

This is the author's version of the following article: "The Development of Children's Understanding of Common Psychological Problems" *Published in Child and Adolescent Mental Health* Volume 14, Issue 1, pages 42–47, February 2009, which has been published in final form at <http://dx.doi.org/10.1111/j.1475-3588.2008.00494.x>

LRH: Eilis Hennessy & Caroline Heary

RRH: Children's Understanding of Psychological Problems

The Development of Children's Understanding of Common Psychological Problems

Eilis Hennessy¹ & Caroline Heary²

¹*University College Dublin, School of Psychology, Belfield, Dublin 4, Ireland.
eilis.hennessy@ucd.ie*

²*National University of Ireland, Galway, School of Psychology, Galway, Ireland*

Background: The aim of the present study was to explore children's beliefs about the causes of psychological problems and their beliefs about potential sources of help for peers experiencing these problems. Despite its importance this is an area that has received relatively little attention from researchers. **Methods:** One hundred and sixteen children were read short vignettes in focus groups or individual interviews. The vignettes described the behaviour of hypothetical children with ADHD, conduct disorder and depression. Following each vignette children were asked questions about the likely causes of the behaviour and possible sources of help. A cross sectional research design was used with equal numbers of boys and girls of three age groups, the average age of the children in each group was: 8.4 years; 11.5 years and 14.3 years respectively. **Results:** Children of all ages were able to offer a range of explanations for the behaviour of the children described in the vignettes and these explanations varied systematically with age and the nature of the behaviour described. The majority of children believed that behaviour could change and that help to support change could be provided by family and friends. **Conclusions:** Results

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confirm and extend the findings of earlier studies that there are developmental changes in children's understanding of some common psychological problems.

Key Practitioner Message:

- Children as young as 8 years offer a range of explanations for problem behaviour in their peers
- These explanations include some that are internal to the individual (such as attention seeking) and others that are external (such as parenting practices)
- Children of all ages saw family as the most important source of help for individuals with problems
- Only a minority of children suggested that professional help was needed, suggesting that children may need more information on the role of professionals in mental health care

Keywords: Mental health; ADD/ADHD; conduct disorder; depression; child development; children's perspectives

Introduction

Since the late 1970s a number of theoretical frameworks have been proposed for the development of children's understanding of physical health and illness (Bearison, 1998) and a large number of publications have arisen from empirical research on the topic. In contrast, the issue of children's understanding of mental health and psychological or psychiatric problems has received relatively little attention (Armstrong, Hill, & Secker, 2000). Although the area has been under-researched there

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are good reasons to believe that it is an important topic to investigate. For example, knowledge of children's beliefs about the causes of psychological problems, their understanding of the language used to describe such problems and their beliefs about sources of help might facilitate communication between children experiencing problems and the professionals who are working with them and their families. It is also possible that children's knowledge about the causes of psychological problems could help us to understand the development of attitudes to individuals experiencing such problem. Research within the framework of attribution theory, suggests that children's beliefs are meaningfully related to their attitudes to peers with such problems (Goossens et al., 2002; Graham & Hoehn, 1995; Juvonen, 1991; Peterson, Mullins, & Ridley-Johnson, 1985; Sigelman & Begley, 1987) so research on the topic might lead to the development of health education programmes to promote understanding of mental health issues.

Research conducted in the 1980s (Roberts, Beidleman, & Wurtele, 1981; Roberts, Johnson, & Beidleman, 1984) suggested that children had better understanding of the aetiology, prognosis and treatment of physical illness than mental illness. More recent research by Magiati, Dockrell, and Logotheti (2002) confirms that children understand substantially less about developmental problems such as autism and behavioural problems such as hyperactivity than they do about sensory deficits such as blindness and deafness or physical disabilities.

The limited knowledge demonstrated by the children in Magiati et al.'s (2002) research may, however, have been due to the researchers' use of the terms 'autism' and 'hyperactive' which the children may not have understood. To overcome possible difficulties with labels, the majority of researchers in the area have chosen to use short

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vignettes or descriptions of behaviour rather than labels. Using this approach researchers have found that children, from as young as 7 years, endorse a variety of explanations for psychological and behavioural problems including aggression (Boxer & Tisak, 2003), school phobia (Chassin & Coughlin, 1983) and paranoid schizophrenia (Norman & Malla, 1983). The explanations endorsed include emotional instability (Boxer & Tisak, 2003), inappropriate parenting (Chassin & Coughlin, 1983) and physiological problems (such as genetics or brain damage) (Norman & Malla, 1983).

Many studies have also reported that there are developmental changes in the explanations that children offer for psychological problems, with some debate focusing on whether there is a growth in the emphasis on internal or external causes with increasing age. For example, research by Maas, Marecek and Travers (1978) and Chassin and Coughlin (1983) indicated that younger children were more likely to explain psychological problems with reference to internal causes (e.g. suggesting that the child was 'born that way') whereas older children (particularly those in their teenage years) are more likely to refer to external family and/or environmental causes. Boxer and Tisak (2003), using a much more detailed questionnaire on causality, concluded that the tendency to endorse internal factors as a cause of aggression increased significantly with age up to late adolescence/early adulthood. These differences may, in part, be explained by different research methods, for example the use of open versus closed questions about causality as well as differences in the nature of the problem being explained.

Relatively few studies have compared children's explanations for different types of psychological problem but their findings suggest that causal explanations

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vary according to the problem type. For example, Chassin and Coughlin (1983) reported that children's explanations for school phobia centred around internal psychological causes, in contrast, passive-aggressive behaviour was typically explained by peer factors and physical causes. Maas et al. (1978) reported that children were more likely to believe that social withdrawal was the result of internal factors than were self-punitive or antisocial behaviours. Roberts et al. (1981) found that young adolescents were more likely to explain acting-out behaviour (such as shouting, screaming and kicking) as due to external family problems whereas 'strange' behaviour (such as claiming to have visited other planets) was explained as due to over exposure to the media or self choice.

A smaller number of studies have looked at children's beliefs about sources of help for problems (Armstrong et al., 2000; Burns & Rapee, 2006; Maas et al., 1978; Roberts et al., 1981, 1984). Roberts et al. (1981) reported that many children believe in the efficacy of self help, whereas, Maas et al. (1978) found that a belief in self help was restricted to younger children. Armstrong et al. (2000) found that primary school children nearly always referred to relatives and friends as sources of help and few expected to have contact with professionals. While Burns and Rapee (2006) also found that teenagers in their study recommended the help of friends and family, they were more likely to recommend the help of a counsellor. Young people's knowledge of possible sources of help is an important element of their general understanding of psychological problems. For example, belief in the efficacy of self help might be associated with negative reactions to peers with problems because of the implication they could choose to help themselves if they wanted to. It is also important for

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professionals to understand young people's beliefs about sources of help in order to provide appropriate support and education.

Children's understanding of mental health has not been well researched (Armstrong et al., 2000) and the present study was carried out in order to further understanding of the topic. The primary aim was to increase our insight into children's spontaneous explanations for common childhood mental health problems and to elicit their ideas about how individuals with these problems might be helped. Specifically the aims were (i) to compare children's spontaneous explanations for internalising and externalising problems in hypothetical peers; (ii) to investigate developmental trends in children's endorsement of internal versus external explanations for psychological problems and (iii) to investigate developmental trends in children's beliefs about sources of help for peers with internalising and externalising problems.

Method

Participants

Participants were 116 children attending co-educational public primary and secondary schools in Dublin, Ireland. Thirty seven pupils ($M = 8$ years 4 months) were in year 4, 40 in year 7 ($M = 11$ years 5 months) and 39 in year 10 ($M = 14$ years 3 months). The age groups were chosen to correspond broadly with cognitive developmental accounts of major stages in children's understanding of health (Bibace & Walsh, 1980). There were an equal number of boys and girls and all children were White. Parents were sent a letter describing the research and were asked for written permission to request

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their child's participation. All children gave verbal assent following a description of the nature of the research and what their participation would involve.

Development of clinical vignettes

The clinical vignettes used in the study were adapted from Carr (1999) and validated with 14 clinical psychologists practicing in Ireland. The clinical psychologists were sent six vignettes describing ADHD, conduct disorder, separation anxiety disorder, dog phobia, Asperger's syndrome and depression. Clinicians were requested to rate each vignette on a 6-point scale for its accuracy as a description of the named disorder and its frequency as a problem presenting in their practice. ADHD, conduct disorder and depression were selected for inclusion in the study as they were given the highest accuracy ratings ($M = 4.71, 4.31, 4.79$ respectively) and were rated as common problems ($M = 4.00, 3.23, 3.86$ respectively). The vignettes for ADHD and conduct disorder describe male characters and the depression vignette describes a female character. Full details of all vignettes are available from the authors on request.

Following each vignette participants were asked open-ended questions to tap their perceptions of the causes of the behaviour (Why does X do the things s/he does?) and possible sources of help for the individual (Who could help X?). These questions were followed with prompts to ensure that the children's responses were as complete as possible and that the researchers understood their meaning.

Procedure

Two methods of data collection were used: focus groups and individual interviews. Focus groups have a number of advantages for collecting data from children

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(Hennessy & Heary, 2004), and in the case of the present study the use of focus groups offered the potential to collect children's views in a relatively short period of time. The decision to run individual interviews with the children as well was based on difficulty of deriving quantitative data from focus group transcripts (Basch, 1987). Children were each randomly assigned to one method or the other. All focus groups were single-sex and involved five children from the same age group, one moderator and one observer. A total of four focus groups were run with each age group of participants (two male and two female). Interviews were one-to-one encounters between a child and one of the two researchers. Both interviews and focus groups took place in the children's schools in empty classrooms and were audio recorded. In all cases children were read the vignettes verbatim with the addition of a statement that the characters described in the vignettes were fictional. To avoid an exclusive focus on negative behaviour three vignettes that described positive behaviour (good social skills, musical ability and academic ability) were administered in addition to the clinical vignettes. All six vignettes were of the same length and were followed by identical questions. Only children's responses to the clinical vignettes are included in the present paper.

Audio-tapes from the interviews and focus groups were transcribed verbatim and transferred to NUD*IST a qualitative data management programme.

Coding interview data

The primary method of data analysis used in the present study was qualitative although some non-parametric statistics are also presented to explore developmental trends. The qualitative analysis method used corresponds with the tactics for

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generating meaning described by Miles and Huberman (1994) and was completed in three stages. The first stage involved reading the participants' responses separately for each vignette and grouping these responses into preliminary categories. The second stage of data analysis involved comparison of categories across the 3 clinical vignettes to ensure consistency in the coding process. Where there were inconsistencies the relevant transcripts were re-read and, if necessary, re-coded. At this stage, key sections of text exemplifying the different categories were identified, as recommended by Robson (2002). In the third stage, children's causal explanations were further classified as internal to the individual or external. Once this process of classification was complete inter-rater reliability was calculated on approximately 50% of the data set. Kappa coefficients range from .75 for causes of depression and ADHD to .95 for sources of help for ADHD with a mean of .82. Full details are presented in Table 1.

[Table 1 about here]

Qualitative data from all the individual interviews and focus groups were used to gain an insight into children's understanding of psychological problems and to generate the causal themes. Non-parametric statistics were then used to explore developmental differences in the interview transcripts. To count the children's responses a report was generated within NUD*IST that included all responses to the relevant questions with corresponding codes. These reports were read and a tally of the number of children referring to each category was made. Because of the possibility of group influence on individual contributions within focus groups

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(Hennessy & Heary, 2004) a decision was made not to include the focus groups in the developmental analysis of individual responses and the number of groups referring to each category was counted instead. Children's responses to the questions about causes were initially counted at the level of category and then combined into the broader 'internal' and 'external' causes.

Results

Causes of behaviour

Participants of all ages proposed a wide range of explanations for the behaviour of the children described in the clinical vignettes. Examples of children's responses and the main categories are presented in Table 2. Under the heading of internal causes were those that had their origins in individual physiology, such as the drinking of coke, but also including references to brain damage resulting from such things as a blow to the head. There were also references to a range of emotional responses such as jealousy, anger and loneliness. In a similar vein, the vignette describing depression evoked responses referring to unfavourable comparison to others as a possible source of the problem. Other participants believed that the behaviour was wilful or done from choice. Two final internal categories were clearly related to school - the first referring to attention seeking behaviour in the classroom and the second referring to a negative attitude towards school.

[Table 2 about here]

There were also a variety of explanations offered that had their origins outside the individual. These include references to the parents' relationship such as parents consistently fighting or recent separation/divorce. There were also references to the parenting role and how deficiencies might result in a young person developing problems. The example in Table 2 refers to a child being 'spoilt' but there were also references to over-strict parenting as a possible cause. The possibility that a death in the family might have caused the problematic behaviour was also mentioned, particularly in relation to the vignette describing depression. The school environment was also mentioned in relation to the possibility that the child in the vignette was being bullied or that the peer group in school was providing a bad example. It was not only peers that were seen as offering a bad example as some of the responses also referred to the possibility that older family members were poor role models.

Chi square tests of homogeneity were run separately for each of the vignettes to determine whether there were differences between children of different ages regarding their endorsement of internal and external explanations. Only data from the interviews (a total of 56 children) were used in these analyses. A breakdown of the number of children at each age referring to specific causes is presented in Table 3 together with the chi square statistics. The analyses indicate that there were no significant differences in the frequency with which children of different ages suggested internal explanations for ADHD, conduct disorder, or depression. Nor were there significant differences in the frequencies with which they suggested external explanations for conduct disorder or depression. However, there was a significant difference in the frequency with which the age groups suggested an external cause for ADHD. Examination of the standardised residuals suggests that significantly fewer

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14-year-olds did not endorse an external explanation for ADHD than would be expected by chance (standardised residual $R = -1.87$).

Focus group discussions were examined to see if they mirrored the developmental patterns observed in the interviews. In relation to the endorsement of internal explanations findings were broadly similar for the vignettes describing ADHD and conduct disorder. With the exception of one group of 11-year-olds, all other groups discussed possible internal explanations for ADHD. In the case of conduct disorder, all groups discussed the possibility of internal explanations, with the exception of one group of 8-year olds. However, only one group of 8-year-olds discussed an internal cause for depression whereas all four groups at 11 and 14 years mentioned this possibility. This indicates an interesting difference in findings for the two methods of data collection. External explanations for the behaviour described in the vignettes were common for all age groups. Participants in all 12 focus groups discussed possible external explanations for ADHD, conduct disorder and depression. These findings are consistent with those of the interviews.

[Table 3 about here]

Sources of help

The final question that the participants were asked was who (if anyone) could help the individuals described in the vignettes. This question produced a large number of suggestions from all age groups and these were classified into three categories: family, peers, professionals. The family category typically included references to immediate family members particularly parents and siblings although there were also a large number of references to the extended family including aunts and grandparents.

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The category professional includes references to psychologists, psychiatrists, therapists, doctors, counsellors and teachers.

[Table 4 about here]

The developmental analysis of the participants' responses to the question about help is presented in Table 4. From this table it is clear that for all age groups and for all three types of psychological problem the family is seen as an important source of help. The peer group is also seen as important for all age groups for the vignettes describing ADHD and conduct disorder. A series of chi-square analyses was conducted to compare the presence and absence of each of these three categories of help for participants in the three age groups. None of the analyses produced significant results for sources of help for ADHD or conduct disorder, however there were two significant findings for depression. Analysis of the standardised residuals suggests that fewer 8 year olds than would be expected by chance did not endorse the family as a source of help ($R = 2.12$); fewer 8 year olds endorsed friends as a source of help than would be expected by chance ($R = -2.38$) and fewer 14 year olds did not endorse friends as a source of help than would be expected ($R = -2.14$). These findings need to be interpreted with caution as in each case there was one cell with an observed frequency of zero (Hinkle, Wiersma, & Jurs, 1998). It is also worth noting that in each age group only a minority of participants mentioned the potentially supportive role of professionals, with particularly small numbers mentioning professional help for depression.

The focus group data were analysed separately from the interview data and were again broadly consistent. In relation to ADHD, the family was mentioned as a source of help by 3/4 of the 8-year olds' focus groups, all of the 11-year olds' focus groups and 1/2 of the 14-year olds' focus groups. Peers and professionals were mentioned by 1/2 of the 8-year focus groups, all of the 11-year olds' focus groups and 1/2 of the 14-year olds' focus groups. In relation to conduct disorder, the family was indicated as a source of help by all of the 8-year olds' focus groups, 3/4 of the 11-year olds' groups and 1/2 of the 14-year olds' groups. Peers were mentioned by 1/2 of the 8-year olds' groups, all of the 11 year olds' groups and 3/4 of the 14-year olds' groups. Professionals were mentioned by 1/2 of the 8-year olds' groups, 3/4 of the 11-year olds' groups and 1/2 of the 14-year olds' groups. With the vignette describing depression, the family was mentioned as a source of help by 3/4 of the 8-year olds' groups, all of the 11-year olds' groups and 1/2 of the 14 year olds' groups. In contrast to the findings of the interviews, the endorsement of peers as a source of help was broadly similar across all age-groups, being mentioned by 3/4 groups of 8- and 11-year-olds and all groups of 14-year olds. The possibility of professional help was mentioned by 1/2 of the groups at all three ages.

Discussion

The results of the present study indicate that children of all ages were able to suggest a range of possible causes for three common psychological problems: ADHD, conduct disorder and depression. The causes they suggested varied across behaviours and included suggestions relating to the individual, his/her family, peer group and school environment. When asked who could provide help to the children with

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problem behaviour participants of all ages regarded family and friends as important, with fewer suggesting professionals such as teachers, psychologists or psychiatrists.

The responses to the vignettes indicated that there was an age related difference in the causes suggested for ADHD, with the 14 year olds appearing to be more likely than the other age groups to endorse external explanations for the behaviour. This is consistent with the findings of Maas et al. (1978) and Chassin and Coughlin (1983) that older children are more likely than younger children to refer to external family and/or environmental causes for some deviant behaviours. It should be noted, however, that we found no evidence that older participants were less likely to endorse internal explanations for the same problem. In this our finding is also consistent with Chassin and Coughlin (1983) who found that the teenagers in their sample endorsed both external social explanations and more psychological explanations. Our findings contrast with those of Boxer and Tisak (2003) who found that increasing age was associated with an increased endorsement of internal causal factors such as impulsivity, emotional instability and social cognitive deficits. It should be noted that these authors focused on aggressive rather than hyperactive behaviour and that their sample included substantially older participants than those in the present study.

Our finding that participants endorsed the importance of family and friends in providing assistance to the children in the vignettes is consistent with those of Armstrong et al. (2000), Burns and Rapee (2006) and Roberts et al. (1984). Maas et al. (1978) conducted a developmental analysis of participants' responses to questions about possible sources of help but unfortunately these are not directly comparable with our findings as they combined help from peers, parents, teachers and mental

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health professionals into a single category. The only significant developmental differences found in the present study was for the depression vignette which suggest an increase in the extent to which peers are endorsed as a source of support from 8 to 14 years. This finding is consistent with the research on the growing importance of the peer group in adolescence (Santrock, 2003). In contrast to Burns and Rapee (2006) our findings indicate that, even among teenagers, family and friends are endorsed more frequently as a source of help than are professionals (including counsellors). This might reflect a lower awareness of the role of mental health professionals among young people in Ireland in contrast to those in Australia or the fact that our participants were younger than those participating in Burns and Rapee's (2006) research.

Limitations

The quantitative developmental analysis in the present study is limited by the fact that only the individual interview data were suitable for inclusion, thus substantially reducing the sample size. The fact that the vignettes describing ADHD and conduct disorder referred to a boy, whereas the vignette describing depression referred to a girl led to a confound between problem type and gender. This was recognised when the study was designed but because a discussion of both boys and girls with each condition would have greatly extended interview and discussion time it was decided to present just one target character with each condition. Future research would ideally present participants with both male and female characters with each problem type. In addition, the inclusion of a representative sample of children in future research would allow for the investigation of the way in which family and socio-demographic

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variables such as socio-economic status might be related to children's responses to peers with problem behaviour.

Conclusions

The findings of the present study are consistent with the findings of many earlier studies in reporting that children are able to offer a range of explanations for the behaviour of their peer group. The findings have important implications for professionals working with children. Firstly, they need to be aware that children as young as 8 years are capable of suggesting a wide range of possible explanations for behaviour and that these explanations may change as children get older. Secondly it is important to note that children of all ages are aware of a range of possible sources of help for individuals with psychological problems but that they may need more information on the potential role of professionals in helping individuals with depression. Children referred to mental health professionals may therefore need information on how they can be helped through their engagement in the therapeutic process.

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Table 1. Kappa coefficients for coding of children's responses to each question

	Causes	Sources of help
ADHD	.75	.95
Conduct disorder	.79	.87
Depression	.75	.83

Table 2. Sample responses illustrating children's causal explanations across vignettes

Category	Sample response
Internal cause	
Physiological	<i>Em... maybe he drinks too much coke in the morning and then he goes to school and he's hyper. (8-year-old boy, ADHD)</i>
Emotional reaction	<i>I'm not sure, but if they interrupt somebody I think they [might] be a little jealous and stuff. (11-year-old boy, ADHD)</i>
Wilful	<i>I'd say he just does it for no reason, just for fun. (11-year-old girl, conduct disorder)</i>
Comparison with others	<i>She'd see like another pretty person or something on TV you like 'Oh, I need that body' or stuff like that. (14-year-old girl, depression)</i>
Attention seeking	<i>He wants attention, like he needs attention probably. (14-year-old boy, ADHD)</i>
Attitude to school	<i>Because they don't like school maybe and they just... and they just don't like listening or... or just wants to do their own thing. (8-year-old girl, ADHD)</i>
External causes	
Parents' relationship	<i>It's probably the influence at home from the Mam and Da fighting. (11-year-old boy, ADHD)</i>
Parenting	<i>It could be that he was spoilt like when he was a child so he has to have everything his way now (14-year-old</i>

	boy, conduct disorder)
Family death	<i>Well if her dad died or something, or her granddad or her brother or sister, that might make her sad. (8-year-old girl, depression)</i>
Bullying in school	<i>She might find it hard to make friends and then people go around calling her pig and all sorts of things like that. (11-year-old boy, depression)</i>
Bad example/poor role models	<i>Maybe he has friends like that and he just wants to copy them. (11-year-old girl, ADHD)</i> <i>Like maybe his older brother or something are like that at home or something. (14-year-old girl, ADHD)</i>

Table 3. Number of children endorsing internal and external causes of behaviours and chi square statistics (interview data only)

Vignette	No. children			χ^2 (<i>df</i> = 2)	<i>p</i>
	8 years	11 years	14 years		
ADHD	<i>N</i> = 20	<i>N</i> = 15	<i>N</i> = 19		
External cause	7	7	16	10.22	<.01
Internal cause	14	8	15	2.58	ns
Conduct disorder	<i>N</i> = 19	<i>N</i> = 16	<i>N</i> = 19		
External cause	12	13	14	1.48	ns
Internal cause	11	13	15	3.02	ns
Depression	<i>N</i> = 20	<i>N</i> = 16	<i>N</i> = 19		
External cause	17	13	15	.24	ns
Internal cause	7	8	12	3.10	ns

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Table 4. Number of children endorsing different sources of help for each vignette and chi square statistics (interview data only)

Source of help	No. children			χ^2 ($df=3$)	p
	8 years	11 years	14 years		
ADHD	<i>N</i> = 21	<i>N</i> = 15	<i>N</i> = 19		
Family	18	12	13	1.79	ns
Peers	10	10	12	1.60	ns
Professionals	11	11	10	1.95	ns
Conduct disorder	<i>N</i> = 21	<i>N</i> = 16	<i>N</i> = 19		
Family	15	12	13	.18	ns
Peers	9	12	13	4.65	ns
Professionals	11	10	9	.82	ns
Depression	<i>N</i> = 21	<i>N</i> = 16	<i>N</i> = 19		
Family	12	14	18	20.43	.001
Peers	5	14	18	26.97	.001
Professionals	5	3	8	2.69	ns