



Jacobs, Myrthe and Woolfson, Lisa and Hunter, Simon C. (2016)
Attributions of stability, control and responsibility : how parents of children with intellectual disabilities view their child's problematic behaviour and its causes. Journal of Applied Research in Intellectual Disabilities, 29 (1). pp. 58-70. ISSN 1360-2322 ,
<http://dx.doi.org/10.1111/jar.12158>

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Attributions of stability, control and responsibility: How parents of children with intellectual disabilities view their child's problematic behaviour and its causes

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Running title: Parental attributions for problematic behaviour

Keywords: Parenting, intellectual disability, child behaviour, causal attributions, causal beliefs, thematic analysis

Acknowledgements

We thank participating parents and staff at schools and local authorities for their contribution.

We would also like to thank the participating voluntary organisations for their help and support in participant recruitment.

Source of funding

This research was funded by a scholarship from the University of Strathclyde in Glasgow, United Kingdom.

Conflict of interest

None.

Accepted for publication in Journal of Applied Research in Intellectual Disabilities.

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Abstract

Background: Children with intellectual disabilities (ID) have high rates of behaviour problems. This study explored parents' causal beliefs and attributions for general problematic child behaviour in children with different aetiologies of ID. **Materials and Methods:** Ten parents of children with ID participated in interviews about their child's problematic behaviour. **Results:** Thematic analysis using NVivo revealed that parents viewed their child's problematic behaviour not only as caused by the child's ID but also by other causes unrelated to the ID, as well as by aspects of the social environmental context. Some causes were viewed as stable and uncontrollable and others as unstable and controllable. Additionally, parents showed a strong sense of responsibility for child behaviour. **Conclusions:** Parents of children with ID do not solely interpret their child's problematic behaviour through the ID but incorporate the environment and non-ID-related causes and attributions which may help to promote more effective parenting.

Introduction

It is well established that children with intellectual disabilities (ID) have high rates of behaviour problems, with prevalence rates ranging from 22% to 64% (e.g. Gillberg et al., 1986, Merrell and Holland, 1997, Totsika et al., 2011). These behaviour problems interfere with the child's ability to benefit from learning opportunities (Marcus et al., 2001, Roberts et al., 2003, Goodman and Linn, 2003). They also predict parental stress above and beyond the child's level of developmental delay or cognitive status (e.g. Hall et al., 2007).

A transactional model of child development proposes that child behaviour, parent behaviour and parent cognitions are closely related and that change in one is likely to affect change in the others (Sameroff and Fiese, 2000). A useful way to understand parents' cognitions about their children's behaviour is by locating them within attributional theory. This theory describes how people think about causes of behaviour on dimensions of locus, stability and control, relating these to their behavioural and emotional reactions (Heider, 1944, Weiner, 1980, Weiner, 1979, Weiner, 1985). In the case of parents and children, parents may think about their child's problematic behaviour in terms of whether it is caused by something internal or external to the child (locus), by something stable or unstable (stability), and whether the child has control or no control over the cause (control).

Causal attributions are related to parents' emotional reactions and parenting strategies in response to child behaviour. Specifically, parents of typically developing (TD) children who view their child's problematic behaviour as caused by factors more internal to the child, more stable and more under the child's control, respond with more negative emotions and less effective strategies when confronted by problematic behaviour (e.g. Baden and Howe, 1992, Dix et al., 1986, Johnston et al., 2009, Johnston and Leung, 2001, Wilson et al., 2006).

Similar relationships between causal attributions and strategies have been reported among parents of children with ID. Attributions for causes of problematic behaviour that are

more internal, more stable and more controllable by the child are related to lower expectations for behaviour management strategies (Keenan et al., 2007, Whittingham et al., 2006). Importantly, in comparison to parents of TD children, parents of children with ID have an additional cause to attribute behaviour to, namely the ID (Drysdale et al., 2009, Armstrong and Dagnan, 2011, Whittingham et al., 2008). Attributing the cause of behaviour to the ID can have important implications for the ways in which parents manage child behaviour. For example, when parents attribute sleep problems to the ID, they are likely to believe that these problems cannot be treated and view behavioural interventions as less acceptable (McDougall et al., 2005, Keenan et al., 2007, Robinson and Richdale, 2004). While viewing a child's disability as the cause for problematic behaviour has positive effects for the parent in reducing guilt and anxiety, it may also have negative effects on parent engagement in behaviour change because parents may feel pessimistic about the possibility of change (Whalen and Henker, 1976, Mah and Johnston, 2008).

Attributions of causality of behaviour to the ID may thus lead to behaviour being viewed as caused by internal, stable and uncontrollable factors (Drysdale et al., 2009) and, as argued above, such stable and internal attributions may be related to the use of less effective parenting strategies. Additionally, attributions of either high or low levels of control to the child may be undesirable because it reduces parental motivation for attempting to change the child's behaviour (Smith et al., 2000, Morrissey-Kane and Prinz, 1999, Hoza et al., 2006, Mah and Johnston, 2008). Although high levels of control are related to negative emotions and less effective parenting strategies, parents do need to see their child as being at least somewhat in control of their behaviour to view them as capable of learning new behaviour (Woolfson, 2005).

A closely associated issue is that the amount of control attributed to the child is related to how responsible the parent feels for that child's behaviour (Gretarsson and Gelfand,

1988). If the child is viewed as unable to control their behaviour, it cannot be seen as the parent's mistake; therefore, the parent feels less responsible for their child's behaviour and/or for acting to improve it (Gretarsson and Gelfand, 1988). Although this may have a positive effect on the parent's self-esteem and self-efficacy, it would not motivate them to address their child's behaviour (Morrissey-Kane and Prinz, 1999, Gretarsson and Gelfand, 1988, Johnston and Patenaude, 1994). In sum, we suggest that viewing the ID as the main cause of problematic behaviour may lead to causal attributions that do not support effective parenting. Stable, internal and uncontrollable attributions imply that problematic behaviour is fixed and could lead parents to feel unmotivated and less responsible for addressing child behaviour.

Besides the child's and the parent's role in behaviour, the environment also plays a part. The social model of disability argues that the social environment places restrictions that prevent people with disabilities from participating in society (Oliver, 1986a, Dowling and Dolan, 2001a). Parents have expressed that these socio-cultural constraints, rather than a child's disability, cause burden and distress (Tronvoll, 1994, Green, 2007). Within their interpretation of their child's behaviour, parents may therefore also attribute causality to the social environment.

In order to examine the subtleties and complexities of how parents of children with ID view the causes of problematic child behaviour, while allowing them to expand on their views, a qualitative design is valuable. Examining the causal attributions of parents of children with ID using qualitative methods, Drysdale et al. (2009) found that mothers were able to spontaneously generate cognitions related to locus, stability and control. However, those authors only included mothers of children and adults displaying serious self-injurious behaviour, limiting the scope of the study's conclusions. Similarly, McDougall et al.'s (2005) qualitative study, of how parents of children with ID view the causes of their child's problematic behaviour, focused only on sleep problems. Findings of these two studies may

therefore not apply to other behaviours such as noncompliance or more general problematic behaviour. These may be less severe, but are among the most prevalent behaviour problems in children with ID (Taanila et al., 2003, Mitchell and Hauser-Cram, 2009, Walker, 1993).

The focus of this study was therefore on any child behaviour that parents may find problematic, rather than specific diagnosed behaviour problems or severe challenging behaviour. The term 'problematic behaviour' will be used throughout.

To sum up, the current study aimed to explore the different ways in which parents understand causes for their child's problematic behaviour, using a qualitative design. How parents of children with ID use the ID as an explanatory cause for problematic behaviour was one key focus. Additionally, the study examined further causal attributions that parents held for problematic child behaviour, in terms of locus, stability and control.

Materials and Methods

A qualitative approach using thematic analysis (Braun and Clarke, 2006) was employed to explore parents' causal attributions and causal beliefs. Semi-structured interviews were conducted to allow participants to tell their story, to get a detailed picture of their perceptions and to be able to follow up on topics introduced by participants (Smith, 1995, Banister et al., 1994). Ethical permission was gained from the appropriate ethics committee at the administering institution.

Participants

Parents of children with ID were recruited through special education schools in the Greater Glasgow area, and from two voluntary organisations. Participants had to be the parent or main carer of a child with ID between the ages of 6 and 12 years. Nine mothers and one father took part in the study. Two of the children attended mainstream education while

eight attended special schools. All participants were from a white Scottish ethnic background. Further details of the participants can be found in **Error! Reference source not found.**

Insert Table 1 about here

Interviews

A topic guide was developed for the interviews which were designed to explore the child's problematic behaviour, participants' views on causes for problematic behaviour, and participants' causal attributions for their child's problematic behaviour. Interviews were carried out at the school attended by the child or in participants' homes or workplaces. Participants were advised about confidentiality and anonymity and gave permission to be audio recorded. All participants gave informed consent prior to the interview.

Six short vignettes were used at the start of each interview to ease participants into the subject and to avoid starting the interview with a focus on their child's problematic behaviour. The vignettes were taken and adapted from the Written Analogue Questionnaire (WAQ). The WAQ assesses parents' attributions for child behaviour and consists of twelve vignettes for problematic child behaviour that can be adapted to be suitable for a range of populations (Johnston and Freeman, 1997). Each vignette was changed slightly to more realistically represent a situation experienced by a parent of a child with ID and from these six were chosen based on their interpretability. The six vignettes are displayed in Table 2.

Insert Table 2 about here.

The researcher read out each vignette and parents were asked if the situation described ever took place between themselves and their child, what they thought caused the

situation or the child's behaviour, and how they would react. Vignettes 1, 2 and 3 were easily recognised by parents, whereas the situations in vignettes 4, 5 and 6 were less prevalent. In relation to vignette 4, parents commented that they would prevent that situation from happening by structuring the evening. The request made in vignette 5 was something the parents never asked their child to do. Finally, parents reported that they did not usually experience problems in getting their child to come for dinner.

Parents were then asked to describe problematic behaviour displayed by their own child and what they thought the causes were. This included exploring their causal attributions and how they would normally react to the behaviour. Examples of child behaviour that parents noted were running away, screaming, having a temper tantrum in public, hiding, and sleep problems. As the vignettes taken from the WAQ were originally developed for TD children and children with ADHD, it is not surprising that parents could not interpret all the vignettes and that additional problematic behaviours were relevant to them. At the end of the interview, participants were asked to complete demographic information. Interviews lasted between 30 minutes and one hour. All interviews were transcribed.

Analysis

The process used for encoding the data was thematic analysis. The steps used in the analysis followed recommendations by Braun and Clarke (2006). The researcher carried out the interviews, transcribed them and re-read the whole dataset. QSR International's NVivo 9 qualitative data analysis software (2010) was used as a tool to code the data. Codes were generated through both a theory-driven and data-driven approach. The theory-driven approach was applied to gather information on causal attributions. Wording of the codes and themes were taken directly from attributional theory. A data-driven approach was used to select features of the data that were relevant to the research aims. Codes were given specific

definitions to avoid codes being interchangeable or redundant (Attride-Stirling, 2001). The researcher worked systematically and recursively through the entire data set and went back to previously identified codes to check their meaning and consistency when new data were added.

Results

Causal beliefs

Parents viewed their child's behaviour as caused by a range of factors, which can occur simultaneously. Most parents spoke about causes that were internal to the child and stable, for example, the child's condition, difficulty in understanding, limited attention span and the child's personality. However, causes controllable by the child were also discussed by parents, for example, attention-seeking or pushing boundaries. Parents also viewed environmental challenges as an important cause. Two causes were clearly related to the child's ID, namely the child's condition as a cause, and difficulty in understanding. Attention-seeking and pushing the boundaries were causes more typical of children generally, and this was also strongly expressed by parents for causes related to the child's attention span and personality. Although ID-related causes were frequently mentioned, causes related to typical development were also present and important to these parents.

The child's condition

Six parents reported causes for problematic behaviour that were related to the ID. Although the type of behaviour attributed to the ID could differ, this kind of attribution was not dependent on the type of diagnosis the child had.

‘He is very specific, all part of autism, about what he’ll eat. He actually eats a lot more than most kids. Variety-wise, I am quite fortunate. He eats about five things that aren’t sweets.’

[DR]

‘And I do think children with Down syndrome have quite strong... they take over, if you don’t kind of assert yourself.’ [KT]

‘I think immaturity. I think her mental age, her emotional age is not the same as her physical age.’ [LN]

Seeing the condition as a cause for some parents affected their reaction to problematic behaviour. When the ID was seen as the cause, certain behaviours were not perceived as problematic.

‘He gets louder and louder and louder. If you’re not paying him any attention, which is quite funny. It really is his... but I don’t see it as a problem because it is because of the autism.’

[SE]

‘There is nothing I can do, because it is a disorder. You know what I mean, so. You just need to tell him “no, that’s wrong” and “you can’t do that.”’ [HP]

Viewing the condition as the cause for behaviour could be supportive. If parents identified what the cause was, they could change their strategies.

‘But what I learned was that if I say “get off the chair” and I wait too long, what others would say too long, she will get off the chair. And I said to the teachers “whatever you ask her to do, wait more than seems polite, and you’ll often find she will respond”. And they did use that because I think it takes a long time. People with Down syndrome, they can’t process quickly.’

[KT]

Difficulty understanding

A lack of understanding was mentioned by eight parents as a cause for problematic behaviour. This was expressed as the child not understanding or not realising how bad the

behaviour was, or that the behaviour came from not understanding the situation or what was happening.

‘In a shop, for example, if he wants one of the sitting rides for a two-year-old, trying to explain to him that he is nine and he’s about seven stone, and he’s far too big for it can be a problem. You know, he doesn’t get that, so he’ll lie on the ground. And he’ll bang and he’ll kick.’ [DR]

‘A lack of understanding that he is not getting something. Why he is not getting it or why it is not happening now. Why am I not doing something that he wants? And he just, you can’t just explain it to him, simply.’ [NR]

‘She maybe wouldn’t get that she, about how you should, how appropriate it is to do something.’ [KT]

Parents reacted in different ways to behaviour that they saw as stemming from a lack of understanding. One mother stressed the importance of reiterating rules so that her daughter could eventually internalise them.

‘How much she understands of what you’ve explained is very difficult and I think she does know because again I will explain to her “I couldn’t see you there, I was really worried, Mummy was crying.” Not that I do, because I think “oh she is somewhere”. But to try and get her to understand how I felt about a situation, so that she can maybe start to develop thinking “well I don’t want to see my Mummy like that so I will not do that again”. Again you just need to consolidate that over a long period of time.’ [MD]

However, other mothers responded to behaviour differently depending on whether they believed the child understood. One mother explained that when her son understood the situation, she did not let him have his way, but she was more tolerant of problematic behaviour that was caused by his difficulty understanding.

‘It’s trying to distinguish between what he understands and what he doesn’t. Because you have to deal with it completely different. You know, if it’s just for naughtiness because I am not giving him biscuits, well he can go and cry if he wants to, he is not getting them. But if he

wants something specific and he can't tell me what it is, or if somewhere, as I say, for example, a good example is if it's closed, if he can't understand why, that's frustration because of his disability.' [DR]

Limited attention span

The child's attention span was mentioned as a cause for problematic behaviour by six parents. Children found it difficult to stay on task or to remember parents' instructions. Parents dealt with this by constantly reminding the child, trying to keep them on task or by structuring the environment to reduce distractions.

'Her attention span is very limited, so... to sit her, you know, you constantly got to keep her on target and on task.' [LN]

'At Christmas I had quite a lot taken away because I had cleared all the stuff away because he always had too much out and so the attention span wasn't good.' [KG]

Some parents stated this as something relevant for all children and not typically for children with an ID:

'She has a very short attention span as well, so if she is concentrating on the iPad, then that is what she wants to do or if she is doing this then it's what she wants to do, because there is television, that is what they want to do so they just go down the avenue that they can see. They don't see the big picture, they just see... I think it is that very much kids in general.'

[MD]

Attention seeking and pushing boundaries

Eight parents talked about causes of their child's problematic behaviour that were related to attention seeking, pushing the boundaries or just being naughty. Some parents expressed this cause as unrelated to the child's ID. This could lead to parents proactively employing clear strategies to manage their child's behaviour.

‘That was her misbehaving. Because she... settle up and get her into bed and that’s what should be happening, not... there is no other purpose, just oh well, going to get up and keeping us up and... attention.’ [PR]

‘He’s not physically unable to do it. That’s what I mean. If he’s not doing it, it’s because he is digging his heels in and he doesn’t want to do it rather than he can’t do it.’ [SA]

‘She’ll manipulate the situation perfectly. She’ll be “I need the toilet, I need the bathroom, I need my teddy, I need tadatadada...” Oh, she is good at that. And again it is about setting the rules and saying “No, I am putting you to bed this time”.’ [MD]

Personality

Nine parents referred to the child’s personality as a cause for problematic behaviour. This also included behaviours that were seen as ‘just’ part of the child or ‘just’ something they enjoyed doing. In relation to this, parents stressed that it was not always the child’s ID that influenced behaviour, but that the child’s personal characteristics were important as well.

‘She is quite an active girl and if she has been doing something really exciting, she can still be really quite alert when she goes to bed at night. Especially during term time when she has got school. She doesn’t really want to go to her bed at eight or nine ‘o clock.’ [MD]

‘That is a different kind of behaviour. That’s laziness. Autistic or not, that’s laziness.’ [DR]

‘So I think what I’ve learned is, each child is different anyway, each person is different and some are more difficult to manage in other ways.’ [KT]

The environment

Another important cause for problematic behaviour was the environment, as mentioned by eight parents. Parents referred to social environments that were busy or distracting which could be difficult for the child to cope with. Strategies aiming to help the

child overcome problematic behaviour can therefore be directed at modifying or avoiding certain environments, rather than modifying the child's behaviour.

'Some kids are very sensory to noise in supermarkets, lights, all sorts, you know what I mean. Very very much, you know, the slightest thing. He goes in somewhere and they've changed it. That upsets him. He's got a routine and it upsets him if they've changed that.' [DR]

'Sometimes he can be really, really good. In a one to one, P. is amazing. He listens and he is really good. But as soon as there is a few of yous there or even two of yous, he is terrible.'

[KG]

'And perhaps when there is more challenge and it is a difficult situation, maybe you will see more behavioural things happening again, I don't know. If she would be that person or not, or how she would take it, or she might just do something, or would get depressed about it.' [KT]

Parents talked about their child's sleep problems and how situations that happened during the day could trigger them. This related to strategies as well. If it is a cause in the environment, then finding out what this is and trying to address it is a strategy to help the child overcome their sleep problems.

'Sometimes he just doesn't sleep. Don't know whether it's things that happened through the day that's made him anxious that kind of, it's on his mind and he is thinking of it. And it's mulling over and it's maybe upsetting him and it's stopping him for sleep (...) But we are going to keep a diary. D. just asked me to keep a diary for the teacher. Because he is going to try and see if the days that he hasn't been sleeping, if it relates to behaviours that he is having that day.' [SA]

Attributions of stability, control and responsibility

Parents' narratives on stability and control referred to the child's behaviour rather than to the causes of child behaviour. Parents did not refer to the locus of causes or of behaviour. However, the previous sections on causal beliefs indicated that parents spoke of

both internal causes (the condition, difficulty understanding, limited attention span, child's personality) and external social environmental causes.

Stability

Eight parents made reference to stability and instability of behaviour. Stability referred to the expectation that the child would always have problems, without knowing what these would be. Instability referred to the expectation that the child would develop and learn to cope with situations, consequently improving behaviour. Both the child and the parent were expected to learn new strategies that would improve behaviour.

'Right at this moment, things are definitely getting worse, and there is no light at the end of the tunnel. It's not like if you have a typical child, you will say "oh, he will grow out of it", or, you know, this may not get better.' [NR]

'She'll be able to behave herself cause there'll be learned behaviours that school and home and social life will keep reiterating to her (...) and I learn other ways of doing things, you know, it's a learning process. So I think maybe other things we can put in place... and she should mature.' [LN]

'Hopefully get a lot better. I am hopeful, because with the help, you're learning all the time.'
[DR]

Child control

Eight parents referred to the amount of control they believed their child had over behaviour. Parents viewed their child as having control over some behaviours but not over others and had the expectation that the child would gain more control as they matured.

'Sometimes she should be able to control that. She has the ability to control that. Other times... no I don't think she has the ability to control it so well. So, depending on the situation.' [LN]

‘I hope that he will be able to learn... strategies to be able to cope in different situations. Not that the situations, or the feelings will be any different and the fear or the stress or the anxiety, but that he’ll have a control of it, with age and development, hopefully.’ [SA]

Some parents distinguished between behaviour they viewed as caused by the ID that they did not think the child controlled, and behaviour they viewed as the child pushing boundaries and that the child did indeed control. Based on the cause and the amount of control, the reaction from parents towards problematic behaviour differed. The final extract highlights that parents go through a learning process before they can understand how much the child can control.

‘We firmly believe that he is a complete control freak for all his difficulties and problems, you know, he likes to control you. So there are definitely things that are within his control. And sometimes I think we don’t give him enough credit (...) Things where I know he can’t control, obviously I have sympathy and I think “well, it’s really not his fault”. He is behaving this way or he is doing this thing. It’s not that he can control it. Other things, I don’t know. He is doing where he maybe knows it is wrong, or, nothing to do with the autism, yeah, they are likely to get a different response. He is just, in that situation, he is just any other naughty child.’ [NR]

‘We’ve had one child and this shouldn’t be a problem. But it did become a problem. But Sleep Scotland were good in that way as well, just coming talking it through and thinking, just look, you’ve got to leave it, you’ve got to leave her at night. You don’t stay there until she falls to sleep, because then it is one eye open and she was up again. And you think, she is taking control of this, this isn’t right.’ [PR]

Parent responsibility

All ten parents showed a strong sense of responsibility, both positive and negative, for their child’s behaviour. Parents took responsibility in a negative sense when they viewed their child’s problematic behaviour as their fault or when they admitted that they did not always take responsibility when they felt that they should have.

‘I’ve taken quite a lot of the blame. For why she did that. You know, taking the call, maybe taking a bit longer. Maybe not... Maybe taking more responsibility for her behaviour.’ [LN]

‘Four years ago, I was just looking at the autism and he was more destructive, and he has, I mean, he’s still destructive, but he’s not as bad as he used to be and I think maybe that’s the problem because I was looking at the, his disorder first before his actual age.’ [HP]

Parents also took responsibility for their child’s behaviour in a more positive sense by consciously setting rules for their child in order to help them learn how to behave appropriately. They took responsibility for their child’s development and viewed it as their task to encourage the child.

‘For example, the biscuits would be easy, you would know exactly why. It is because he wants something he can’t have. Although you can’t explain to him that it’s bad for his health, it’ll make him fat, it gives him bad teeth. None of that is important to him. He just wants the biscuits. So it’s my responsibility to have a limit on what he gets.’ [DR]

‘There was a time he wouldn’t even get in the car. There was a time he wouldn’t even go on the school bus. So he does all these things now because we have kind of pushed that. And it’s like everybody else, you cannot protect him.’ [SA]

Parents explained that it was *necessary* for them to take this responsibility for their child’s behaviour and development. They were aware that children with an ID may not be stimulated to learn because of their difficulties and therefore they took on responsibility for their child’s learning.

‘But we are setting boundaries, you could be too nice, you could be too kind with her and too “oh well it is just Lucy”, not take her learning seriously.’ [PR]

‘In order for her to go places she has to learn how to behave with other people.’ [KT]

Discussion

Main findings

The main aim of this study was to explore the different ways in which parents of children with ID understand causes for their child's problematic behaviour, and how parents may use the ID as an explanatory cause. One key finding was that parents do not simply identify problematic behaviour as a consequence of the ID only. On the one hand, behaviour known to be associated with a particular condition was readily attributed to the ID, for example, children with autism expressing strong preferences, or sleep problems being common for all children with an ID. But on the other hand, parents stressed the importance of causes that were not necessarily related to the ID, such as a limited attention span or the child's personality. A challenging social environment was seen as an additional source for problematic child behaviour.

The results around causal attributions showed a similar picture. While some behaviours were indeed viewed as stable and uncontrollable (for example, the belief that behaviour is caused by the ID), others were seen as unstable and controllable (for example, behaviour that parents believed could eventually be controlled, either by themselves or the child, through learning and development). These different explanatory causes and causal attributions affect how parents interact with their child. Behaviour that was viewed as caused by the ID or by a challenging social environment could be met with sympathy and attempts to restructure the environment. However, behaviour caused by factors unrelated to the ID or that the child was viewed to have control over, such as the child's personality or attention seeking, were met with strategies aimed at the child. Overall, parents expressed a strong sense of responsibility that was related to and motivated by the child's ID.

Meaning of the study

Parents attributed some of their child's misbehaviours to causes that were related to the child's ID, as did parents in Keenan et al.'s study (2007). However, some causes were

stressed as being typical of all children, for example causes related to the child's limited attention span or the child trying to push boundaries. When behaviour was viewed as caused by the child's personality, parents placed a strong emphasis on the child's individuality, minimising the effect of the ID. It seems important for parents to view their child as more than a child with an ID, and to stress that in many ways they are just like any other child. This dovetails with prior research reporting that some parents place particular importance on counteracting stigmatising societal beliefs of ID (Skinner and Weisner, 2007, Green, 2003, Landsman, 2005, Maul and Singer, 2009).

The social environment was another cause to which parents attributed problematic child behaviour. Problematic behaviour in this case was seen as a sign that something in the environment was upsetting the child. This could lead to the parent making adaptations in the social environmental context where possible or avoiding certain situations completely. The social model of disability suggested how disability is experienced is affected by how society is organised rather than only directly by the impairment itself (Oliver, 1986b, Dowling and Dolan, 2001b). The findings of the current study confirmed that this also applies children with ID. Studies by Green (2007) and Tronvoll (1994) illustrated how socio-cultural attitudes of professionals and local authorities could cause parents to experience burden and emotional distress when trying to gain access to services for their child. The current study extends the effects of the social environment to situations that are difficult for children with ID to cope with, for example noise and lights in supermarkets or the number of people around them. As many children with ID have difficulty communicating their needs, their discomfort and emotions can often be expressed through their behaviour (Molteno et al., 2001, Sullivan et al., 2007). Parents of children with ID in the current study have shown themselves to be aware of this and reinterpreted their child's problematic behaviour as a response to

challenging features of the social environment, rather than viewing it as a deliberate action from their child.

Parents spoke about the stability and instability of their child's current and future behaviour. Stability related to the expectation that behavioural issues would persist over time. However, parents also held the expectation that through child and parent learning, difficult behaviour would become less frequent. This mixed picture of stability and instability, with parents being both realistic and hopeful about the future, is similar to mothers' views of their child's self-injurious behaviour in Drysdale et al.'s (2009) study. The current study extends this to general problematic behaviour in children with ID.

The literature had indicated that parents of TD children who view their child's problematic behaviour as caused by more stable factors, respond with more negative emotions and less effective strategies (Baden and Howe, 1992, Dix et al., 1986, Johnston et al., 2009, Johnston and Leung, 2001, Wilson et al., 2006). Similar results had been found among parents of children with ID in that more stable attributions were related to lower expectations for behaviour management strategies (Whittingham et al., 2006). The current study found that even though certain problematic behaviours were viewed as stable over time and the parent did not have an effective strategy in place yet, parents did expect to learn strategies to effectively handle them in the future. While a stable attribution may be related to less effective strategies, this does not need to diminish parents' hope and motivation for being able to learn more effective strategies in the future.

Again the literature for parents of TD children suggested that attributing problematic behaviour to causes that are under the child's control was related to the use of less effective parenting strategies (Dix et al., 1986, Johnston et al., 2009, Johnston and Leung, 2001). Among parents of children with ID, an attribution of control was related to lower expectations for behaviour management strategies (Keenan et al., 2007, Whittingham et al.,

2006). The present findings show that parents do distinguish between behaviour that the child can and cannot control, and that they use different strategies in response. When behaviour was viewed as caused by the ID or by a lack of understanding, parents did not attribute control to the child. This combination of attributions led parents of children with an ID to be sympathetic toward problematic behaviour (Weiner, 1985). These results echo Woolfson's (1999) finding that mothers of children with an ID felt unsure about how to handle behavioural difficulties because they viewed it as part of the child's condition and felt that normal care giving rules did not apply. The current study points to a relationship between a control attribution for problematic behaviour formed around the child's ID and the use of parenting strategies among parents of children with an ID. However, parents also reported that their child had control over other behaviours which they classified as seeking attention or pushing boundaries. This attribution was more likely to lead to the parent trying to manage the behaviour. The current study showed that knowing what the child can and cannot control is a learning process for parents. Appropriate support in this area may help parents manage their child's behaviour more effectively.

Parents felt responsible for setting rules and for promoting their child's development. As a result of the child's ID, difficulties with learning and development, and the child's lack of control, parents felt that they had to take responsibility. This is in contrast to suggestions by Johnston and Patenaude (1994) and Morrissey-Kane and Prinz (1999). These authors suggested that viewing problematic behaviour as uncontrollable minimises parental feelings of responsibility for the behaviour, which on the one hand protects their self-esteem, but on the other hand reduces attempts to manage behaviour. It may be that in the present study, it was not just the child's lack of control that motivated parents' responsibility, but more broadly the ID which incorporated an interpretation of reduced control for certain behaviour as well as the child's developmental level. Overall, this reflects responsibility in a positive

sense. However, some parents also experienced responsibility in a more negative sense by taking blame. Himelstein et al. (1991) suggested that parents who take responsibility are more likely to act on their child's behalf. On the other hand, Snarr et al. (2009) suggested that parents of TD children who held themselves responsible for their child's problematic behaviour experienced more negative parent outcomes. This can be explained with these different aspects of parent responsibility. For parents of TD children, responsibility could mostly reflect the self-blaming aspect of responsibility, which would be related to negative parent outcomes. For parents of children with an ID on the other hand, the motivational aspect of responsibility stemming from the child's difficulty with learning and development seems to be more salient. This motivates parents to teach their child appropriate rules of behaviour. Parents could benefit from support that builds on from this sense of responsibility that many may have developed already in relation to their child's ID.

Strengths and limitations

Participants in the current study were parents of children with different conditions, as seen in Table 1. In addition, participants were asked about general problematic behaviour rather than focussing only on one domain of challenging behaviour. The results can therefore be interpreted within this wider range and therefore extend findings of previous research. During the interviews, parents were given time and space to think about and explore causes, leading to rich and detailed accounts of the ways in which they understood their children's problematic behaviour.

Despite these strengths, the current study also had weaknesses which are important to note so that appropriate conclusions can be drawn. Of the ten participants, only one was a father. His views were similar to the mothers' views and he was the main carer of his child, but the results may not be generalizable to other fathers. A second limitation is the relatively

small sample size of ten parents. Although this small sample size has allowed for an in-depth analysis of the data, it may limit the degree to which these findings are representative and can be generalised. Future research should investigate parental causal beliefs and attributions for problematic behaviour of children with ID in a bigger sample.

Conclusions

The current study supports the contention that parents of children with ID do not solely interpret their child's problematic behaviour as being a consequence of the ID. This is a powerful message, since parents who adopt such a position are likely to view problematic behaviour as something which is malleable and able to be actively addressed. Parents take a broad view, incorporating non-ID-related and social environmental causes and attributions, which helps them to perceive themselves as having responsibility for helping the child learn to control behaviour, or to adapt the environment, and so to act as motivated and effective parents. Nonetheless, parents highlighted that support was needed to help them understand the causes and the amount of control the child may have for different behaviours. The current study suggests that support should build on parents' strengths, such as their sense of responsibility. Due to the complexity of the behaviour of children with ID, parents may need support in identifying causes of behaviour and exploring effective strategies.

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Tables

Table 1

Participant Information

Participant initials	Relation to child	Gender child	Age child	Child diagnosis
LN	mother	girl	6	microencephaly; global delays
DR	mother	boy	10	autism
SA	mother	boy	9	autism; severe behavioural difficulties
NR	mother	boy	7	autism
HP	mother	boy	9	autism
SE	mother	boy	9	autism
PR	father	girl	9	Cornelia de Lange syndrome
KG	mother	boy	8	ID; epilepsy
KT	mother	girl	12	Down Syndrome
MD	mother	girl	9	Down Syndrome

Note: Participant initials have been modified to ensure anonymity.

Table 2

Vignettes Used at the Start of the Interviews

Vignette 1	Your child is looking for a certain toy he wants to play with while you are busy talking on the telephone. When he can't find it, he tries to get your attention and keeps interrupting you to indicate that he wants you to help him find the toy.
Vignette 2	You and your child are in the lounge. You are planning a family outing that day and together you are waiting for the weather forecast on the TV. Just as the weather comes on, your child begins to make a noise with a toy that he is playing with.
Vignette 3	Your child is getting ready for school. You notice that his hair is not yet brushed. You remind him that his hair needs to be brushed before going to school but he refuses and does not cooperate.
Vignette 4	Your child is watching a programme on TV. It is the child's bedtime, and there is another programme you want to watch. Although the show is a repeat episode that your child has already seen, he indicates that he has to see the ending and insists on watching the entire programme.
Vignette 5	You have just finished matching and folding socks after doing the laundry. The clean socks are piled on the kitchen table. It is nearly time for lunch and you tell your child to take his pile to his room. He does not take the socks to his room.
Vignette 6	You have just put dinner on the table and your child is playing in his room. You go to the room and tell your child to come to the table for dinner. The child does not come to the table.