

**Pilot study for a trial on the effects of child, parent and teacher focused
interventions to reduce aggressiveness in Jamaican school children**

FINAL REPORT

To the Caribbean Health Research Council

Julie Meeks Gardner
Caribbean Child Development Centre
University of the West Indies, Mona

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Abstract

This study was designed to pilot interventions aimed at improving parental practices and teacher classroom management in an effort to improve child behaviour, with a long term goal to reduce violence. Four primary schools in Kingston, Jamaica were randomly assigned to receive a parent training programme (parent), a teacher training programme (teacher), a combined intervention with both the teacher and parent components (both) or neither intervention (control). Teachers from grades 1 and 2 in all schools nominated aggressive children. Their parents were approached and the study described. Those who selected to participate and allow their children to be measured were met with to set up convenient times to host workshops. Teachers from grades 1, 2 and 3 (with 5 or 6 streams for each grade in each school) were also met with and workshops arranged. The interventions were based on the Incredible Years programmes. For caregivers these comprised 12 weekly 2 to 2 ½ hour workshops in which caregivers were taught how to develop and implement structured contingency management programs at home, effective non-physical modes of discipline, supervisory and monitoring skills, and non-physical strategies for dealing with intra-family conflicts. For teachers, there was 15 hours of workshops covering child management, child behaviour problems, methods of improving self esteem in children, communication with caregivers, conflict resolution, and school programmes to reduce aggression in general. 47 teachers and 122 child/caretaker pairs completed the study. Children in the groups receiving the parent intervention, or both interventions improved in their emotional difficulties, those receiving both interventions also improved their arithmetic scores, while those in the teacher intervention group improved their spelling score. The children's attitude to school also improved with either intervention or both interventions. These were small, but important differences which might have an impact on the children's school career. It would be useful to follow-up these or other children to see whether these benefits persist, and have a long term benefit in reducing violent behaviour.

Background

Violence is now recognized as a serious public health problem worldwide. In Jamaica, there were over 1000 homicides each year since 2002, resulting in one of the highest murder rates in the hemisphere. The best predictor of adult violence is aggressive behaviour in childhood, hence preventive interventions should be conducted with children (Huesmann et al, 1984). In a recent study in Jamaica, we identified a number of child and family factors associated with aggressive behaviour. Exposure to neighborhood violence, family discord, experiences of physical punishment at school and at home, and poor school achievement were risk factors for aggression whereas participation in religious practices and close parental supervision were protective factors. The aggressive children were more likely than prosocial children to have other behavioural problems including emotional difficulties, hyperactivity and poor attention (Meeks Gardner et al 2001).

In a separate study of 29 schools we found that children in some schools were more aggressive than others even after controlling for neighborhood violence (Meeks Gardner et al, 2001). Schools that gave more rewards and less punishment and had more extracurricular activities had a protective effect. Although changing some of these factors would require intervention at the level of the larger society, some should be amenable to change at the child, school and family levels.

By this time, a large number of interventions have been carried out especially in North America and western Europe. The Blueprints Model Programs reviewed over 600 violence prevention programs (CSVP, 2002) while Powell and Hawkins (1996) described 13 projects related to school-based programs with careful evaluation components, and parent or home-based interventions have been reviewed by Gill (1998) and Barlow (1999). Many interventions have shown only limited and unsustained benefits (Brestan and Eyberg, 1998), especially those which were short term and focused on only one or a limited number of risk factors. The most effective appear to have multiple components focusing on children and parents (Webster-Stratton, 1998, 2003). Our proposed intervention will target children, their parents and teachers and focus on those factors which we found to be particular risk factors in this environment.

We received some funding towards a pilot study to develop focused and feasible strategies, curricula and materials aimed at reducing aggression in school children, and evaluate the effect of introducing these in a few schools. The plan was then to use the intervention package that we develop, or its most effective elements, in a larger study at a later stage.

We requested funding from the CHRC for a research assistant to help in the provision of the intervention. The intervention originally proposed would have three components: (1) Tutoring and counseling of high-risk children; (2) parent training of parents with high-risk children; and, (3) teacher workshops on classroom management. The intervention was to be assessed in two large primary schools. In addition, support was requested for

paper and printing, for refreshments for the teacher and parent workshops and for transportation costs to these workshops.

Overall Goal

To develop and assess an intervention to reduce aggressiveness among Jamaican children.

Objectives

1. To develop a feasible intervention programme for aggressive children, their teachers and families.
2. To assess any problems with implementing the intervention.
3. To determine the effect of the programme on aggressive children's behaviour and school achievement, and parental and teaching practices, using a randomised controlled trial design.

Parents' and teachers' attitudes and practices of child behaviour management were assessed before and at the end of the intervention. Problems encountered during the implementation of the intervention were identified and their solutions noted for future implementation of the interventions.

Methodology

Study Design

During the piloting of the interventions, a number of problems were encountered. The schools approached did not want the high risk children removed from regular classes, and after-school tutoring was logistically difficult to arrange. In particular, caregivers did not want their children leaving school later than usual as it was felt this put the children at greater risk of facing violence in the communities. Teachers were also reluctant to remain on premises after regular school hours. As we also felt that the individual counselling would be the component of the intervention which would be least likely to be affordable and sustainable, the final design comprised teacher and parent interventions only. As a result, the original study design was modified from a 3 treatment design in one school, to a more powerful 2 treatment design among 4 schools. The CHRC-funded research assistant provided extensive tutoring/ training to groups of parents and teachers, rather than to children. The final study design is shown in Table 1.

Selection of schools

Four large primary schools (with five or six classes in each grade level from grade 1 to grade 3) in the Kingston metropolitan area were selected randomly, using random numbers tables, and were approached to be a part of the study. (School 4 had only four grade 2 classes). The research team met with the principals and teachers and the aims and design of the study described. The school personnel agreed that there was a substantial

problem with aggression among some children at their respective schools, and expressed gratitude for the assistance offered.

Selection and randomisation of classes

Grades 1, 2 and 3 were selected as those with the youngest children, and younger children are more amenable to these behavioural modifications. The teacher training took place in two schools, with teachers from all classes in grades 1, 2 and 3, as well as the guidance counsellors.

With the modified study design, randomisation was carried out at the level of the school, so for each school all classes were assigned to the same intervention. Thus there was no randomisation at the level of classes.

Selection of high risk children

Within each school, aggressive children were identified from grades 1 and 2 only, using teacher ratings which we have successfully used in previous studies (Meeks Gardner et al, 2001; Ani and Grantham-McGregor, 1996; Dodge, 1982). The parents of each of these children were contacted and told about the study. Their permission was requested to carry out measurements on their children, and those from the schools selected for parent training were invited to attend special workshops.

Intervention

Training

The intervention used was based the 'Incredible Years' (www.theincredibleyears.com), which are research-based, proven effective programs for reducing children's aggression and behavior problems and increasing social competence at home and at school. The Incredible Years has carefully designed, detailed training programs for teachers, children, and parents. The three programs are complementary, but may be used independently. The Incredible Years has been utilized and widely assessed in a range of environments among several different ethnic groups, both by the developers and by independent researchers. However we were not aware of any trials of the programme in a developing country.

With assistance from colleagues in the UK and the British Council, an 'Incredible Years' trainer visited Jamaica and carried out the training with our team of principal investigator, and the four research assistants who would undertake the delivery of the intervention. The training comprised five days of 6 hour workshops, including introduction to the materials, role play and practice workshops with parents and teachers from a nearby community (not attached to the study schools).

Components of the intervention

As indicated above, the two intervention programs selected targeted parents (or other caregivers) and teachers. Caregivers and teachers were provided with a snack and a small transportation stipend at each workshop to encourage attendance.

(a) Workshops with caregivers of high risk children. A pair of research assistants led weekly group meetings for the caregivers of the identified aggressive children at the school during the 6 month intervention period. The workshops comprised 12 weekly 2 to 2 ½ hour meetings in which caregivers were taught how to develop and implement structured contingency management programs at home, effective non-physical modes of discipline, supervisory and monitoring skills, and non-physical strategies for dealing with intra-family conflicts using established methods. The primary topic areas were play, praise and rewards, setting limits, supporting children's education, promoting positive behaviours and reducing inappropriate behaviours. We also focused on improving the quality of caregiver-child interactions.

(b) Workshops for teachers. The second pair of research assistants led workshops with the grades 1, 2 and 3 teachers. (There was some overlap of duties among the research assistants, but generally the same groups were taken by the same pair of research assistants throughout their training.) Workshops comprised 15 hours of discussions, video viewing, role play and assessment. The workshops were presented either as 3 five-hour sessions, held on consecutive days over a school break, or six 2 to 2 ½ hour workshops held weekly at school. The approach was participatory and the topics covered included: child management techniques, child behaviour problems, methods of improving self esteem in children, ways of communicating with caregivers, conflict resolution, and school programmes to reduce aggression in general.

Measurements

Before and at the end of the 6 month intervention caregivers' and teachers' attitudes and practices of child behaviour management were assessed by questionnaire. The children's achievement scores were measured using the WRAT III (Wide Range Achievement Test), background variables such as age, sex and socio-economic status, behaviour (including aggressiveness), attitude to school, social cognition and self esteem were measured using questionnaires administered by the researchers. Four scorers carried out these measurements on enrolments, and a further four scorers (who were not a part of the intervention training team) carried out the post-test measurements. In all cases, scorers were blind to the assigned group of the subject being tested or interviewed. Inter-rater reliabilities (concordance) computed across the testers for all scales ranged from 90-100% agreement on 10 to 38 subjects, except for one observer pair in the 'attitude to school' questionnaire which was 85%.

Attendance at workshops and reasons for non-attendance were recorded. After each workshop, a qualitative analysis was carried out by the leader and co-leader, and

recorded. An assessment by the participants (teachers or caregivers) was also made after each workshop.

Problems encountered during the implementation of the intervention were identified and possible solutions noted for future implementation of the interventions.

Data analysis

Background data were compared across groups using t-test or Anova.

The change in caregiver practices, teacher classroom strategies, children's behaviour, school achievement or attitude to school were all assessed using multiple regression. The dependent variable in each case was the post-intervention score. Independent variables child's age and sex (for those regressions relating to children), and the baseline scores were entered first, followed by group (coded as 1, 0 for caregiver intervention or no, teacher intervention or no, both interventions or no). This assessed change in scores. The regressions were repeated comparing teacher intervention (both or teacher only groups) or none, and any caregiver intervention (both or parent only groups) or none.

The children's attitude to school data were factor analysed to reduce the data. The change over time between baseline and post-intervention in these factors were compared by intervention group using multiple regression. As above, the final score was the dependent variable predicted by the independent variables initial score, child's age and child's gender (entered as a block), followed by group.

Ethical Approval

The study received the approval of the Ministry of Education and the UWI Ethics Committee.

Results

Participation

At the start of the study, all teachers from the selected grades were enrolled, a total of 61. 154 children were identified as high risk (aggressive) by the teacher ratings. 25 parents (16%) did not chose to participate when first approached. The reasons given for non-participation were that the parents were not interested, that the child changed schools, or the child broke his leg and was not attending school.

Table 1 indicates the numbers initially enrolled in the study, as well as the numbers with complete data collected. The tables showing results, including the baseline findings, include data only from those subjects with complete data collected. Where the data are presented by 'Teacher intervention group', the groups that received both interventions and teacher intervention only are combined, and the other two groups (parent intervention only and control) serve as the control group. Similarly, where the data are presented as

‘Parent intervention group’, the group receiving both interventions or the parent intervention only are combined, and the other two groups (teacher intervention only and control) serve as the control.

Process Evaluation

Parent Workshops. One caregiver was invited to attend the workshop for each high risk child. In most cases, this was the mother, but some fathers attended, and a few non-parents (Table 2). After discussions with caregivers as to the best time to hold the workshops, Monday, Wednesday and Friday mornings, and Wednesday afternoons were selected. Caregivers were expected to attend their assigned workshop at the same time each week. Each workshop was assigned 9 to 17 caregivers. Caregivers were telephoned each week to remind them to come to the workshops, as well as to remind them of the messages imparted at the workshops and the ‘homework’ they were expected to complete. Although the program should have been completed within 12 weeks, there were unavoidable delays in completing the workshops owing to a tropical storm and a hurricane and the accompanying rain and floods. After the first 5 weeks, attendance at the Friday workshops had fallen so low that this workshop was cancelled, and attending caregivers were reassigned to other workshops convenient to them. Attendance at workshops varied considerably. Occasionally, caregivers not assigned to a particular workshop arrived, as they had missed their own time (unexpected number). The mean attendance was 66%. The reasons caregivers gave for missing workshops are shown in Table 3.

Caregivers rated each workshop for ‘helpfulness’ and in almost every case the session contents, videotape vignettes, groups leader’s teaching and group discussions were considered helpful or very helpful (Table 4).

We found a number of the assumptions about the caregivers did not hold for our sample. For example, a book should have been provided to each caregiver entitled ‘The Incredible Years - A Troubleshooting Guide for Parents of Children Aged 2-8 Years’ (Webster-Stratton, 2001). However the language and complexity of the book was of a much higher level than we estimated and we did not provide this book to the caregivers in our study. Other support materials were of a similarly high literacy level and were not appropriate (e.g. book marks assumed the caregivers were readers and refrigerator stickers assumed that they had a refrigerator).

The video vignettes that were available as a part of the program showed North American families of Caucasian, African-American and Asian backgrounds. The language was not a problem as most of the caregivers were very familiar with American speech from television. The vignettes selected were carefully chosen to be not too dissimilar from the households of the participants, though there were no situations which were similar to the multi-family housing arrangements common to our caregivers.

The lesson plans were not always completed as there was a great deal of enthusiasm to share experiences, and comment on others' experiences. The group format was very welcomed among the caregivers.

Teacher Workshops. Some teachers did not attend the workshops, which were voluntary, although they were encouraged to do so both by the workshop leaders and their peers. A few teachers attended none, or only one, some attended two or more, but did not come to all the workshops (Table 5). The reasons given for absence were: illness, other engagements, forgot, had to complete errands, personal studies, had to take their baby to the clinic.

The teachers were also asked to rate each workshop for helpfulness, and similar to the caregivers, they rated almost all the session contents, videotape vignettes, group leader's teaching and group discussions as 'helpful' or 'very helpful' (Table 6).

The video vignettes for teachers similarly did not portray school settings like those faced by our teachers. The classrooms were spacious and carpeted, with room for teachers to walk around behind the chairs of the students rather than the densely crowded conditions and concrete floors faced by teachers in our study, and the furniture was generally flexible allowing for different arrangements of desks in contrast with the benches sometimes encountered here.

Other Limitations

- Workshop groups were sometimes too big (up to 18 in one session) or too small (2 to 3 persons) to facilitate the necessary group dynamics and flow of ideas. It was also difficult to manage large groups, ensuring understanding of all participants and letting everyone participate meaningfully.
- Participants were consistently late, especially the caregivers.
- Since all caregivers did not have telephones, contact to remind them about workshops and for follow-up was often difficult.
- Teacher reported that it was often difficult to carry out their workshops because the classes had too many children, classrooms were crowded with furniture, there were few resources and a demanding curriculum to get through.

Sample description

Characteristics of the children enrolled, their caregivers, and the selected teachers are shown in Tables 7, 2 and 8, respectively. The children were about 7 years of age. The mean age was significantly different between the group receiving both interventions and

the parent intervention or the control. There were more boys than girls designated as aggressive in three of the four schools. The index child lived with the mother in most cases, and with the father in a half or fewer cases. On average the index child was the mother's second.

The caregivers' characteristics indicate that most were female, whether the child's biological or step-mother or another female caregiver. About half were single, similar to the proportion in the Jamaican population in general. Most caregivers had secondary school education, and some had further vocational training, but none had tertiary level training.

The teachers were overwhelmingly female, with only one male teacher in any of the groups. Most teachers had completed teachers' college, while a few had also completed a university degree (trained graduate) and fewer still were not yet trained. The mean length of time in teaching and teaching at the present school were similar among the groups.

Caregivers' Practices

The summary scales of the caregiver practices before and at the end of the intervention are shown in Table 9. There was a significant group difference on baseline. However the regression controlling for baseline scores, as well as child age and gender, and socio-economic variables did not indicate a significant difference in the final score.

Teachers' Classroom Strategies

The summary scales for the teachers' classroom management strategies are shown in Table 10. One scale was significantly different between the groups on baseline. However, again, controlling for the baseline scores and child's age and gender, there were no significant group differences on the scores after training.

Children's behaviour

Children's behaviour was assessed using reports from the teachers (Table 11) and from caregivers (Table 12). Regression analyses indicated that children of the groups receiving both interventions, or parent intervention had significantly reduced emotional difficulties scores compared with the other groups.

Children's School Achievement Levels

When the four intervention groups are compared, there was a benefit in the arithmetic score (change) for the group that received both interventions, contrasted with the other groups, once age and gender are controlled (Table 13). The improvement in spelling scores among the children who received the teacher intervention compared with those that did not was also significant (Table 14).

Children's attitude to school

Five factors were obtained from the questionnaire data, describing Positive About School Overall, Positive About Teacher, Positive About Schoolmates, Negative About Schoolmates, and Positive About Schoolwork (Table 15). In a multiple regression predicting the first factor, Positive About School Overall, controlling for the baseline score, this factor was significantly improved for each of the intervention groups, compared with the control (Table 16).

Discussion

The critical problem of violence clearly has many causes, and solutions have to be multifocal (PAHO, 1994). While remediation and rehabilitation of offenders and suppression of violence are all necessary, prevention must also be an important aim. Violence prevention as with any public health measure is far more cost effective. It is agreed that violence prevention needs to be aimed at young children, as attitudes to solving issues are much more malleable. In the English-speaking Caribbean we are fortunate in having very high attendance rates among young children at primary schools. This is therefore an excellent setting to base violence prevention programmes.

The present study provides the first rigorous assessment of violence prevention programs that we are aware of aimed at young children in the Caribbean. A large number of programmes and projects have been put in place with little formal assessment of the proposed goals of behaviour change (e.g. Meeks Gardner et al., in press). Programmes regularly report process evaluations but it is difficult to assess behaviour and this is regularly omitted. A major strength of the study is that it attempts to address this.

Another strength of the study was the use of multiple informants: caregivers, teachers and children for different outcome variables. It is interesting that the adults reporting on the children describe similar outcomes for children's attitudes to school and other behaviours.

The Latin square study design allowed a more powerful sample size for the two interventions assessed. However the sample size was small for this pilot. Also the randomisation of only four schools to the four treatment groups meant that school differences might have contributed to the variance in outcomes. It would be useful for a future study to include a larger number of schools and participants.

Another drawback to the study included the shortened time post-intervention before final testing. The original design provided for some months post-intervention prior to the testing to allow the information provided in the workshops to become a part of the caregivers' or teachers' routines, which would then presumably positively influence the children's behaviour. Because of problems already listed, the interventions took much longer than anticipated to complete. However it was necessary to carry out the post-intervention testing as scheduled for a number of logistical reasons and resource limitations. Although there was little time for the later workshop recommendations to be

incorporated into behaviour, there were a few positive outcomes in terms of children's behaviour, school achievement and their attitudes towards school.

Notably, children in the groups receiving the parent intervention, or both interventions improved in their Emotional Difficulties scores, and those receiving both interventions also improved their arithmetic scores, while those receiving the benefit of the teacher intervention improved their spelling score. The children's attitude to school also improved with either intervention or both interventions. These were small, but important differences which might have an impact on the children's school career. It would be useful to follow-up these or other children to see whether these benefits persist.

The proposed mechanism for these positive changes in the children was that the workshops induced changes in the caregivers and teachers, and their behaviour changes in turn affected the children. It was surprising therefore that these positive outcomes related to the children were found although there were no significant changes to caregiver or teacher practices as reported. It is also possible that the child changes detected were solely due to chance. However if this were the case, one would expect the significant findings to be both positive (in the direction hypothesized) and negative. To the contrary all our findings, though few, were in the hypothesized direction. It is difficult to explain this if there was no change in the caregivers or teachers. Possibly the activity of the workshops in the schools might have created an environment which led to the children's improved behaviour and attitudes. In one of the two schools which received the teacher intervention, though, the workshops were not held at the school. It is possible that the questionnaires did not detect the changes that did take place among the caregivers and teachers either because they were not designed to (i.e. changes other than those assessed took place), or they were not sufficiently sensitive. This is the most likely explanation for the lack of significant changes observed among the caregivers and teachers.

This project was conducted as a pilot study to determine whether these interventions could be carried out and with what measure of success. Having managed to carry out the interventions with some problems noted, we would recommend that a larger study be carried out taking these issues into account. For example, the additional materials that should have been provided to the caregivers as books might be recorded onto cassette tapes for parents. Simpler, more useful reminders could also be designed. In order to overcome the problem of poor communication, cell phones may have to be provided to caregivers who do not have one. In order to improve the participation of teachers, the timing of the workshops would have to be carefully set to avoid conflicts with other activities teachers might be involved with.

A future study might consider attempting the child programme of the Incredible Years which we selected to omit from this study. The high cost of a programme that focuses on identified high risk children would make this least likely to be feasible to replicate on a large scale, however, benefits to especially difficult children might make it sufficiently worthwhile for consideration.

In conclusion, this small pilot study of a parent programme and a teacher programme to improve young children's behaviour found that each programme contributed benefits to children's behaviour, school achievement and attitudes to school. There were several issues with the details of the programmes, which had been adopted from programmes designed in North America, but the overall presentation in workshops with video vignettes and group discussions worked very well. Attendance, punctuality and drop out from the training were other problems that were noted. We would recommend the programmes to be carried out with attention paid to specific details. Such programmes carried out on a large scale may go some way toward preventing the epidemic of violence now facing our societies.

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References

- Ani CC & Grantham-McGregor S, 1999. Family and personal characteristics of aggressive Nigerian boys: Differences from and similarities with western findings. *Journal of Adolescent Health*, 23: 1-6.
- Barlow J. Systematic review of the effectiveness of parent-training programmes in improving behaviour problems in children aged 3-10 years. 2nd Edition. Health Services Research Unit, University of Oxford; 1999.
- Brestan EV, Eyborg SM (1998) Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. *Journal of Clinical Child Psychology* 27: 180-189.
- CSPV (Center for the Study and Prevention of Violence) (2003). Blueprints Model Programs Overview. Retrieved from <http://www.colorado.edu/cspv/index.html>.
- Dodge K, 1980. Social cognition and children's aggressive behaviour. *Child Development*, 51:162-170.
- Gill A, 1998. What Makes Parent Training Groups Effective. Promoting Positive Parenting Through Collaboration. PhD Thesis, University of Leicester.
- Heusmann LR, Eron LD, Lefkowitz MM & Walder L, 1984. Stability of aggression over time and generations. *Developmental Psychology*, 20: 1120-1134.
- Meeks Gardner J, Powell C & Grantham-McGregor S. A Case-control Study of Family and School Determinants of Aggression in Jamaican Children. Kingston: Planning Institute of Jamaica, Policy Development Unit; 2001.
- Pan American Health Organization. Health and Violence: Regional Plan of Action. PAHO/ Hpp. 94.11. Washington, D.C.: PAHO, 1994.
- Pan American Health Organization. Violence in the Americas: The Social Pandemic of the 20th Century. Washington, D.C.: PAHO, 1996.
- Powell KE, Hawkins DF, 1996. Youth violence prevention. *American Journal of Preventive Medicine* 12 (Suppl) (5).
- Webster-Stratton C. Parent training with low-income families: Promoting parental engagement through a collaborative approach. In: Lutzker (ed.) *Handbook of Child Abuse Research and Treatment*. New York: Plenum Press; 1998.
- Webster-Stratton C. *The Incredible Years - A Troubleshooting Guide for Parents of Children Aged 2-8 Years*. New York: Plenum Press; 2001.

Table 1. Study Design

School	Grade	Number of Teachers	Number of High risk Children / Parents
1. Both interventions	1	5 <i>INTERVENED</i>	14 <i>INTERVENED</i>
	2	6	20
	3	5	-
2. Teacher intervention	1	6 <i>INTERVENED</i>	19
	2	5	24
	3	5	-
3. Parent intervention	1	6	22 <i>INTERVENED</i>
	2	5	22 -
	3	5	-
4. Control	1	6	20
	2	4	13
	3	5	-
TOTAL ENROLLED		32 <i>INTERVENED</i> 29 <i>NON-INTERVENED</i>	78 <i>INTERVENED</i> 76 <i>NON-INTERVENED</i>
TOTAL COMPLETING		24 <i>INTERVENED</i> 23 <i>NON-INTERVENED</i>	54 <i>INTERVENED</i> 68 <i>NON-INTERVENED</i>

Table 2. Characteristics of participating caregivers and their households

Variables	Intervention Group			
	Both (n=24)	Teacher (n=38)	Parent (n=30)	Control (n=30)
Gender				
Male	2, 8	3, 8	2, 7	5, 17
Female	22, 92	35, 92	28, 93	25, 83
Age (mean, s.d)*	35.1, 12.3	35.8, 10.7	29.9, 4.7	35.2, 7.9
Relation to child				
Mother/stepmother	18, 75	28, 74	27, 90	22, 73
Other female caregiver	4, 17	7, 18	1, 3	3, 10
Father	2, 8	2, 5	2, 7	-5, 17
Other male caregiver	0, 0	1, 3	0, 0	0, 0
Marital status				
Single	7, 29	21, 55	17, 57	12, 40
Married	6, 25	8, 21	3, 10	8, 27
Common law	11, 46	9, 24	10, 33	10, 33
Highest education achieved				
Primary	2, 8	4, 11	0, 0	1, 3
Secondary	16, 67	11, 29	24, 80	20, 67
Vocational	6, 25	38, 31	6, 20	9, 30
Occupation				
Unskilled	3, 13	8, 21	8, 27	9, 30
Semi-skilled	13, 34	11, 29	12, 40	6, 20
Skilled	6, 25	18, 47	10, 33	12, 40
Highly skilled	2, 8	1, 3	0, 0	3, 10
Crowding (people per room) (mean, s.d.)**	2.0, 1.2	1.9, 0.8	2.5, 1.2	1.6, 1.0
Home possessions score (mean, s.d.)	5.3, 1.2	5.3, 1.4	4.7, 1.3	5.7, 1.5
Toilet score‡				
None	0, 0	0, 0	4, 13	0, 0
Pit	0, 0	0, 0	3, 10	1, 3
Flush	24, 100	38, 100	23, 77	29, 97
Water source score†				
Pipe outside yard	0, 0	0, 0	3, 10	0, 0
Pipe in yard	3, 13	10, 26	15, 50	4, 13
Pipe inside	21, 88	28, 74	12, 40	26, 84

* Anova p<0.05

**Anova p<0.010

† Chi square p<0.01

‡ Chi square p<0.001

Table 3. Reasons given by caregivers for missing workshops

Did not remember
Child/ children or other family member ill
Started a job or had a job interview
Had to work
Away in the country or abroad
No money for travelling
Storm, hurricane, flood, rain
Community violence
Unspecified personal or family obligations
Was not reminded
No longer interested
Had to be with wife delivering baby
Overslept/ Tired
Had to attend a funeral
Was not reminded or thought no workshop was being held

Table 4. Caregiver ratings of workshops

	Not helpful	Neutral	Helpful	Very helpful	TOTAL
I found the contents of this session:	0	15	61	153	230
I feel the videotape examples were ^a :	0	9	48	149	206
I feel the group leader's teaching was:	0	4	30	196	230
I found the group discussions to be:	2 ^b	10	39	179	230
TOTALS (%)	2 (0.2)	38 (4)	177 (20)	677 (76)	896 (100)

^a In some workshops videos were not shown (because there was no electricity, it was the final day with presentation of certificates, or because the equipment could not be retrieved due to industrial action), or the parents arrived after the videotapes were shown (n=3) and did not score this, so the total scores for the videotape examples are smaller than the others.

^b The two respondents both said they had already participated in a workshop where these concepts were discussed. Caregivers were allowed to attend additional workshops to make up for missed workshops.

Table 5. Attendance at workshops by teachers

Sessions attended (out of maximum 7)	Number of teachers (out of 39), percent
0	4, 10
1	6, 15
2	6, 15
3	4, 10
4	3, 8
5	2, 5
6	6, 15
7	8, 21
Total	39, 100

NB 12 workshops were held, repeating topics to accommodate teachers who missed their scheduled workshops.

Table 6. Teachers' ratings of workshops

	Not helpful	Neutral	Helpful	Very helpful	TOTAL
I found the contents of this session:	0	0	26	106	132
I feel the videotape examples were:	0	1	53	78	132
I feel the group leader's teaching was:	0	0	29	103	132
I found the group discussions to be:	0	0	24	108	132
TOTALS (%)	0 (0)	1 (0)	132 (25)	395 (75)	528 (100)

Table 7. Characteristics of children in the study (Grades 1 & 2)

Variables	Intervention Group			
	Both (n=24)	Teacher (n=38)	Parent (n=30)	Control (n=30)
Age in years (mean, s.d.)*	7.4, 0.7	7.2, 0.7	6.9, 0.7	6.9, 0.7
Gender (n, %)				
Male	17, 71	27, 71	19, 63	14, 47
Female	7, 29	11, 29	11, 37	16, 53
Lives with mother	17, 71	31, 82	27, 90	23, 77
Lives with father	10, 42	13, 34	10, 33	16, 53
No. of children born to mother (mean, s.d.)	2.5, 1.6	2.4, 0.9	3.0, 1.6	2.5, 1.9
Birth position of child (mean, s.d.)	1.9, 1.2	1.7, 0.9	2.1, 1.1	2.0, 1.8

* Baseline Anova $p < 0.05$

Table 8. Characteristics of teachers in the study

Variables	Intervention Groups			
	Both n=16	Teacher n=16	Parent n=15	Control n=14
Gender (n,%)				
Male	1, 6	0, 0	0,0	0,0
Female	15, 94	16, 100	15,100	14,100
Training Level (n,%)				
Pretrained	3, 19	0, 0	1, 7	0, 0
Teacher's College	11, 69	14, 88	12, 80	8, 57
Trained Graduate	2, 13	2, 13	2, 13	6, 43
No. of Years in teaching (mean, s.d)	11.2, 8.3	16.4,10.3	14.6,10.3	11.8, 9.0
No. of years in present school (mean, s.d)	9.6, 7.3	9.2, 6.8	9.5, 8.9	8.8, 8.7

Table 9. Caregiver practices

Summary Scales	Parent Training Groups			
	Parent Training(n=54)		No Parent Training(n=68)	
	Pre	Post	Pre	Post
Appropriate Discipline	21.2,4.0	21.7,3.7	20.8,3.6	21.7,3.4
Harsh and Inconsistent Discipline ^a	28.5,4.8	26.9,4.1	26.1,4.2	25.8,4.8
Positive Verbal Discipline	19.2,3.3	19.9,3.2	19.8,3.3	20.1,3.5
Physical Punishment	5.6,1.6	5.7,1.9	5.6,1.5	5.4,1.5
Praise and Incentives	26.1,4.0	24.7,4.3	25.4,3.9	24.6,4.2
Clear Expectations	14.1,2.7	14.7,2.8	14.3,2.4	15.0,2.6
Monitoring	15.7,2.3	15.6,2.3	16.6,1.9	16.3,2.5

^a Baseline: Anova $p < 0.01$

Table 10. Teachers' Classroom Strategies

Summary Scales	Teacher Training Groups			
	Teacher Training (n=24)		No Teacher Training (n=23)	
	Pre	Post	Pre	Post
Confidence Managing Classroom ^a	5.4,1.1	5.8,1.0	6.1,1.0	6.1,1.1
Positive Approaches with Parents	14.2,2.8	15.3,2.9	15.2,3.7	16.3,3.6
Praise and Incentives	22.0,3.8	22.0,3.2	23.9,3.2	23.1,3.3
Proactive Strategies	17.9,2.7	17.2,2.3	18.0,3.9	18.0,3.9
Limit-Setting Strategies	18.0,2.8	17.5,2.2	17.0,2.8	16.4,2.3
Inappropriate Strategies	21.8,3.8	20.3,3.6	22.5,5.3	20.6,4.1

^a Baseline Anova $p < 0.05$

Table 11. Children's behaviour scored by teachers (Rutter Scale)

Behaviour Score	Intervention Group							
	Both (n=24)		Teacher (n=38)		Parent (n=30)		Control (n=30)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Prosocial ^a	20.2,6.5	21.5,10.1	15.9,7.7	19.3,8.8	19.4,8.2	23.3,6.2	23.9,7.7	18.9,8.5
Hyperactivity/ Inattention	6.0,2.6	4.1,2.4	6.0,2.0	5.4,2.3	6.4,2.0	4.6,3.0	5.3,2.3	4.9,2.3
Conduct Difficulties	7.3,3.0	3.7,3.3	7.6,2.6	5.2,3.1	6.9,2.9	3.5,3.1	6.6,2.8	4.6,2.7
Emotional Difficulties *	2.3,1.4	1.1,1.2	2.6,1.4	2.1,1.8	2.3,1.5	1.3,1.3	2.7,1.8	2.3,2.0
Total difficulties	19.3,7.6	11.3,6.8	19.9,5.0	15.9,8.3	19.5,6.8	11.2,6.3	18.6,7.3	14.4,8.8

^a Baseline: Anova $p < 0.001$ (Post hoc: Teacher intervention v. control $p < 0.001$) Significantly different between groups at

* Regression Both interventions v. rest, $p < 0.05$; parent intervention, $p < 0.05$ (gender, $p < 0.01$)

Table 12.Children’s behaviour rated by caregivers (Rutter Scale)

Behaviours	intervention Groups							
	Both (n=24)		Teacher (n=38)		Parent (n=30)		Control (n=30)	
	Pre	Post	Pre	Post	Pre	Post	Pre	post
Prosocial score	13.6,3.3	14.9,3.8	14.4,3.0	15.0,2.6	14.9,3.4	14.0,3.6	15.8,3.0	15.6,2.9
Conduct difficult score ^a	4.3,2.7	5.0,2.7	4.6,2.4	4.2,2.4	6.1,2.1	4.9,2.4	3.6,1.7	3.3,2.3
Has many friends (item)	1.5,0.8	1.3,0.8	1.6,0.7	1.6,0.7	1.7,0.5	1.4,0.8	1.5,0.7	1.5,0.6
Prefers to do things alone (item)	0.8,0.7	1.0,0.8	0.9,0.7	0.7,0.8	0.8,0.7	0.9,0.8	0.7,0.8	0.6,0.7
Talks easily with other adults (item)	1.5,0.7	1.6,0.7	1.8,0.5	1.7,0.6	1.4,0.7	1.7,0.5	1.6,0.6	1.6,0.6

^a Baseline Anova $p < 0.001$ (post hoc tests: both v. parent, $p < 0.05$; teacher vs parent, $p < 0.05$; parent vs. control, $p = 0.001$).

Table 13. Children's Academic Performance by intervention group

Academic Performance	Intervention Group							
	Both (n=24)		Teacher (n=38)		Parent (n=30)		Control(n=30)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Reading scores	19.2,5.6	21.5,5.4	20.6,8.1	21.6,8.0	16.3,6.3	17.3,6.9	19.0,4.3	20.3,3.5
Spelling scores	17.7,2.6	19.1,3.3	17.1,5.8	18.8,5.8	15.3,4.8	16.1,5.3	17.4,2.5	18.0,3.3
Arithmetic scores ^{a**}	17.4,3.5	20.6,3.4	17.2,3.9	18.6,3.9	14.9,4.3	16.4,4.3	17.4,3.2	18.9,3.2

^a Baseline Anova $p < 0.05$. Posthoc: Both v. parent only, $p = 0.082$, teacher vs. parent, $p = 0.072$, parent vs. control, $p = 0.059$

** Multiple Regression $p < 0.01$. Both vs else: $p < 0.05$

Table 14. Children's Academic Performance by Teacher Intervention group

Variables	Teacher Intervention			
	Teacher Intervention n=62		No Teacher Intervention n=60	
	Pre(n=62)	Post(n=62)	Pre(n=60)	Post(n=60)
Reading scores ^a	20.1,7.2	21.5,7.0	17.7,5.5	18.8,5.6
Spelling scores*	17.3,4.8	18.9,5.0	16.4,3.9	17.1,4.5
Arithmetic scores	17.2,3.7	19.4,3.8	16.1,3.9	17.7,4.0

^a Significantly different between groups at baseline

* Multiple regression Group significant ($p < .05$) (controlling for age and gender of child)

Table 15: Children’s attitude to school: factor analysis

	Factor loading	
	Baseline	Post intervention
Factor 1: Positive About School Overall (Eigen =8.7)		
I want to do very well at my school	.782	.454
I like coming to school	.735	.501
I like to learn new things	.733	.532
I like my teacher this year	.664	.434
It is important for me to do good in school	.661	.578
I like the school work	.611	.641
I try very hard with my schoolwork	.608	.479
I respect myself	.549	.530
I like myself	.547	.586
I like to learn in my school	.546	.573
I have a lot to be proud about	.468	.571
The teachers quickly stop children from bullying other children	.407	.290
My teacher tells me how to do things so that I understand	.383	.339
I know I am a good person	.348	.604
Factor 2: Positive About Teacher (Eigen = 2.9)		
After looking at my work, my teacher tell me that I can do better	.791	.402
My teacher wants me to do very well in my work	.605	.457
My teacher says nice things when I do well	.593	.672
My teacher tells me when I do good in my schoolwork	.562	.617
My teacher gives me hard work and wants me to hurry and finish	-.485	.026
I do good in most things	.447	.413
When my teacher writes on the board I understand	.443	.563

Table 16 (continued): Children’s attitude to school: factor analysis

	Factor loading	
	Baseline	Post intervention
Factor 3: Positive About Schoolmates (Eigen = 2.5)		
All of my friends at school really care about me	.682	.627
I am friends with most of the children at my school	.575	.605
I am friends with most of the children in my class	.569	.580
Other children at my school like me	.458	.660
My teacher listens to me	.431	.413
There are a lot of good things about me...like	.416	.499
Factor 4: Negative About Schoolmates (Eigen = 1.9)		
Other children tease me at my school	.748	.681
Other students kick and hit me at my school	.714	.762
Other students tell lies about me at my school	.682	.612
My teacher gets angry with my class only when we do wrong	-.524	-.150
Children are mean to me at this school	.453	.622
Children at my school ‘bad me up’	.353	.705
Factor 5: Positive About Schoolwork (Eigen = 1.7)		
When the schoolwork is hard, my teacher shows me how to do it	.603	.767
My teacher helps me with my work	.547	.688
When I am having trouble with my work, my teacher finds time to help me	.497	.724
My teacher tells me when I make mistakes	.472	.361
My teacher keeps the class quiet and does not shout at us	.470	.326

Table 16: Children's Attitudes to school: factor scores by treatment group

Factor	Groups							
	Both intervention(n=24)		Teacher intervention(n=38)		Parent intervention(n= 30)		Control (n=30)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Positive About School Overall*	38.5,3.8	38.3,3.4	39.1,4.2	39.0,3.1	38.2,4.2	37.9,3.8	39.3,3.4	40.4,1.8
Positive About Teacher	16.5,3.0	17.4,1.7	18.0,1.6	17.9,2.0	17.0,2.7	17.2,1.7	17.8,1.8	18.7,1.9
Positive About Schoolmates	14.8,3.2	14.8,2.3	15.8,2.2	15.1,2.4	15.9,2.1	15.7,2.2	15.2,2.8	15.2,2.2
Negative About Schoolmates	10.5,2.2	11.3,2.4	12.0,4.2	12.2,2.9	11.8,2.7	11.6,2.4	12.0,2.7	13.1,3.1
Positive About Schoolwork	10.8,1.9	11.9,1.9	12.0,2.3	11.4,2.0	11.0,2.3	11.6,2.1	11.3,2.2	11.7,2.2

* Multiple regression $p < 0.05$. Both v. else, $p < 0.05$; teacher v. else, $p = 0.05$; parent v. else, $p < 0.01$

Table17: Children’s attitudes to school by parent intervention groups

Attitudes	Parent Intervention Groups			
	No Parent Intervention(n= 68)		Parent Intervention(n=54)	
	Pre	Post	Pre	Post
Positive About School Overall*	39.2,3.9	39.6,2.7	38.3,4.0	38.1,3.6
Positive About Teacher ^{a*}	17.9,1.7	18.2,2.0	16.8,2.8	17.3,1.7
Positive About Schoolmates	15.5,2.5	15.3,2.1	15.4,2.7	15.0,2.3
Negative About Schoolmates	12.0,3.6	12.6,3.0	11.2,2.5	11.5,2.4
Positive About Schoolwork	11.6,2.3	11.5,2.1	10.9,2.1	11.7,2.0

^a Baseline anova $p < 0.01$

* Multiple Regression $p < 0.05$ (controlling for age and gender of child):

Appendix 1: Instruments used in the study

UNIVERSITY OF THE WEST INDIES
Tropical Medicine Research Institute
Epidemiology Research Unit

Intervention Study in Primary School Children

Teacher Strategies Questionnaire

Good morning/afternoon, my name is _____. I am a Researcher with UWI. As you remember, we are carrying out an intervention program to reduce aggressive behaviour in children. We would like to ask you some questions about how you manage your classroom. Just a reminder that all the information you provide us will be **kept strictly confidential**. The interview will take about 20 minutes.

1. *Interviewer Name:* _____

2. *Date:* _____ *Id. no:* _____

3. *School:*

St. Jude's Primary (1)

Half Way Tree Primary (2)

Dunrobin Park Primary (3)

Dupont Primary (4)

4. *Teacher's Name:* _____

5. *Class:* _____

6. *Sex:* **Male (1)**

Female (2)

7. *Years in Teaching:* _____

8. *Years in Present School:* _____

9. *Training Level:*

Pretrained (1)

Teachers' College (Certificate) (2)

Teachers College (Diploma) (3)

Trained Graduate (Degree) (4)

Post-Graduate Diploma (5)

Other: _____ (6)

Managing Classroom Behavior											
		<i>Very unconfident</i>	<i>Unconfident</i>	<i>Somewhat unconfident</i>	<i>Neutral</i>	<i>Somewhat confident</i>	<i>Confident</i>	<i>Very confident</i>			
1.	How confident are you in managing current behavior problems in your classroom?	1	2	3	4	5	6	7			
2.	How confident are you in your ability to manage future behavior problems in your class?	1	2	3	4	5	6	7			
Specific Teaching Techniques		Frequency					Usefulness				
	<i>In this section we'd like to get your idea of how often you use the following techniques, and how useful you find each one for managing your classroom.</i>	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Most times</i>	<i>Always</i>	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Most times</i>	<i>Always</i>
1.	Comment on good behavior	1	2	3	4	5	1	2	3	4	5
2.	Comment on bad behavior.	1	2	3	4	5	1	2	3	4	5
3.	Reward good behavior with incentives (e.g. stickers)	1	2	3	4	5	1	2	3	4	5
4.	Praise good behavior	1	2	3	4	5	1	2	3	4	5
5.	Use Time Out for disruptive <i>behavior (place child in a corner by himself)</i>	1	2	3	4	5	1	2	3	4	5
6.	Call attention to a child or a group of children for misbehavior	5	4	3	2	1	1	2	3	4	5
7.	Physically hold or restrain a child for any of the following reasons: throwing a tantrum, fighting or some similar behavior	1	2	3	4	5	1	2	3	4	5
8.	Raise your voice to correct misbehaviour	5	4	3	2	1	1	2	3	4	5
9.	Send a child to the principal's office/ guidance counselor for misbehavior	1	2	3	4	5	1	2	3	4	5
10.	Warn or threaten to send a child out of the classroom if s/he doesn't behave	5	4	3	2	1	1	2	3	4	5
11.	Telephone parents to report bad behavior	5	4	3	2	1	1	2	3	4	5
12.	Ignore misbehavior that is not disturbing the class	1	2	3	4	5	1	2	3	4	5
13.	Command the children to pay attention	1	2	3	4	5	1	2	3	4	5
14.	Use a problem-solving strategy (<i>To teach or help a child solve behavior problems using a step by step approach</i>)	1	2	3	4	5	1	2	3	4	5

		<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Most times</i>	<i>Always</i>	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Most times</i>	<i>Always</i>
15.	Use an anger management strategy (<i>give the child some hints or steps as to how to deal with their anger</i>)	1	2	3	4	5	1	2	3	4	5
16.	Use routines when preparing children to move to next activity	1	2	3	4	5	1	2	3	4	5
17.	Use group incentives	1	2	3	4	5	1	2	3	4	5
18.	Use special privileges (e.g. eating lunch with teacher, helping in the classroom, read a favorite story)	1	2	3	4	5	1	2	3	4	5
19.	Set up individual incentive program (e.g. stickers)	1	2	3	4	5	1	2	3	4	5
20.	Warn of consequences for misbehavior	1	2	3	4	5	1	2	3	4	5
21.	Reinforce classroom rules	1	2	3	4	5	1	2	3	4	5
22.	Ask children about how they feel (good, bad, sad...)	1	2	3	4	5	1	2	3	4	5
23.	Use nonverbal signals to get child to pay attention to activities (<i>e.g. putting finger on your lip, holding up your hand, etc.</i>)	1	2	3	4	5	1	2	3	4	5
24.	Send notes home to report problem behavior to parent	1	2	3	4	5	1	2	3	4	5
25.	Make home visits	1	2	3	4	5	1	2	3	4	5
26.	Hold parent support groups (<i>rather seminars or workshop</i>)	1	2	3	4	5	1	2	3	4	5
27.	Send notes home about positive behavior	1	2	3	4	5	1	2	3	4	5
28.	Telephone a child at home after s/he has had a bad day	1	2	3	4	5	1	2	3	4	5
29.	Take a written student interest survey (teaching career)	1	2	3	4	5	1	2	3	4	5
30.	Telephone parents to report good behavior	1	2	3	4	5	1	2	3	4	5
Working with Parents											
	<i>In this section we'd like to get your idea of how often you use each of the following approaches. Please mark the response that most clearly describes your interactions with parents.</i>		<i>Never</i>	<i>1 time per year</i>	<i>2-3 times per year</i>	<i>Once a month</i>	<i>Once a week (or more)</i>	<i>Daily</i>			
1.	Collaborate with parents on a written home-school behavior plan (have parent of a problem child come in, discuss a behaviour plan for school and home and write up the plan)	1	2	3	4	5	6				
2.	Have grade meetings with parents	1	2	3	4	5	6				
3.	Have extra meetings with parents for particular problems (<i>different from grade meetings</i>)	1	2	3	4	5	6				
4.	Ask parents to volunteer in classroom or class outings	1	2	3	4	5	6				
5.	Talk with parents	1	2	3	4	5	6				

*Tropical Medicine Research Institute
Epidemiology Research Unit
Intervention Study in Primary School Children*

ATTITUDE TO SCHOOL SURVEY – PRIMARY

Name: _____ **Age** ____ **Female (1) Male (2)**
Grade: _____ **School:** _____ **Date:** _____ **Id #:**

Here are some sentences about school. You are going to answer “yes” or “no”. If you say “yes”, you are going to tell me if it’s “likkle bit/ sometimes” or “nuff/ most times”.

		<i>No</i>	<i>Yes sometimes (likkle bit)</i>	<i>Yes most times (nuff)</i>
1.	My teacher treats me the same as the other children in my class <i>(Just like the other children)</i>	1	2	3
2.	My teacher helps me with my work	1	2	3
3.	My teacher wants me to do very well in my work <i>(Like she want me to get whole heap a tickey)</i>	1	2	3
4.	My teacher tells me how to do things so that I understand	1	2	3
5.	My teacher keeps the class quiet and does not shout at us	3	2	1
6.	When the schoolwork is hard, my teacher shows me how to do it	1	2	3
7.	After looking t my work, my teacher tell me that I can do better	1	2	3
8.	My teacher makes the work in class boring	3	2	1
9.	When my teacher writes on the board I understand	1	2	3
10.	My teacher says nice things when I do well <i>(bigs me up)</i>	1	2	3
11.	My teacher gets angry with my class only when we do wrong <i>(When something do wrong and teacher/miss get mad)</i>	1	2	3
12.	When I am having trouble with my work, my teacher finds time to help me <i>(When yuh nuh do it good and teacher rub it out and send you to do it over)</i>	1	2	3
13.	My teacher gives me hard work and wants me to hurry up and finish <i>(finish by the time the clock reach by 11, and you don't finish)</i>	3	2	1
14.	My teacher tells me when I make mistakes <i>(When teacher tell you to rub it out and write it back)</i>	1	2	3
15.	I have a lot to be proud about <i>(like when I feel good about myself)</i>	1	2	3
16.	Children at my school ‘bad me up’	3	2	1
17.	I know I am a good person	1	2	3
18.	My teacher tells me when I do good in my schoolwork <i>(Teacher says that is the best work in class)</i>	1	2	3

19.	I like the school work	1	2	3
20.	Other children at my school like me (<i>Like when people like you</i>)	1	2	3
21.	I like myself	1	2	3
		<i>No</i>	<i>Yes sometimes (likkle bit)</i>	<i>Yes most times (nuff)</i>
22.	Other children tease me at my school	3	2	1
23.	I like coming to school (<i>glad to come to school</i>)	1	2	3
24.	It is important for me to do good in school	1	2	3
25.	I do good in most things	1	2	3
26.	Other students kick and hit me at my school	1	2	3
27.	I respect myself (<i>doing what's good for me</i>)	1	2	3
28.	I am friends with most of the children at my school (<i>you like dem and dem like you</i>)	1	2	3
29.	At this school there is a teacher who cares about me (<i>Like when I don't have any bus fare and a teacher give me</i>)	1	2	3
30.	I want to do very well at my school	1	2	3
31.	My teacher listens to me	1	2	3
32.	There are a lot of good things about me...like	1	2	3
33.	I am friends with most of the children in my class (<i>you like them, and dem like you – you all can 'gree</i>)	1	2	3
34.	I like to learn in my school (<i>feels good to learn</i>)	1	2	3
35.	I try very hard with my schoolwork	1	2	3
36.	Other students tell lies about me at my school	3	2	1
37.	All of my friends at school really care about me	1	2	3
38.	I like my teacher this year	1	2	3
39.	I like to learn new things	1	2	3
40.	The teachers quickly stop children from 'badding up' other children	1	2	3
41.	My teacher gets angry with my class only when we do wrong (<i>When something do wrong and teacher/miss get mad</i>)	3	2	1

April 2004

Dear Parent/Guardian,

The Epidemiology Research Unit at the University of the West Indies is studying children's behaviour and what their parents do about it. The Ministry of Education has approved the study and children from several schools are involved. Your child is one of those selected to participate in this study. We would like to ask him/her some questions about school and ask him/her to do a short Maths and English test. On a day convenient to you we would also like to ask you some questions about how s/he behaves at home and what you do about it.

All the information we collect will be kept strictly confidential. On computer, all information will be identified by numbers only, not names. We will not use you or your child's name in our report. The information will be used to advise the Ministry of Education and Principals on programmes that they can introduce in schools to help improve children's behaviour.

Allowing your child to participate in this study is voluntary. If you agree to let him/her participate in this study, please fill out and sign the attached form and return to the child's teacher. We hope that you will allow your child to take part in the study.

Thank you very much.

Yours sincerely,

Julie Meeks Gardner, PhD.

Principal Investigator

University of the West Indies

Tropical Medicine Research Institute

Epidemiology Research Unit

Intervention Study in Primary School Children – 2004

CONSENT FORM

I _____ parent/guardian of

(Write name here)

(Write child's name here)

give permission for him/her to take part in the study on children's behaviour being conducted by Epidemiology Research Unit (ERU) at the University of the West Indies.

Signed: _____

Date: _____

INFORMATION SHEET

Child's Name: _____

**Parent's/Guardian's
Name:** _____

**Parent's/Guardian's other
name(s):** _____

Home address:

Telephone no.: _____ (home) _____ (work)
_____ (cell)

University of the West Indies
Tropical Medicine Research Institute
Epidemiology Research Unit

Intervention Study in Primary School Children

Parent Practices Questionnaire

Good morning/afternoon, my name is _____. I am a Researcher with U.W.I. We are doing a study to look at how school children behave and what their parents do about it. As you remember your child was one of the children selected to be interviewed for this study. We have already spoken with him/her and his/her teacher at school but there are some other things and we would like to talk to you about this. As his/her parent or guardian we would like to discuss with you what s/he is like at home. The interview will take about 15 minutes. All the information you provide will be **kept strictly confidential**. Please let us know if you have the time now for the interview.

Interviewer Name: _____

Date: _____

Name of Child: _____

Sex: M ___ F ___

Age: _____

Parent's Guardian's Name: _____

Sex: M ___ F ___

Age: _____

Address: _____

Family Status:

1. What is your relation to _____? 1. Mother _____ 2. Father _____
 3. Other Relative _____ 4. Other non-relative _____
2. If not mother, does _____'s mother live here with him/her? 1. Yes _____ 0. No _____
3. If no, how often does s/he see her? 1. Never _____ 2. Once or less than 1 /year _____ 3. More than 1/year but less than once per month _____
 4. Once/More than 1/mth but less than once a week _____ 5. Once or more than once a week _____
4. Does _____'s father live here with him? 1. Yes _____ 0. No _____
5. If no, how often does s/he see him? 1. Never _____ 2. Once or less than 1 /year _____ 3. More than 1/year but less than once per month _____
 4. Once/More than 1/mth but less than once a week _____ 5. Once or more than once a week _____
6. How many children does _____'s mother have? _____
7. What position (birth position - 1st, 2nd, etc) is _____ for his/her mother? _____
8. What is your current marital status? 1. Divorced _____ 2. Separated _____ 3. Single _____
 4. Married _____ 5. Common-law wife _____ 6. Widowed _____

Socio-economic assessment

9. Possessions
- | | | |
|--------------------------|---|---|
| Oil, gas, electric stove | 1 | 0 |
| Television | 1 | 0 |
| Cable | 1 | 0 |
| Radio | 1 | 0 |
| Fridge | 1 | 0 |
| Video Player | 1 | 0 |
| Motorcycle/bike | 1 | 0 |
| Car/Bus/Truck | 1 | 0 |
| No. _____ | | |
10. Crowding (in household)
1. No. Of Children younger than 15 years < 15 years _____
 2. No of children < 5 years _____
 3. No of people > 14 years (share food, sleep in home) _____
 4. No of rooms in household (excluding kitchen and bathroom) _____

11. Toilet

- | | |
|----------------------|---|
| Own inside flush | 6 |
| Shared inside flush | 5 |
| Own outside flush | 4 |
| Shared outside flush | 3 |
| Own pit | 2 |
| Shared Pit | 1 |
| None | 0 |

12. Water:

- | | |
|-----------------------|---|
| Own inside pipe | 6 |
| Shared Inside pipe | 5 |
| Own pipe in yard | 4 |
| Shared in yard | 3 |
| Outside yard < 100yds | 2 |
| Outside yard > 100yds | 1 |

13. (If outside yard) Where do you get the water that you use for household purposes? _____

Occupation (when last worked if not working)

14. Mother _____

1. Unskilled
 2. Unskilled
 3. Skilled
 3. Highly skilled

15. Father: _____

1. Unskilled
 2. Semi-skilled
 3. Skilled
 4. Highly skilled

5. Professional 6. Never worked

5. Professional 6. Never worked

Education (last school attended)

16. Mother _____

17. Father: _____

1. Less than Grade 5
2. Grade 5-9, Jnr. Sec, no exams
3. Grade 5-9, Secondary exams, or incomplete High
4. High School complete , but not passed O'levels/CXC
5. High School passed O'Levels/CXC

1. Less than Grade 5
2. Grade 5-9, Jnr. Sec, no exams
3. Grade 5-9, Secondary exams, or incomplete High
4. High School complete , but not passed O'levels/CXC
5. High School passed O'Levels/CXC

All children misbehave sometimes. Do you know what I mean by misbehave? (If parent can't explain: That is when they do something they shouldn't do, or when they don't do something that they should). Now parents respond in different ways when children misbehave.

1	<i>I have a list of things that some parents do when their children misbehave. Please tell me how often you do each of these things when your child misbehaves.</i>					
	When _____ misbehaves, do you					
	a. Ever see it and ignore it (<i>see it and behave as if you don't see it</i>)	5	4	3	2	1
	b. Raise your voice at him/her.	5	4	3	2	1
	c. Get him/her to correct the problem or make up for what s/he has done.	1	2	3	4	5
	d. Threaten to punish him/her (but don't really punish him/her).	5	4	3	2	1
	e. Send him/her to room or to bed or put him/her to sit down and don't move	1	2	3	4	5
	f. Take away privileges (like TV, playing with friends, take away toy or game).	1	2	3	4	5
	g. Slap or hit him/her one or two times with your hand	5	4	3	2	1
	h.. Beat him/her.	5	4	3	2	1
	i. Give him/her extra things to do in the house or yard.	5	4	3	2	1
	j. Talk about the problem with him/her or ask questions.	1	2	3	4	5
	k. Send him/her to read his/her book.	5	4	3	2	1
	l. Not give him/her any food.	5	4	3	2	1
2.	<i>In general, how often do the following things happen?</i>					
	a. If you ask _____ to do something and s/he doesn't do it, do you ever give up trying to get him/her to do it (<i>that is u mek him/her stay because u can't bother or u ask somebody else to do it</i>)?	5	4	3	2	1
	b. If _____ is doing something that s/he is not supposed to do, and you say you are going to discipline him/her if s/he doesn't stop it, do you actually discipline him/her if s/he keeps on misbehaving?	1	2	3	4	5
	c. Does _____ ever get away with things that you feel s/he should have been disciplined for?	5	4	3	2	1
	d. If you have decided to punish _____, do you ever change your mind based on his/her explanations or excuses?	5	4	3	2	1
	e. Do you show anger when you discipline _____ ?	5	4	3	2	1
	f. Do arguments with _____ ever build up and you do or say things you don't mean to?	5	4	3	2	1
	g. Does the kind of punishment you give _____ depend on your mood (<i>i.e. how you are feeling at the time</i>)?	5	4	3	2	1

3.	<i>How likely are you to do the following:</i>	<i>Never</i>	<i>Hardly</i>	<i>Sometimes</i>	<i>Often</i>	<i>Always</i>
	a. When _____ finish doing something that you tell him/her to do, how likely are you to say or do something nice?	1	2	3	4	5
	b. When _____ does NOT finish doing something that you told him/her to do, how likely are you to punish him/her (such as not making him watch tv, play with friends)?	1	2	3	4	5
	c. When _____ fights, steals or lies, how likely are you to punish him/her?	1	2	3	4	5
	d. When _____ does NOT go to bed or get up on time, how likely are you to punish him/her?	1	2	3	4	5
4.	<i>These are things that parents might do when their child behaves well or does something good at home or school. Please tell me how often you do each of the following things when your child behaves well or does something good at home or school?</i>					
	When _____ behaves well or does something good at home or at school, do you					
	a. Ever see it and ignore it (<i>see it and behave as if you don't see it</i>)	5	4	3	2	1
	b. Praise him/her by saying something like: "very good!" "I am proud of you!" "Good boy/girl!" etc.	1	2	3	4	5
	c. Give him/her a hug, a kiss or a pat	1	2	3	4	5
	d. Buy something for him/her (like ice cream, cake, a toy, a book) or give him/her something special for good behaviour.	1	2	3	4	5
	e. Give him/her an extra privilege (special activity for good behaviour).	1	2	3	4	5
	f. Promise him/her something (whether to buy him/her something or carry him/her somewhere)	5	4	3	2	1

5	<i>How much do you agree or disagree with the following statements?</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neither agree nor disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
	a. Sometimes parents have to get really angry with their children in order to teach them a lesson.	5	4	3	2	1
	b. Children learn best when they don't know what kind of punishment to expect for doing something wrong (<i>doing what they are not suppose to do</i>).	5	4	3	2	1
	c. The best way to avoid a big behaviour problem is to discipline the child when the problem is still small (<i>deal with the problem now before it get out of hand</i>).	5	4	3	2	1
	d. It's okay for parents to let children get away with behaviours that are not serious - it's better to focus on big things.	1	2	3	4	5
6	<i>How much do you agree or disagree with the following statements.</i>					
	a. Parents should not have to give their children nice things to get them to do things they are supposed to do.	1	2	3	4	5
	b. It is important to praise children when they do well.	5	4	3	2	1
	c. You would like to praise _____ more often, but it is hard for you to find behaviors to praise.	1	2	3	4	5
	d. If you reward _____ by giving him/her something for doing good or behaving well, s/he will expect you to give him/her something each time.	1	2	3	4	5

	e. If you praise _____ by saying <i>nice things</i> to him/her for doing something good or behaving well s/he will expect you to do that each time.	1	2	3	4	5
	f. It is a good idea for parents to give an extra privilege or something special to children who are having trouble doing what they are supposed to do (such as going to bed, picking up toys, doing chores).	5	4	3	2	1
7	<i>How much do you agree or disagree with the following statements:</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neither Agree nor Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
	a. <i>It is very important for me to know where my child is when s/he is away from me.</i>	5	4	3	2	1
	b. <i>Giving children lots of free time where they are not being watched by an adult help them learn to be more responsible.</i>	1	2	3	4	5
	c. <i>Children who are not supervised by an adult are more likely to develop behavior problems (to be rude).</i>	5	4	3	2	1
8	<i>How much do you agree or disagree with the following statements?</i>					
	a. You have made clear rules for _____ about doing chores in the house or yard (that is s/he knows what s/he is suppose to do and what you would do if s/he doesn't do it).	5	4	3	2	1
	b. You have made clear rules for _____ about fighting, stealing, lying etc. (s/he knows what you will do if s/he does these things).	5	4	3	2	1
	c. You have made clear rules for _____ about going to bed on time and getting up on time (s/he knows what time to go to bed and what time to get up and what u will do if s/he doesn't follow your rule).	5	4	3	2	1

9. In a REGULAR week, how many times do you:

- a. Praise _____ for doing something **good** at home or school? _____
- b. Give _____ something extra, like a small gift, privileges, or a special activity with you for doing **something good** at home or school? _____

10. Within the LAST 2 DAYS (*state the days*), how many times did you:

- a. Praise or compliment _____ for anything s/he did well? _____
- b. Give _____ something extra, like a small gift, privileges, or a special activity with you, for something s/he did well?

11. Between yesterday and today, how many hours did _____ spend at home without any adult around to supervise him (*watch or look after him*)? _____

12. How much of the time do you know where _____ is when s/he is not with you? 1. None 2. Few 3. About a half 4. Most 5. All

13. How many of _____ friends do you know well? 1. None 2. Few 3. About a half 4. Most 5. All

**TROPICAL MEDICINE RESEARCH INSTITUTE
EPIDEMIOLOGY RESEARCH UNIT
STUDY OF CHILDREN'S BEHAVIOUR**

**PARENT'S RATING OF CHILD'S BEHAVIOUR
(Revised from Rutter)**

Name of child: _____
F

Sex of Child : M

Name of Parent: _____
child: _____
Interviewer: _____
Date: _____

Relationship to

Interviewer's instructions to parent/guardian:

I am going to read to you some descriptions of behaviour often shown by children. After each statement I want you to tell me if your child definitely shows the behaviour described by the statement (Certainly Applies) or if he/she shows the behaviour described by the statement but to a lesser degree or less often (Applies Somewhat). If, as far as you are aware, your child does not show the behaviour, you will tell me (Doesn't Apply).

Please answer on the basis of your child's behaviour **DURING THE PAST THREE MONTHS.**

1	2	0
	Applies	Doesn't
	Applies	Apply
		Somewhat
		Certainly
1.	Tries to be fair when he is playing with other children	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	
2.	Considerate of other people's feelings	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	
3.	Will try to help someone who has been hurt	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	
4.	Frequently fights or is extremely quarrelsome with other children	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	

5. Volunteers to help around the house or yard
-
6. Kind to younger children
-
7. Blames other people for things
-
8. Comforts a child who is crying or upset
-
9. Has stolen things on one or more occasions in the past 12 months
-
10. Is often disobedient
-

0

1 2

Applies Applies Doesn't

Apply

Somewhat

Certainly

11. Tries to stop quarrels or fights

12. Shares out sweets and snacks with friends

13. Kicks, bites or hits other children

14. Helps other children who are feeling sick

15. Often tells lies

16. Bullies other children (bad bullying)

17. Kind to animals

18. Inconsiderate of others

19. Has many friends

20. Prefers to do things alone

21. Talks easily with other adults

Tropical Medicine Research Unit

Teacher's Rating of Child Behaviour
(Modified from Rutter)

Name of Child: _____

Date:

Name of Teacher: _____

Interviewer:

School: _____

Grade: _____ Id #:

Interviewer's instructions to Teacher:

I would like to ask you about _____ by indicating certain behaviours shown by children. If _____ definitely shows the behaviour described by the statement the response will be "*Certainly Applies.*" If s/he shows the behaviour described by the statement but to a lesser degree, or less often the response is "*Applies Somewhat.*" If as far as you are aware, s/he does not show the behavior, it would be "*Doesn't Apply.*"

Please think of his/her behaviour DURING THE SCHOOL YEAR. Some children are difficult to assess so I would like you to think very carefully.

	<i>0</i> <i>Doesn't</i>	<i>1</i> <i>Applies</i>	<i>2</i>
<i>Certainly</i>	<i>Apply</i>	<i>Somewhat</i>	<i>Applies</i>
1. If there is a quarrel or disagreement will try to stop it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Very restless, has difficulty staying seated for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Willingly shares rulers, pencils etc., being used in a task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Will invite other children to join in a game	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. "Skulls" school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Squirmy, fidgety, moves about a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Will try to help someone who has been hurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Often destroys or damages own or other's property (e.g. books, desks, walls)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Frequently fights or is extremely quarrelsome with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Not much liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Apologizes spontaneously after bad behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Often worried and anxious about a lot of things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Tends to be on own – rather solitary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Irritable, touchy, short-tempered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<i>0</i> <i>Doesn't</i>	<i>1</i> <i>Applies</i>	<i>2</i>
<i>Certainly</i>	<i>Apply</i>	<i>Somewhat</i>	<i>Applies</i>
15. Shares out sweets or snacks or anything else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Often appears miserable, unhappy or distressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Stares into space (stares blankly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Frequently sucks thumb or finger or bites nails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Is considerate of teacher's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Stops talking quickly when asked to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Tends to be absent from school for trivial reasons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Is often disobedient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Spontaneously helps to pick up objects which another child has dropped (e.g. pencils, books, etc.,)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Takes the opportunity to praise the work of less able children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Inattentive, easily distracted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Excessive demands for teacher's attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Shows sympathy to someone who has made a mistake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Cannot settle to anything for more than a few moments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Tends to be afraid of new things or new situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Offers to help other children who are having a difficulty with a task in the classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Often tells lies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Helps other children who are feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Has stolen things on one or more occasion in the past twelve months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Has stutter, stammer or other speech problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Can work easily in a small peer group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Unresponsive, or apathetic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Comforts a child who is crying or upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Often complains of aches or pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Is helpful with regular classroom tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Short attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Cries easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Certainly</i>	<i>0 Doesn't Apply</i>	<i>1 Applies Somewhat</i>	<i>2</i>
42. Settles down to work quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Fearful of coming to school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Fails to finish things started	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. Will clap or smile if someone else does something well in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. Disturbs other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. Resentful or aggressive when corrected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. Volunteers to help clear up a mess in the classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Bullies other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Blames others for things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. Gives up easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. Tries to be fair in games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. Inconsiderate of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Kicks, bites or hits other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. Tends to be shy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Has many friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Talks easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 2: Photographs



Parent workshop (with group leader at far left)



Materials for teacher training.



Materials for parent training.





Classroom after the hurricane