A qualitative study of teacher's perceptions of an intervention to prevent conduct problems in Jamaican pre-schools

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Abstract

Background   There is a growing evidence base showing the efficacy of school-based interventions to prevent conduct problems but few evaluations have addressed teachers' perceptions of these programmes. Teachers' views on the acceptability, feasibility and usefulness of an intervention will influence implementation fidelity and programme sustainability and can help further our understanding of how the intervention works and how it may be improved.

Methods   A pilot study of the Incredible Years Teacher Training Programme supplemented by a curriculum unit on social and emotional skills was conducted in inner-city pre-schools in Kingston, Jamaica. Three pre-schools comprising 15 classrooms participated in the intervention which involved seven monthly teacher workshops and 14 weekly child lessons in each class. At the end of the intervention in-depth individual interviews were conducted with each intervention teacher.

Results   Teachers reported benefits to their own teaching skills and professional development, to their relationships with children and to the behaviour, social-emotional competence and school readiness skills of the children in their class. Teachers also reported benefits to teacher–parent relationships and to children's behaviour at home. A hypothesis representing the teachers' perceptions of how the intervention achieved these benefits was developed. The hypothesis suggests that intervention effects were due to teachers' gains in skills and knowledge in three main areas: (1) a deeper understanding of young children's needs and abilities; (2) increased use of positive and proactive strategies; and (3) explicitly teaching social and emotional skills. These changes then led to the variety of benefits reported for teachers, children and parents. Teachers reported few difficulties in implementing the majority of strategies and strongly recommended wider dissemination of the intervention.

Conclusions   The intervention was valued by Jamaican pre-school teachers and teachers felt they were able to successfully integrate the strategies learned into their regular practice.

Introduction

The prevalence of conduct problems in young children is reported to be in the range 7–25% (Webster-Stratton & Hammond 1998) and children with conduct problems are at increased risk for developing conduct disorders in later childhood. Conduct disorder is the commonest psychiatric disorder in childhood and results in a significant impairment burden for

affected children (Moffitt & Scott 2008) and large economic and social costs to society (Scott *et al.* 2001). There are many studies describing universal school-based interventions to prevent conduct problems and evidence from meta-analyses and systematic reviews indicate that these programmes generally lead to significant reductions in children's aggressive and/or disruptive behaviour (Durlak & Wells 1997; Hahn *et al.* 2007; Wilson & Lipsey 2007). However, there are few studies describing participants' views of these programmes. A number of studies have used parent and/or teacher satisfaction questionnaires (Webster-Stratton *et al.* 2001, 2008; Mishara & Ystgaard 2006) but there are few qualitative evaluations (Hutchings *et al.* 2004, 2007; Seifer *et al.* 2004). In-depth investigations of teachers' perceptions of school-based interventions are important as teachers are usually responsible for programme implementation and their views are likely to affect their compliance (Han & Weiss 2005; Beets *et al.* 2008).

We are aware of no previous studies of school-based interventions to prevent conduct problems from a developing country where schools often have high staff–child ratios, low levels of teacher training, few classroom resources and poor physical conditions. Interventions that have been shown to be effective in developed countries may be more difficult to implement in this context. Different cultural beliefs and values may also affect the acceptability of the goals and/or strategies advocated by these programmes.

We piloted the Incredible Years (IY) Teacher Programme and a curriculum unit on social and emotional skills drawn from the IY Dina Dinosaur Classroom Curriculum through a cluster randomized design in five inner-city pre-schools in Kingston, Jamaica. The intervention produced significant benefits to observations of teachers' positive behaviours, negative behaviours, teachers' promoting social and emotional skills and to ratings of children's classroom behaviour and their interest in class activities (Baker-Henningham *et al.* 2009). A qualitative evaluation was conducted in the three intervention schools. The aims of the qualitative evaluation were to determine teachers' (1) perceptions of any benefits of the intervention; (2) successes and challenges in implementing the strategies learned; (3) views concerning the acceptability of the programme; and (4) beliefs as to how the intervention achieved its effects.

Methods

Sample

Three community pre-schools situated in inner-city areas of Kingston, Jamaica participated in the intervention. The schools consisted of 15 classrooms staffed by 16 teachers. One teacher left the school before the end of study. The remaining 15 teachers (13 women, two men) were interviewed for this study. Twelve teachers had completed a basic vocational course in early childhood care, education and development but only one was a trained teacher.

Ethical approval for the study was given by the University of the West Indies Ethics Committee. Written informed consent was obtained from all teachers.

The intervention

The intervention was based on the IY Teacher Training Programme and aspects of the IY Dina Dinosaur Classroom Curriculum (Webster-Stratton 2000). The IY Teacher Training Curriculum includes modules on partnering with parents, developing positive relationships with and motivating children, preventing and reducing inappropriate behaviour and teaching social and emotional skills. The training methods included videotape modelling, role plays and discussions and throughout the training participants were encouraged to learn from each other, to solve their own problems with group support and to apply the new skills learnt to their own situations. Teachers attended full-day training workshops once a month for 7 months and individual in-class consultations were conducted with each teacher every month. The research team also delivered weekly lessons in each classroom over a 14-week period in collaboration with the teacher. The lessons were based on content and activities from the IY Dina Classroom Curriculum and covered the topics: (1) learning how to do your best in school; (2) understanding and detecting emotions; (3) anger management; and (4) friendship skills. Each lesson consisted of a circle time discussion and follow-up practice activity and lasted approximately 30 min. Teachers were asked to review the concepts taught during the week and to promote the new skill taught throughout the daily routine. Schools were provided with additional materials to implement the intervention including a hand puppet, pictures to represent the concepts taught, manipulatives and puzzles.

Measurements

At the end of the intervention period, in-depth individual interviews with each teacher were conducted by a research assistant who had not been involved with the study. Interviews were conducted in a quiet location at school and they lasted between 45 min and 1 h. A semi-structured interview guide was used which covered the follow topics:

1 teachers' overall opinion of the training programme and their perceptions of any benefits of the training to themselves and to the children;
2 how teachers used the new strategies learned in the classroom, most and least useful components of the training and the difficulties encountered implementing the strategies;
3 teachers' views on how the intervention led to changes in their own and the children's behaviour;
4 recommendations for future implementation of the training programme.

Analysis

All interviews were taped and transcribed and the transcriptions were checked for accuracy against the audiotape. Data were analysed using the framework approach (Ritchie & Spencer 2002) which involved reading and rereading the transcripts, listing recurrent themes and constructing an index of codes which were grouped into categories and further subdivided within coding hierarchies (Gibbs 2007). The index was used to code all data and when segments of text contained more than one theme, all relevant codes were applied. The data were rearranged in charts of each theme and/or sub-theme within the coding hierarchy with entries for each teacher under each theme. In the interpretation stage of the analysis, the charts were examined to identify the key characteristics of the data, to look for recurring patterns and associations and to investigate teachers' accounts of the mechanism by which the intervention achieved its effects. The number of teachers who reported each theme and/or sub-theme was recorded to indicate the salience of each within the data.

Results

Four main categories were constructed: (1) benefits to teachers; (2) benefits to children; (3) difficulties encountered; and (4) recommendations for the future. These were subdivided into themes and sub-themes (Table 1).

Benefits to teachers

Teachers reported wide ranging benefits to their knowledge, skills and practices (Table 2). They reported increased knowledge of young children's needs and abilities in terms of a better understanding of child development, using more developmentally appropriate strategies, using more interactive teaching methods, spending individual time with children and showing children more affection. Thus teachers believed they now had

more appropriate expectations for child behaviour and better understanding of the large individual differences in children's development and of the need to give attention and encouragement to all children:

> It open my eyes, it make me see different, stop looking at the ones that are bright, but look at the others who aren't and make them feel important just like the other ones.

Teachers gave many clear examples of how they used the strategies taught to prevent and reduce child misbehaviour in the classroom and their accounts revealed that increases in the use of positive strategies resulted in decreased reliance on corporal punishment and other negative strategies such as shouting and name-calling:

> I found that when I praise them, it takes less stress because normally when they are misbehaving I would shout at them or just get angry. . . . but when I praise the child who is not out of line . . . I find the child who is not in line start to respond.

This increased focus on positive rather than negative behaviours also resulted in teachers' developing better relationships with the children and with their parents. Teachers also reported several additional benefits. The use of more effective classroom management strategies led to better classroom control which made them feel less stressed, more confident and increased their ability to meet the objectives set. One unexpected benefit was teachers reporting increased enjoyment of the children. It appeared that the intervention had helped the teachers to relax and have fun with the children:

> We build with blocks and when I say 'I can't even find the red one', they will help me: 'Miss, see the red one here.' So you know you find joy sitting with them and playing in a circle.

Benefits to children

The main aims of the IY interventions are to reduce children's problem behaviour and to increase their social and emotional competence. The teachers' accounts suggest that these aims had been met. Teachers reported reductions in the problem behaviour of children who had challenging behaviour at baseline, improvements in the behaviour of shy children and reductions in the levels of aggression and noise in the classrooms (Table 3).

> Behaviours have improved. Some of them had the biting and kicking problems but they not doing that anymore, nobody is kicking anymore, nobody is pinching and

Table 1. Categories, themes and sub-themes emerging from the data

1. Benefits to teachers	2. Benefits to children
Increased understanding of children	Improved child behaviour
• Understanding children's needs and abilities (14)	• Of children with behaviour problems (12)
• Using developmentally appropriate practices (5)	• Of shy children (4)
• Using fun and interactive teaching methods (4)	• Lower levels of classroom aggression (9)
• Spending time with children (7)	• Less noise (3)
• Showing children affection (5)	
Increased use of appropriate behaviour management strategies	Improved social skills
• Use of praise (15)	• Sharing with one another (14)
• Use of incentives (15)	• Praising each other (8)
• Building positive relationships with children (15)	• Helping each other (5)
• Teaching social and emotional skills (15)	
• Using classroom rules and routines (12)	
• Using the ignore strategy (6)	
• Using time-out (8)	
Less use of negative strategies	Increased emotional competence
• Less use of corporal punishment (5)	• Showing empathy (4)
• Fewer other negatives (8)	• Better understanding of emotions (6)
	• Anger management (6)
	• Increased confidence (6)
Better relationships	Better relationships
• With children (6)	• Better parent–child relationships (4)
• With parents (10)	
Other benefits	Other benefits
• Feeling less stressed (7)	• Increased participation (7)
• Feeling more confident (3)	• Increased academic skills (9)
• Better classroom control (12)	• Enjoying school more (7)
• Better able to meet lesson objectives (6)	• Transfer of skills to home (4)
• Increased enjoyment of teaching (9)	
3. Difficulties with the intervention	**4. Recommendations for the future**
Strategies do not always work (3)	Train all teachers (12)
Strategy has unintended consequences (2)	Trained teachers share strategies
	• With other teachers (3)
Difficulty implementing a strategy (4)	• With parents (5)
Need to practice a lot (4)	Integrate content into regular lessons (7)
Misunderstanding of a strategy (4)	Supplement programme with Jamaican videos (4)
Disagreement with a strategy (1)	Involve parents (2)
No difficulties (5)	

Numbers of teachers mentioning each topic are given in parenthesis.

biting anymore. You still have a little hitting here and there, but the kicking and the biting . . . attention and praise has really worked.

Teachers reported improvements to children's social skills including increases in sharing, helping and complimenting each other and it was clear that these skills were highly valued. Teachers also reported benefits to children's emotional competence including better understanding of their emotions, showing more empathy, better anger management skills and showing increased confidence. Other benefits reported included increased participation in lessons, better academic skills and increased enjoyment of school. The benefits to children's participation and learning were attributed to the interactive teaching methods teachers were now using:

You might think that you can't teach them this because they won't understand but if you break it down and find the puppet to show them, they are interested and you see them practicing – you realise they are really getting it.

Some teachers reported that there was transfer of the skills learned to the home setting and it was interesting that several teachers reported improvements to the relationships between parents and their children:

Some parents used to be aggressive to the children 'you nah do nothing and you nah learn nothing' attacking, always on the attacking but now they are more receptive to the children 'Very good' 'Miss he's doing good cause I see this and that come home.' It's working.

Table 2. Teachers' perceptions of the benefits of the intervention to themselves

Themes	Example of quotations from respondents
Understanding children's needs and abilities	'They are three year olds and I now get to understand that, hey they are three and they won't sit all the time, just give them a little wiggle space.' (Using developmentally appropriate practices) 'I would just sit and observe the free activity area but now from what I learned, I get up and go around and listen to what they are saying and encourage them. Normally, I would sit at my desk, now I get up and meet them at the door, rap with them a little so they start to open up.' (Spending time with children)
Using more appropriate strategies	'Proximity praise, I praise the children who is closest to that child giving trouble, and when he hears the rest of children getting praised he behaves himself because he wants to get praise also.' (Use of praise) I encourage them and say 'I like they way you are sharing, I encourage them to take turns and remind them to use their words if they want something.' (Teaching social and emotional skills) 'Because we do those rules in class everyday, what we want them to do in class, "Eyes on teacher," "Four on the floor," "Hands to self," "Walk." When they are coming to wash hands I say, "What rules do you follow when you going to wash hands?" and they say "Walk" and I tell them they are going to follow that rule and go to the pipe and stand in the line and wait your turn to wash your hands.' (Using classroom rules and routines)
Less use of negative strategies	'What I find is that with the difficult children, some of the time when they misbehave I would respond to either giving them a little slap or maybe shouting at them but instead of doing that now I find myself finding a time to praise them, giving them more praise and hugging them and that really works. It works far better than shouting.' (Less corporal punishment and fewer other negatives) 'I have two children in my class – they throw themselves in a tantrum and I have to just try and ignore their behaviour and allow them to cool down. Before I would shout at them and give them a command but now I just leave them and allow them to quiet off and then go back to them.' (Fewer other negatives)
Better relationships	'Now I find that if you know a child, you know what you can and cannot do with them. Playing with them and just finding out what they are thinking, sitting around and watching what they are doing and maybe just say some things or ask some questions so that they tell you what they are thinking.' (With children) 'I have a better relationship with the parents. Cause at first you tend to want to give the negative, "He's not behaving well" and now you say "Tajay did this today, he sat at his table and completed his task." The parents know that "Hey, my child is doing something in school and he is great." ' (With parents)
Other benefits	'Now that we find the new stuff its less stressful for you because you don't have to be saying the same thing over and over and you doing the same thing the same way and not getting a result.' (Feeling less stressed) 'Things like, putting a quiet hand has really helped me to maintain control.' (Better classroom control) 'You find that you are able to acquire the objective that you set out to acquire, because . . . . you don't have to stop every minute to call to them. You get to do what you set out to do.' (Better able to meet objectives) 'You see them smile and it makes you feel good. To see the fun that they have when I play with them, they laugh and say "Look at teacher".' (Increased enjoyment of teaching)

Difficulties with the interventions

Although all the teachers reported a good deal of success with the strategies there were several accounts of the strategies not working to the desired extent or having unintended consequences in terms of disturbing other children or the class as a whole (Table 4). Several teachers also reported having difficulty implementing strategies to deal with child misbehaviour (ignore and time out) correctly and they found that some of the new strategies required practice and effort before they were confident implementing them. There was evidence that the use of the discipline strategies had not been fully understood by several teachers. For example, the ignore strategy is meant to be used for minor child misbehaviours that are not causing harm to others and that do not involve non-compliance to teacher requests. However, one teacher reported that it was difficult to ignore non-compliance while another teacher described how she could not ignore aggressive behaviour. One teacher commented that although the strategies were useful, there was still a place for corporal punishment for some of the more difficult children. A third of the teachers reported no difficulties in implementing the strategies.

Recommendations

The main recommendations from the teachers were that the skills they learnt were so valuable that all pre-school and primary teachers should attend the training and the social and emotional skills should be taught to all children and integrated into the regular classroom curriculum (Table 5).

> It should be in the curriculum. . . . There isn't any space in the curriculum but they should make space because it's very important.

Table 3. Teachers' perceptions of the benefits of the intervention to children

Themes	Example of quotations from respondents
Improved child behaviour	'She would just bite and she can't sit by nobody and Tenice can't agree with nobody and now I can put her to sit beside anybody. I used to put her at just one spot that I can see her and say "TENICE" . . . and now she is helpful and she is just in her class, do her work and things.' (Improved behaviour of children with behaviour problems) 'The shy ones now, because of the praise, "I like what you are doing" – it helps the shy ones to just open up and respond and they start to interact with each other much better and they feel more confident so they started to talk and participate in the activities.' (Improved behaviour of shy children) 'I used to have a problem with a lot of loud shouting. It break down a little, decrease a whole lot because of the classroom rules that I got. Using the inside voice and listening has helped with the noise.' (Less noise)
Better social skills	'The asking for something when they need it, they don't just pull it from the other person, the sharing, that is in place, so all when break time, children keep coming to me to tell me that they are sharing.' (Sharing with one another) 'When they colour their things nicely they compliment the person "Wow, I like it". If someone build anything normally they would get jealous and break it down, now they compliment the child, "Wow, that is very nice" and when they see a child doing something they would ask, "May I help you build the tower?" ' (Praising each other) 'Them help each other, like when they doing they school work, and some finish first them will go around and say, "No a nuh so, rub out that one there." ' (Helping each other)
Increased emotional competence	'They care more about each other. I've seen a child in my class crying and the other one went over and comfort that child and tell the child she loved them and asked why she was crying.' (Showing empathy) 'If they are sitting in the areas you hear them talking to each other, they are playing with the teddy and they ask "How are you feeling today? Are you feeling sad?" ' (Better understanding of emotions) 'At first the children in the classroom, they are so angry like they use their pencils to stab each other. Now they are more calm. They have been controlling anger by taking a deep breath and calm down themselves and using their ignore muscles.' (Anger management)
Better parent–child relationships	'Sometimes we used to put a little note that the child was naughty and he hit a child and so on and the parent would be very angry and beat the child and the child comes back with scars. Normally now we ask them to come in to talk with us and we know how to bring it across in a way so the parent doesn't get upset and take out their anger on the child.'
Other benefits	'They participate more. You now not only praise for things that are done right, you praise for effort. It's very effective.' (Increased participation) 'Their communication skills have improved a whole lot.' (Increased academic skills) 'It's helping, not just in the school but in the home. It is rubbing off. The parents say they hear the children saying, "Keep your hands to yourself." ' (Transfer of skills to home)

Teachers suggested that they should share the strategies learned with parents and with other teachers. For example, some teachers expressed significant concern that other schools were in need of the intervention and they reported actively helping them:

> This teacher. . . . at another school and. . . . I told her about the workshop and she really wanted to come. So, . . . I gave her some of my happy grams, some of my stars and some of my cue cards and tell her how to use it and she copy them and use it in her classroom.

Some teachers also recommended that some video vignettes of Jamaican classrooms should be used rather than only clips from US classrooms which are so different in terms of staffing, classroom resources, class size and space. Only two teachers recommended including parents as a target of the intervention although it was evident that parent involvement was valued by many teachers as they reported sharing skills with parents and forging better relationships with them.

Summary/synthesis

In the final step of the analysis, the charts containing the data reorganized under each category, theme and sub-theme were examined to produce an account of teachers' perceptions of how the intervention achieved its effects. Three main strands were identified (Fig. 1).

First, the intervention helped teachers gain a deeper understanding of young children's needs and abilities which resulted in teachers' spending more time getting to know children, joining in the children's play and using more developmentally appropriate teaching methods. This in turn led to closer teacher–student relationships and increased teachers' confidence and enjoyment in teaching. Second, the intervention increased teachers' use of positive and proactive classroom management strategies and reduced use of less appropriate strategies. This led to improvements in children's behaviour, participation in classroom activities and school readiness skills and also resulted in teachers forming better relationships with

Table 4. Difficulties experienced by teachers

Themes	Example of quotations from respondents
Strategies do not always work	'I'm thinking of the friendship skills. Its not that it was not helpful, it was helpful to an extent, I did not see much of it coming out in the children. You will have a set of children working together and you see one pulling things away from the other and you help them to share . . . and if you move away they go back to grabbing.'
Difficulty implementing some strategies	'Some of them were difficult, especially, at first with the ignoring because sometimes you ignore them and you don't remember to go back to them. When they stop misbehaving you don't remember to go back to them and give them a compliment and thing.' 'Focusing on negative behaviour did chip in sometimes especially when you are really annoyed with the behaviour it's really hard.'
Unintended consequences	'Like giving the time out is difficult for me. You give a child a time out . . . and then they are going to do things in time out and that is going to distract you and disturb your session.' 'With descriptive commenting, only thing, what I find happens sometimes is that it distracts somebody else.'
Some strategies need a lot of practice	'The proximity praise because that one was a new one and it takes quite a bit of getting used to but I think I am getting there. The child that would normally be the disruptive one and to catch that child, while that child is doing something good, it is easy for you to not see. Because you are expecting the disruptive behaviour it makes it sort of difficult to catch that child and to praise them right at that moment.'
Misunderstanding of strategies	'Like to ignore – challenging, challenging, challenging. Even if you see that child . . . Say you tell that child not to do that and the child continue doing it and you want to ignore that child – sometimes we can't ignore them type of stuff there.'
Disagreeing with a principle	'These children are different, it takes more than that. Sometimes you have to use a little force to control them. What we have learnt, after two minutes then they are back to normal so we have to use a little force.'
No difficulties	'I didn't have a problem with them, I didn't have any problems – none of them were difficult. They were explained in a simple manner so I could understand, they weren't difficult and they weren't challenging.' 'No, none of them were difficult. The programme is – the instruction given they are clear – they are demonstrated to you before you even start and you practice them in the workshop so you have a clear understanding of what it is you are supposed to do.'

Table 5. Teachers' recommendations for future dissemination of the programme

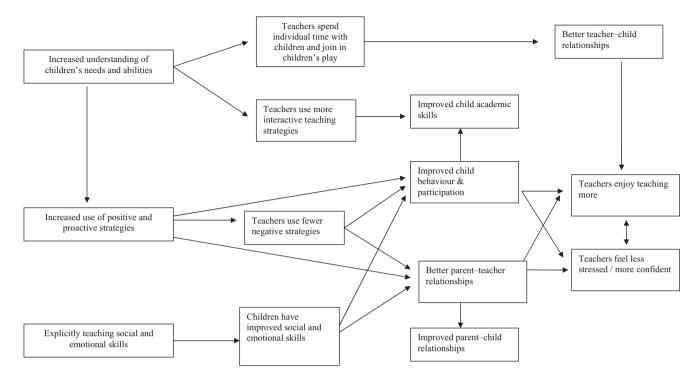| Themes	Example of quotations from respondents
Train all teachers	'For me the only thing I would like is if it could go on in more schools, if it could continue in more schools. Our school getting it and you would hear that another school having a problem and you say "I have this child and his programme help" so I mean I wish if they could get into this programme so it could help with the difficult ones.'
Trained teachers share strategies learned	'I've been printing cards so that I have other cards to give other school teachers and then they have the lessons to go with it. So I'm going to print the lessons now and go and tell them. So we can do some training on our own' (With other teachers) 'I encourage his mother, because she used to beat him a lot for things that he does at home. So, every time I learn a new method I would share it with his mother so that both of us will be using the same method to correct him. It works well.' (With parents)
Integrate content into regular lessons	'You have to implement it in every lesson that you do. Every lesson that you do, you put a little piece into it, so like in the morning you start with it and continue with your class, if they try to put it in, it will work.' 'We can use them as concepts and based on how you teaches your lesson, so if you teach a lesson on certain topic you can reinforce it in your lessons. I don't think that will throw off, or prevent you from bringing cross what you are teaching.'
Supplement programme with Jamaican videos	'In addition, what else could be done, we could get some video clippings of basic schools and when we're watching, like what we do at the workshop, we can say "Ah, that looks like one of my boys or one of my girls" and we can address the issues right there.' 'It would have been good to have more of our type of school setting, reason for that is, the schools that were used in the demonstration, their setting is different from ours, so the result would be different.'
Involve parents	'I think it would have been more effective if the parents were educated in terms of what is going on in the workshops, because we are here trying to get the children to change and when they go home it's something different.'

Figure 1. Diagram showing the teachers' perceptions of how the intervention produced its benefits.

children's parents. These improvements led to teachers feeling less stressed and more confident in their teaching ability. Teachers also perceived that the improvements in their relationships with parents benefited parent–child relationships. Third, explicitly teaching social and emotional skills to the children resulted in improvements to children's social and emotional skills at school and at home. These improvements in social and emotional skills (in conjunction with the increased use of positive and proactive strategies) in turn reduced the level of aggression in the classroom and helped to increase parent involvement in school.

Discussion

The teachers reported wide-ranging benefits of the intervention. A hypothesis of the mechanism by which the intervention achieved its effects, which was grounded in the data, was put forward. Three recurrent themes were identified: (1) teachers' enhanced understanding of children's needs and abilities; (2) teachers' increased use of positive and proactive strategies; and (3) teachers' actively promoting children's social and emotional skills. These gains led to a cascade of benefits to the teachers' personal and professional development and to their relationships with children and parents; to the children's academic

skills, behaviour and social emotional competence at home and school and to parent–child relationships.

It was reassuring that few barriers to implementing the strategies were reported. Although some strategies took time to learn, teachers found that with practice they were able to implement most of them effectively. All teachers gave clear accounts of appropriate use of the positive strategies (e.g. praise, incentives and building positive relationships with children) but only half of the teachers reported effective use of the discipline strategies (e.g. ignore, time-out). This preference for positive strategies concurs with previous studies which have found that teachers perceive positive strategies (e.g. praise) to be more acceptable, more effective and easier to use than negative strategies (e.g. ignore, time-out) (Han & Weiss 2005). Several teachers had not fully understood the use of the discipline strategies and hence it is important that this is addressed in future workshops. For example, we have prepared additional practical activities to help teachers distinguish between behaviours that can and cannot be ignored (e.g. quizzes and card-sorting activities to promote discussion among teachers) and we have designed additional role plays involving the use of the discipline hierarchy for use in the next round of implementation. Assisting each teacher to make a concrete and explicit plan for how the discipline strategies will be operationalized in his/her own

classroom context will also be important. The teachers strongly recommended that the training programmes be made available on a wider scale.

Teachers reported reduced use of inappropriate strategies, including negative comments and corporal punishment. The accounts correspond closely with the quantitative evaluation of the intervention which involved observations of the classroom environment (Baker-Henningham *et al.* 2009). Corporal punishment is a common discipline strategy in Jamaican schools (Samms-Vaughan *et al.* 2000; Pottinger & Nelson 2004) and is often viewed as culturally normative. It is possible that use of corporal punishment may reflect teachers' lack of alternative classroom management strategies. The evidence from the current study suggests that when teachers learn these strategies, their use of negative strategies reduces. This evidence is important for policy and practice in Jamaica as a relatively recent development has been the prohibition of corporal punishment in early childhood institutions under an Act passed in 2005.

It is also widely believed that Jamaican teachers and parents place a strong emphasis on children's academic skills and less emphasis on their social-emotional competence. For example, in a survey of transition practices from pre-school to primary school, Bailey and Brown (1998) found that the priorities of pre-school teachers, primary teachers and parents were similar with all groups placing a strong emphasis on academic outcomes and less emphasis on children's social skills (Bailey & Brown 1998). In the quantitative evaluation of this study, we also reported that at baseline, teachers rarely promoted children's social-emotional skills and this changed with intervention (Baker-Henningham *et al.* 2009). Nonetheless, the teachers' accounts indicate that when they were provided with strategies to promote children's social and emotional skills, the gains made by children in these skills were greatly valued by both parents and teachers.

Our findings concur with previous qualitative evaluations of the IY teacher and child programmes (Hutchings *et al.* 2004, 2007) in which teachers reported increased use of positive strategies, less stress, reductions in children's disruptive behaviour and improvements in children's social, emotional and academic skills after intervention. However, the benefits reported here are more wide-ranging, possibly because the majority of teachers in this study had received little formal teacher training. Some key additional benefits were the reports of improved interpersonal relationships including improvements to teacher–child, teacher–parent, child–child and parent–child relationships. It is possible that improvements to interpersonal relationships are particularly valued by Jamaican teachers and/or that the intervention benefited these relationships more strongly in the

Jamaican context. Improved relationships were also related to teachers increased enjoyment of school. International literature points to the critical importance of these relationships for children's behavioural development (e.g. Hamre & Pianta 2001; Ladd & Burgess 2001; Snyder *et al.* 2008).

This study is one of few studies to investigate teachers' perceptions of a school-based intervention to prevent child conduct problems. Utilizing existing staff and structures should be a cost-effective and sustainable method of improving children's health in resource-poor settings and school-based interventions have the potential to benefit large numbers of children (Cortina *et al.* 2008). However, it is important that the personnel involved are not over-burdened and that they perceive the intervention to be useful. The findings reported here are therefore very encouraging. These results provide information on how the intervention may work in a developing country context including identifying the scope of the potential benefits and the skills that teachers regard as pivotal to intervention effectiveness. These variables can be investigated empirically in future studies.

This study also has limitations. The research team was responsible for both implementing the intervention and analysing the data. Although a researcher who had not been involved in the intervention conducted the interviews, it is possible that teachers enhanced the benefits and minimized the difficulties associated with the intervention during the in-depth interview. However, it was stressed that information was required to improve the intervention and teachers' accounts were rich with specific examples of how they used the strategies and specific details of the reported behavioural changes. To counteract potential bias in the analysis, all data were coded and we have tried to provide sufficient raw data to permit the reader to judge the face validity of the themes and sub-themes. Unfortunately, we had insufficient resources to interview parents and hence benefits to children's behaviour at home and to parent–child relationships are from the teachers' perspective only. In future studies it will be important to elicit parents' perceptions of the intervention including their perceptions of any changes in their child's behaviour, their views on their own relationship with their child's teacher and their perceptions of the extent to which the teacher has been successful in forging an effective school–home partnership.

Conclusion

Many studies have examined the efficacy of school-based interventions to prevent conduct problems but there is little information on teachers' perceptions of these programmes. This

study shows how in-depth interviews with teachers can assist in evaluating the acceptability and usefulness of a school-based intervention from the teachers' perspective. This methodology can inform future implementation by identifying the skills teachers find most useful and those that are more difficult and may need additional emphasis. In-depth interviews can also assist in identifying the scope of potential outcomes and in building hypotheses about the mechanism by which the intervention achieves its effects. This is important for developing countries as most literature emanates from developed countries and additional or alternative mechanisms and outcomes may be relevant.

Key messages

- Few studies have examined teachers' perceptions of school-based interventions to prevent conduct problems. Teachers' views will affect the fidelity of programme implementation and programme sustainability.
- Implementation of these interventions in developing countries may present unique challenges. However, we are aware of no previous evaluation from a developing country.
- A qualitative evaluation of the Incredible Years Teacher Training Programme was conducted with pre-school teachers in Jamaica. The training was highly valued by teachers who reported wide-ranging benefits to themselves, to children and to their parents.
- Teachers' accounts suggested that improvements to their practice in three main areas were pivotal to the effectiveness of the intervention. These were: (i) a deeper understanding of children's needs and abilities; (ii) use of more positive and proactive strategies; and (iii) explicitly teaching social and emotional skills.

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