were used: (3) (infan\* or child\* or adolescen\* or teenag\* or youth or pediatric or paediatric). The symbol \* represents a database operator which signifies potential extra letters in the term to be included in the search.

The three searches were then combined using 'AND'. A flow diagram of the results is displayed in figure 1. Nine hundred and eight papers which were published in or before the second week of January 2014 were obtained. Duplicates were removed leaving 650 articles. Inclusion and exclusion criteria were applied. Inclusion criteria were: (1) studies that investigated friendship or social participation after ABI (2) participants from birth to 18 years of age at the time of the study. Papers were excluded if they were (1) review articles,

conference abstracts, single case studies, book chapters, unpublished dissertations, non-peer reviewed publications, (2) non- English language papers.

Five hundred and ninety-seven papers were excluded based on the title and 38 articles were removed as their abstracts did not meet the specified criteria. On reading the full remaining 15 papers, five were excluded for the reasons outlined in figure 1. A hand search of the journal 'Brain Injury' over the past three years was performed as this yielded the most relevant papers in the computerised search. No further articles were identified. The reference sections of the ten selected articles were inspected to identify potential studies to include; none were found.

**Figure 1. Flow diagram showing the process of selection.**





### Methodological appraisal of included studies

All abstracts were rated by the author and an independent reviewer (Psychiatrist colleague). The author developed a measure to assess the quality of the papers (Appendix 1.2). It was based on the Clinical Trial Assessment Measure (CTAM) [35], an appraisal tool used in a systematic review [36], the Strengthening the Reporting of Observational studies in Epidemiology (STROBE) statement [37], a checklist of items to be included in reports of observational studies and Consolidated Standards of Reporting Trials (CONSORT) guidelines [38]. Criteria specific to paediatric ABI and highlighted within the literature were included. The checklist contained 24 items covering the sample, measures, analysis and results. These were rated 0 or 1 ('1' if criteria was met, '0' if not) excluding question five which was rated 0, 1, or 2 depending on the sample. Each paper was rated out of 25. Those that met 75% of the criteria (scoring 19 or above) were rated as 'high' quality, those between 50% and 75% (scoring 13-18) were 'moderate' and those less than 50% (scoring 12 and under) were of 'low' quality.

The analytical tool allowed for a general rating of quality to be provided. The reliability of the tool was assessed, an independent reviewer (Trainee Clinical Psychologist) using the same checklist rated five of the papers across friendship and social participation. The overall agreement between the raters was 91%. Differences in ratings were resolved by discussion.

## **Results**

Ten papers were selected for review.

### ***Friendship results***

Five articles related to friendship after TBI in children; four papers were between group designs [39-42] and one was a retrospective relational study [43]. These five articles had a total of 439 participants aged between seven and 17. One hundred and seventy-nine had a TBI, 12 had an ABI of another cause and 248 were controls. The time since injury ranged from six months to seven years, one month. Two of the friendship studies were rated as 'high' methodological quality [39, 40] and three were of 'moderate' quality [41-43].

Table 1 displays the methodological ratings for the friendship studies.

**Table 1. Description and methodological quality ratings of included studies: friendship outcomes**

| Study and quality rating                | Study description   | Total number of participants | Brain Injured | Controls  | Age range   | Sex, Injury severity, time since injury  | Measures <sup>a</sup>                               | Findings  |
|---|---|------------------------------|---------------|---|-------------|--|---|---|
| Tonks et al. [39]<br><br>84% high       | Comparative design<br><br>Explored peer relationships and emotional distress after ABI and in controls. | Parents of 204 children      | 40            | 137 healthy children<br><br>27 MH <sup>b</sup>  | 8-17        | 88/89 MF <sup>c</sup><br><br>MH sex unknown<br><br>Moderate – Severe ABI<br><br>mean time post injury - 6.4 yrs.     | Background questionnaire<br>SDQ (Parents)           | ABI children had more peer relationship difficulties and emotional distress than healthy controls.<br><br>No significant difference between ABI and CAMHS group.  |
| Ross et al. [40]<br><br>76% high        | Between groups<br><br>Examined friendship after TBI   | 28                           | 14            | 14 non injured  | 7-13        | TBI - 10/4 MF<br><br>Moderate or severe TBI<br><br>6mths - 6.4 yrs post injury.<br><br>Age at injury 3.5- 12yrs.     | FQQ, LSDS (Child)<br><br><br>PIC – 2, SDQ (Parents) | SDQ greater total, emotional and hyperactivity difficulties scores for TBI group.<br><br>No significant difference on measures completed by children and PIC-2.   |
| Bohnert et al. [41]<br><br>68% moderate | Comparative design<br><br>Explored children's friendship networks                                       | 44                           | 22            | 22 non injured – if more than one comparison child provided best match, data from 2 were averaged | 8.2 - 15.11 | 17 /5 MF<br><br>Severe TBI - N = 15<br><br>Time post injury - 11 mths – 7.1yrs<br><br>Mean age at injury - 8.94 yrs. | PSND, FCBFC, FQQ, (child)<br><br>RCC (parent)       | Parents rated TBI group less socially competent than controls. TBI children reported comparable friendship networks.<br><br>Girls more likely to have friendships that pre dated injury. These gender differences were significant. |

| Study and quality rating                   | Study description  | Total number of participants | Brain Injured | Controls           | Age range | Sex, Injury severity, time since injury   | Measures <sup>a</sup> | Findings  |
|--|--|------------------------------|---------------|--------------------|-----------|---|-----------------------|---|
| Yeates et al. [42]<br><br>68% moderate     | Between groups design.<br><br>Examined peer relationships in TBI relative to controls. | 87                           | 55            | 32 OI <sup>b</sup> | 8-13      | 53/34 MF<br><br>Severe – N = 15<br><br>Complicated mild/moderate – N = 40<br><br>12 - 63 months post injury<br><br>Mean age at injury = 7.7 yrs   | ECP, PAR, BFN (Child) | Severe TBI group higher in rejection victimisation and less likely to have a mutual friend than controls.<br><br>No significant group differences on PAR or BFN found.  |
| Prigatano & Gupta [43]<br><br>64% moderate | Retrospective relational study.<br><br>Parental perspectives of recovery after TBI     | 76 Parents                   | 60            | 16 OI <sup>b</sup> | 7-14      | 47/29 MF<br><br>Severe N = 14<br><br>Moderate N = 10<br><br>Mild N = 36<br><br>Time post injury 11 mths – 7.1yrs<br><br>Mean age at injury – 9.58 | CBCL (Parents)        | 75% of controls, 39 % of mild TBI, 20% of moderate TBI, and 14% of severe TBI children reportedly had 4 or more friends.<br><br>Analysis of group membership and number of friends was significant. However relationship between injury severity and number of friends was partially supported. |

<sup>a</sup> Title of outcome measures: Friendship quality questionnaire- revised (FQQ), Loneliness and social dissatisfaction scale (LSDS), Personality inventory for children- 2<sup>nd</sup> edition (PIC), Strengths and difficulties questionnaire (SDQ), Extended class play (ECP), Peer Acceptance Ratings (PAR), Best Friend Nominations (BFN), Peer Social Support Network Diagram (PSND). Frequency of contact with best friend Checklist (FCBFC), Ratings of Childs Competence (RCC), The Child Behaviour Checklist (CBCL).

<sup>b</sup> Mental Health (MH), Orthopaedic Injury (OI), <sup>c</sup> Male/Female (MF)

## High Quality

Tonks et al. [39] used a comparative design to look at peer relationships and emotional distress in children with ABI, healthy children and mental health controls. They found that the ABI group had significantly more peer relationship difficulties and emotional distress than controls, as measured by the Parent's Strengths and Difficulties Questionnaire (SDQ) [44]. No significant difference was found between ABI children and those accessing Child and Adolescent Mental Health Services (CAMHS). No specific information was given about the CAMHS mental health attendees problems; however Tonks et al. [39] noted that the sample was typical of those using this service. Not accounting for age at injury is a limitation of this study as outcomes may vary depending on age [39]. They failed to provide a clear description of injury severity and to consider the differences between traumatic and non traumatic ABI. The numbers of individuals at each stage e.g. eligible, included, dropped out etc. were not given. However many strengths were noted; the rationale, hypothesis, inclusion/exclusion criteria, matching criteria and participant characteristics were adequately described.

Ross et al [40] using a between groups design compared friendship quality, rates of loneliness and psychosocial functioning in children after TBI and non injured controls. All children completed the Friendship Quality Questionnaire–Revised [45] and the Loneliness and Social Dissatisfaction Scale (LSDS) [46, 47]. The main caregiver completed the Personality Inventory for Children–2nd edition (PIC-2) [48] and the SDQ [44]. No significant differences or difficulties were found on measures rated by children. The TBI caregiver group perceived the children as having significantly greater emotional and hyperactivity

difficulties than controls. There was a clear rationale, hypothesis, inclusion/exclusion criteria in this study. The characteristics of the participants and their controls matched for gender and age were detailed. The injury severity was specified but did not contribute to the analysis.

### **Moderate Quality**

A comparative design was used by Bohnert et al. [41] to explore the size and composition of children's friendship networks and features of their best friendship. Children completed the Peer Social Support Network Diagram (PSND) [49], Frequency of contact with best friend Checklist (FCBFC) [49] and FQQ [45]. Parents completed the Ratings of Child's Competence (RCC) [50] and a method of paired comparisons (developmental issues) was employed with both children and parents. Results showed that children with TBI were significantly less socially competent than controls according to parents; they also reported that children with more severe injuries had greater difficulty developing intimacy in friendships. Children who had been injured at a younger age reported more conflict within their closest friendships. However children with TBI reported having comparable friendship networks.

Significant differences in friendship maintenance were found with girls more likely than boys to have friendships that pre dated the injury. However this is based on a small sample size (17/5 gender split in favour of males). There were also very few children that had experienced a mild TBI in the study and as such the generalisability of the results are questionable. No information regarding premorbid functioning is provided. The number of individuals at

each stage e.g. eligible, approached, participated etc. was not established. Lastly the participant characteristics, the rationale and hypothesis, inclusion/exclusion criteria and time since injury were described.

Yeates et al. [42] utilised a between groups design to examine peer relationships in children with TBI relative to Orthopaedic Injury controls. Three classroom measures were administered to all groups. Severe TBI children were higher on rejection victimisation than controls and were less likely to have a mutual friend. There was no difference on self-report ratings namely peer acceptance ratings or the number of best friend nominations. Limitations include the small sample of the severe TBI group, limited information on the children's pre-injury relationships, and matching criteria for the controls not explained. A clear rationale, hypothesis and inclusion/exclusion criteria were described. Information regarding injury severity, time since injury, participant characteristics and numbers of participants at each stage of the study e.g. eligible, approached etc. was given.

A retrospective relational study by Prigatano and Gupta [43] focused on parental perspectives of recovery following TBI in school aged children using the Child Behaviour Checklist (CBCL) [51]. Results found that 75% of controls, 39% of the mild TBI group, 20% of the moderate TBI group, and 14% of the severe TBI group had four or more friends. Glasgow Coma Scale (GCS) score [52] at admission positively correlated with the number of friends post-acutely reported by parents. Higher scores on this measure relate to less injury severity. Limitations include the lack of information regarding the number of pre-injury close friendships, no clear description of the matching criteria and characteristics of the participants and no information about the

number of participants that were eligible, approached and participated. However the study does present a clear rationale, hypothesis and inclusion/exclusion criteria alongside specifying injury severity.

### ***Social participation results***

Five articles were relevant to social participation after ABI in children. Two of these, a comparative design and a prospective cohort study are based on one ABI sample [54a, 54b] and as such will be reported as one study. Of the remaining articles, one is a cross-sectional design [56], one is a prospective cohort study [55], and one is a comparative design [53].

All articles had a total of 1291 participants aged between four and 17 years. Seven hundred and twenty nine had a TBI, 31 had an ABI of another cause and 531 were controls. The time since injury ranged from 37 days to seven years, however one study [54a, 54b] did not specify this. Of the two papers contributing to the amalgamated study, one was rated as 'high' methodological quality, and the other was 'moderate'. The combined rating of the studies is 70% and as such will be discussed under 'moderate' quality. Of the remaining articles one was of 'high' quality and two were of 'moderate' quality.

Table 2 displays the methodological ratings for the social participation studies.



**Table 2. Description and methodological quality ratings of included studies: social participation outcomes**

| Study and quality rating           | Description of study  | Total participants | Brain Injured | Controls       | Age range (years) | Sex, Injury severity, time since injury   | Measures <sup>a</sup>                     | Findings   |
|------------------------------------|---|--------------------|---------------|----------------|-------------------|---|---|--|
| Anderson et al. [53]<br>84% High   | Social function at 6 months post TBI compared to matched controls.  | 136                | 93            | 43             | 5.3 – 15.4        | 86/50 MF <sup>b</sup><br><br>Mild TBI N = 60<br><br>Moderate/severe N = 33<br><br>Mean time post injury – 6.57 mths | CASP, ABAS-II (Parent)<br><br>FQQ (Child) | Significant group differences in social participation with moderate/severe TBI group - less age appropriate levels of participation than mild and control group.<br><br>Injury severity - associated with poorer social participation. |
| Rivara et al. [55]<br>72% Moderate | Prospective cohort design<br><br>Examined participation in social and community activities 3, 12, and 24 months after TBI in children and controls. | 645                | 511           | 134 arm injury | 5 – 17            | Mild TBI – N = 440<br><br>Moderate – N = 59<br><br>Severe – N = 12<br><br>Time post injury - 37 days                | CASP (Parent/ adolescent over 14)         | 3 months post injury - decrease in level of activities that moderate and severe TBI groups could participate in. Improved at 12 and 24 months but still significantly impaired.  |

| Study and quality rating  | Description of study   | Total participants | Brain Injured | Controls | Age range (years) | Sex, Injury severity, time since injury                                | Measures <sup>a</sup> | Findings   |
|---|--|--------------------|---------------|----------|-------------------|--|-----------------------|--|
| Law et al.[54a]<br>80% High                                     | Comparative design<br><br>Describes participation patterns of ABI children and controls.                       | 489                | 135           | 354      | 4-17              | 234/255 MF<br><br>Mild ABI – N = 100<br><br>Moderate to severe- N = 35 | CAPE (Child)          | ABI group participated in less social activities than peers but were involved in same intensity of social interaction.   |
| Anaby et al. [54b]<br>60% Moderate<br>(2 studies, 1 ABI sample) | Prospective cohort design<br><br>Examined participation levels of ABI children at 3 time points over one year. | 136                | 136           | 0        | 4.11-17.6         | 88/48 MF<br><br>Mild ABI – N = 101<br><br>Moderate to severe- N = 35   |                       | Change across time for participation intensity in social activities was explained by injury severity. Mild group scores improved over time, other group showed a slight decline.   |
| Galvin et al. [56]<br>60% Moderate                              | Cross sectional design<br><br>Explain participation of ABI children at home, school and in the community.      | 20 parents         | 20            | 0        | 5.3 – 15.3        | Time post injury – 4mths - 7yrs  | CFFS (Parent)         | Children were reported to have participation restrictions for structured events in the community, and social, play or leisure activities with peers at school or in the community. |

<sup>a</sup> Titles of outcome measures: The Children’s Assessment of Participation and Enjoyment (CAPE), Child and Adolescent Scale of Participation (CASP), Adaptive Behaviour Assessment System – II (ABAS-II), The Friendship Quality Questionnaire – Revised (FQQ), The Child and Family Follow-up Survey (CFFS) (The CFFS includes the Child and Adolescent Scale of Environment (CASE), the Child and Adolescent Factors Inventory (CAFI) and the CASP).

<sup>b</sup> Male/Female (MF)

## **High Quality**

Anderson et al. [53] looked at social function six months post TBI compared to controls matched for age, sex and socio-economic status. They used the Child and Adolescent Scale of Participation (CASP) [57] and the Adaptive Behaviour Assessment System – II (ABAS-II) [58] with parents and the FQQ [45] with children. Significant group differences for social participation were found. Less age appropriate participation for children with moderate/severe TBI in comparison to the mild and control group were noted. Poor social participation was associated with greater injury severity. A limitation of the study was that despite differences between parent and child ratings, the authors were unable to explain the reason for the discrepancy and the design had no means of suggesting any causes. Moreover the numbers of individuals who were eligible, approached, participated etc. were not provided. This study scored the highest in terms of methodological quality. The rationale, hypothesis, inclusion/exclusion criteria, matching criteria, demographics, injury severity and time since injury were documented.

## **Moderate Quality**

Rivara et al [35] in a prospective cohort study, explored disability in health related QoL, adaptive skills, and participation in social and community activities, three, 12, and 24 months after TBI in children and adolescents. This was compared to a control group. The CASP [57] was employed with parents or children over 14 years. A significant decrease in the level of activity participation by children with moderate and severe TBI was found three months post injury compared to pre-injury functioning. These activities improved at 12 and 24 months but were still significantly impaired.

Strengths of this study include a matched group and a few assessment time points. The number of individuals, eligible, approached and participated was recorded. The rationale, hypothesis, inclusion/exclusion criteria, participant characteristics and injury severity were adequately described.

Law et al. [54a] and Anaby et al. [54b] used the Children's Assessment of Participation and Enjoyment (CAPE) [59] with ABI children. Law et al [54a] examined participation patterns relative to peers and Anaby et al [54b] looked at participation levels at three time points, return to school and 8 and 12 months thereafter. Results showed that ABI children participated in significantly less activities than controls but were involved in the same intensity of social interaction [54a]. Injury severity explained rates of change across time for participation intensity in social activities. Scores for children in the mild group improved over time whereas scores for the moderate to severe group showed a slight decline [54b]. Only 17% of the sample had a severe injury and thus generalisability may be compromised. In addition the time period since ABI was not specified. When comparing the ABI sample with peers, controls were matched on ethnicity and income but not age and gender; there were more adolescents and fewer boys [54a]. Injury severity, participant characteristics, inclusion/exclusion criteria, number of individuals at each stage, aims and rationale were adequately outlined [54a, 54b]. However no control group was used when considering the ABI sample longitudinally [54b]. A greater time span may have revealed different patterns of change in participation.

Lastly Galvin et al. [56] employed a cross sectional design to explain participation at home, school and in the community for children following ABI. Parents completed the Child and Family Follow-up Survey (CFFS) [60]. Children were reported to have participation restrictions for structured events, social, play or leisure activities with

peers either at school or in the community. In terms of generalisability, the sample size was small and individuals were recruited from the same out-patient clinic. The rationale, hypothesis, and inclusion/exclusion criteria were adequately described. However the participant characteristics and injury severity were not clearly reported. The numbers of individuals eligible and approached were not provided.

## **Discussion**

### ***Friendship outcomes: main results***

Overall a number of deleterious effects of ABI in children can be established. More emotional problems were highlighted by carers for brain injury groups relative to controls [39, 40]. Hyperactivity issues were also noted [40]. According to parents, children with an ABI had more difficulties developing relationships and more problems within their peer groups [39, 41]. In contrast children with ABI reported no friendship difficulties, describing a network of friends comparable to their peers [40, 41]. There is an important link between friendship difficulties and injury severity with severe injury associated with greater peer problems [41 - 43]. There is a clear suggestion that children with ABI experience emotional problems. Emotional distress may result from disrupted relationships due to impaired social skills as noted by Rosema et al [34]. Alternatively it may impact on peer relationships leading to difficulties forming close friendships later in development when the social environment becomes increasingly complex and requires 'executive' and advanced social communication abilities.

### ***Friendship outcomes: future research***

Regarding future research, children could be observed in a greater number of settings and the use of multi informants is encouraged [40]. The detailed assessment of children's interaction with their peers may help to clarify the types of behaviour that lead to rejection and to establish the exact point of difficulty [41, 42]. Research could be extended to examine problems in social information processing and its effects on interactions for children after ABI [42].

Identifying and recording intervention strategies that improve friendships after ABI would be helpful [39]. There is a need to address how early interventions to improve cognition following TBI may affect adult relationships [40]. This longitudinal aspect would allow for the adolescent/adult experience of children with TBI to be documented. The nature of relationship difficulties that emerge at each developmental stage could be recorded. Regarding the design, a larger sample size could be used [39] and any differences between the friendships of traumatic and non traumatic ABI children could be considered.

### ***Social participation outcomes: main results***

There was a significant decrease in social participation for children following ABI [53 54a, 55, 56]. This point reflects the earlier findings of Kozloff [30] and Fletcher et al [12] who reported a decrease in recreational interactions and social participation following brain injury; however Kozloff's sample ranged from 12 to 60 years. Although children with ABI had reduced social participation, they were found to have the same intensity of involvement [54a]. Furthermore, greater injury severity was associated

with less social participation [53, 54b, 55]. Some improvement was reported at 12 and 24 months [55], but the moderate and severe ABI groups still had significantly reduced participation levels [53, 54b, 55]. This link between injury severity and participation reflects Jaffe et al's [33] earlier findings of a significant negative association between injury severity and overall rate of recovery. However different patterns of involvement may emerge at a later stage of recovery [54b]. Beyond this more distinct aspects of reduced social participation were noted; restrictions on more structured events within the community and leisure activities with peers were found [56], however this was based on a small sample size. Overall there is a suggestion that ABI is associated with a reduction in social participation.

In summarising the findings overall, it is appropriate to return to the original question of whether ABI has an impact on children's friendships and social participation. The evidence shows that there are a variety of factors to be considered however ABI leads to a decrease in social participation and leads to vulnerabilities which may impact on the development of friendships. In both cases greater injury severity is likely to increase the level of impairment found.

### ***Social participation outcomes: future research***

A number of proposals for future research emerge. Considering family functioning is suggested [53, 54b, 56], with a focus on the relationship between family dysfunction and behavioural and social problems, and social participation for ABI children [53, 54a]. Caregivers could be asked about sibling's social experience and how it may influence their expectations relative to their ABI child's participation [56]. A longitudinal study is recommended to record the trajectory of recovery and social

involvement after ABI [53, 54b]. Such a study would benefit from a large sample size [54b]. The observation of social participation in different settings is recommended [54a], taking account of varying perspectives such as peers and teachers [56].

### **Strengths, limitations and future directions**

This paper systematically reviews the literature on friendship and social participation after ABI and draws attention to progressive areas of research. The suggestion that a wider group of observers and assessors could provide a more comprehensive understanding of the topic is important. The need for a large longitudinal study becomes clear. This could widen the knowledge base relative to relationships that adolescents and adults, who have experienced a childhood ABI, develop over time. The review draws together some relevant findings. The research on injury severity is important in understanding post ABI relationships. The need for the study of effective psychosocial and cognitive interventions for children after ABI emerges.

The studies include participants with ABI due to traumatic and non traumatic causes. This may be seen as a limitation impacting on generalisability, as the potential differences between the sequelae for each group is unknown. A limitation of the review is that there was a relatively large age range of participants (5 to 17 years) and friendships and activities may vary across this developmental spectrum. The time post injury also varied and conducting research involving children out-with the post-acute time frame (six months) is suggested. Regarding future research, longitudinal studies with large samples looking at the trajectory of peer relationships



and social participation in children with ABI is suggested. Such studies could ascertain the impact of emotional difficulties on future peer relationships. In some studies children reported no difficulties whereas parents recorded notable reservations, thus a multi informant perspective is recommended. It is worth considering possible differential effects of a traumatic and non traumatic ABI.

### **Practical applications**

The review highlights difficulties in friendship and social participation post ABI in children. This can inform or encourage future research in this area and around possible psychosocial and cognitive interventions after ABI.

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## CHAPTER 2: MAJOR RESEARCH PROJECT

A study of Reactive Attachment Disorder (RAD) symptoms in the youth justice population.

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Prepared in accordance with the guidelines for Child Abuse and Neglect (Appendix 2.2)

## Lay Summary

Reactive Attachment Disorder (RAD) may be diagnosed when people find it difficult to socialise with others in a way that is not overly friendly or distant. It is thought to arise from continual neglect, maltreatment or many changes in caregivers. Maltreatment, educational and social relationship difficulties and mental health problems have been found to be common among young offenders (Chitsabesan et al 2006). As such this study explored the prevalence of RAD in the youth justice population and associated factors such as mental health, educational attainment, number of placement moves and the number and type of offences. Twenty-nine adolescents (aged 12-17) known to youth justice services, and their carers and teachers took part. All participants completed questionnaires about RAD and mental health. The carers also completed an interview about RAD symptoms. Information about maltreatment and clinician observations of the adolescent's behavior was recorded. Results showed that 86% of the adolescents were maltreated and 52% displayed RAD symptoms, all of whom had a maltreatment history. There was a strong association between RAD symptoms and other mental health symptoms. No association was found between RAD symptoms and educational attainment, placement moves and offending. Results, limitations and suggestions for future research are considered.

## Abstract

Reactive Attachment Disorder (RAD) is a disorder where people have significant difficulties relating to others, it is associated with neglect and abuse. Two subtypes exist; an Inhibited and a Disinhibited form. This study aims to explore RAD symptoms in the youth justice population and factors that may be associated with it such as mental health symptoms, educational attainment, number of placement moves and number and type of offences. A cross-sectional design was used with 29 young people who were known to youth justice services, aged 12 to 17 ( $M = 16.2$ ,  $SD = 1.3$ ), 29 carers and 20 teachers. They completed measures investigating symptoms of RAD, psychopathology and educational attainment. Results found a 52% prevalence of RAD and borderline RAD. Eighty-six percent of young people had experienced some form of maltreatment. A positive correlation between RAD symptoms and symptoms of other mental health disorders (as rated by carer-report Strengths and Difficulties Questionnaire Total Difficulties Score), accounting for 36% of the variance was found, with a large effect size ( $r_s = .60$ ). RAD was associated with hyperactivity and peer relationship problems. Inhibited RAD was strongly correlated with Total Difficulties as rated by carers whereas Disinhibited RAD was strongly associated with Total Difficulties as rated by teachers. No association was found between RAD and educational attainment, placement moves and offending (violent or nonviolent). The strengths and limitations of the study are discussed alongside suggestions for future research.

**Keywords:** Reactive Attachment Disorder, young offenders, youth justice, maltreated children

## **Introduction**

### *Reactive Attachment Disorder (RAD)*

RAD is a relatively new diagnosis (Potter et al., 2009) characterised by 'markedly disturbed and developmentally inappropriate social relatedness in most contexts; beginning before age five' (Diagnostic and statistical manual of mental disorders fourth edition revised; DSM-IV-TR, APA, 2000). The behaviours are thought to arise from persistent caregiver neglect, physical or emotional abuse or a lack of continuity in caregivers that prevents the formation of stable attachments, for example frequent changes in foster care.

In the DSM-IV-TR two subsets of RAD are identified; an inhibited (IRAD) and a disinhibited (DRAD) type. The inhibited child does not initiate suitable social interactions and if approached responds inappropriately. They may avoid the caregiver, resist comfort and watch them in a non-communicative detached way (DSM IV, APA, 2000). The International Classification of Diseases, 10<sup>th</sup> edition (ICD-10; WHO, 1992) highlights that children's inappropriate social interaction is seen when the caregiver returns to or leaves the child. Misery, huddling, clinginess, an inappropriate lack of response, or aggression can be seen. In the disinhibited type the child exhibits an active involvement in close social interactions with numerous people, failing to discriminate between suitable attachment figures. Although two distinct subtypes are outlined, research shows that they can occur together (Smyke, Dumitrescu, & Zeanah, 2002). Recently the DSM 5 (APA, 2013) divided the two types into distinct disorders; the inhibited form continues to be known as RAD whereas the disinhibited form was redefined as Disinhibited Social Engagement Disorder. The criteria within these remain the same and for ease of reference within

this study, both types are referred to as RAD. In any of the classification systems, the diagnosis can only be made if there has been a history of maltreatment (abuse or neglect).

### *Roots of Attachment*

The origins of attachment theory stemmed from Bowlby's (1944) work with young offenders. Fourteen out of 44 teenage 'thieves' were identified as showing a lack of affection and little guilt towards their victims. More than 80% of these "affectionless" children ( $n = 12$ ), had experienced maternal separation of over six months in their first two years. Of the 44 non offending controls only two (five percent) had experienced maternal separation. Bowlby concluded that maternal separation could have an adverse effect on development in terms of emotions, behaviour, social relationships and intellect.

Follan and Minnis (2010) re-interpreted Bowlby's findings by suggesting that the affectionless group could be classified as displaying RAD; they struggled to establish relationships and showed behaviours that were socially inappropriate. They noticed that many of the "affectionless" children were neglected during separation and suggested that these problems may have arisen from neglect by the parent rather than the stress of the separation. However both nature and nurture may impact on the development of such problems (Minnis et al, 2007) and they may arise from poor or non-existent parent-infant attunement, which is a broader concept than attachment (Minnis, Marwick, Arthur and McLaughlin, 2006b).

### *RAD Prevalence and symptoms*

Skovgaard (2010) estimated the rates of RAD in 211 Danish one and a half year olds to be 0.9%. Minnis et al (2013) found the prevalence of RAD in 1646 six to eight year old children in a deprived area of the UK to be 1.4%.

Many studies of RAD have been conducted with ex-institutionalised children. Tizard and Rees (1975) investigated institutionalised rearing, behavioural problems and disrupted relationships for 26 children aged four to 16 compared with an adopted and a non institutionalised group. They found that the institutionalised children had slightly higher levels of behaviour problems, clinginess and struggled to form an attachment relationship. In a study of 165 Romanian and 52 UK adoptees (age six), symptoms of severe attachment disorder were noted for six percent of those that had experienced less than six months parental deprivation and 31% of those that had experienced over two years parental deprivation (O'Connor and Rutter, 2000). Working with the same sample it was found that a number of children also displayed attention deficits (Rutter, Kreppner and O'Connor, 2001). Failure to discriminate appropriately between adults, showing a lack of wariness with strangers and a lack of physical boundaries was found amongst institutionalised Romanian children (Zeanah, Smyke & Dumitrescu, 2002).

Two studies explored RAD in children in care (Millward, Kennedy, Towlson and Minnis, 2006; Minnis, Everett, Polosi Dunn and Knapp, 2006a). Higher scores on measures of RAD were found compared to children not in care. Millward et al (2006) found a high correlation ( $r = 0.84$ ) between RAD and other mental health symptoms. Minnis et al (2006a) also found higher symptom scores for RAD in children in care compared to the school population.

The following section will explore the connection between deprivation or neglect and social relationships, as suggested by Follan and Minnis (2010).

### *Maltreatment and peer interactions*

The effects of early adversity and maltreatment can be seen to have an impact on peer interactions. Fantuzzo, delGaudio Weiss, Atkins, Meyers, and Noone (1998) found that maltreated children were involved in less positive interactions in play than non-maltreated children. They also showed less social competence than peers in their ability to respond positively to others, show empathy in response to peer distress and avoid conflict. Such difficulties in social skills may impact on their ability to form relationships and thus to develop prosocial peer groups.

### *Maltreatment and offending*

A number of studies have identified a strong association between maltreatment and later criminal behaviour (Widom and Maxfield, 2001; Smith, Thornberry and Ireland, 2004; Trentacosta and Shaw, 2008). Ryan, Williams and Courtney (2013) confirmed this association and reported the level of maltreatment to be 30% amongst a sample of young offenders. Further studies expanded this association relative to the specific type of offence (Topitzes, Mersky and Reynolds, 2012; Lansford et al., 2007). In the first case an association between maltreatment and adolescent violent offences was noted and in the second a link between maltreatment and both violent and nonviolent offences in adolescence was found. This research leads on to an emerging profile of young offenders. A survey of 300 offenders, aged 13 to 18, found that a third had

experienced foster care, 36% had educational needs, 48% had difficulties with social relationships and 31% had mental health problems (Chitsabesan et al, 2006).

Given the link between maltreatment and young offending and the fact that a history of maltreatment is a prerequisite for a RAD diagnosis, it may be suggested that this group might have a higher prevalence of RAD. However there is no previous research exploring RAD within the youth justice population. This study will, for the first time, examine RAD prevalence within the youth justice population and examine factors that may be associated with higher levels of RAD symptoms within this group.



## **Hypotheses and Research Questions**

The hypothesis is that there will be a high prevalence of RAD in the youth justice sample and that RAD symptoms will be associated with specific risk factors e.g. other mental health symptoms. The Research Questions are:

1. What is the prevalence of RAD diagnoses among the youth justice population?
2. Is there a correlation between RAD symptoms and symptoms of other mental health problems, and what is the profile of mental health problems in the youth justice population?
3. What is the correlation between educational attainment and RAD symptoms?
4. What is the correlation between the number of placement moves and RAD symptoms?
5. What is the correlation between RAD symptoms and the number and type of offences?

## **Methods**

### *Design*

A cross-sectional study was undertaken to examine the prevalence of RAD in the youth justice population. A correlational design was used to address hypotheses including the association between RAD and other mental health symptoms which will form the basis of the main analysis.

### *Power calculation*

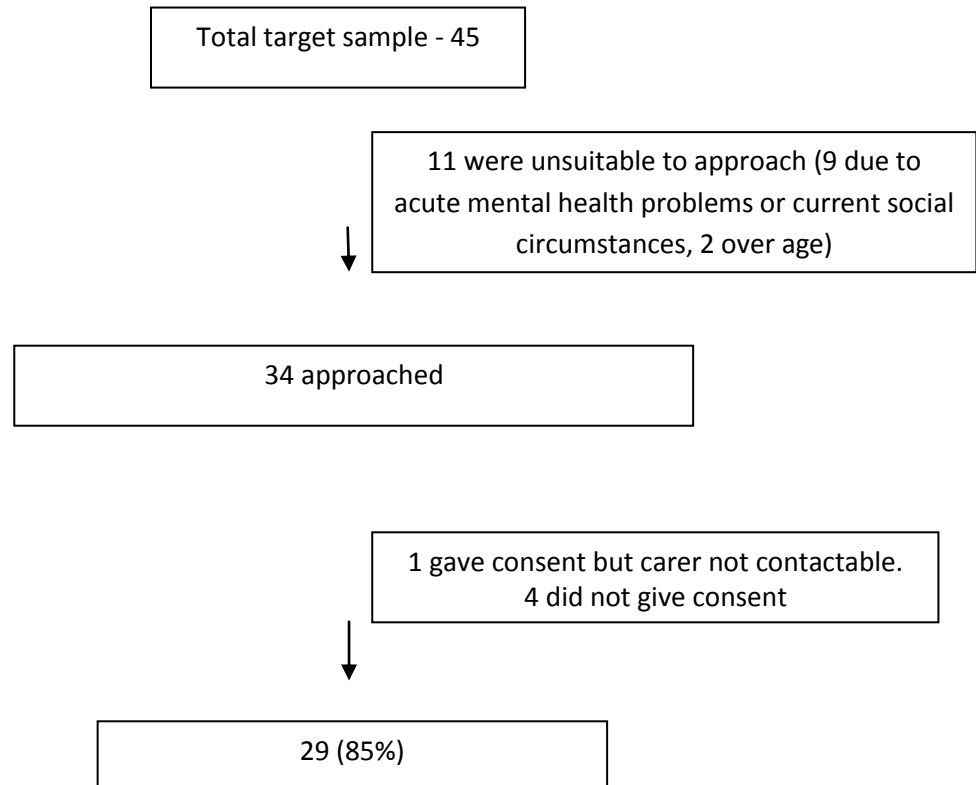
The estimation of prevalence of RAD in this population is exploratory. A power calculation was made based on the hypothesis that there will be a relationship between RAD symptoms and mental health symptoms. A previous study (Millward et al., 2006) found a correlation of ( $r = 0.84$ ) between RAD and the Strengths and Difficulties Questionnaire (SDQ) scores. Using G\*Power (Faul, Erdfelder, Lang and Buchner, 2007) and inputting a more conservative estimate of a high effect size of ( $r = 0.5$ ), setting power at 0.8 and alpha at 0.05, calculated that a sample size of 29 was adequate.

### *Participants*

The study aimed to include all young people aged 12-17 and their caregivers who were receiving Intensive Youth Justice Services from Glasgow City Council until the target sample size was reached. In Glasgow, these services, including the Intensive Support and Monitoring Service (ISMS) and the Young Women's Centre (YWC),

provide community based support for young people aged between 12 and 18. These adolescents present with a range of risks including causing harm to themselves and others. All but two of the participants had a definite history of offending. In this study a carer was defined as the person with main primary care giving responsibility for the individual or someone who knows them well e.g. a relative, key worker, foster carer. Inclusion criteria consisted of contact with the aforementioned services, age 12 to 17 and fluent in English. Exclusion criteria were impaired capacity to consent as judged by the referring clinician.

Overall 11 individuals were deemed unsuitable to approach (see figure 2 for reasons). Of those approached, one gave consent but their carer was not contactable, four did not want to take part and 29 participated, 85% of those approached (see figure 2).



**Figure 2. Flow chart of participant recruitment**

*Measures (Appendix 2.3)*

- ◆ *Strengths and difficulties questionnaire (SDQ; Goodman, Meltzer and Bailey, 1998).* The SDQ assesses child psychiatric symptoms across five subscales; prosocial behaviour, relationships with peers, hyperactivity, conduct and emotions. It can be completed in ten minutes and contains 25 items, for example, 'I worry a lot', rated as *not true*, *somewhat true* or *certainly true*. The SDQ has strong validity, test-retest reliability and internal consistency (Goodman, 2001). It has been well validated against other screening instruments (Goodman and Scott, 1999) and against psychiatric diagnosis (Goodman, Ford, Simmons, Gatward, and Meltzer, 2003). Self, parent/carer

and teacher-report versions were utilised. The Total Difficulties Score can range from 0 - 40 and is created by summing the scores from all the scales except the prosocial subscale. Based on SDQ ratings, individuals are categorised as *unlikely*, *possible* or *probable* in terms of each subscale and overall mental health problems.

- ◆ *The Child and Adolescent Psychiatric Assessment, Reactive Attachment Disorder (CAPA RAD; Minnis et al., 2009)* is a semi-structured interview for parents/carers, used to assess RAD symptoms. It was based upon the well validated Child and Adolescent Psychiatric Assessment (CAPA) semi-structured parent report interview for child psychopathology (Angold and Costello, 2000). For each item, one of a small range of recommended stem questions is asked and if definitely or possibly present, the carer is asked to give an example of the behaviour. Based on this, the item is rated *present* or *not present*. As this is the first study to use the CAPA-RAD in an adolescent population, slight modifications were made. In collaboration with the author of the CAPA-RAD and after consideration of new and as yet unpublished data on the manifestations of inhibited symptoms in older children and adolescents, two new items were added to address IRAD. Therefore it consisted of 31 items.
  
- ◆ *Relationship Problems Questionnaire (RPQ ; Minnis et al. 2007)*. This explores RAD symptoms, looking at the behaviour of both subtypes. It is a well validated ten item questionnaire, with four graded responses from *exactly like*

*my child* through to *not at all like my child* with two moderate measures in between. The scale has an 0.85 internal consistency (Minnis et al., 2007) and scores range from 0 – 30. The measure takes five minutes to complete. A parent/carer and teacher version was used.

◆ *Attainment questionnaire*

This was developed for the study, based on the current Curriculum for Excellence stages which broadly indicate the expected educational level for each child's age. In Scotland the Curriculum for Excellence sets out a progressive framework of skills development in all areas for children aged three to 18. The attainment questionnaire established the child's working level compared to the age appropriate level of attainment, according to the child's teacher. It also clarified any current additional support for learning.

◆ *Observational Schedule for Reactive Attachment Disorder (Youth Version)*

The Observational Checklist for Reactive Attachment Disorder (McLaughlin, Espie and Minnis, 2010), normally used when observing children within the clinical waiting room, was modified for use with this age group. In consultation with one of the authors, and after consideration of new and as yet unpublished data on the manifestations of RAD symptoms in older children and adolescents, ten items were deleted and six were added to better describe symptoms in this age-range. This was used alongside the other measures when making a diagnosis of RAD.

In childhood, the carer and teacher's report is usually considered sufficient to inform a psychiatric diagnosis. However because RAD in adolescence is poorly researched, it was considered useful to incorporate observations from this schedule. As such this was an exploratory part of the study.

◆ *History of Maltreatment Checklist (HOM; Kocovska et al., 2012)*

This is a six item checklist examining areas of maltreatment such as neglect and abuse. It also addresses the number of substitute care placements the child has had and asks about any existing diagnoses. Generally there are four response/scoring options; *yes, no, probable, and unknown*. This checklist is used to gain information in a systematic fashion from case notes and/or from the child's key worker.

◆ *Structured Assessment of Violence Risk in Youth (SAVRY; Borum, Bartel and Forth, 2002)*, (not in appendix, see reference for details)

The SAVRY is used to assess risk of violence and aggression in young people (aged 12 - 18). It considers historical, social/contextual and individual/clinical risk factors and is comprised of 24 risk items which are rated as *low, moderate* or *high*. It also includes six protective factors that are rated *present* or *absent*. For the purpose of this study information from two risk items were used; history of violence and history of nonviolent offending. For History of Violence individuals were classed as "Low" if they had committed no acts of violence, "Moderate" if they committed one or two acts of violence and "High" if they

committed three or more acts of violence. For nonviolent offending young people were rated as “Low” if they had not previously engaged in nonviolent offending, “Moderate” if they occasionally engaged in prior acts of nonviolent offending, and “High” if they engaged in acts of nonviolent offending on five or more occasions.

### *Procedures*

The project received ethical approval from the NHS West of Scotland Research Ethics Committee, NHS Research and Development and Glasgow City Council Social Work Services Performance and Research Team (Appendix 2.4).

Agreement was sought by the multi-agency care team regarding whether the young person could be approached. This included a Clinical Psychologist with input to Intensive Youth Justice Services. Then, where appropriate, the Clinical Psychologist (or ISMS/YWC worker) provided the young person and their carer, if present, with a study information sheet and a consent form (Appendix 2.5). There was a participant version and a carer’s version. The young person was also asked if they wanted to meet the researcher to find out more about the study. It was made clear that consenting to partake in the study was the young person’s decision and would in no way affect their care plan.

Full consent was established when signed forms were received. Details regarding who completed each questionnaire can be seen in Appendix 2.6. In terms of the young person’s SDQ, seven already had an up-to-date version (less than six months old), 12 needed to be updated and a further ten had never completed one and



needed to do so. For one individual it was not possible to get an up-to-date version and as such their old version was used. The Observational Schedule for RAD and the HOM checklist were completed for all 29 participants.

The researcher made contact with the nominated carer and provided information if not already given. Again full consent for their participation was established when signed consent forms were returned. The researcher met with each carer and completed the CAPA-RAD interview, the carer SDQ and RPQ. This took approximately one hour. All 29 carers were key workers and/or residential care staff.

Twenty teachers were identified. The remaining nine young people had not had contact with education for at least a year. The researcher either met with the teacher or sent out an information sheet and consent form (Appendix 2.5) along with the teacher's SDQ, RPQ and Attainment Questionnaire for completion. These measures took approximately ten minutes to complete.

Two clinicians (H.M and K.M a Child and Adolescent Psychiatrist and Trainee Clinical Psychologist) reviewed the data from the RPQ, CAPA-RAD, the Observational Schedule for RAD, and the HOM Checklist to provide a diagnosis of RAD, borderline RAD or no RAD based on DSM-V criteria. The impact of any other existing diagnoses on RAD was taken into account when making a diagnosis of RAD.

All data was managed and analysed using the Statistical Package for Social Sciences (SPSS) Version 19. Imputed means were calculated and entered for missing items on the teacher's measures (TRPQ and TSDQ), where missing data amounted to no more than 20% (Youth*in*Mind website, n.d). This involved calculating a mean based on responses provided. Seven individuals had scores imputed on the TSDQ and six were imputed on the TRPQ.

Cohen's (1988) guidelines were used to interpret effect sizes: small ranged between .10 and .29, medium between .30 and .49 and large between .50 and 1.0. Categorical data is presented as numbers and percentages. Depending on the distribution of the data, continuous variables are presented using means and standard deviations or medians and interquartile ranges. Correlations are provided using either Pearson's product-moment correlation or Spearman's rank order correlation depending on the data. Comparisons of associations between categorical variables are performed using Chi square or Fisher's Exact test. All analyses are two sided using a significance level of five percent.

Due to the correlational design of this study, consideration was given to adjusting for multiple comparisons, specifically the use of the Bonferroni correction as a means of mitigating a type I error. However using such a method would increase the likelihood of a type II error. As this study is exploratory in nature, it was deemed that this trade off would not be helpful as it may limit the generation of new ideas in a novel area of research. A description of the test and effect size was therefore seen to be the most appropriate means of presentation. Although the significance level is also reported, this should be interpreted with caution in light of the reasons outlined above.

## **Results**

Preliminary analysis indicated that the data was normally distributed for the carer and teacher SDQ; however it was positively skewed for the carer and teacher RPQ, and placement moves and therefore violated the assumptions required for parametric tests. As such, in all analysis non-parametric tests were selected.

### **Demographics**

Twenty-nine individuals involved with intensive youth justice services (ISMS and the YWC), 29 of their carers and 20 teachers participated. The young people were aged between 12 years 10 months and 17 years 11 months ( $M = 16.2$ ,  $SD = 1.3$ ), ten female and 19 male. Table three details participant characteristics recorded by the HOM Checklist such as maltreatment background and number of placement moves.

**Table 3. History of maltreatment category number and percentage and number of placement moves.**

|                                    | <b>Yes</b>                                      | <b>No</b> | <b>Probable</b> | <b>Unknown</b> |
|------------------------------------|---|-----------|-----------------|----------------|
| <b>Emotional neglect</b>           | 19 (65%)  | 4 (14%)   | 6 (21%)         | 0              |
| <b>Physical neglect</b>            | 11 (38%)  | 11 (38%)  | 7 (24%)         | 0              |
| <b>Emotional abuse</b>             | 10 (34%)  | 15 (52%)  | 4 (14%)         | 0              |
| <b>Physical abuse</b>              | 12 (41%)  | 11 (38%)  | 6 (21%)         | 0              |
| <b>Sexual abuse</b>                | 7 (24%)   | 15 (52%)  | 5 (17%)         | 2 (7%)         |
| <b>Witnessed domestic violence</b> | 18 (62%)  | 9 (31%)   | 2 (7%)          | 0              |
| <b>No. of placement moves</b>      | Range – 0-12 (Mdn = 2, Interquartile range 1-5) |           |                 |                |

Overall 86% ( $n = 25$ ) of the sample experienced at least one form of maltreatment and a further ten percent ( $n = 3$ ) probably experienced a minimum of one type of maltreatment.

Beyond this, ratings from the SAVRY (Borum et al. 2002) for history of violence and history of nonviolent offending were obtained for 18 males. This data was not accessible for the ten females and one male. For History of Violence six percent of the sample ( $n = 1$ ) was rated as “Low”, 22% ( $n = 4$ ) were rated as “Moderate” and 72% ( $n = 13$ ) were classed as “High”. For nonviolent offending 11% ( $n = 2$ ) were rated as “Low”, 44.4% ( $n = 8$ ) were classed as “Moderate” and 44.4% ( $n = 8$ ) were rated as “High”.

### **Hypothesis 1: There will be a high prevalence of RAD diagnoses in the youth justice population**

Fifty-two percent of the sample received a RAD or Borderline RAD diagnosis. Ten percent had Inhibited RAD, 21% Disinhibited RAD, ten percent a mixed presentation and ten percent borderline RAD. Forty-eight percent received no diagnosis (see table 4). This finding supports the hypothesis that a high prevalence of RAD will be diagnosed in the youth justice population.

**Table 4. Number and percentage of participants with and without RAD**

|                             | <b>Number of individuals</b> | <b>Percentage</b> |
|-----------------------------|------------------------------|-------------------|
| <b>Total RAD/Borderline</b> | 15                           | 52%               |
| <b>IRAD</b>                 | 3                            | 10%               |
| <b>DRAD</b>                 | 6                            | 21%               |
| <b>Mixed RAD</b>            | 3                            | 10%               |
| <b>Borderline</b>           | 3                            | 10%               |
| <b>No RAD</b>               | 14                           | 48%               |

**Hypothesis 2: There will be a relationship between RAD symptom scores and symptom scores for other mental health problems**

This hypothesis formed the basis of the main analysis. The relationship between Total RAD symptoms (as measured by the Carer RPQ; C-RPQ) and other mental health symptoms (as measured by the Carer SDQ; C-SDQ) were investigated using a Spearman's rank order correlation (see table 5).

**Table 5. Correlations for the C-SDQ and C-RPQ**

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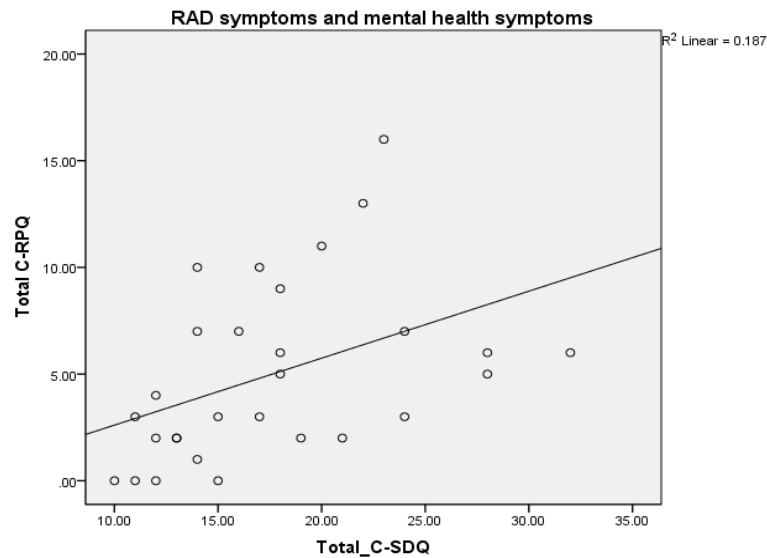
|                 |                     |                          |
|-----------------|---------------------|--------------------------|
| Total C-SDQ and | Total CRPQ          | $r_s = .60, p = .001$    |
|                 | IRAD                | $r_s = .61, p < .001$    |
|                 | DRAD                | $r_s = .30, p = .118$    |
| Total C-RPQ and | Hyperactivity       | $r_s = .50, p = .005$    |
|                 | Peer problems       | $r_s = .47, p = .010$    |
|                 | Emotional symptoms  | $r_s = .37, p = .051$    |
|                 | Conduct problems    | $r_s = .19, p = .326$    |
|                 | Prosocial behaviour | $r_s = -.25, p = .195$   |
| IRAD and        | Hyperactivity       | $r_s = .50, p = .006$    |
|                 | Prosocial behaviour | $r_s = -.59, p = .001^*$ |
|                 | Conduct problems    | $r_s = .44, p = .018$    |
|                 | Emotional symptoms  | $r_s = .32, p = .088$    |
|                 | Peer problems       | $r_s = .34, p = .074$    |
| DRAD and        | Hyperactivity       | $r_s = .30, p = .114$    |
|                 | Prosocial behaviour | $r_s = -.03, p = .865$   |
|                 | Conduct problems    | $r_s = -.06, p = .765$   |
|                 | Emotional symptoms  | $r_s = .16, p = .416$    |
|                 | Peer problems       | $r_s = .35, p = .064$    |

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\* based on  $N = 28$

*Total RAD, IRAD, DRAD and C- SDQ total*

There was a strong positive correlation found between the variables, ( $r_s = .60$ ,  $p = .001$ ) with higher levels of Total RAD Scores associated with higher scores for other mental health problems (SDQ Total Difficulties Scores) (see figure 3). This explains 36% ( $R^2 = .36$ ) of the variance.



**Figure 3. Total RAD Scores and C-SDQ Total Difficulties Scores**

Further analysis showed a strong positive correlation between Inhibited RAD and symptoms of other mental health problems (SDQ Total Difficulties Scores), ( $r_s = .61$ ,  $p = .001$ ), accounting for 37% of the variance ( $R^2 = .37$ ). A medium (non significant) correlation was noted between DRAD symptoms and symptoms of other mental health problems (SDQ Total Difficulties Scores), ( $r_s = .30$ ,  $p = .118$ ).

### *Total RAD and C-SDQ subscales*

Analysis then focused on correlations between Total RAD Scores and the individual mental health subscales of the C-SDQ. There was a strong positive correlation found between Total RAD Scores and hyperactivity, ( $r_s = .50, p = .005$ ). This explained 25% ( $R^2 = .25$ ) of the variance. There was a medium correlation found between Total RAD Scores and peer relationship problems ( $r_s = .47, p = .010$ ), accounting for 22% ( $R^2 = .22$ ) of the variance.

A medium (non significant) correlation was noted between Total RAD Scores and emotional symptoms ( $r_s = .37, p = .051$ ). A small (non significant) correlation was noted between Total RAD scores and conduct problems ( $r_s = .19, p = .326$ ) and Total RAD scores and prosocial behaviour ( $r_s = -.25, p = .195$ )

### *IRAD, DRAD and C-SDQ subscales*

Considering IRAD and DRAD independently there was a strong correlation found between IRAD and hyperactivity ( $r_s = .50, p = .006$ ) accounting for 25% ( $R^2 = .25$ ) of the variance. A strong negative correlation was noted between IRAD and prosocial behaviour ( $r_s = -.59, p = .001$ ), explaining 35% ( $R^2 = .348$ ) of the variance. This was based on a sample size of 28 as data on one participant was missing. A medium correlation between IRAD and conduct problems was found ( $r_s = .44, p = .018$ ) accounting for 19% ( $R^2 = .19$ ) of the variance.

A medium (non significant) correlation was noted between IRAD and emotional symptoms ( $r_s = .32, p = .088$ ) and IRAD and peer relationship problems ( $r_s = .34, p = .074$ ). A medium (non significant) correlation was also noted between DRAD and



hyperactivity ( $r_s = .30, p = .114$ ) and DRAD and peer problems ( $r_s = .35, p = .064$ ). No correlation was noted between DRAD and emotional problems ( $r_s = .16, p = .416$ ), conduct ( $r_s = -.06, p = .765$ ), and prosocial behaviour ( $r_s = -.03, p = .865$ ).

*Teacher's measures (TRPQ and TSDQ)*

A sensitivity analysis (where findings were compared before and after imputation) was conducted for correlations between Total RAD Scores and symptoms of other mental health problems based on these measures. Generally findings were similar before and after imputation and can be seen in Appendix 2.7. Results of the reported correlations on teacher measures are displayed in table six and were based on a sample size of 19.

**Table 6. Reported correlations for teacher measures TSDQ and TRPQ**

|                       |                  |                      |
|-----------------------|------------------|----------------------|
| <b>Total TSDQ and</b> | Total TRPQ       | $r_s = .45, p = .51$ |
|                       | DRAD             | $r_s = .51, p = .03$ |
| <b>Total TRPQ and</b> | Hyperactivity    | $r_s = .46, p = .05$ |
|                       | Conduct problems | $r_s = .54, p = .02$ |
| <b>DRAD and</b>       | Hyperactivity    | $r_s = .47, p = .04$ |
|                       | Conduct problems | $r_s = .51, p = .03$ |

A medium (non significant) correlation was noted between Total RAD Scores (TRPQ) and Total Difficulties Scores on the TSDQ ( $r_s = .45, p = .51$ ). A strong correlation was noted between DRAD and Total Difficulties Scores ( $r_s = .51, p = .03$ ). A strong

correlation was also found between Total RAD Scores and conduct ( $r_s = .54, p = .02$ ) and a medium correlation between Total RAD Scores and hyperactivity ( $r_s = .46, p = .05$ ). Lastly a strong correlation was noted between DRAD and conduct problems ( $r_s = .51, p = .03$ ) and a medium one between DRAD and hyperactivity ( $r_s = .47, p = .04$ ).

The only correlation that was significant as reported by both carer and teacher measures was that of Total RAD Scores and hyperactivity.

#### *Profile of other mental health difficulties and RAD*

Results for other mental health problems based on the C-SDQ were also described in terms of individuals with and without RAD. The 'with RAD' group includes those who have been classed as Borderline (table 7). As the assumptions for a Chi square were not met (three cells had an expected count of less than five) and a Fisher's Exact test was not possible, descriptive statistics were seen to be the most appropriate means of presenting the data.

**Table 7. Mental health problems based on the C-SDQ described in terms of individuals with and without RAD**

|                      | With RAD/Borderline |          |          | Without RAD |          |          |
|----------------------|---------------------|----------|----------|-------------|----------|----------|
|                      | Unlikely            | Possible | Probable | Unlikely    | Possible | Probable |
| <b>Total</b>         | 2 (13%)             | 3 (20%)  | 10 (67%) | 6 (43%)     | 2 (14%)  | 6 (43%)  |
| <b>Emotional</b>     | 6 (40%)             | 4 (27%)  | 5 (33%)  | 9 (64%)     | 1 (7%)   | 4 (29%)  |
| <b>Conduct</b>       | 0                   | 4 (27%)  | 11 (73%) | 4 (29%)     | 0        | 10 (71%) |
| <b>Hyperactivity</b> | 5 (33%)             | 3 (20%)  | 7 (47%)  | 11 (79%)    | 1 (7%)   | 2 (14%)  |
| <b>Peer problems</b> | 2 (13%)             | 3 (20%)  | 10 (67%) | 4 (29%)     | 2 (14%)  | 8 (57%)  |
| <b>Prosocial</b>     | 7 (50%)             | 3 (21%)  | 4 (29%)  | 6 (43%)     | 6 (43%)  | 2 (14%)  |

There is a higher percentage of those with RAD that have possible and probable other mental health difficulties, emotional difficulties (60% vs. 36%), conduct problems (100% vs. 71%), hyperactivity (67% vs. 21%), and peer problems (87% vs. 71%).

*Profile of other mental health difficulties*

Proportions of those with other mental health problems based on the C-SDQ were calculated. Fifty-five percent ( $n = 16$ ) of the sample were reported to have another mental health problem and 17% ( $n = 5$ ) were rated as having possible mental health problems. Twenty-eight per cent ( $n = 8$ ) were unlikely to have another mental health problem. Further details on the number and percentages of participants relative to each difficulty are displayed in table eight.

**Table 8. Number and percentage of individuals with unlikely, possible and probable mental health difficulties**

|                      | <b>Unlikely</b> | <b>Possible</b> | <b>Probable</b> | <b>Missing</b> |
|----------------------|-----------------|-----------------|-----------------|----------------|
| <b>Total</b>         | 8 (28%)         | 5 (17%)         | 16 (55%)        |                |
| <b>Emotional</b>     | 15 (52%)        | 5 (17%)         | 9 (31%)         |                |
| <b>Conduct</b>       | 4 (14%)         | 4 (14%)         | 21 (72%)        |                |
| <b>Hyperactivity</b> | 9 (31%)         | 5 (17%)         | 15 (52%)        |                |
| <b>Peer problems</b> | 6 (21%)         | 5 (17%)         | 18 (62%)        |                |
| <b>Prosocial</b>     | 13 (45%)        | 9 (31%)         | 6 (21%)         | 1 (3%)         |

The main findings showed that 31% ( $n = 9$ ) had emotional problems, 17% ( $n = 5$ ) had possible emotional difficulties and 52% ( $n = 15$ ) had no emotional difficulties.

Seventy-two percent ( $n = 21$ ) had conduct problems and 14% ( $n = 4$ ) had possible conduct problems. Fifty-two percent ( $n = 15$ ) had hyperactivity problems and 17% ( $n = 5$ ) had possible hyperactivity problems. Sixty-two percent ( $n = 18$ ) had peer problems and 17% ( $n = 5$ ) had possible peer problems. Lastly 21% ( $n = 6$ ) had probable difficulties with prosocial behaviour and 31% ( $n = 9$ ) had possible difficulties in this area.

Results from the three versions of the SDQ (Self, Carer, Teacher) can be seen in Appendix 2.8. On overall Total Difficulties Scores, young people under-reported difficulties compared to carers and teachers, and carers and teachers were comparable. Young people under-reported in comparison to carers and teachers on conduct, peer problems and prosocial behaviour. Young people were comparable to carers on their reporting of hyperactivity and teachers reported less. Young people were comparable to teachers on their reporting of emotional difficulties and carers reported more problems in this area.

### **Hypothesis 3: there will be an association between educational attainment in those with and without RAD**

Of the 29 participants, 14 (48%) were not currently involved in education/training. Eighteen teachers/trainers completed the attainment questionnaire. Of this 18, 12 were in school, three were on training courses and three were no longer in education, therefore three teachers completed questionnaires retrospectively about young people who had left school. Individuals were rated by teachers, on a measure designed for this study related to the Curriculum for Excellence levels, as having

appropriate, or below age appropriate levels of attainment. This was then considered in relation to whether or not they had RAD (see table 9).

**Table 9. Proportion of individuals with/without RAD and age appropriate levels of educational attainment**

| <b>Attainment level</b> | <b>RAD</b> | <b>No RAD</b> |
|-------------------------|------------|---------------|
| Appropriate             | 6 (60%)    | 4 (40%)       |
| Below                   | 1 (12.5)   | 7 (87.5)      |

As the data is categorical, the sample size is small ( $N = 18$ ) and the assumptions for a Chi square were not met (three cells had an expected count of less than five), a Fisher's Exact test was employed. The result indicated a non significant association between educational attainment and RAD ( $p = .66$ ). However it is worth noting that 44% ( $n = 8$ ) of the sample was classed as working below their age appropriate level.

**Hypothesis 4: There will be a correlation between the number of placement moves and RAD symptoms**

The number of placement moves ranged from 0 - 12 (Mdn = 2, Interquartile range 1-5). A small (non significant) correlation ( $r_s = .22$ ,  $N = 29$ ,  $p = .24$ ) was noted between the number of placement moves and Total RAD Scores (as measured by the C-RPQ).

### **Hypothesis 5: There will be a correlation between RAD symptoms and number and type of offences**

No correlation was noted between history of violence (as measured by the SAVRY) and Total RAD Scores ( $r_s = -.04$ ,  $N = 18$ ,  $p = .887$ ) and between nonviolent offending (as measured by the SAVRY) and Total RAD Scores ( $r_s = -.18$ ,  $N = 18$ ,  $p = .475$ ).

### **Discussion**

The initial power calculation made, based on the hypothesis that there will be a relationship between RAD symptoms and mental health symptoms, suggested that a sample size of 29 was adequate. Using G\*Power (Faul et al, 2007) and inputting information from this study; sample size and correlation (based on the relationship between RAD symptoms and mental health symptoms as rated by carers), a post hoc power calculation gave a noted power of .97 at the .05 level. This suggests that the study is adequately powered to detect an effect.

Results found a high prevalence of RAD or borderline RAD (52%). This greatly exceeds what previous research estimated the rates to be in one and a half year olds (0.9%; Skovgaard, 2010) and in a materially deprived school aged population (1.4%; Minnis et al., 2013). However it is worth noting that there is no overlap in the sample age across studies. Evidence was found to support IRAD and DRAD occurring together, as previously outlined by Smyke et al (2002).

Of the sample, 86% had experienced at least one form of maltreatment and a further ten percent was classed as probably experiencing maltreatment. This level of maltreatment is higher than the 30% found by Ryan et al (2013) in young offenders.

According to carers a strong link between mental health symptoms and RAD was noted. This is in line with Millward et al (2006). However, only a moderate association was noted between Total RAD Scores and Total Difficulties Scores as reported by teachers. The only significant association shared by carer and teacher measures was RAD and hyperactivity. Interestingly carer measures did not find any strong correlations with DRAD and mental health but noted strong associations with IRAD and hyperactivity and a negative association with prosocial behaviour. This contradicts the findings from teachers, where strong links between DRAD and Total Difficulties Scores and conduct problems were found. This could be as key workers may not notice disinhibited behaviour, often working with maltreated young offenders, whereas teachers may contrast these young people with others in their class. This leads to the consideration of whether key workers are better informants for the inhibited symptoms and teachers for the disinhibited.

Turning to the mental health profile of the sample, according to carers 55% were found to have another probable mental health problem and 17% were reported as having another possible mental health problem. This amounts to 21 out of 29 individuals and represents a high proportion of total difficulties experienced. This result was higher than was found by Chitsabesan et al (2006) where 31% of the young offenders had mental health problems. However this sample, although having a similar mean age and gender split, reported mental health problems based on semi structured interviews with the young people whereas the current study employs multiple informant questionnaires and carer interviews.

On overall Total Difficulties Scores on the SDQ, young people under reported difficulties compared to carers and teachers, and the carers and teachers were generally comparable. This may suggest that the young people may be less insightful

about their situation. This variety of perspectives highlights the relevance of using multiple informants in research and in the clinical assessment of RAD. A related example of this can be found in the study by Minnis et al (2013), where information was gathered from the parents, teachers and children to confirm a RAD diagnosis.

Educational attainment was not seen to be associated with RAD. However it must be noted that 44% of the sub sample ( $n = 18$ ) was thought to be working below the appropriate level for their age and as such had clear educational needs. This is in keeping with previous research by Chitsabesan et al. (2006) who found that 36% of the young offender sample had educational needs. It is also worth noting that 44% may be an underestimation as 11 of the 29 participants did not have school contact, and thus were not included in this calculation and three of those that were included were based on past school contact as they are no longer in education. In light of this the null hypothesis may be explained by a 'floor effect'; many of the sample having low educational attainment. The majority of children who had no school contact were over 16.

Only a small association was noted in terms of RAD and placement moves. This does not support the relationship between the numerous changes in foster carers and RAD as suggested in the DSM IV and 5 (APA, 2000, 2013). However the diagnostic guidelines refer to placement moves occurring before the age of five and only two participants were moved prior to this age. It is also worth noting that as such a high proportion of participants had RAD, there may have been little variance to see a relationship in a relatively small sample.

Again only a small link was noted between history of violence and RAD symptoms or between nonviolent offending and RAD symptoms. Such a finding may be related to



the categorical nature of the data which does not account for the potential range of variability within individuals. Given the high prevalence of RAD in this population and the link suggested between maltreatment and RAD (Minnis et al, 2007) coupled with the association found between maltreatment and criminality (Widom and Maxfield, 2001), further investigation pertaining to RAD and offending is warranted.

This research returns to a sample of young people similar to those studied in Bowlby's original work (1944). As previously discussed he suggested that these young offenders experienced early adversity which may have impacted on their social relationships. This study confirmed this link, with peer problems being reported by most carers. Following on from Bowlby, Follan and Minnis (2010) reviewed the young offender's records and found that most had experienced maltreatment and neglect. This research supports this development as it was found that the clear majority of this youth justice sample was maltreated and over half displayed RAD symptoms.

Such findings have both clinical and theoretical implications. The results identify needs within a high risk/vulnerable population. Drawing attention to this may lead to education for clinical staff and carers which may result in a greater understanding of the young person, and the potential for improvements in care. Highlighting complex presentations also underlines the need for a multidisciplinary approach to assessment and treatment with a focus on a variety of symptoms which may be associated with early exposure to adversity. As the research is exploratory in nature, it also lays the foundations for future studies to further examine the link between RAD and other mental health problems and RAD and offences.

## **Limitations**

The cross-sectional nature of the study may be seen as a limitation as it does not allow for any assertions about the direction of causality for associations between RAD and other factors. The use of multiple comparisons may also be seen as a limitation as it may increase the probability of a type I error. However given the exploratory nature of the study, adjusting for such comparisons and increasing the risk of dismissing an important finding as untrue, was seen to be potentially more detrimental to the research. As the study is exploratory in nature, any findings must therefore be interpreted as such. As some of the target sample was lost, an element of bias may have been introduced. For example, the young people who workers thought were too unwell or chaotic to be involved in the study may well have been more likely to have RAD, so the prevalence finding may be an under-estimate. However a relatively high participation rate in this study was observed.

In addition, no parents participated and carer measures were completed by residential staff/key workers who had known the young people for a minimum of one month. Having parents as informants may have resulted in differing reports. The diagnostic criteria requires onset of RAD before the age of five. The best source of information on the child's history could have been the parents rather than employees working in an environment where frequent changes in caregivers are found.

Furthermore the measure of attainment was a blunt tool and six of the informants had no recent contact with the young people or were trainers. Future research could gather routine information on the young person's school attendance. Assessing level of attainment may be somewhat inappropriate in this sample as attendance in this

study was not sufficient enough in many cases for teachers to be able to provide an accurate report.

Lastly information on the number and type of offences was not accessible within the time frame of this study. This proved to be a more convoluted process than originally anticipated due to the complexities of the legal system in relation to children and difficulties in obtaining reliable offence data. As this study is exploratory it was helpful to identify such a hurdle and to develop a clear pathway of how to gain access to such data which can then be followed in future research. This would involve accessing social work records.

## **Conclusion**

Overall there was a high prevalence of RAD found within this youth justice population which was strongly associated with other mental health difficulties. Further research is warranted into factors associated with RAD specifically the link between RAD and the number and type of offences committed.

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## CHAPTER 3: ADVANCED CLINICAL PRACTICE I CRITICAL REFLECTIVE ACCOUNT

Title: From self to systems; where and how do we fit?

A reflection on my development in terms of team working within an ever changing environment.

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## **Abstract**

This reflective account focuses on the development of the trainee across time. It looks specifically at team working as well as the advancement of communication skills. This is all considered against the backdrop of an ever changing political landscape. To help provide structure the Integrated Developmental Model (Stoltenberg, 1998) will be adopted. It outlines three stages of skills development across three main areas, namely self and other awareness, motivation and autonomy. Gibbs' (1988) model of reflection will also be employed. It will be used to aid the reflective process relating to learning experiences at varying stages of development. It proposes six stages of reflection. They are description, feelings or thoughts, evaluation, analysis, conclusion and action plan.

This account aims to highlight how the trainee shifts from an inward focus with high levels of dependency on the supervisor to a viewpoint that places more emphasis on the client, to a position that ultimately encompasses the self, the client and the broader systems they function within. It outlines experiences that paved the way for learning that facilitated the capacity to reach this particular point of development. Points for future practice are considered throughout the account and lastly reflections on writing the review are discussed.

## CHAPTER 4: ADVANCED CLINICAL PRACTICE II CRITICAL REFLECTIVE ACCOUNT

Title: Training in every sense of the word – a reflection on the evolution  
of my understanding and interpretation of the term training and its  
execution.

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## **Abstract**

This reflective account focuses on my experiences of developing and delivering training. It is considered within the context of the changing role of the Clinical Psychologist. The Integrated Developmental Model (Stoltenberg, 1998) is employed to facilitate the realisation of these skills over the course of clinical training. It outlines three stages of skills development across three main areas, namely self and other awareness, motivation and autonomy. Gibbs' (1988) model of reflection is also adopted. It will be used to aid the reflective process relating to learning experiences at varying stages of development. It proposes six stages of reflection. They are description, feelings or thoughts, evaluation, analysis, conclusion and action plan.

This account focuses on the trainee's developing skills in the design and delivery of training to other individuals and of how this increasing exposure and competence development leads to a shift in the understanding of what is meant by the term training. It also considers the relevance of training others for the profession of Clinical Psychology and its place within the current landscape. It outlines the experiences that impact upon and shape such development. Future practice is consistently considered and lastly reflections on writing the review are discussed.

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**Appendix 1.1      Guidelines for submission to *Brain Injury***

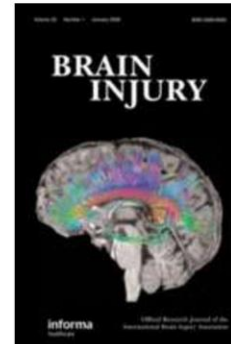
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All declarations of interest must be outlined under the subheading "Declaration of interest". If authors have no declarations of interest to report, this must be explicitly stated. The suggested, but not mandatory, wording in such an instance is: *The authors report no declarations of interest.* When

submitting a paper via ScholarOne Manuscripts, the "Declaration of interest" field is compulsory (authors must either state the disclosures or report that there are none). If this section is left empty authors will not be able to progress with the submission.

Please note: for NIH/Wellcome-funded papers, the grant number(s) must be included in the Declaration of Interest statement.

*Click here to view our full [Declaration of Interest Policy](#).*

## **Mathematics**

*Click for more information on the [presentation of mathematical text](#).*

## **References**

References should follow the Council of Science Editors (CSE) Citation & Sequence format. Only works actually cited in the text should be included in the references. Indicate in the text with Arabic numbers inside square brackets. Spelling in the reference list should follow the original. References should then be listed in numerical order at the end of the article. Further examples and information can be found in The CSE Manual for Authors, Editors, and Publishers, Seventh Edition. Periodical abbreviations should follow the style given by Index Medicus.

Examples are provided as follows:

**Journal article:** [1] Steiner U, Klein J, Eiser E, Budkowski A, Fetters LJ. Complete wetting from polymer mixtures. *Science* 1992;258:1122-9.

**Book chapter:** [2] Kuret JA, Murad F. Adenohypophyseal hormones and related substances. In: Gilman AG, Rall TW, Nies AS, Taylor P, editors. *The pharmacological basis of therapeutics*. 8th ed. New York: Pergamon; 1990. p 1334-60.

**Conference proceedings:** [3] Irvin AD, Cunningham MP, Young AS, editors. *Advances in the control of Theileriosis*. International Conference held at the International Laboratory for Research on Animal Diseases; 1981 Feb 9-13; Nairobi. Boston: Martinus Nijhoff Publishers; 1981. 427 p.

**Dissertations or Thesis:** [4] Mangie ED. *A comparative study of the perceptions of illness in New Kingdom Egypt and Mesopotamia of the early first millennium* [dissertation]. Akron (OH): University of Akron; 1991. 160 p. Available from: University Microfilms, Ann Arbor MI; AAG9203425.

**Journal article on internet:** [5] De Guise E, Leblanc J, Dagher J, Lamoureux J, Jishi A, Maleki M, Marcoux J, Feyz M. 2009. Early outcome in patients with traumatic brain injury, pre-injury alcohol abuse and intoxication at time of injury. *Brain Injury* 23(11):853-865. <http://www.informaworld.com/10.1080/02699050903283221>. Accessed 2009 Oct 06

**Webpage:** [6] *British Medical Journal* [Internet]. Stanford, CA: Stanford Univ; 2004 July 10 - [cited 2004 Aug 12]; Available from: <http://bmj.bmjournals.com>

**Internet databases:** [7] *Prevention News Update Database* [Internet]. Rockville (MD): Centers for Disease Control and Prevention (US), National Prevention Information Network. 1988 Jun - [cited 2001 Apr 12]. Available from: <http://www.cdcnpin.org/>

## Appendix 1.2

## Methodological Rating Scale

### Scoring guidelines

1 if met, 0 if not met or unable to determine (excluding Q5)

Q5 – score 0, 1 or 2 depending on sample

|   | 0 | 1 | 2 |
|---|---|---|---|
| 1. Was the scientific background and rationale for the investigation explained?                                     |   |   |   |
| 2. Was the hypotheses and/or objectives stated?   |   |   |   |
| 3. Were the key elements of the study design presented early in the paper?  |   |   |   |
| 4. Were the settings and locations where data were collected stated?  |   |   |   |
| 5. Is the sample clinic attendees (score 1) or all patients eligible in one area (score 2) or volunteers (score 0). |   |   |   |
| Sample size =   |   |   |   |
| 6. If there is a comparison group did they come from a similar population?  |   |   |   |
| 7. Is a rationale given for the choice of controls?   |   |   |   |
| 8. For matched studies are the matching criteria explained?   |   |   |   |
| 9. Are the inclusion/exclusion criteria described?  |   |   |   |
| 10. Were the characteristics of participants clearly described (e.g. demographic information such as age, sex)?     |   |   |   |
| Age =<br>Sex =  |   |   |   |
| 11. Did the article specify the severity of the brain injury for participants with acquired brain injury?           |   |   |   |
| TBI severity =  |   |   |   |
| 12. Did the article specify the time since injury?  |   |   |   |
| Time since TBI =  |   |   |   |
| 13. Were the measures appropriate for the age group?  |   |   |   |

|   |    |  |   |
|---|----|--|---|
| Assessments used  |    |  |   |
| 14. Were at least some of the measures standardised assessment tools?   |    |  |   |
| 15. Was the rationale for the study size explained?   |    |  |   |
| 16. Was the statistical analysis appropriate?   |    |  |   |
| 17. Are any efforts to address potential sources of bias described (e.g. adjustment of alpha for multiple comparisons)?   |    |  |   |
| 18. Were data adequately described (mean, range etc.)?  |    |  |   |
| Mean =<br>Range =   |    |  |   |
| 19. Were the numbers of individuals at each stage of study given (e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) |    |  |   |
| 20. Was there an explanation as to how missing data were addressed?   |    |  |   |
| 21. Were the key results summarised with reference to the study objectives?   |    |  |   |
| 22. Were limitations of the study discussed?  |    |  |   |
| 23. Were sources of potential bias discussed?   |    |  |   |
| 24. Was the generalisability (external validity) of the study results discussed?  |    |  |   |
| Total score   | 25 |  | % |

**75% and over** = **High**  
**50% - 75%** = **Moderate**  
**Under 50%** = **Low**

**Appendix 2.1 Major Research Project Proposal**



**University  
of Glasgow**

**Major research project proposal**



**Title: A study of Reactive Attachment Disorder (RAD) symptoms in the youth justice population.**

|                              |  |
|------------------------------|--|
| <b>Trainee name:</b>         | Kate Moran                               |
| <b>Matriculation number:</b> | 0406666                                  |
| <b>University supervisor</b> | Dr. Sue Turnbull, Dr. Helen Minnis       |
| <b>Field supervisors:</b>    | Dr. Aileen Blower, Dr. Jennifer McDonald |
| <b>Date of submission:</b>   | 21/03/2013                               |
| <b>Version number:</b>       | 10                                       |
| <b>Word count:</b>           | 3762                                     |

## **Abstract**

Word count: 183

### **Background**

Reactive Attachment Disorder (RAD) features in the DSM IV (APA, 2000) and the ICD 10 (World Health Organisation WHO, 1992). It is characterised by 'markedly disturbed and developmentally inappropriate social relatedness in most contexts; beginning before age 5' (DSM-IV, APA, 2000). Behaviours are thought to arise from persistent caregiver neglect, physical or emotional abuse or a lack of continuity in caregivers.

Research identifies difficulties with education, social relationships and mental health in young offenders (Chitsabesan et al, 2006). Given young offenders' experiences and needs it may be suggested that they are more likely to display RAD symptoms. Thus it seems appropriate to investigate RAD within this population.

### **Aims**

- To explore RAD symptoms in the youth justice population, specifically within the Intensive Support and Monitoring Service (ISMS).

### **Methods**

A cross-sectional study with 29 ISMS attendees aged 12 to 17 and their carers and teachers will be undertaken. They will complete measures investigating symptoms of RAD, psychopathology and educational attainment.

### **Applications**

The findings will contribute to the understanding of this population and will thus have implications for future interventions.

## **Introduction**

Reactive Attachment Disorder (RAD) is a relatively new diagnosis which was first included in the DSM in 1980 (Potter, Chevy, Amaya-Jackson, O'Donnell, Murphy and Zeanah, 2009). It features in the DSM IV (APA, 2000) and the ICD 10 (World Health Organisation WHO, 1992). It has a particular profile characterised by 'markedly disturbed and developmentally inappropriate social relatedness in most contexts; beginning before age 5' (DSM-IV, APA, 2000). In other words the child that displays RAD relates to others socially in an inappropriate way relative to their age and stage of development. Both classification systems make clear that the behaviour is not linked to distinct delays in development or any pervasive developmental disorder and that the behaviours are thought to arise from persistent caregiver neglect, physical or emotional abuse or a lack of continuity in caregivers.

Two subsets of RAD are identified; an inhibited and a disinhibited type. The inhibited child does not initiate suitable social interactions and if approached does not respond appropriately. They may avoid the caregiver, resist comfort and watch them in a non communicative detached way (DSM IV, APA, 2000). The ICD 10 (WHO, 1992) in addition highlights that young children's inappropriate social interaction is commonly seen when the caregiver returns to or leaves the child, i.e. excessive misery, huddling, clinginess; or an inappropriate lack of response or aggression. In the disinhibited type the child exhibits an active involvement in close social interactions with numerous people, failing to discriminate between suitable attachment figures. Although two distinct subtypes are outlined research shows they can occur together (Smyke, Dumitrescu, & Zeanah, 2002).

In terms of prevalence Skovgaard (2010) estimated the rates of RAD in 1.5 year olds to be 0.9%. The population prevalence beyond infancy is unknown. Many studies into RAD have been conducted with ex-institutionalised children (O'Connor & Rutter, 2000; Zeanah, Smyke & Dumitrescu, 2002). Millward, Kennedy, Towlson and Minnis (2006) explored RAD in looked-after children and found that those in care scored higher on measures of RAD than children not in care. Furthermore, they found a high correlation ( $r=0.84$ ) between RAD and mental health symptoms. Minnis, Everett, Pelosi, Dunn and Knapp (2006) also found higher symptom scores for RAD (mean = 18.6) in children in care compared to the school population (mean = 12.74). Here more than two thirds of the foster care group had experienced placement movements. Beyond this a number of studies explored poor infant care and the development of severe attachment disorders (O'Connor and Rutter, 2000; Zeanah, 1996). O'Connor and Rutter assessed a group of 165 Romanian adoptees and 52 UK adoptees at age 6 and found that 6% of those that had experienced less than 6 months of parental deprivation showed symptoms of severe attachment disorder, whereas 31% of the group that had experienced over two years of parental deprivation displayed such symptoms. Haugaard and Hazan's review paper (2004) acknowledges the link between this period of deprivation, the severity of the symptoms and a RAD diagnosis.

Beyond this a history of abuse and neglect in children was found to increase the likelihood of adolescent delinquency and arrest by 59% (Widom and Maxfield, 2001). This history of maltreatment was highlighted as relating to mental health problems (Ferguson and Lynskey, 1997) and poorer academic achievement (Kendall-Tackett and Eckenrode, 1996).



A clear connection between maltreatment and delinquency was found by Smith and Thornberry (1995) in a sample of 1000 13 to 14 year olds studied over a period of four and a half years. They noted an increased number of offences in line with the experience of maltreatment. They suggested that the experience of maltreatment may influence children's attitudes to others, affecting their peer and family attachments. This may lead to antisocial behaviour and associated rejection. Mueller and Silverman (1989) found that a peer group displaying antisocial behaviour tended to be involved in more forensic activity.

More specifically Chitsabesan et al. (2006) surveyed 300 young offenders, aged 13 to 18, and noted that a third had experienced foster care. They reported that 36% had educational or work needs including poor school attendance and performance difficulties. They reported that 48% had difficulties with social relationships, 29% had problems with family relationships and 35% with peers. Lastly, 31% of this group had a mental health problem.

Overall there is an emerging link between maltreatment, attachment, offending and mental health. Given the profile of young offenders and their experience and needs it may be suggested that they are more likely to display symptoms of RAD. Thus it seems appropriate to investigate RAD within this population. In Glasgow the Intensive Support and Monitoring Service (ISMS) provide a direct community-based alternative to secure care for young offenders. This study will look at RAD within this population and explore factors that may be associated with higher levels of RAD symptoms.

## **Aims and Hypotheses**

### **Aims**

- to explore the prevalence of RAD within a young offender population.
- to explore the profile of RAD symptoms in this population
- to explore factors that may be associated with a higher level of RAD symptoms: increased severity of mental health symptoms; poorer educational attainment; higher number of placements; frequency of offences.
- to explore the pattern of offending behaviour in those diagnosed with RAD.

### **Hypotheses and Research Questions**

1. What is the prevalence of RAD diagnosed in adolescents with a forensic history?
2. There will be a correlation between increased RAD symptoms and the level of mental health symptoms.
3. There will be a correlation between educational attainment and RAD symptoms.
4. There will be a correlation between the number of placement movements and RAD symptoms.
5. There will be a correlation between RAD symptoms and the frequency of offences

## **Plan of investigation**

### **Participants**

29 individuals involved with ISMS and their carers and teachers will be invited to participate. The young people will be aged 12 to 17 as this is the age range seen by ISMS. All young people who receive ISMS are offered a service from a Clinical Psychologist, who is based within the Forensic Child and Adolescent Mental Health Service (F-CAMHS) and has a dedicated role within ISMS. Most of those assessed do not have a moderate to severe mental disorder, but they receive a mental health assessment and psychological formulation as part of their ISMS assessment.

A carer is the person with main primary care giving responsibility for the individual or someone who knows them well. The young person will nominate a carer who knows them well; e.g. a relative, key worker, foster carer etc.

### **Inclusion and exclusion criteria**

#### *Inclusion criteria*

- ◆ Contact with ISMS.
- ◆ Aged 12 to 17
- ◆ Fluent in English

#### *Exclusion criteria*

- ◆ Severe communication problems

- ◆ Impaired capacity to consent as judged by the referring clinician.

### **Recruitment procedures**

As many of the young people will be under 'Vulnerable Young Persons' procedures the ISMS/FCAMHS Clinical Psychologist will get agreement from the multi-agency team of whether the young person can be approached.

Then, if appropriate, the ISMS/FCAMHS Clinical Psychologist at the routine assessment appointment will provide the young person and their carer, if present, with information regarding the study; specifically an information sheet and a consent form. There will be a participant version (Appendix 1) and carer's version (Appendix 2). They will also ask the young person if they would like to meet the researcher to find out more about the study. It will be made clear that meeting the researcher to discuss the study is the young person's decision and will in no way affect their care.

The researcher will be available to meet with the young person at the end of this appointment and/or at their next appointment if they wish to discuss the study and to obtain consent. The young person will usually attend for one or two appointments which are offered weekly. Full consent will be established when signed consent forms are received.

The researcher will also be available to meet or phone the nominated carer to discuss the study and again full consent for their participation will be established when signed consent forms are returned. Lastly an information sheet and consent

form created for teachers (Appendix 3) will be sent out along with the teachers' questionnaires.

## **Measures**

The measures which will be used with young people, carers and teachers are as follows;

### *Young person*

- ◆ *Strengths and difficulties questionnaire (SDQ) (Goodman, Meltzer and Bailey, 1998)*

The SDQ assesses for child psychiatric symptoms across five subscales; pro-social behaviour, relationships with peers, hyperactivity, conduct and emotions. It can be completed in ten minutes and contains 25 items. The SDQ has strong validity, test-retest reliability and internal consistency (Goodman, 2001). It has been well validated against other screening instruments (Goodman and Scott, 1999) and against psychiatric diagnosis (Goodman, Ford, Simmons, Gatward, and Meltzer, 2003).

### *Carers*

- ◆ *The Child and Adolescent Psychiatric Assessment, Reactive Attachment Disorder (CAPA RAD) (Minnis, Green, O'Connor, Liew, Glaser, Taylor, Follan, Young, Barnes, Gillberg, Pelosi, Arthur, Burston, Connolly and Sadiq, 2009).*

This measure for parents/carers is used to assess RAD symptoms. It was based upon the well validated Child and Adolescent Psychiatric Assessment

(CAPA) semi-structured parent report interview for child psychopathology (Angold and Costello, 2000). It consists of 28 items taking the form of a semi-structured parent report interview.

- ◆ *Relationship Problems Questionnaire (RPQ) (Minnis, Reekie, Young, O'Connor, Ronald, Gray and Plomin, 2007)*

This explores RAD symptoms, looking at the behaviour of both subtypes. It focuses on the child's emotional, hyperactive or conduct problems as distinct from RAD type behaviours. It is a 10 item parent report questionnaire with 4 graded responses from 'exactly like my child' through to 'not at all like my child' with two moderate measures in between. Scores have 0.85 interval consistency (Minnis et al., 2007) and range from 0 – 54. The measure takes 5 minutes to complete.

- ◆ *Strengths and difficulties questionnaire (SDQ) (Goodman, 1997)*

This is the carer's version of the SDQ described above.

#### *Teachers*

- ◆ *A teacher's Strengths and difficulties questionnaire (Goodman, 1997)*

This is the teacher's version of the SDQ described above.

- ◆ *Relationship Problems Questionnaire (RPQ) (Minnis et al, 2007)*

As outlined above this questionnaire investigates the symptoms of RAD.

◆ *Attainment questionnaire*

This will establish the child's working level compared to the age appropriate level of attainment. It will clarify any current additional support for learning.

The following measures will be completed by the Clinician/Researcher;

◆ *Clinician's Checklist for Reactive Attachment Disorder*

The Observational Checklist for Reactive Attachment Disorder (McLaughlin, Espie and Minnis, 2010) which is used when observing subjects within the clinical waiting room will be modified. A checklist of typical RAD behaviours for adolescents will be created considering the listed measures and manifestation of RAD behaviours within this age range. It can then be used alongside other measures when making a diagnosis. It will be completed by a clinician.

In adolescents the individual and carer and/or teacher's report should be sufficient to inform a RAD diagnosis. However it was considered useful to incorporate the clinician's observations. As such this is an exploratory part of the study.

◆ *History of Maltreatment Checklist*

This is an 18 - item checklist looking at areas of maltreatment such as neglect and abuse alongside parental variables such as mental health, educational level, addictions and parent's age at birth. It also addresses number of placements held. Generally there are four response options; 'yes', 'no', 'probable', and 'unknown'. This checklist is used to gain information from case files in a systematic fashion. It will be completed by the researcher.

## **Design**

A cross-sectional study will be undertaken. The project will be embedded in the team and introduction to the study will be integral at the point of initial assessment.

## **Research procedures**

The project will be introduced by a clinician and the potential participants will be provided with an information sheet (Appendix 1, 2 and 3). Subsequently, the researcher will make contact by phone or be available in person to discuss it further and to obtain consent. The minimum required people to consent are the young person and a nominated carer and/or teacher.



### *Young person*

The young person will have completed a SDQ as part of their routine assessment. If this has not been done, the researcher will ask the clinician to ensure it is completed. The researcher will receive this data.

### *Carer*

The researcher will meet with the carer separately to administer the aforementioned measures. If the carer cannot attend the clinic the measures may be completed by phone. This should take approximately one hour.

### *Teacher*

Information regarding the participant's teacher will be obtained and an information sheet, consent form, SDQ, RPQ and Attainment questionnaire will be sent to them for completion. The teacher's measures take approximately 10 minutes to complete.

### *Clinician*

The clinician who conducted the initial interview will rate the individual's behaviour (based on waiting room observations) according to the Clinician's Checklist for Reactive Attachment Disorder. This will take 5 minutes.

### *Researcher*

The researcher will review the participant's case files in conjunction with the History of Maltreatment Checklist. They will also gather information regarding the number and type of convictions upheld.

Once the information is collated, two clinicians will blindly review the data from the RPQ, CAPA-RAD, Clinician's Checklist for RAD, and The History of Maltreatment Checklist to provide a diagnosis of RAD or no RAD. Subsequent to this, data analysis will commence.

### **Data analysis**

Descriptive statistics will be employed to illustrate the prevalence of RAD symptoms in adolescents (aged 12-17) with a forensic history. A confidence interval (CI) will also be calculated. Non-parametric correlations will be used to explore the relationships between RAD symptoms and the factors hypothesised to be associated (mental health symptoms; educational attainment; number of placements; frequency of offences). If regression assumptions are met a linear regression will be completed with significant variables to explore their influence on RAD symptoms. A Statistical Package for the Social Sciences version 19 (SPSS) will be used to investigate the hypotheses.

### **Justification of sample size**

The estimation of prevalence of RAD in this population is exploratory. A power calculation was made based on the hypothesis that there will be a relationship between RAD symptoms and mental health symptoms. A previous study (Millward et al., 2006) found a correlation of  $r=0.84$  between RAD and SDQ scores. Using G\*Power (Faul, Erdfelder, Lang and Buchner, 2007) and inputting a more

conservative estimate of a high effect size of  $r = 0.5$ , setting power at 0.8 and alpha at 0.05 calculates that a sample size of 29 is adequate.

In terms of recruitment ISMS receives one new referral a week and it is estimated that two-thirds of these will consent to taking part. As the recruitment period will run from July 2013 to March 2014 this should allow enough time to reach a sample size of 29.

### **Settings and Equipment**

The setting will be Stanley Street Schoolhouse, where ISMS and FCAMHS are based. Interview rooms are available for booking and a pinpoint alarm and duty system is in place.

An encrypted laptop will be used to store and analyse data. The aforementioned measures will be used. (See Appendix 4)

### **Health and safety issues**

**Researcher and Participant safety** (See appendix 5 – Health and Safety for Researchers Form)

### **Ethical Issues**

Ethical approval will be sought from the West of Scotland Research Ethics Committee. As this is a vulnerable population it will be made clear that their decision

to participate or not is entirely voluntary and will not affect their ISMS input or any other aspect of their legal status, care or management. Individuals, who are deemed to have impaired capacity to consent, as judged by the referring clinician, will not be approached to take part. Participants will have the opportunity to discuss the study with the researcher and to ask questions before agreeing to consent. The measures employed are not anticipated to cause distress. The researcher will report any information given that highlights risk to the young person or another person, to the clinical team. A summary of the study will be reviewed by the Carer and Users of Services of Psychology (CUSP) to ensure that the material is understandable.

All data will be anonymous and confidential. It will be stored on an NHS, password protected or encrypted computer. The time period of data storage will be in accordance with NHSGG&C policies and the confidentiality and use of participant's data will be determined by the data protection act (1998), it will only be used for the purposes outlined. Any publications arising from the study will contain non identifiable data.

### **Timetable**

|                   |   |                               |
|-------------------|---|-------------------------------|
| Outline           | – | December 3 <sup>rd</sup> 2012 |
| Proposal draft    | – | December 2012                 |
| Complete proposal | – | February 2013                 |
| Apply for ethics  | - | July 2013                     |
| Data collection   | – | July 2013 – March 2014        |

Data analysis - April 2014

Write up and submission - June 2014

### **Practical Applications**

The study will contribute to the understanding of the youth justice population specifically highlighting the prevalence and presentation of RAD symptoms within this group. This will have implications for future interventions.

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## Appendix 2.2 Guidelines for submission to *Child Abuse and Neglect*

Downloaded on the 1<sup>st</sup> of July 2013

<http://www.elsevier.com/journals/child-abuse-and-neglect/0145-2134?generatepdf=true>



### Preparation

#### Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork. To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

#### Length and Style of Manuscripts

Full-length manuscripts should not exceed 35 pages total (including cover page, abstract, text, references, tables, and figures), with margins of at least 1 inch on all sides and a standard font (e.g., Times New Roman) of 12 points (no smaller).

Instructions on preparing tables, figures, references, metrics, and abstracts appear in the [Publication Manual of the American Psychological Association](#) (6th edition).

For helpful tips on APA style, [click here](#).

#### Article structure

##### **Subdivision**

Divide your article into clearly defined sections. Three levels of headings are permitted. Level one and level two headings should appear on its own separate line; level three headings should include punctuation and run in with the first line of the paragraph.

##### **Introduction**

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

#### Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.

• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.**

• **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

### **Abstract**

Abstracts should follow APA style (see 6th ed., pages 25-27 for detailed instructions and page 41 for an example). Abstracts should be 150-250 words. **Keywords**

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

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*Table footnotes* indicate each footnote in a table with a superscript lowercase letter.

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- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
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Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

### **References**

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*Text:* Citations in the text should follow the referencing style used by the American Psychological Association (view the [APA Style Guide](#)). You are referred to the Publication Manual of the American Psychological Association, Sixth Edition, ISBN 978-1-4338-0561-5.

*List:* references should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

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- Phone numbers

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- References are in the correct format for this journal
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Web)
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in

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- If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes

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## **Appendix 2.3      Measures**

Strengths and Difficulties Questionnaire (SDQ; Self, Carer and Teacher versions)

CAPA RAD - Youth Version

Relationship Problems Questionnaire (RPQ; Carer and Teacher version)

Attainment Questionnaire

Observational Schedule for Reactive Attachment Disorder (Youth Version)

History of Maltreatment Checklist

## Strengths and Difficulties Questionnaire

S 11-17

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your Name .....

Male/Female

Date of Birth.....

|  | Not<br>True              | Somewhat<br>True         | Certainly<br>True        |
|--|--------------------------|--------------------------|--------------------------|
| I try to be nice to other people. I care about their feelings    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am restless, I cannot stay still for long                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get a lot of headaches, stomach-aches or sickness              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I usually share with others (food, games, pens etc.)             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get very angry and often lose my temper                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am usually on my own. I generally play alone or keep to myself | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I usually do as I am told  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry a lot  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am helpful if someone is hurt, upset or feeling ill            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am constantly fidgeting or squirming                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I have one good friend or more                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I fight a lot. I can make other people do what I want            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am often unhappy, down-hearted or tearful                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other people my age generally like me                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am easily distracted, I find it difficult to concentrate       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am nervous in new situations. I easily lose confidence         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am kind to younger children                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am often accused of lying or cheating                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other children or young people pick on me or bully me            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I often volunteer to help others (parents, teachers, children)   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I think before I do things                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I take things that are not mine from home, school or elsewhere   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get on better with adults than with people my own age          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I have many fears, I am easily scared                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I finish the work I'm doing. My attention is good                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Do you have any other comments or concerns?

**Please turn over - there are a few more questions on the other side**



Overall, do you think that you have difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

| No                       | Yes-<br>minor<br>difficulties | Yes-<br>definite<br>difficulties | Yes-<br>severe<br>difficulties |
|--------------------------|-------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>      | <input type="checkbox"/>         | <input type="checkbox"/>       |

If you have answered "Yes", please answer the following questions about these difficulties:

- How long have these difficulties been present?

| Less than<br>a month     | 1-5<br>months            | 6-12<br>months           | Over<br>a year           |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties upset or distress you?

| Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties interfere with your everyday life in the following areas?

|                    | Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| HOME LIFE          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| FRIENDSHIPS        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| CLASSROOM LEARNING | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| LEISURE ACTIVITIES | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties make it harder for those around you (family, friends, teachers, etc.)?

| Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Your Signature .....

Today's Date .....

**Thank you very much for your help**

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## Strengths and Difficulties Questionnaire

P 4-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months.

Child's Name .....

Male/Female

Date of Birth.....

|   | Not<br>True              | Somewhat<br>True         | Certainly<br>True        |
|---|--------------------------|--------------------------|--------------------------|
| Considerate of other people's feelings                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Restless, overactive, cannot stay still for long                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often complains of headaches, stomach-aches or sickness             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shares readily with other children (treats, toys, pencils etc.)     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often has temper tantrums or hot tempers                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rather solitary, tends to play alone                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Generally obedient, usually does what adults request                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Many worries, often seems worried                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Helpful if someone is hurt, upset or feeling ill                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Constantly fidgeting or squirming                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has at least one good friend  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often fights with other children or bullies them                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often unhappy, down-hearted or tearful                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Generally liked by other children                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Easily distracted, concentration wanders                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Nervous or clingy in new situations, easily loses confidence        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Kind to younger children  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often lies or cheats  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Picked on or bullied by other children                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often volunteers to help others (parents, teachers, other children) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Thinks things out before acting                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Steals from home, school or elsewhere                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gets on better with adults than with other children                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Many fears, easily scared   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sees tasks through to the end, good attention span                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Do you have any other comments or concerns?

**Please turn over - there are a few more questions on the other side**

Overall, do you think that your child has difficulties in one or more of the following areas:  
emotions, concentration, behaviour or being able to get on with other people?

|  |                          |                               |                                  |                                |
|--|--------------------------|-------------------------------|----------------------------------|--------------------------------|
|  | No                       | Yes-<br>minor<br>difficulties | Yes-<br>definite<br>difficulties | Yes-<br>severe<br>difficulties |
|  | <input type="checkbox"/> | <input type="checkbox"/>      | <input type="checkbox"/>         | <input type="checkbox"/>       |

If you have answered "Yes", please answer the following questions about these difficulties:

• How long have these difficulties been present?

|  |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
|  | Less than<br>a month     | 1-5<br>months            | 6-12<br>months           | Over<br>a year           |
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

• Do the difficulties upset or distress your child?

|  |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
|  | Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

• Do the difficulties interfere with your child's everyday life in the following areas?

|                    |                          |                          |                          |                          |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                    | Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
| HOME LIFE          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| FRIENDSHIPS        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| CLASSROOM LEARNING | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| LEISURE ACTIVITIES | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

• Do the difficulties put a burden on you or the family as a whole?

|  |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
|  | Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Signature .....

Date .....

Mother/Father/Other (please specify:)

**Thank you very much for your help**

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## Strengths and Difficulties Questionnaire

T 4-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's Name .....

Male/Female

Date of Birth.....

|   | Not True                 | Somewhat True            | Certainly True           |
|---|--------------------------|--------------------------|--------------------------|
| Considerate of other people's feelings                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Restless, overactive, cannot stay still for long                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often complains of headaches, stomach-aches or sickness             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shares readily with other children (treats, toys, pencils etc.)     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often has temper tantrums or hot tempers                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rather solitary, tends to play alone                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Generally obedient, usually does what adults request                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Many worries, often seems worried                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Helpful if someone is hurt, upset or feeling ill                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Constantly fidgeting or squirming                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has at least one good friend  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often fights with other children or bullies them                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often unhappy, down-hearted or tearful                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Generally liked by other children                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Easily distracted, concentration wanders                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Nervous or clingy in new situations, easily loses confidence        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Kind to younger children  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often lies or cheats  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Picked on or bullied by other children                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Often volunteers to help others (parents, teachers, other children) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Thinks things out before acting                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Steals from home, school or elsewhere                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gets on better with adults than with other children                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Many fears, easily scared   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sees tasks through to the end, good attention span                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Do you have any other comments or concerns?

**Please turn over - there are a few more questions on the other side**

Overall, do you think that this child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

| No                       | Yes-<br>minor<br>difficulties | Yes-<br>definite<br>difficulties | Yes-<br>severe<br>difficulties |
|--------------------------|-------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>      | <input type="checkbox"/>         | <input type="checkbox"/>       |

If you have answered "Yes", please answer the following questions about these difficulties:

- How long have these difficulties been present?

| Less than<br>a month     | 1-5<br>months            | 6-12<br>months           | Over<br>a year           |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties upset or distress the child?

| Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties interfere with the child's everyday life in the following areas?

|                    | Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| PEER RELATIONSHIPS | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| CLASSROOM LEARNING | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- Do the difficulties put a burden on you or the class as a whole?

| Not<br>at all            | Only a<br>little         | Quite<br>a lot           | A great<br>deal          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Signature .....

Date .....

Class Teacher/Form Tutor/Head of Year/Other (please specify:)

**Thank you very much for your help**

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Definitions and questions

|  |  |   |
|--|--|---|
| <p><b>AVOIDS EYE CONTACT</b></p> <p>Parent/carer's generalized evaluation that the child characteristically avoids making eye contact with others and that s/he often turns his/her eyes away when others try to initiate eye contact.</p> <p>This can still be rated as positive if the parent says there is only eye contact when the child is lying.</p> <p>Distinguish from avoidance of eye contact which occurs with shyness, eg when the child meets new people or is in an unfamiliar setting. Distinguish also from culturally dictated strictures.</p> <p><b>*Does s/he avoid looking you or others directly in the eyes?</b><br/><b>*Does s/he turn his/her eyes or body away to avoid eye to eye contact?</b></p> <p>Does this happen with everyone?</p> <p>When did this start?</p> | <p>Coding rules</p> <p>0 – No</p> <p>2 – Present</p> | <p>Intensity<br/>PVA2I01</p> <input data-bbox="1236 539 1313 598" type="checkbox"/> <p>Onset<br/>PVB2001</p> <input data-bbox="1236 721 1331 795" type="text" value="/ /"/> |
|--|--|---|

Reactive Attachment Disorder

1

| Definitions and questions   | Coding rules   | Codes   |
|---|--|---|
| <p><b>MISUNDERSTANDING EMOTIONS</b></p> <p>When present, this item has the quality of the child not being able to gauge the type and intensity of emotion being expressed by others. This could include perceiving a parent or teacher’s mild annoyance as anger, or perceiving praise as manipulation.</p> <p>It should be distinguished from the lack of focus on faces/eyes and difficulty recognizing basic facial expressions found in autism spectrum disorders.</p> <p><b>*Does s/he often misunderstand people’s emotions?</b></p> <p><b>*Does s/he think you are angry when you are only mildly annoyed?</b></p> <p><b>*Does s/he misinterpret your facial expressions more often than other children the same age?</b></p> <p>Does s/he perceive silence as a threat?</p> <p>Does his/her teacher report this?</p> <p>Does it happen in other situations?</p> | <p>0 – No</p> <p>2 – Present</p> <p><b>HOME</b></p> <p><b>SCHOOL</b></p> <p><b>ELSEWHERE</b></p> | <p>Intensity<br/>PZR7I01</p> <p><input type="checkbox"/></p> <p>Situation<br/>Intensity<br/>PZR7I02</p> <p><input type="checkbox"/></p> <p>Situation<br/>Intensity<br/>PZR7I03</p> <p><input type="checkbox"/></p> <p>Situation<br/>Intensity<br/>PZR7I04</p> <p><input type="checkbox"/></p> <p>Onset<br/>PZR7001</p> <p><input type="checkbox" value="//"/></p> |

Definitions and questions

Coding rules

Codes

**COMFORT SEEKING FROM STRANGERS**

Only code here is the parent/carer is able to give an example of e.g. the child hurting him/herself when both parent/carer and stranger are present and child goes to stranger for comfort rather than parent/carer.

**\*Does s/he preferentially seek comfort from strangers over those s/he is close to?**

**\*Does s/he allow others to soothe him/her if s/he is hurt, frightened, or sick?**

How about when other people offer him/her comfort?

What does s/he do?

Who does this happen with?

How often does this happen?

When did it start happening?

0 – Absent

2 – Present

Intensity  
PVA9I01

Frequency  
PVA9F01

Onset  
PVA9001

/ /



Definitions and questions

Coding rules

Codes

**PAROXYSMS OF MISERY**  
The child has terrible bouts of crying e.g. throwing him/herself on the bed/sofa. When anyone tries to offer comfort, they are shrugged off and the misery is unassuaged.

Distinguish from general whinginess and from temper tantrums. There should be a quality of despair that cannot be shared with the parent/carer.

**\*Does s/he sometimes have terrible bouts of crying?**

Does s/he sometimes seem completely distraught?

Get examples

**\*What happens if you try to comfort him/her?**

- 0 – No
- 2 – Present

|                      |                                       |
|----------------------|---------------------------------------|
| Intensity<br>PZR9I01 | <input type="checkbox"/>              |
| Onset<br>PZR9001     | <input type="checkbox" value=" / /"/> |

Definitions and questions

Coding rules

Codes

**FROZEN WATCHFULNESS**

A child who stands/sits so still that it is as if s/he is frozen, wants to be invisible or wants to avoid being hurt despite a literal threat. There is a fearful quality to this.

**\*Does s/he often stand or sit as if frozen?**

**\*Does s/he often act as if s/he is trying to be invisible?**

**\*Do you get the feeling that s/he acts as if s/he needs to avoid being hit or hurt?**

Get examples

**\*Was he ever like this?**

0 – Absent  
2 – Present

Ever Intensity  
PZRI0E01

Onset  
PZRI001

Current Intensity  
PZRI0I01

Definitions and questions

Coding rules

Codes

**HYPER VIGILANCE**

Looks wary or watchful despite literal threat.  
Carers may note that s/he scans the environment.  
There is a fearful quality to this.

**\*Is s/he a jumpy child?**

**\*Does s/he seem wary or watchful, even though you can't see any reason why?**

Does s/he sometimes have to check things out before they can settle into a situation?

0 – No  
2 – Present

Ever  
Intensity  
PZR11E01

Onset  
RZR11001

Current  
Intensity  
PZR11I01

| Definitions and questions   | Coding rules                 | Codes  |
|---|------------------------------|--|
| <p><b>HIGH INTENSITY BEHAVIOUR</b></p> <p>The child rarely reaches equilibrium, and usually seems to be in a state of high emotion. Winds others up to similar state.</p> <p>Note that this refers to emotion rather than to activity levels.</p> <p><b>*How intense are his/her emotions?</b></p> <p><b>*Are drama or crisis situations common?</b></p> <p><b>*Does s/he always need to have something stimulating going on?</b></p> | <p>0 = No</p> <p>2 = Yes</p> | <p>Intensity<br/>PZRI3I01</p> <input data-bbox="1257 510 1332 571" type="text"/><br><br><p>Onset<br/>PZRI3001</p> <input data-bbox="1257 712 1348 788" type="text" value="/ /"/> |

Definitions and questions

Coding rules

Codes

**UNPREDICTABLE REUNION RESPONSES**

To be positive on this item, there should be the sense that the child's reunion responses are highly unpredictable and could, for example, vary from an affectionate cuddle to pushing the parent/carer away with no apparent way the parent/carer could predict this.

**\*When you have been separated for a while (e.g. after an overnight apart), is it difficult to tell whether s/he will be friendly or unfriendly?**

- 0 – No
- 2 – Present

Intensity  
PZRI5I01

Onset  
PZRI5001

/ /

| Definitions and questions   | Coding rules   | Codes  |
|---|--|--|
| <p><b>NEGATIVE ATTITUDE TOWARD SELF</b></p> <p>The child has a negative attitude towards him/herself as demonstrated by bad language about him/herself, self-harm e.g. cutting, scratching, headbanging, and/or by losing/breaking/refusing possessions/gifts as if these things are too good for him/her.</p> <p>Self harm activities should be clearly associated with a sense of the child disliking or being angry with him/herself and should not include self-stimulation.</p> <p><b>*Does s/he often bad mouth him/herself?</b></p> <p><b>*Does s/he harm herself physically?</b></p> <p>Does s/he cut/scratch/headbang?</p> <p><b>*Does s/he destroy or lose presents or other special things she is given?</b></p> | <p>0 - No</p> <p>2 - Present</p> <p>3 Actual Self Harm</p> | <p>Intensity<br/>PZ4I6101</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> <p>Onset<br/>PZR16001</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto; text-align: center;">/ /</div> |

Definitions and questions

Coding rules

Codes

**LACK OF REMORSE**

**\*Is s/he sorry if s/he has done something wrong?**

**\*Will s/he accept that something is his/her fault?**

0 – No

2 – Present

Intensity  
PZRI7101

Onset  
PZRI7001

| Definitions and questions   | Coding rules                     | Codes   |
|---|----------------------------------|---|
| <p><b>LACK OF EMPATHY/EMOTIONAL RESPONSIVENESS</b></p> <p>A lack of awareness of, and sensitivity to, other people’s feelings. Lack of ability to detect other’s feelings, not lack of willingness to respond to them. This lack is pervasive and not specific to any particular relationship.</p> <p><b>*Is s/he good at understanding other people’s feelings?</b></p> <p><b>*Can s/he usually tell when other people are upset?</b></p> <p>If another child is crying, does s/he try to comfort the child?<br/>Does his/her response ever seem inappropriate?<br/>Like s/he laughs if a child is crying?</p> <p><b>*Can s/he tell if s/he is making someone upset?</b></p> | <p>0 – No</p> <p>2 – Present</p> | <p>Intensity<br/>PVA2I01</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> <p>Onset<br/>PAVA2001</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto; text-align: center;">                 / /             </div> |



Definitions and questions

**OBVIOUS NAUGHTINESS**

There should be a lack of guilt or embarrassment around this, despite clear evidence that s/he broke the rules. This should only be coded if the child will break the rules even when bound to be found out because the evidence is absolutely blatant e.g. a child who has his/her hand in the cookie jar and chocolate round his/her mouth.

**\*Does s/he break the rules when s/he is bound to be found out?**

**\*Does s/he deny rule breaking despite clear evidence?**

Coding rules

0 – No

2 - Present

HOME

SCHOOL

ELSEWHERE

Codes

Intensity  
PZR19901

Onset  
PZR19001

 / /

Intensity  
PZR19F01

Intensity  
PZR19F02

Intensity  
PZR19F03

| Definitions and questions   | Coding rules                     | Codes   |
|---|----------------------------------|---|
| <p><b>NEED TO BE IN CONTROL</b></p> <p>The quality of this item is that the child will not ask for, or accept help from, adults or other children, as if s/he is used to always deciding what to do for him/herself.</p> <p><b>*Does s/he have a need to control things?</b></p> <p><b>*Does s/he want to be his/her own boss?</b></p> <p><b>*Does s/he get very upset if someone else is making the rules?</b></p> | <p>0 – No</p> <p>2 - Present</p> | <p>Intensity<br/>PZR21I01</p> <p><input type="checkbox"/></p> <p>Onset<br/>PZR21001</p> <p><input type="checkbox"/> / /</p> <p>Intensity<br/>PZR21I02</p> <p><input type="checkbox"/></p> <p>Intensity<br/>PZR21I03</p> <p><input type="checkbox"/></p> <p>Intensity<br/>PZR21I04</p> <p><input type="checkbox"/></p> |
|   | <p>HOME</p>                      |   |
|   | <p>SCHOOL</p>                    |   |
|   | <p>ELSEWHERE</p>                 |   |

Definitions and questions

Coding rules

Codes

**FAILURE TO LEARN FROM MISTAKES**

This is referring to behaviour and relationships, rather than chores or school work. An example could include a child who loses pocket money because s/he deliberately breaks a sibling's toy, seems upset at the consequence but does the same thing the next day and seems upset at the same consequence again.

**\*Does s/he keep making the same mistakes?**

**\*Does s/he learn from his/her mistakes?**

**\*Does s/he have to learn the hard way?**

0 – No  
2 - Present

HOME

SCHOOL

ELSEWHERE

Intensity  
PZR22I01

Onset  
PZR22001

Intensity  
PZR22I02

Intensity  
PZR22I03

Intensity  
PZR22I04

| Definitions and questions   | Coding rules   | Codes  |
|---|--|--|
| <p><b>INDISCRIMINATE ADULT RELATIONSHIPS</b></p> <p>The child is reported to be willing to be friendly towards almost any adult, to a degree unusually to his/her developmental age, social group, and familiarity with the adult. The child demonstrates reduced or absent reticence around unfamiliar adults. Behaviour is inappropriate for contact with unfamiliar adults. This behaviour should not have a quality in which adults are simply being used as objects (as can be seen in ASD), but should be social in nature.</p> <p>Often the child appears ‘needy’ or ‘clingy’, and behaves inappropriately with unfamiliar adults. This item should only be coded as being present when the child’s behaviour is clearly outside normal limits. If in doubt, code this item as being absent. A child who is simply friendly or polite to adults would not code here.</p> <p><b>*Is s/he overly friendly with strangers?<br/>*Does s/he seem to need affection from whatever adult is near?</b></p> <p>Is X sensible about being friendly with adults?<br/>Is that more than average for a child his/her age, do you think?<br/>Does it worry you?<br/>Do you think it’s a problem?<br/>Has s/he always been like that?</p> <p>Get an example, establish whether the behaviour would be appropriate if the person was not a stranger. Do not code behaviours which would be abnormal even with an intimate.</p> | <p><b>INDISCRIMINATE ADULT RELATIONSHIPS</b></p> <p>0 – No</p> <p>2 – Indiscriminate in adult relationships but parent does not regard this as a problem.</p> <p>3 – Parent regards it as a problem.</p> | <p>Intensity<br/>PAN7I01</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> <p>Onset<br/>PAN7001</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto; text-align: center;">/ /</div> |

Definitions and questions

Coding rules

Codes

**FALSE AFFECTION**

This item has the quality that there is a superficial, cloying or irritating quality to demonstrations of affection by the child.

**\*When s/he is affectionate, does it feel genuine?**

**\*Does s/he often come across as superficially charming?**

**\*Can hugs, kisses etc. feel over-the-top or irritating?**

0 – No  
2 - Present

Intensity  
PZR24I01

Onset  
PZR24001  
 / /

| Definitions and questions   | Coding rules   | Codes   |
|---|--|---|
| <p><b>IMMATURE BEHAVIOUR</b><br/>This is concerned with social behaviour rather than with cognitive abilities.</p> <p><b>*Does s/he act younger than his/her age?</b></p> <p><b>*Do you feel as if you are dealing with a younger child?</b></p> <p><b>*Does s/he act in a babyish way?</b></p> | <p>0 – No</p> <p>2 - Present</p><br><br><br><p>HOME</p><br><br><br><p>SCHOOL</p><br><br><br><p>ELSEWHERE</p> | <p>Intensity<br/>PZR27I01</p> <p><input type="checkbox"/></p><br><p>Onset<br/>PZR27001</p> <p><input type="checkbox"/> / /</p><br><p>Intensity<br/>PZR27I02</p> <p><input type="checkbox"/></p><br><p>Intensity<br/>PZR27I03</p> <p><input type="checkbox"/></p><br><p>Intensity<br/>PZR27I04</p> <p><input type="checkbox"/></p> |

Definitions and questions

Codes

|   |                  |                          |                          |
|---|------------------|--------------------------|--------------------------|
| <p><b>DEMANDING OR ATTENTION-SEEKING</b></p> <p>The child will go to great lengths to get an adult's attention and will resent the adult giving attention to other people or activities.</p> <p><b>*Does s/he need to be the centre of attention?</b></p> <p><b>*Can s/he be demanding?</b></p> | 0 – No           | Intensity<br>PZR28I01    |                          |
|   | 2 - Present      | <input type="checkbox"/> | Onset<br>PZR28001        |
|   |                  | <input type="checkbox"/> | / /                      |
|   | <b>HOME</b>      | Intensity<br>PZR28I02    | <input type="checkbox"/> |
|   | <b>SCHOOL</b>    | Intensity<br>PZR28I03    | <input type="checkbox"/> |
|   | <b>ELSEWHERE</b> | Intensity<br>PZR28I04    | <input type="checkbox"/> |

Definitions and questions

Coding rules

Codes

**HANGING ON BEHAVIOUR**

This behaviour has an irritating limpet-like quality in which the child crowds the adult physically and may have to be peeled off. The child's affect is likely to be false or cloying.

Should be distinguished from separation anxiety in which the child is likely to be displaying anxiety and upset at being separated. Because this behaviour is difficult to describe unless it has been experienced, we recommend beginning by giving the parent the following example:

**\*Some children have an irritating habit of hanging on to adults when they try to walk around the house, so that they feel they either have to drag the child around or peel him/her off. Is s/he like that?**

Who is s/he like that with?

Family?

Strangers?

**\*Does s/he crowd people?**

**Does this happen even if you have not been away or the child is not upset?**

**Is there a pattern of behaviour?**

0 - No

2 - with intimates and strangers and various situations.

Intensity  
PZR29I01

Onset  
PZR29001

Ever  
Intensity  
PZR29I02



Definitions and questions

Coding rules

Codes

**POSSESSIVENESS**

This has the quality that the child wants the parent/carer all to him/herself and will physically try to get between the parent/carer and a rival e.g. spouse, sibling or other close family member or friend.

**\*Does s/he try to get between you and your partner or other family members?**

**\*Does s/he react badly to you giving affection to another member of the family?**

0 – No

2 - Present

Intensity  
PZR30I01

Frequency  
PZR30F01

Onset  
PZR30001

Definitions and questions

Coding rules

Codes

**MINIMAL CHECKING WITH CAREGIVER IN UNFAMILIAR SETTING**

Child rarely or minimally checks back with parent/carer after venturing away even in unfamiliar settings.

**\*If you are in a new place, does X tend to wander away from you?**

IF PRESENT ASK:

Does s/he check in with you?

Either by making eye contact with you or coming back to where you are?

Does this behaviour worry you?

Do you think it's a problem?

Does it ever put him/her in danger?

Add

**Do you have to supervise him/her more than other children to prevent him wandering off?**

Do you have to treat him/her like a much younger child in order to keep him/her safe?

0 – No

2 – Minimal checking but parent does not regard as a problem.

3 – Parent regards it as a problem.

Intensity  
PVA5I01

Onset  
PVA5001

 / /

Definitions and questions

Coding rules

Codes

**CUDDLINESS WITH STRANGERS**

The child invades the social boundaries of strangers and acts in a pseudo-intimate way as if the stranger is a loved one.

This behaviour should not have quality in which adults are simply being used as objects (as can be seen in ASD), but should be social in nature.

**\*How cuddly is s/he with people s/he doesn't know well?**

**\*Does s/he get too physically close to strangers?**

**\*Does this cuddliness feel sociable?**

Do not code if behaviour would be abnormal even with an intimate.

0 – No  
2 - Present

Intensity  
PZR31I01

Onset  
PZR32001  
 / /

| Definitions and questions   | Coding rules                     | Codes  |
|---|----------------------------------|--|
| <p><b>PERSONAL QUESTIONS</b></p> <p>This has a sociable quality in which it is as if the child is trying to get to know the stranger, but does not recognize social boundaries or hierarchies.</p> <p>This behaviour should not have quality in which the adult is being questioned because of a stereotyped interest of the child's (as can be seen in ASD), but should be social in nature.</p> <p><b>*Does s/he ask very personal questions of strangers?</b></p> <p><b>*Does s/he say things that other children would know to be nosy or intrusive?</b></p> <p><b>*Does s/he disclose personal information to strangers?</b></p> <p><b>*Does this have a sociable quality?</b></p> | <p>0 – No</p> <p>2 - Present</p> | <p>Intensity<br/>PZR33I01</p>                          |
|   | HOME                             | <input type="checkbox"/>                               |
|   | SCHOOL                           | <p>Frequency<br/>PZR33F01</p> <input type="checkbox"/> |
|   | ELSEWHERE                        | <p>Frequency<br/>PZR33F02</p> <input type="checkbox"/> |
|   |                                  | <p>Frequency<br/>PZR33FO3</p> <input type="checkbox"/> |
|   |                                  | <p>Onset<br/>PZR33001</p> <input type="checkbox"/>     |
|   |                                  | <input type="checkbox"/> <p>/ /</p>                    |

Definitions and questions

**INVADING SOCIAL BOUNDARIES**

Distinguish from impulsivity. The child should clearly feel s/he has a right to be in places other children would know to be out of bounds.

**\*If you take him/her to a new place, does s/he go into areas other children would know to be out of bounds e.g. the staff room in a clinic, or behind the counter in a shop?**

**\*Does s/he use or explore things which other children would know to be someone else's personal property e.g. rummaging in your locked drawer, using your writing paper to draw on.**

Coding rules

0 – No

2 - Present

Codes

Intensity  
PZR34I02

Onset  
PZR34001

 / /

Definitions and questions

Coding rules

Codes

**PSEUDO-ADULT BEHAVIOUR**

This is not simply a lack of understanding of the social hierarchy (as in ASD): in order to score positively on this item the child should be aware of who is “the boss”, but appear to think s/he is at the same level of the social hierarchy.

**\*Is s/he drawn towards adults, even when in the company of other children?**

**\*Does s/he quickly get on first name terms with adults as if on an equal footing?**

**\*Does s/he sometimes act as if s/he thinks s/he is an adult?**

0 – No  
2 - Present

Intensity  
PZR35101

Onset  
PZR35001  
 / /

Item in broader CAPA RAD only

Definitions and questions

**SMEARING FAECES**

**\* Since s/he was toilet trained, has s/he ever moved his/her bowels anywhere other than the toilet?**

**\*Does s/he ever smear faeces on clothes, towels, furniture etc.?**

Coding rules

- 0 – No
- 2 – Defaecation outside toilet
- 3 – Smearing faeces

Codes

|                            |                                  |
|----------------------------|----------------------------------|
| Intensity<br>PZR36I01      | <input type="checkbox"/>         |
| Frequency<br>PZR36F01      | <input type="checkbox"/>         |
| Onset<br>PZR36001          | <input type="text" value="/ /"/> |
| Ever Intensity<br>PZR36I02 | <input type="checkbox"/>         |
| Ever Frequency<br>PZR36F02 | <input type="checkbox"/>         |

| Definitions and questions  | Coding rules                         | Codes  |
|--|--------------------------------------|--|
| <p><b>DIFFICULT RELATIONSHIPS WITH PRIMARY CAREGIVER</b></p> <p>To score positively on this item, there must be evidence of a specifically very negative attitude towards the primary caregiver.</p> <p>Distinguish from the way many children will express their most negative feelings openly to their attachment figure. There must be a sense that this is out of proportion to reality.</p> <p><b>*Can you tell me about his/her relationship with you (mother or mother-substitute)?</b></p> <p><b>*Do you get a harder time than other family members?</b></p> <p>Does this feel out of proportion?</p> | <p>0 – Absent</p> <p>2 – Present</p> | <p>Intensity<br/>PZR37I01</p> <input data-bbox="1254 521 1327 577" type="checkbox"/><br><br><p>Onset<br/>PZR37001</p> <input data-bbox="1254 745 1362 819" type="text" value="/ /"/> |



Definitions and questions

Coding rules

Codes

**ABNORMAL EATING PATTERNS**

Distinguish from children who simply overeat. To score positively, this must have the quality of the child eating as if starving e.g. stuffing food into his/her mouth, despite being well fed, grabbing food off others' plates or eating until sick.

**GORGING**

**\*Does he/she sometimes gorge on food?**

**STEALING FOOD**

**\*Does he/she ever steal food or hide it away?**

**\* Does s/he scavenge food, eg picking up sweets from the ground?**

0 – Absent  
2 – Present

0= absent  
2=present

Intensity  
PZR38I01

Onset  
PZR38001

PZR38I02

Onset  
PZR38002

Definitions and questions

**SELF-STIMULATION**

In addition to rocking, these behaviours could include head-banging, skin picking etc. as long as not associated with signs of negative feelings about the self.

**\*Have you ever noticed any behaviours such as rocking, or other forms of self-stimulation?**

Coding rules

0 – Absent

2 – Present

Codes

Intensity  
PZR39I01

Onset  
PZR39001

Definitions and questions

**FAILURE TO SEEK/ACCEPT COMFORT**

Code if the young person routinely fails to seek or accept comfort from caregivers, despite hurt or upset.

**\*Does s/he seek comfort from those s/he is close to?**

**\*Does s/he allow carer to soothe him/her if s/he is hurt, frightened, or sick?**

Coding rules  
0 – Absent  
2 – Present

Intensity

Onset

Definitions and questions

**EMOTIONAL WITHDRAWAL**

Code if the young person is routinely emotionally withdrawn, particularly during attempts at social interaction. For example, sitting with hair or hoodie over face during attempts at conversation, turning physically away from the person trying to initiate conversation, or being dismissive of conversation (e.g. by monosyllabic responses or irritable disparagement of the social interaction). Code as positive if the young person was unusually emotionally withdrawn during the first interaction with a new person or during the beginning of a social interaction, even if they “warm up” later.

**\*Is s/he unusually emotionally withdrawn?**

**\*Does s/he avoid social interaction e.g by turning away, hiding under a hood?**

**\*Is s/he dismissive of attempts at social interaction e.g. by not responding or by giving gruff or one-word responses?**

**\*Does s/he fail to engage in conversation**

Coding rules

0 – Absent

2 – Present

Intensity

Onset

Parent RPQ

**Relationship Problems Questionnaire**

Please tick the statement that best describes your child.

|   | Exactly<br>like my<br>child | Like my<br>child         | A bit Like<br>my child   | Not at all<br>like my<br>child | For<br>Office<br>Use Only   |
|---|-----------------------------|--------------------------|--------------------------|--------------------------------|-----------------------------|
| Gets too physically close to<br>strangers   | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 1  |
| Is too cuddly with people s/he<br><i>doesn't know well</i>  | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 2  |
| Often asks very personal questions<br>even though s/he does not mean to<br>be rude  | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 3  |
| <b>Can be aggressive towards<br/>him/herself e.g. using bad<br/>language about him/herself,<br/>headbanging, cutting etc.</b> | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 4  |
| <b>Has no conscience</b>  | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 5  |
| Is too friendly with strangers  | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 6  |
| <b>Sometimes looks frozen with fear,<br/>without an obvious reason</b>  | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 7  |
| <b>If you approach him/her, he/she<br/>often runs away or refuses to be<br/>approached</b>                                    | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 8  |
| <b>There is a false quality to the<br/>affection s/he gives</b>   | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 9  |
| <b>If you approach him/her, you<br/>never know whether s/he will be<br/>friendly or unfriendly</b>                            | <input type="checkbox"/>    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> 10 |
| Scoring   | 3                           | 2                        | 1                        | 0                              |                             |

Score by adding up scores on items 1-10.

Items 1,2,3 and 6 comprise the disinhibited subscale.

Items 4,5,7,8,9 and 10 comprise the inhibited subscale.

### Relationship Problems Questionnaire

Please tick the statement that best describes \_\_\_\_\_ (name of child).

|  | Exactly<br>like -----<br>(child's<br>name) | Like<br>-----<br>(child's<br>name) | A bit Like<br>-----<br>(child's<br>name) | Not at all<br>like -----<br>(child's<br>name) | For<br>Office<br>Use Only   |
|--|--|------------------------------------|--|---|-----------------------------|
| Gets too physically close to strangers   | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 1  |
| Is too cuddly with people s/he doesn't know well   | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 2  |
| Often asks very personal questions even though s/he does not mean to be rude                               | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 3  |
| Can be aggressive towards him/herself e.g. using bad language about him/herself, headbanging, cutting etc. | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 4  |
| Has no conscience  | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 5  |
| Is too friendly with strangers   | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 6  |
| Sometimes looks frozen with fear, without an obvious reason  | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 7  |
| If you approach him/her, he/she often runs away or refuses to be approached                                | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 8  |
| There is a false quality to the affection s/he gives   | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 9  |
| If you approach him/her, you never know whether s/he will be friendly or unfriendly                        | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 10 |
| <b>Will not admit that they cannot do tasks</b>  | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 11 |
| <b>Will not ask for help with tasks</b>  | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 12 |
| <b>Tends to copy other children</b>  | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 13 |
| <b>Is too keen to get to know school staff, eg teachers, janitor, playground supervisors</b>               | <input type="checkbox"/>                   | <input type="checkbox"/>           | <input type="checkbox"/>                 | <input type="checkbox"/>                      | <input type="checkbox"/> 14 |
| Scoring  | 3  | 2                                  | 1  | 0   |                             |

Score by adding up scores on items 1-14 (scoring range 0-42).

Items 1,2,3 and 6 comprise the disinhibited subscale.

Items 4,5,7,8,9 and 10 comprise the inhibited subscale.

Items 10-14 were added by teachers in consultation and we do not yet know on which subscale they will load.



Child's name ..... Male/Female

Date of Birth ..... School year .....

Q1. What level is the young person working at?

A  B  C  D  E  F

First level  Second level  Third level  Fourth level

Q.2 How does this compare to the age appropriate level of attainment?

.....

Q3. Does the young person have any current additional support for learning?

Yes  No

If yes, please provide details below

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

Q3. If you have prolonged experience of working with this student do you feel that they have the potential to be working at a higher level?

Yes  No

If yes, please provide details below

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

**Thank you very much for your help**

**Observational schedule for Reactive Attachment Disorder (Youth Version)**

Child Stranger Interaction

|   | Yes                      | No                       |
|---|--------------------------|--------------------------|
| 1. Does the young person ask inappropriately personal questions?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the child look at stranger(s) as if to invite conversation (the child does not have to smile but, the eye contact must be of a quality that would invite the stranger to communicate in a "normal" social setting)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the child initiate conversation with the stranger(s) as if previously familiar?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Does the young person move towards and approach the stranger(s) with an inappropriate lack of reticence?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the child make physical contact with the stranger(s)?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Does the child display appropriate caution or shyness with the stranger(s)?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is there excessive self disclosure?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Is the young person over-familiar in approach?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Does the young person display emotional withdrawal e.g. hoody up, guarded manner?  | <input type="checkbox"/> | <input type="checkbox"/> |

General Behavioural Characteristics

|  |                          |                          |
|--|--------------------------|--------------------------|
| 1. Does the young person offer the usual social greeting?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is there a fearful quality to the young person's interaction e.g scanning the environment, asking worried questions about the environment or stranger(s)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the child display rapid shifts in emotional expression (defined as sudden shifts to the extremes of emotion)?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Does the child appear to adopt the role of a younger, "babyish" child either in voice or behaviour?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the child appear superficially charming i.e. affection appears insincere or over-the-top (e.g. gives a false smile)?                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Does the child try to exert control over their environment (e.g. tries to be the boss)?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Does the child display a seemingly insatiable demand for attention?   | <input type="checkbox"/> | <input type="checkbox"/> |



### History of Maltreatment Checklist

| Child's ID number:   |     | Child's DOB:  |          |         |
|----------------------|-----|---|----------|---------|
|                      | Yes | No  | Probable | Unknown |
| Emotional neglect    |     |   |          |         |
| Physical neglect     |     |   |          |         |
| Emotional abuse      |     |   |          |         |
| Physical abuse       |     |   |          |         |
| Sexual abuse         |     |   |          |         |
| Domestic violence    |     |   |          |         |
| Number of placements |     | Episodes in care (dates and type e.g. foster care (FC), residential care (RC), kinship care (KC)) |          |         |
| Any other diagnosis? |     |   |          |         |

## **Appendix 2.4 Ethics**

NHS Ethics Committee approval letter

NHS Research and Development approval letter

Social Work Ethical Approval E-mail



**WoSRES**  
*West of Scotland Research Ethics Service*

**Re-issued 5<sup>th</sup> September 2013**

Miss Kate Moran  
Trainee Clinical Psychologist  
Institute of Health and Wellbeing,  
College of Medical, Veterinary and Life Sciences  
Gartnavel Royal Hospital  
1055 Great Western Road,  
Glasgow  
G12 0XH

**West of Scotland REC 1**

Ground Floor, Tennent Building  
Western Infirmary  
38 Church Street  
Glasgow  
G11 6NT

Date 27<sup>th</sup> August 2013  
Direct line 0141-211-6270  
Fax 0141-211-1847

Dear Miss Moran

**Study title:** A study of Reactive Attachment Disorder(RAD)  
symptoms in the youth justice population.  
**REC reference:** 13/WS/0151  
**IRAS project ID:** 128922

Thank you for your email received 20 August 2013, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information was considered in correspondence by a sub-committee of the REC.  
A list of the sub-committee members is attached.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the Assistant Co-ordinator Miss Sharon Jenner, sharon.jenner@ggc.scot.nhs.uk.

**Confirmation of ethical opinion**

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

**Ethical review of research sites**

## NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

## Non-NHS sites

### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.*

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

*Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of approvals from host organisations*

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

### Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

| <i>Document</i>                                   | <i>Version</i>         | <i>Date</i>   |
|---|------------------------|---------------|
| Investigator CV                                   |                        | 13 May 2013   |
| Letter of invitation to participant               | 1                      | 27 May 2013   |
| Other: Academic Supervisor CV - Dr Helen Minnis   |                        | 03 May 2013   |
| Other: Academic Supervisor CV - Dr Susan Turnbull |                        | 25 April 2013 |
| Other: History of maltreatment checklist          |                        |               |
| Other: Capa-style RAD assessment                  | broader version pruned | 13 July 2006  |
| Other: letter from Prof Tom McMillan              |                        | 22 March 2013 |
| Other: Letter from Dougie Fraser                  |                        | 06 June 2013  |

|  |    |                |
|--|----|----------------|
| Other: Email from Miss Kate Moran                                      |    | 13 July 2013   |
| Other: email from Kate Moran   |    | 07 August 2013 |
| Other: Email from Kate Moran (response to Sub Committee queries)       |    | 20 August 2013 |
| Participant Consent Form: 16+ (tracked changes)                        | 3  | 10 July 2013   |
| Participant Consent Form: Carers (tracked changes)                     | 2  | 13 July 2013   |
| Participant Consent Form: Teachers (tracked changes)                   | 2  | 13 July 2013   |
| Participant Consent Form: Ages 12-15 (tracked changes)                 | 2  | 10 July 2013   |
| Participant Information Sheet: Ages 12-17 (tracked changes)            | 4  | 07 August 2013 |
| Participant Information Sheet: Carers (tracked changes)                | 3  | 07 August 2013 |
| Participant Information Sheet: Teachers (tracked changes)              | 3  | 07 August 2013 |
| Protocol (tracked changes)   | 10 | 21 March 2013  |
| Questionnaire: Strengths and Difficulties                              |    |                |
| Questionnaire: Parent Relationship Problems                            |    |                |
| Questionnaire: Teacher Relations Problems                              |    |                |
| Questionnaire: Observational schedule for reactive attachment disorder |    |                |
| Questionnaire: Attainment  | 1  | 27 May 2013    |
| REC application  |    | 24 May 2013    |
| Response to Request for Further Information                            |    | 13 July 2013   |
| Response to Request for Further Information                            |    | 07 August 2013 |
| Response to Request for Further Information                            |    | 20 August 2013 |

#### **Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

#### **After ethical review**

##### Reporting requirements

The attached document "*After ethical review – guidance for researchers*" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

##### Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

|                   |   |
|-------------------|---|
| <b>13/WS/0151</b> | <b>Please quote this number on all correspondence</b> |
|-------------------|---|

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

With the Committee's best wishes for the success of this project.

Yours sincerely



**Dr Peter Hutchison**  
**Vice Chair**

Email: [sharon.jenner@ggc.scot.nhs.uk](mailto:sharon.jenner@ggc.scot.nhs.uk)

*Enclosures: List of names and professions of members who were present at the meeting and those who submitted written comments*  
*"After ethical review – guidance for researchers" [\[SL-AR2\]](#)*

*Copy to: Ms Joanne McGarry, Research and Development*

**West of Scotland REC 1**

**Attendance at Sub-Committee of the REC meeting on 27 August 2013**

**Committee Members:**

| <i>Name</i>        | <i>Profession</i>     | <i>Present</i> | <i>Notes</i> |
|--------------------|-----------------------|----------------|--------------|
| Dr Jane Gow        | Researcher (retired)  | Yes            |              |
| Dr Peter Hutchison | GP (Vice Chair)       | Yes            |              |
| Dr Audrey Morrison | Research Practitioner | Yes            |              |

**Also in attendance:**

| <i>Name</i>        | <i>Position (or reason for attending)</i> |
|--------------------|---|
| Miss Sharon Jenner | Assistant Coordinator                     |

Coordinator/Administrator: JMcG/ LR  
Direct Line: 0141 211 8548  
E-mail: [Joanne.McGarry@ggc.scot.nhs.uk](mailto:Joanne.McGarry@ggc.scot.nhs.uk)  
Website: [www.nhsggc.org.uk/r&d](http://www.nhsggc.org.uk/r&d)

R&D Management Office  
Western Infirmary  
Tennent Institute  
1<sup>st</sup> Floor, 38 Church St  
Glasgow  
G11 6NT

6<sup>th</sup> Sept 2013

Miss Kate Moran  
Trainee Clinical Psychologist  
Gartnavel Royal Hospital  
1055 Gt Western Road  
Glasgow  
G12 0XH

### NHS GG&C Board Approval

Dear Miss Moran

**Study Title:** A study of Reactive Attachment Disorder (RAD) symptoms in the youth justice population.

**Chief Investigator:** Miss Kate Moran

**GG&C HB site:** Community

**Sponsor:** NHS GG&C Health Board

**R&D Reference:** GN13KH179

**REC Ref:** 13/WS/0151

**Protocol no:** V10 dated 21/03/13

I am pleased to confirm that Greater Glasgow & Clyde Health Board is now able to grant **Approval** for the above study.

#### Conditions of Approval

1. **For Clinical Trials** as defined by the Medicines for Human Use Clinical Trial Regulations, 2004
  - a. During the life span of the study GGHB requires the following information related solely to this site
    - i. Notification of any potential serious breaches.
    - ii. Notification of any regulatory inspections.

It is your responsibility to ensure that all staff involved in the study at this site have the appropriate GCP training according to the GGHB GCP policy ([www.nhsggc.org.uk/content/default.asp?page=s1411](http://www.nhsggc.org.uk/content/default.asp?page=s1411)), evidence of such training to be filed in the site file.

2. **For all studies** the following information is required during their lifespan.
  - a. Recruitment Numbers on a monthly basis
  - b. Any change of staff named on the original SSI form
  - c. Any amendments – Substantial or Non Substantial
  - d. Notification of Trial/study end including final recruitment figures
  - e. Final Report & Copies of Publications/Abstracts

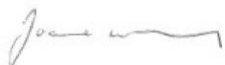


**Please add this approval to your study file as this letter may be subject to audit and monitoring.**

Your personal information will be held on a secure national web-based NHS database.

I wish you every success with this research study

Yours sincerely



**Joanne McGarry  
Research Co-ordinator**

**CC: Dr Helen Minnis, Academic Supervisor, Glasgow  
Dr Sue Turnbull, Academic Supervisor, Glasgow**

4/10/13

Hi Kate

Thanks for this – your research is now approved. I will forward the information sheet on to Jennifer and will ask her to speak to you directly if any changes are required. You should link with Jennifer to get your research started.

As with all external research projects, approval of this research is based on the understanding of the project in its current form and should any significant changes be made to the research aims or methodology, Glasgow City Council reserves the right to withdraw consent.

This consent is also subject to the understanding that Glasgow City Council will be given the opportunity to view the results of the research prior to final publication or submission. I would therefore ask that a copy of your research report is sent to me, Jennifer McDonald and Steve Collins before final publication/submission.

Good luck with the project! I look forward to reading your report.

Thanks

Tina

---

**Tina Callan**

Senior Officer (Performance and Research)

Research & Practice Development Team  
Social Work Services  
Glasgow City Council

✉: Social Work Centre, 40 John Street, Glasgow, G1 1JL

☎: 0141-287 8310

☎: 0141-287 8840

✉: [tina.callan@sw.glasgow.gov.uk](mailto:tina.callan@sw.glasgow.gov.uk)

**Appendix 2.5      Information sheets ISMS and YWC**  
**Consent forms ISMS and YWC**  
**(Young person, Carer, Teacher)**



### Information Sheet (Ages 12- 17)

**Study title: “A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist with the University of Glasgow and NHS (National Health Service). As part of my training I am conducting this research project to help professionals gain a better understanding of young people and their problems.

In this project we are interested in looking at how young people get on with other people.

**Why have I been invited?**

You have been identified as you attend the Intensive Support and Monitoring Service (ISMS). We will be seeing a total of 29 individuals who have contact with ISMS.

**Do I have to take part?**

It is up to you to decide whether or not to take part. This study is completely voluntary. You don't need to take part if you don't want to. It has nothing to do with your ISMS plan, and won't affect your care or any legal issues.

If you do decide to take part you will be asked to sign a consent form, which you will get a copy of. If you decide to take part you can still change your mind and pull out at any time without giving a reason.

**What will happen to me if I take part?**

You will only need to meet with the researcher on one occasion to sign the consent (permission) form.

As part of the study, I would ask a carer or someone that you feel knows you best to participate. I am interviewing carers because I want to get as many points of view as possible. They will be asked to complete three questionnaires and an interview. The interview with your carer will take approximately one hour. I will interview your carer on their own, without you. Their answers will be kept private.

Lastly with your permission I will send your teacher three short questionnaires to complete about education, strengths and difficulties and social relationships.

**What do I have to do?**

You should just attend your F-CAMHS appointment as usual. When you attend the appointment you will be asked to complete a Strengths and Difficulties (SDQ) questionnaire unless you have done this already. We are asking you to agree to us seeing your information.

**What are the possible disadvantages and risks of taking part?**

We do not think that there are any risks or disadvantages in taking part.

**What are the possible benefits of taking part?**

It is unlikely that the study will help you directly. However it is hoped that this research will improve our understanding of how young people get on with others and help us to understand young people better.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints about the research, you can contact us at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

Dr. Suzy O' Connor (Clinical Tutor)  
Department of Health and Wellbeing,  
Admin Building, Gartnavel Royal Hospital,  
1055 Great Western Road,  
Admin Building, Gartnavel Royal Hospital,  
1055 Great Western Road,  
Glasgow  
G12 0XH

Phone number: 0141 211 0607

Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it. You will be allocated an anonymous ID code during testing which will be used in place of your name on any future publications.

If you join the study some parts of the information gathered may be looked at by authorised people to check that the research is being carried out correctly.

A letter will be sent to your GP to let them know that you have agreed to take part in the study.

Lastly, if we are concerned about risk to you or another person, we will report this to your care team.

**What will happen to the results of the research study?**

The results will be compiled and presented in a thesis form as part of a Doctoral programme in Clinical Psychology. In all cases including publication of the study, your name and personal details will not be identified.

**Who is organising the research?**

The study is being organised by Kate Moran, a Doctorate student from the University of Glasgow. This is in collaboration with Dr. Sue Turnbull and Dr. Helen Minnis from the University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given a favourable opinion by the West of Scotland Research Ethics Committee and Glasgow City Council Social Work Ethics Service.

This study has also been reviewed by Doctorate in Clinical Psychology staff at the University of Glasgow.

**Contact for further information**

If you wish to ask anything further, please contact Kate Moran via the address below:

Department of Health and Wellbeing,  
Admin Building, Gartnavel Royal Hospital,  
1055 Great Western Road,  
Glasgow  
G12 0XH

Or via this email address: [Kate.moran@ggc.scot.nhs.uk](mailto:Kate.moran@ggc.scot.nhs.uk)

Or on the following number: 078478149568

**Thank you for reading this information sheet. You will be given a copy to keep. If you have understood the contents of this sheet and wish to take part, please complete the consent sheet on the next page. If you have any questions please feel free to ask them now.**



### Information Sheet (Carers)

**Study title: “A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist and currently attend the University of Glasgow for teaching, in addition to working within the NHS. As part of my training I am conducting this research project to help clinicians gain a better understanding of individual's problems.

In this project we are interested in looking at how adolescents in the youth justice system relate to other people. The adolescent will be asked to complete a questionnaire about their strengths and difficulties. A carer suggested by the adolescent and a teacher will be asked to complete similar questionnaires. It is hoped that this understanding will help to improve the care of young people in the youth justice system in the future.

**Why have I been invited?**

You have been identified by an individual attending the Intensive Support and Monitoring Service (ISMS) as someone who knows them best. We would like to ask you some questions about their behaviour. We will be seeing a total of 29 individuals who have contact with ISMS.

**Do I have to take part?**

It is up to you to decide whether or not to take part. Participating in this study is completely voluntary and you are not under any obligation to consent. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form, which you will get a copy of. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the service or monitoring that the young person gets from the ISMS.

**What will happen to me if I take part?**

If you decide to take part in the study you will be asked to complete an interview and two short questionnaires. I am interviewing carers to try and get as many perspectives as

possible. This will take up to one hour. Any responses given to me will remain confidential and I will not reveal them to the young person in question.

**What do I have to do?**

When you attend the ISMS clinic you will meet with the researcher. As mentioned above you will complete an interview and two questionnaires. The researcher will give you clear instructions beforehand and guide you through the process.

**What are the possible disadvantages and risks of taking part?**

We do not anticipate any risks from taking part in the study. If you feel distressed at any time during the interview please let the researcher know. You are free to take a break or stop at any point. If you feel upset after the interview, please contact the researcher, Clinical Psychologist or your ISMS key worker.

**What are the possible benefits of taking part?**

There will be no direct benefit to you. However it is hoped that this research will improve our understanding of social relationships and may therefore influence the care of future young people in the youth justice system.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints regarding the way this research has been conducted or the way you have been tested, you can contact us at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

Dr. Suzy O' Connor (Clinical Tutor)  
Department of Health and Wellbeing,  
Admin Building, Gartnavel Royal Hospital,  
1055 Great Western Road,  
Admin Building, Gartnavel Royal Hospital,  
1055 Great Western Road,  
Glasgow  
G12 0XH  
Phone number: 0141 211 0607  
Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

All information which is collected during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognized from it. You will be allocated an anonymous ID code during testing which will be used in place of your name on any future publications. Some parts of the information gathered may be looked at by authorised people to check that the research is being carried out correctly. Lastly, if we are concerned about risk to you or another person, we will report this to the clinical team.



**What will happen to the results of the research study?**

The results will be compiled and presented in a thesis form as part of a Doctoral programme in Clinical Psychology. In all cases including publication of the study, names and personal details will not be identified.

**Who is organising the research?**

The study is being organised by Kate Moran, a Doctorate student from the University of Glasgow. This is in collaboration with Dr. Sue Turnbull and Dr. Helen Minnis from the University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given a favourable opinion by the West of Scotland Research Ethics Committee and Glasgow City Council Social Work Ethics Service.

This study has also been reviewed by Doctorate in Clinical Psychology staff at the University of Glasgow.

**Contact for further information**

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Or on the following number: 078478149568

**Thank you for reading this information sheet. You will be given a copy to keep. If you have understood the contents of this sheet and wish to take part, please complete the consent sheet on the next page. If you have any questions please feel free to ask them now.**



**Information Sheet (Teachers)**



**Study title: “A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist and currently attend the University of Glasgow for teaching, in addition to working within the NHS. As part of my training I am conducting this research project to help clinician's gain a better understanding of individual's problems.

In this project we are interested in looking at how adolescents in the youth justice system relate to other people. The adolescent will be asked to complete a questionnaire about their strengths and difficulties. A carer suggested by the adolescent and a teacher will be asked to complete similar questionnaires. It is hoped that this understanding will help to improve the care of young people in the youth justice system in the future.

**Why have I been invited?**

Because you teach an adolescent who has agreed to participate in the research. We will be seeing a total of 29 individuals who have contact with the Intensive Secure and Monitoring Service (ISMS).

**Do I have to take part?**

It is up to you to decide whether or not to take part. Participating in this study is completely voluntary and you are not under any obligation to consent. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form, which you will get a copy of. If you decide to take part you are still free to withdraw at any time and without giving a reason. This will not affect the service or monitoring that the adolescent gets from the ISMS.

**What will happen to me if I take part?**

If you decide to take part in the study you will be asked to complete three short questionnaires relating to the child's functioning and educational attainment. They will take approximately 15 minutes to complete.

Information sheet date of issue: August 2013

Information sheet version number: 3

1

**What do I have to do?**

You will be asked to complete three short questionnaires and return them by freepost.

**What are the possible disadvantages and risks of taking part?**

We do not think that there are any risks or disadvantages in taking part.

**What are the possible benefits of taking part?**

There will be no direct benefit to you. However it is hoped that this research will improve our understanding of social relationships and may therefore influence the care of future young people in the youth justice system.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints regarding the way this research has been conducted or the way you have been tested, you can contact the researcher at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

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1055 Great Western Road,  
Glasgow  
G12 0XH

Phone number: 0141 211 0607

Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

All information which is collected during the course of the research will be kept strictly confidential. Any information you provide will be anonymous. Some parts of the information gathered may be looked at by authorised people to check that the research is being carried out correctly.

Lastly, if we are concerned about risk to the young person or another person, we will report this to the clinical team.

**What will happen to the results of the research study?**

The results will be compiled and presented in a thesis form as part of a Doctoral programme in Clinical Psychology. In all cases including publication of the study, names and personal details will not be identified.

**Who is organising the research?**

The study is being organised by Kate Moran, a Doctorate student from the University of Glasgow. This is in collaboration with Dr. Sue Turnbull and Dr. Helen Minnis from the

Information sheet date of issue: August 2013

2

Information sheet version number: 3

University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

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This study has also been reviewed by Doctorate in Clinical Psychology staff at the University of Glasgow.

**Contact for further information**

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Or on the following number: 078478149568

**Thank you for reading this information sheet. You will be given a copy to keep. If you have understood the contents of this sheet and wish to take part, please complete the consent sheet on the next page. If you have any questions please feel free to contact the researcher.**



### Information Sheet (Ages 12- 17)

**Study title: “A study of social relationship patterns among young people in the Young Women’s Centre (YWC)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist with the University of Glasgow and NHS (National Health Service). As part of my training I am conducting this research project to help professionals gain a better understanding of young people and their problems.

In this project we are interested in looking at how young people get on with other people.

**Why have I been invited?**

You have been identified as you attend the Young Women’s Centre (YWC). We will be seeing a total of 29 individuals who have contact with this service and with the Intensive Support and Monitoring Service.

**Do I have to take part?**

It is up to you to decide whether or not to take part. This study is completely voluntary. You don't need to take part if you don't want to. It has nothing to do with your involvement with the YWC, and won't affect your care or any legal issues.

If you do decide to take part you will be asked to sign a consent form, which you will get a copy of. If you decide to take part you can still change your mind and pull out at any time without giving a reason.

**What will happen to me if I take part?**

You will only need to meet with the researcher on one occasion to sign the consent (permission) form.

As part of the study, I would ask a carer or someone that you feel knows you best to participate. I am interviewing carers because I want to get as many points of view as possible. They will be asked to complete three questionnaires and an interview. The interview with your carer will take approximately one hour. I will interview your carer on their own, without you. Their answers will be kept private.

Lastly with your permission I will send your teacher three short questionnaires to complete about education, strengths and difficulties and social relationships.

**What do I have to do?**

You should just attend the YWC as usual. When you attend the appointment you will be asked to complete a Strengths and Difficulties (SDQ) questionnaire unless you have done this already. We are asking you to agree to us seeing your information.

**What are the possible disadvantages and risks of taking part?**

We do not think that there are any risks or disadvantages in taking part.

**What are the possible benefits of taking part?**

It is unlikely that the study will help you directly. However it is hoped that this research will improve our understanding of how young people get on with others and help us to understand young people better.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints about the research, you can contact us at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

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1055 Great Western Road,  
Glasgow  
G12 0XH

Phone number: 0141 211 0607

Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it. You will be allocated an anonymous ID code during testing which will be used in place of your name on any future publications.

If you join the study some parts of the information gathered may be looked at by authorised people to check that the research is being carried out correctly.

A letter will be sent to your GP to let them know that you have agreed to take part in the study.

Lastly, if we are concerned about risk to you or another person, we will report this to your care team.

**What will happen to the results of the research study?**

The results will be compiled and presented in a thesis form as part of a Doctoral programme in Clinical Psychology. In all cases including publication of the study, your name and personal details will not be identified.

**Who is organising the research?**

The study is being organised by Kate Moran, a Doctorate student from the University of Glasgow. This is in collaboration with Dr. Sue Turnbull and Dr. Helen Minnis from the University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

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**Contact for further information**

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### Information Sheet (Carers)

**Study title: “A study of social relationship patterns among young people in the Young Women’s Centre (YWC)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist and currently attend the University of Glasgow for teaching, in addition to working within the NHS. As part of my training I am conducting this research project to help clinicians gain a better understanding of individual's problems.

In this project we are interested in looking at how adolescents in the youth justice system relate to other people. The adolescent will be asked to complete a questionnaire about their strengths and difficulties. A carer suggested by the adolescent and a teacher will be asked to complete similar questionnaires. It is hoped that this understanding will help to improve the care of young people in the youth justice system in the future.

**Why have I been invited?**

You have been identified by an individual attending the Young Women’s Centre (YWC) as someone who knows them best. We would like to ask you some questions about their behaviour. We will be seeing a total of 29 individuals who have contact with this service and the Intensive Support and Monitoring Service (ISMS).

**Do I have to take part?**

It is up to you to decide whether or not to take part. Participating in this study is completely voluntary and you are not under any obligation to consent. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form, which you will get a copy of. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the service that the young person gets from the YWC.

**What will happen to me if I take part?**

If you decide to take part in the study you will be asked to complete an interview and two short questionnaires. I am interviewing carers to try and get as many perspectives as possible. This will take up to one hour. Any responses given to me will remain confidential and I will not reveal them to the young person in question.



**What do I have to do?**

When you attend the YWC you will meet with the researcher. As mentioned above you will complete an interview and two questionnaires. The researcher will give you clear instructions beforehand and guide you through the process.

**What are the possible disadvantages and risks of taking part?**

We do not anticipate any risks from taking part in the study. If you feel distressed at any time during the interview please let the researcher know. You are free to take a break or stop at any point. If you feel upset after the interview, please contact the researcher or Clinical Psychologist.

**What are the possible benefits of taking part?**

There will be no direct benefit to you. However it is hoped that this research will improve our understanding of social relationships and may therefore influence the care of future young people in the youth justice system.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints regarding the way this research has been conducted or the way you have been tested, you can contact us at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

Dr. Suzy O' Connor (Clinical Tutor)  
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Glasgow  
G12 0XH  
Phone number: 0141 211 0607  
Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

All information which is collected during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognized from it. You will be allocated an anonymous ID code during testing which will be used in place of your name on any future publications. Some parts of the information gathered may be looked at by authorised people to check that the research is being carried out correctly. Lastly, if we are concerned about risk to you or another person, we will report this to the clinical team.

**What will happen to the results of the research study?**

Information sheet date of issue: August 2013  
Information sheet version number: 3

2

The results will be compiled and presented in a thesis form as part of a Doctoral programme in Clinical Psychology. In all cases including publication of the study, names and personal details will not be identified.

**Who is organising the research?**

The study is being organised by Kate Moran, a Doctorate student from the University of Glasgow. This is in collaboration with Dr. Sue Turnbull and Dr. Helen Minnis from the University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

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**Contact for further information**

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**Information Sheet (Teachers)**



**Study title: “A study of social relationship patterns among young people in the Young Women’s Centre (YWC)”.**

**Chief Investigator:**

Kate Moran, Trainee Clinical Psychologist

**Research Supervisors:**

Dr. Sue Turnbull and Dr. Helen Minnis

You are being invited to take part in a research study. Before you decide it is important for you to understand what the research is and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. If you don't understand, or want more information, you can ask us. Take time to decide whether or not you wish to take part.

**Background and Purpose**

I am training to be a Clinical Psychologist and currently attend the University of Glasgow for teaching, in addition to working within the NHS. As part of my training I am conducting this research project to help clinician's gain a better understanding of individual's problems.

In this project we are interested in looking at how adolescents in the youth justice system relate to other people. The adolescent will be asked to complete a questionnaire about their strengths and difficulties. A carer suggested by the adolescent and a teacher will be asked to complete similar questionnaires. It is hoped that this understanding will help to improve the care of young people in the youth justice system in the future.

**Why have I been invited?**

Because you teach an adolescent who has agreed to participate in the research. We will be seeing a total of 29 individuals who have contact with the Young Women's Centre (YWC) and the Intensive Secure and Monitoring Service (ISMS).

**Do I have to take part?**

It is up to you to decide whether or not to take part. Participating in this study is completely voluntary and you are not under any obligation to consent. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form, which you will get a copy of. If you decide to take part you are still free to withdraw at any time and without giving a reason. This will not affect the service that the adolescent gets from the YWC.

**What will happen to me if I take part?**

If you decide to take part in the study you will be asked to complete three short questionnaires relating to the child's functioning and educational attainment. They will take approximately 15 minutes to complete.

Information sheet date of issue: August 2013  
Information sheet version number: 3

1

**What do I have to do?**

You will be asked to complete three short questionnaires and return them by freepost.

**What are the possible disadvantages and risks of taking part?**

We do not think that there are any risks or disadvantages in taking part.

**What are the possible benefits of taking part?**

There will be no direct benefit to you. However it is hoped that this research will improve our understanding of social relationships and may therefore influence the care of future young people in the youth justice system.

**What if something goes wrong?**

We do not anticipate any harms or risks from taking part in this study. However, if you have any concerns or complaints regarding the way this research has been conducted or the way you have been tested, you can contact the researcher at any time. Dr. Suzy O' Connor, who is independent from the study, may also be contacted if you have any questions. Her contact details are as follows;

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Phone number: 0141 211 0607

Email address: Suzy.O'Connor@glasgow.ac.uk

**Will my taking part in this study be kept confidential?**

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Lastly, if we are concerned about risk to the young person or another person, we will report this to the clinical team.

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Information sheet date of issue: August 2013

Information sheet version number: 3

2

University of Glasgow and Dr. Aileen Blower and Dr. Jennifer McDonald from NHS Greater Glasgow and Clyde.

**Who has reviewed the study?**

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Or on the following number: 078478149568

**Thank you for reading this information sheet. You will be given a copy to keep. If you have understood the contents of this sheet and wish to take part, please complete the consent sheet on the next page. If you have any questions please feel free to contact the researcher.**



University of Glasgow

Young Person's Consent Form (12-15)



Title of Project: "A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)".

Name of Researcher: Kate Moran

Please initial the box

- 1. I confirm that I have read the information sheet dated 10/07/2013 (version 2) for the above study.
2. I have had enough time to discuss this study and ask questions.
3. I have received satisfactory answers to all of my questions.
4. I have received enough information about the study
5. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.
6. I understand that sections of my case notes may be looked at by the research team where it is relevant to my taking part in the research. I will allow these individuals to look at my records.
7. I agree to take part in the above study
8. I agree to my GP being told that I am taking part in this study
9. I agree to the researcher contacting my carer or someone who knows me well. Their name is
10. I agree to the researcher contacting my teacher.

Name of Participant Date Signature

Consent form date of issue: 10th July 2013
Consent form version number: 2



-----  
Name of Parent/carer

-----  
Date

-----  
Signature

-----  
Name of Person  
taking consent.

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013  
Consent form version number: 2

2



University  
of Glasgow

Young Person's Consent Form  
(16+)



Title of Project: "A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)".

Name of Researcher: **Kate Moran**

Please initial the box

1. I confirm that I have read the information sheet dated 10/07/2013 (version 3) for the above study.
2. I have had enough time to discuss this study and ask questions.
3. I have received satisfactory answers to all of my questions.
4. I have received enough information about the study
5. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.
6. I understand that sections of my case notes may be looked at by the research team where it is relevant to my taking part in the research. I will allow these individuals to look at my records.
7. I agree to take part in the above study
8. I agree to my GP being told that I am taking part in this study
9. I agree to the researcher contacting my carer or someone who knows me well. Their name is \_\_\_\_\_
10. I agree to the researcher contacting my teacher.

-----  
Name of Participant

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013

Consent form version number: 3

1





-----  
Name of Person  
taking consent.

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013  
Consent form version number: 3

2





**Consent form (Teachers)**

Title of Project: "A study of social relationship patterns among young people in the Intensive Support and Monitoring Service (ISMS)".

Name of Researcher: **Kate Moran**

***Please initial all boxes***

- 1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- 2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
- 3. I agree to take part in the above study.

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Consent form date of issue: July 2013  
Consent form version number: 2

Page 1 of 1



University  
of Glasgow

Young Person's Consent Form  
(12-15)



Title of Project: "A study of social relationship patterns among young people in the Young Women's Centre (YWC)".

Name of Researcher: **Kate Moran**

Please initial the box

1. I confirm that I have read the information sheet dated 10/07/2013 (version 2) for the above study.
2. I have had enough time to discuss this study and ask questions.
3. I have received satisfactory answers to all of my questions.
4. I have received enough information about the study
5. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.
6. I understand that sections of my case notes may be looked at by the research team where it is relevant to my taking part in the research. I will allow these individuals to look at my records.
7. I agree to take part in the above study
8. I agree to my GP being told that I am taking part in this study
9. I agree to the researcher contacting my carer or someone who knows me well. Their name is \_\_\_\_\_
10. I agree to the researcher contacting my teacher.

-----  
Name of Participant

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013

Consent form version number: 2

1



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Name of Parent/carer

-----  
Date

-----  
Signature

-----  
Name of Person  
taking consent.

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013  
Consent form version number: 2

2



University of Glasgow

Young Person's Consent Form (16+)



Title of Project: "A study of social relationship patterns among young people in the Young Women's Centre".

Name of Researcher: Kate Moran

Please initial the box

- 1. I confirm that I have read the information sheet dated 10/07/2013 (version 3) for the above study.
2. I have had enough time to discuss this study and ask questions.
3. I have received satisfactory answers to all of my questions.
4. I have received enough information about the study
5. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.
6. I understand that sections of my case notes may be looked at by the research team where it is relevant to my taking part in the research. I will allow these individuals to look at my records.
7. I agree to take part in the above study
8. I agree to my GP being told that I am taking part in this study
9. I agree to the researcher contacting my carer or someone who knows me well. Their name is
10. I agree to the researcher contacting my teacher.

Name of Participant Date Signature

Consent form date of issue: 10th July 2013
Consent form version number: 3



-----  
Name of Person  
taking consent.

-----  
Date

-----  
Signature

Consent form date of issue: 10th July 2013  
Consent form version number: 3

2







### Consent form (Teachers)

Title of Project: "A study of social relationship patterns among young people in the Young Women's Centre (YWC)".

Name of Researcher: **Kate Moran**

*Please initial all boxes*

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
  
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
  
3. I agree to take part in the above study.

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Consent form date of issue: July 2013  
Consent form version number: 2

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## Appendix 2.6 Information on who completed measures with participants

| Measure                                     | Completed by  |
|---|---|
| <b>1. SDQ (Self)</b>                        |   |
| 7 already complete                          | ISMS Psychologist   |
| 12 to be updated                            | 4 - ISMS Psychologist<br>5- Researcher<br>2 – participants and passed to carers |
| 1 old version used                          |   |
| 10 had no SDQ                               | 9 – Researcher<br>1- participant and passed to carer                            |
| <b>2. Observational Schedule</b>            | 12 - ISMS Psychologist<br>15- Researcher<br>2 – carers                          |
| <b>3. History of Maltreatment Checklist</b> | 19 – ISMS Psychologist<br>10 – YWC staff  |
| <b>4. Carer Measures</b>                    | 29 – Researcher   |

## Appendix 2.7 Imputed data results - before and after imputation on the TSDQ and the TRPQ

|             | Total TSDQ and TRPQ | Imputed Total TSDQ and TRPQ |
|-------------|---------------------|-----------------------------|
| $r_s$       | .47                 | .45                         |
| P value     | .17                 | .51                         |
| $N$         | 10                  | 19                          |
| Significant | No                  | No                          |

|             | Total TSDQ and Disinhibited TRPQ | Imputed Total TSDQ and Disinhibited TRPQ |
|-------------|----------------------------------|--|
| $r_s$       | .51                              | .51                                      |
| P value     | .07                              | .03                                      |
| $N$         | 13                               | 19                                       |
| Significant | No                               | Yes                                      |

|             | Total TSDQ and Inhibited TRPQ | Imputed Total TSDQ and Inhibited TRPQ |
|-------------|-------------------------------|---------------------------------------|
| $r_s$       | .55                           | .41                                   |
| P value     | .05                           | .09                                   |
| $N$         | 13                            | 19                                    |
| Significant | No                            | No                                    |

|               | Total TRPQ and subscales        | Total Imputed TRPQ and imputed subscales |
|---------------|---------------------------------|--|
| Emotional     | $r_s = .02, p = .95, N=12$ (NS) | $r_s = -.01, p = .98, N=19$ (NS)         |
| Conduct       | $r_s = .38, p = .25, N=11$ (NS) | $r_s = .54, p = .02, N=19$ (S)           |
| Hyperactivity | $r_s = .33, p = .27, N=13$ (NS) | $r_s = .46, p = .05, N=19$ (S)           |
| Peer problems | $r_s = .31, p = .30, N=13$ (NS) | $r_s = .22, p = .38, N=19$ (NS)          |
| Prosocial     | $r_s = .16, p = .63, N=11$ (NS) | $r_s = -.04, p = .89, N=18$ (NS)         |

|               | Total Disinhibited TRPQ and subscales | Total Imputed Disinhibited TRPQ and imputed subscales |
|---------------|---------------------------------------|---|
| Emotional     | $r_s = .17, p = .54, N=16$ (NS)       | $r_s = .08, p = .73, N=19$ (NS)                       |
| Conduct       | $r_s = .53, p = .04, N=15$ (S)        | $r_s = .51, p = .03, N=19$ (S)                        |
| Hyperactivity | $r_s = .58, p = 0.2, N=17$ (S)        | $r_s = .47, p = .04, N=19$ (S)                        |
| Peer problems | $r_s = .39, p = .14, N=16$ (NS)       | $r_s = .22, p = .37, N=19$ (NS)                       |
| Prosocial     | $r_s = .08, p = .82, N=12$ (NS)       | $r_s = .13, p = .60, N=18$ (NS)                       |

|               | Total Inhibited TRPQ and subscales | Total Imputed Inhibited TRPQ and imputed subscales |
|---------------|------------------------------------|--|
| Emotional     | $r_s = .16, p = .56, N=16$ (NS)    | $r_s = .05, p = .83, N=19$ (NS)                    |
| Conduct       | $r_s = .45, p = .09, N=15$ (NS)    | $r_s = .44, p = .06, N=19$ (NS)                    |
| Hyperactivity | $r_s = .46, p = .06, N=17$ (NS)    | $r_s = .44, p = .06, N=19$ (NS)                    |
| Peer problems | $r_s = .33, p = .22, N=16$ (NS)    | $r_s = .29, p = .23, N=19$ (NS)                    |
| Prosocial     | $r_s = -.34, p = .29, N=12$ (NS)   | $r_s = -.25, p = .32, N=18$ (NS)                   |

## Appendix 2.8 Table of SDQ results (Self, Carer and Teacher versions)

| <b>Total</b>             | <b>Unlikely</b> | <b>Possible</b> | <b>Probable</b> | <b>Possible and probable percentages summed</b> |
|--------------------------|-----------------|-----------------|-----------------|---|
| <b>Self</b>              | 14 (48%)        | 9 (31%)         | 6 (21%)         | 52%   |
| <b>Carer</b>             | 8 (28%)         | 5 (17%)         | 16 (55%)        | 72%   |
| <b>Teacher (Imputed)</b> | 4 (21%)         | 2 (11%)         | 13 (68%)        | 79%   |
| <b>Emotional</b>         |                 |                 |                 |   |
| <b>Self</b>              | 22 (76%)        | 4 (14%)         | 3 (10%)         | 24%   |
| <b>Carer</b>             | 15 (52%)        | 5 (17%)         | 9(31%)          | 48%   |
| <b>Teacher (Imputed)</b> | 14 (74%)        | 3 (16%)         | 2 (11%)         | 27%   |
| <b>Conduct</b>           |                 |                 |                 |   |
| <b>Self</b>              | 12 (41%)        | 5 (17%)         | 12 (41%)        | 58%   |
| <b>Carer</b>             | 4(14%)          | 4(14%)          | 21(72%)         | 86%   |
| <b>Teacher (Imputed)</b> | 4 (21%)         | 0               | 15 (79%)        | 79%   |
| <b>Hyperactivity</b>     |                 |                 |                 |   |
| <b>Self</b>              | 11 (38%)        | 4 (14%)         | 14 (48%)        | 62%   |
| <b>Carer</b>             | 9(31%)          | 5 (17%)         | 15(52%)         | 69%   |
| <b>Teacher (Imputed)</b> | 10 (53%)        | 3 (16%)         | 6 (32%)         | 48%   |
| <b>Peer problems</b>     |                 |                 |                 |   |
| <b>Self</b>              | 19 (66%)        | 7 (24%)         | 3 (10%)         | 34%   |
| <b>Carer</b>             | 6 (21%)         | 5 (17%)         | 18 (62%)        | 79%   |
| <b>Teacher (Imputed)</b> | 8 (42%)         | 2 (11%)         | 9 (47%)         | 58%   |
| <b>Prosocial</b>         |                 |                 |                 |   |
| <b>Self</b>              | 24 (83%)        | 2 (7%)          | 3 (10%)         | 17%   |
| <b>Carer</b>             | 13 (46%)        | 9 (32%)         | 6 (21%)         | 53%   |
| <b>Teacher (Imputed)</b> | 4 (22%)         | 5 (28%)         | 9 (50%)         | 78%   |