

# Identifying speech, language and communication needs among children in residential care

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## **Abstract**

It is recognised that levels of communication impairment are likely to be higher among looked-after children than they are in the general population (Royal College of Speech and Language Therapists [RCSLT], 2006). Moreover, there are claims that communication needs in this vulnerable population remain largely undetected and unmet (Cross, 2004). Empirical research in this area is lacking.

## **Keywords**

Residential care, speech needs, language needs, communication needs

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## **Introduction**

It is recognised that levels of communication impairment are likely to be higher among looked-after children than they are in the general population (Royal College of Speech and Language Therapists [RCSLT], 2006). Moreover, there are claims that communication needs in this vulnerable population remain largely undetected and unmet (Cross, 2004). Empirical research in this area is lacking.

There have been no systematic, large-scale investigations focusing specifically on communication impairment in looked-after children. Accounts are largely at the level of anecdote or, at best, expert opinion. Thus, Cross (2004) reports on discovering via clinical practice a 'startling number' of previously undetected communication impairments among young people in public care. Guidance on research is, fortunately, available from a growing body of evidence from closely related areas.

It is accepted that in the general population, ten percent of school-aged children will have difficulties with speech, language or communication at a level that will impact on their functioning (RCSLT, 2006). Significantly higher rates have been reported for children who have experienced socio-economic disadvantage (Locke, Ginsborg and Peers, 2002), impoverished early language environment (Law, 1992) and inadequacies in their early caregiver relationships (Madigan et al., 2007); circumstances that pertain to most looked-after children in the UK (Minnis et al., 2001). Psychological distress and emotional-behavioural problems are prevalent amongst children and young people in residential care

(Residential Care Health Project, 2004). Recent research establishes links between particular behavioural problems and specific patterns of communicative difficulty in children (van Daal et al., 2007). In particular, emerging evidence establishes a link between behavioural problems and 'pragmatic' impairment, which refers to difficulty in communicating and interacting effectively and appropriately in social contexts (Ketelaars et al., 2010). There is equally compelling evidence that more than half of young people with psychiatric disorders also have communication disorders, often within this realm of pragmatic functioning (Cohen & Roberts, 1996).

Mental health problems arise far more frequently in looked after children as a group, and reported levels among children in residential care are significantly higher than those in foster care (Meltzer et al., 2003), indicating that the residential care group may be of particular interest. Moreover, there are significant issues of under-detection and lack of referral for mental health difficulties and as a result there has been a focus on improving the detection of affected individuals. For example, it has been found that detection of mental health problems could be enhanced by using the Strengths and Difficulties Questionnaire (SDQ) as a regular screening measure (Goodman et al., 2004), and that such a move is endorsed by social workers and managers who have had some experience of its use (Whyte and Campbell, 2008).

This study sets out to explore the levels and nature of speech, language and communication impairments in this population; and to consider the use of a screening tool intended to differentiate those with difficulties in the structural aspects of speech and language from those with difficulties of a pragmatic or social nature. The study has the following aims:

- To investigate whether elevated levels of communication impairment exist among children in residential care.
- To explore the nature of communication impairment among children in residential care, including difficulties in pragmatic and social interaction areas.
- To explore levels of previously undetected and unmet communication need
- To consider the suitability of the Children's Communication Checklist - Revised (CCC-2) as a screening tool in this context.

## Methodology

### *Study design*

Residential care staff completed the CCC-2 regarding children well-known to them. Resulting data were analysed to determine the level and nature of reported communication difficulty within the sample population. In addition, staff members were asked to provide information as to whether children were known to have a communication difficulty or had previously been suspected as having such difficulty, and whether referral to relevant professionals had been made. When compared to data from the CCC-2, the results provided insight about levels of previously undetected and unmet need.

### **Participants**

Children's homes in four local authority areas in Scotland were approached to take part. Members of staff were asked to provide information on all children residing within each unit who met the inclusion criteria. These criteria, stipulated by the CCC-2, included children and young people aged four and over who were able to talk in connected utterances of three or more words. Staff were required to have had regular contact with the child on whom they were reporting, for at least three to four days a week for at least the preceding three months. Checklists were received for 30 children and young people.

### **Materials**

The CCC-2 has been developed to provide a general screen for communication disorder and to identify impairments in the pragmatic and social interaction realm (Bishop, 2003). It is a 70-item instrument that takes around 5 - 15 minutes to complete. It consists of ten subscales as follows: speech, syntax, semantics, coherence, inappropriate initiation, stereotyped language, use of context, non-verbal communication, social relations and interests. Respondents are required to indicate how frequently an observed behaviour occurs, on a four-point scale ranging from less than once a week (or never) to several times a day (or always).

The CCC-2 has been robustly standardised in the UK (Bishop, 2003) and it has been shown to have good inter-rater agreement and validity (Norbury et al., 2004), thereby establishing the instrument's effectiveness in distinguishing children with communication impairments from unimpaired peers, and in identifying those children whose difficulties lie primarily in pragmatic and social areas.

Ethical approval was first granted from the appropriate committee within the University of Strathclyde. Permission to conduct the study was then gained from senior managers within the local authorities, before further permission was received from the managers of each residential unit. These managers were asked to gain assent from those holding parental responsibility. Individual members of staff gave their written consent for each checklist they completed.

### **Procedure**

Completed checklists were returned and responses analysed using CCC-2 Excel software. This generated, for each subject, both a total raw score and a scaled score for each of the ten scales, as well as corresponding percentiles. In addition, two composite scores were generated for each case. All of the derived scores were collated on individual summary sheets. A sample summary sheet can be found in Table 1.

| <b>Table 1. CCC - Communication and Symbolic Function Scales - Profile summary sheet for male subject (aged 15 years)</b> |                  |                     |                   |
|---|------------------|---------------------|-------------------|
| <i>Scale</i>  | <i>Raw score</i> | <i>Scaled score</i> | <i>Percentile</i> |
| <b>A. speech</b>  | 2                | 6                   | 14                |
| <b>B. syntax</b>  | 1                | 8                   | 28                |
| <b>C. semantics</b>   | 3                | 6                   | 12                |
| <b>D. coherence</b>   | 6                | 4                   | 4                 |
| <b>E. inappropriate initiation</b>  | 6                | 5                   | 5                 |
| <b>F. stereotyped language</b>  | 4                | 5                   | 6                 |
| <b>G. use of context</b>  | 4                | 4                   | 3                 |
| <b>H. nonverbal communication</b>   | 3                | 6                   | 15                |
| <b>S. social relations</b>  | 6                | 3                   | 2                 |
| <b>J. interests</b>   | 9                | 3                   | <1                |
| <b>General Communication Composite -</b>  |                  |                     |                   |
| <b>Social Interaction Deviance Composite - ID</b>   |                  | -                   |                   |
| <b>Consistency Check</b>  |                  |                     |                   |

Use of the CCC-2 permits identification of cases where the communicative profile obtained is suggestive of Specific Language Impairment. This term applies when linguistic functioning is significantly impaired in an individual in whom there is no explanatory impairment in intellectual or sensory functioning and no associated medical or developmental conditions (Tomblin, 2008). Cases suggestive of this profile arise where an SIDC of nine or more is obtained in a child with a GCC below 55.

Data from CCC-2 was cross-referenced with reports of previous concerns and/ or referrals in relation to the child's speech, language or communication, where such information had been provided.

## Results

**Overall:** In 19 of the 30 cases, scores on the CCC-2 indicated the presence of speech, language or communication impairments of clinical significance. For the remaining 11 cases no such impairments were indicated.

**Gender:** The sample population was evenly split between males (N=15) and females (N=15). Among the group whose CCC-2 profile was clinically significant (N=19), the population was heavily skewed towards males (N=13) as opposed to females (N=6). Conversely, among the group where no potential concerns were indicated (N=11), there was a clear majority of female subjects (N=9) as opposed to males (N=2). In this study, then, male subjects were considerably more likely to obtain profiles suggestive of impairment.

### *Nature of communication impairments within the sample population*

Within the 19 cases where impairment was indicated, eight had profiles suggestive of an autism spectrum condition. For the remaining 11 cases, the profile was instead suggestive of impaired functioning in areas of speech, language or communication, but not characteristic of autism spectrum conditions.

Among the group of eight children whose profiles suggested possible autism spectrum conditions, six had scores indicating autism and two had profiles suggestive of Asperger's Syndrome.

The group of 11 individuals with low GCC scores was sub-divided according to severity. Representing the most severe levels of impairment were seven of these 11 children, with a GCC at or below 40. No child in the sample generated a profile suggestive of Specific Language Impairment.

### *Levels of undetected and unmet need*

There were 19 cases on which information was available regarding previous concerns and/or referrals regarding speech, language or communication. None of these 19 cases had been confirmed, nor indeed identified, as having speech, language or communication needs. None of the 19 cases had been referred to relevant professionals over concerns in these areas.

For three cases, it was reported that there had been concerns with regard to the child's speech, language or communication. No referrals had been made to address these concerns. It was reported in one case that a referral was being instigated; it was unclear as to whether completion of the CCC-2 had been influential in this decision. In a second case where prior concerns were noted, the CCC-2 indicated no impairment, although a profile indicating autism spectrum was narrowly missed. In the third case, the CCC-2 showed a clinically significant profile, the form of a low GCC but not a negative SIDQ.

In 16 of the 19 cases where information was available, there had been no previous concerns over speech, language or communication. In seven of these 16 cases, no

impairments were indicated on the CCC-2. The CCC-2 highlighted cause for concern in nine of these 16 cases, with five individuals obtaining low GCC scores and a further four obtaining profiles suggestive of autism spectrum conditions.

Put another way, information regarding previous concerns and/ or referrals was available for ten of the 19 cases whose profiles indicated impairment: in nine out of these ten cases there had been concerns but no referrals had been made despite this.

### *Usefulness of the CCC-2 as a screening tool*

This preliminary study did not set out to evaluate respondents' perceptions of the CCC-2 as an instrument with which to consider and report on children and young people's speech, language and communication. Nevertheless, it can be observed, from responses received, that staff members in residential care homes as a group are suitably placed to complete the checklists on children they know well. Designed as a parent-completed checklist, the levels of literacy and understanding required for completion of the CCC-2 are well within the capabilities of staff employed in residential settings. Bishop (2003) stresses that the CCC-2 should not be viewed as a diagnostic tool. Rather, when used in a screening context, it should be seen as an indicator of the need for supplementary, targeted assessment.

There are additional practical considerations regarding the use of the CCC-2 as a screening tool within the residential care setting. In essence, the issue concerns timing of a screening tool within a context in which children often encounter frequent moves and changes of care personnel. The CCC-2 is not suitable for conducting screening immediately on entry to the residential care system, or on entry to a new care context. At a minimum, three months of settled, frequent interaction is necessary for a caregiver to complete this instrument.

Nonetheless, results in this preliminary investigation support the suitability of the CCC-2 as an instrument both to consider the communicative profiles of individual children and young people in residential care, and to investigate patterns and trends within that population as a whole.

## **Discussion**

This was a preliminary pilot study with limited numbers of children and young people. As such it should be treated with some caution. However, the findings were interesting and merit further research. This study indicated substantially higher levels of communication impairment among children in residential care than exists in the general population. Almost two-thirds of the sample population (19 out of 30) obtained CCC-2 profiles indicative of clinical impairment, meriting further assessment. This is in marked contrast with the accepted prevalence estimate that ten percent of the typical school-aged population will encounter difficulties with speech, language or communication sufficient to impact on their functioning (RCSLT, 2006). Further, the likelihood of communication impairment being detected by the CCC-2 in this study was considerably higher among males.

Predictions of high levels of pragmatic and social difficulties were borne out by results of this investigation. In eight of the 19 cases where impairment was indicated, the profile was indicative of the social and communicative impairments typically associated with autistic spectrum disorders. This represents 26.7 percent of the overall sample population. This is markedly more than the upper prevalence estimates for such disorders within the general population, which range from 0.5% to 1% (Scott et al., 2002). Where social and communicative impairment was indicated, the general trend in the study was towards greater levels of severity.

The study did not reveal children in whom communication impairment had been confirmed, but who had not received intervention. Such a finding would have been consistent with the experiences of Conway and Stokes (2005) who bemoaned the difficulties in providing access to and consistency of speech and language therapy services to referred children and young people, whose frequent moves proved disruptive to service provision. Nor did the study reveal substantial numbers of children for whom communication impairment had been suspected but who had not been referred for investigation. This would have provided support for the views of Whyte and Campbell (2008) regarding lack of knowledge of where or how to refer suspected cases, or indeed lack of confidence that services would respond and a fear of 'flooding' services. Instead, and arguably of more fundamental concern, the study indicated the presence of communication impairment among substantial numbers of children for whom it had never previously been suspected. Results in this study, therefore, provide preliminary evidence that communication impairments in looked-after children, in the main, remain undetected, rather than being unmet.

The explanations for why communication impairments among children in residential care remain undetected are likely to be complex and multi-factorial. Communication is neglected in the statutory assessment of children entering care (Cross, 2004) and this neglect is also to be found in service-enhancement policy papers purporting to be holistic and wide-ranging (e.g. Scottish Executive, 2007). Differing philosophical stances may have a bearing here: there may be reluctance among practitioners in the care system to adopt an impairment-based model. The tradition among social work services has been to operate from social rather than medical models, and from a desire to avoid unnecessarily 'labelling' children (Goodman et al., 2004). Equally, issues may be much more practical in nature, and reflect systemic issues which are widely believed to limit access of looked-after children to healthcare services (Dunnett et al., 2006). Research indicates that the problems of placement disruption and high staff turnover can frequently affect the lives of looked-after children (Colton and Roberts, 2007). This may preclude the deep understanding of children's functioning, gained over time and in a range of contexts, that may be necessary to raise and sustain concerns about communicative functioning. Perhaps related, there is a further possible explanatory contributing factor regarding lack of staff training and awareness. This has certainly been found to be relevant in the lack of identification of mental health issues among this population (Whyte and Campbell, 2008). This may be exacerbated by the nature of communicative impairments, especially those whose surface presentation may be relatively subtle, such as receptive language impairments or pragmatic disorders. On the other hand, overt manifestation of

communication difficulties, in the form of disruptive behaviour, may invoke a response targeting the behaviour rather than exploring underlying causes (Cross, 2004).

The effects of unmet communication needs on individuals are likely to be far-reaching and long-standing. There is evidence, for example, that children with communication support needs often under-perform in the highly verbal and communicatively complex environment of schools (Law et al., 2007). Statistics show that a substantial majority of care leavers fail to gain any formal qualifications (Connelly and Chakrabarti, 2008), and that the highest level of educational difficulty and the lowest levels of attainment are recorded among those who are looked after away from home. Young people from the care system were found in significant numbers in Bryan et al.'s (2007) investigation into previously undetected communication difficulty among the population in young offenders' institutions (19 of the 58 subjects). The implications, therefore, go beyond the level of the individual and are of wider significance to society.

It would seem indefensible to ignore such clear indications that children and young people in residential care encounter difficulties with speech, language and communication in such proportions, to such a degree of severity, and with such significant consequences. There is clear justification for action to be taken with the aim of identifying and addressing communicative impairments among this group. Use of the CCC-2 could help identify relatively subtle pragmatic impairments efficiently via a care-giver completed checklist.

Further research is necessary to determine the extent to which results reported here are replicated among larger samples, spread across wider geographical areas. Use of a matched control group would strengthen the design. Future studies should implement greater controls over the numbers of checklists distributed in order to be able to provide statistical confirmation that returns are representative of the population as a whole. Additional systems should be put in place to maximise the return of complete and analysable data. This study highlighted the CCC-2 as a promising screening tool for children and young people within residential care. It would be beneficial to evaluate its use as a screening tool more systematically and from a range of perspectives, including those of the workers who might be required to use it. Research is also needed to examine the relationship between initial CCC-2 scores and the results of subsequent, more detailed and robust assessment on children and young people from the residential care population.

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