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A Promising Start: An Evaluation of the HIPPY Program in New Zealand

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A Promising Start: An Evaluation of the HIPPY Program in New Zealand

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Three studies were carried out to investigate the impact of participation in the Home Instruction Programme for Preschool and Year One Youngsters (HIPPY) on New Zealand children's reading ability, school readiness and school behaviour. In study 1, scores on a Reading Diagnostic Survey were obtained for 77 six-year-old HIPPY children and 704 six-year-old non-HIPPY children. In study 2, 29 HIPPY children who had recently entered school and 29 control children were assessed using four sub-sections of the Metropolitan Readiness tests. In the third study the Behavioural Academic Self Esteem Scale (BASE) was completed by teachers for the HIPPY and control children in study 2 as well as all their classmates. HIPPY children were found to show consistently better performance on all of the measures used and the differences reached statistical significance on three of the six sub-tests of the Reading Diagnostic Survey and the BASE scale.

Key words: Early intervention, program evaluation, HIPPY, school achievement, disadvantaged communities

The consequence of residing in poverty for children's development has become a growing concern in both academic and political writings over the past two decades. Although the effects are not yet fully understood (Brooks-Gunn, 1995), poverty in industrialized nations is believed to place children at risk for psychopathology (Mash & Dozois, 1996); maladaptive behaviour, juvenile delinquency (Huston, McLoyd & Coll, 1994; Yoshikawa, 1994, 1995); and educational failure (Ceci, 1996; Morris, Hembrooks, Gelbwasser & Bronfenbrenner, 1996).

Poverty in New Zealand is a growing phenomenon. In 1996, 32.6% of all children in New Zealand were living in poverty (Hassall, 1997). Single parent households and families from minority ethnic groups, such as indigenous Maori and those with Pacific Island descent, are particularly likely to have low socio-economic status (Hassall, 1997).

Children from economically disadvantaged backgrounds are said to enter formal schooling with a disadvantage, as they lack fluency in the 'language' of schools (Feagans, Fendt & Farran, 1995). These children may also lack the resources and
experiences that are necessary for school success (e.g. Ramey & Ramey, 1998). This may lead to early difficulties at school, that appear to be strongly linked to later educational failure (Slavin, Karweit & Wasik, 1993). Children from ethnic minorities appear to be at additional risk for educational failure (Combes, 1995; Evans, 1995). The link between economic disadvantage and educational failure may be particularly important as school failure can lead to illiteracy, unemployment and in extreme cases to antisocial behaviour (Combes, 1995; Evans, 1995; Kagitcibasi, 1996). One approach that may improve the school readiness and subsequent school performance of children from disadvantaged backgrounds is early intervention that is aimed at increasing their initial school success.

Early intervention usually involves a broad range of activities whose aim is to enhance young children's development (Ramey & Ramey, 1998). Research has demonstrated that extensive, high quality, early interventions have meaningful and sustained effects on children (e.g. Berrueta-Clement, Schweinhart, Barnett, Epstein & Weikart, 1984; Scheinhart & Weikart, 1997). Many successful interventions have been university-based and were able to provide a range of resources such as the provision of full-time, exceptional quality day care, from infancy to school age (e.g. Campbell and Ramey, 1995). When fewer resources are available, it has been found that by including parents in interventions, the effectiveness of the programme is considerably increased (Fuerst & Fuerst, 1993; Reynolds, 1994; Seitz & Apfel, 1994; Reynolds, Marogenes, Bezruczko & Hagemann, 1996; Kagitcibasi, 1997).

A small number of home based interventions have been piloted in New Zealand with varying degrees of success. The main emphasis of these programmes has been the improvement of health, education and family functioning (Livingstone, 1998; O'Rourke, 1993). The Home Instruction Programme for Preschool and Year One Youngsters (HIPPY) is unique in this context as it is specifically aimed at increasing the school success of children from low SES backgrounds.

HIPPY is a home-based intervention aimed at improving the school success of children from economically disadvantaged backgrounds (Lombard, 1994). The programme has been in New Zealand since 1992 and is presently operating in 12 disadvantaged rural and urban areas.

HIPPY was developed in Israel in the late 1960's and is a school preparation programme focused on pre-literacy and pre-numeracy skills (Kagitcibasi, 1996; Lombard, 1994). The program's main objective is to help children prepare for school by enhancing the educationally oriented practices of their primary caregivers (Bekman, 1998; Kagitcibasi, 1996; Lombard, 1994; Westheimer, 1997). The targeting emphasis of HIPPY is on the educational disadvantage of parents from communities under stress, primarily for financial reasons (National Council of Jewish Women, 1993). Families are recruited to the programme primarily through referrals from community agencies and through 'door-knocking' in target areas. The home tutors themselves are mothers of pre-schoolers from the same communities (Lombard, 1994). In New Zealand, the local centers are run by a co-ordinator who is usually a professional woman with a background in education.

HIPPY focuses on the parent-child dyad, with an explicit aim of increasing parents' awareness of their potential and strengths as home educators. Parents facilitate their
children's learning using a work-book activity for 15 to 20 minutes a day, five days a week, 30 weeks a year for two years from the age of four (Lombard, 1994). The exercises were designed to ensure that parents, irrespective of their own educational background, would be able to deliver them successfully to their children. Children begin participation in the program at approximately age four, and continue through their first year at school. The timing of the program may be particularly important as it has been found that educational interventions that continued through the early years of schooling had a greater impact on children's scholastic achievement than regular attendance of kindergartens and pre-schools prior to school entry (Reynolds, 1994; Reynolds et al., 1996).

An initial evaluation of HIPPY in New Zealand was undertaken by a government agency with some positive results regarding children's academic performance (Burgon, 1997). However the results remain very tentative since use was made of a comparison group of children who differed on many important background variables from the HIPPY target group. Consequently, the present study aimed to conduct a more rigorous evaluation, by comparing children who had participated in HIPPY with non-HIPPY children from the same schools. Both an outcome and a process evaluation were carried out. The outcome evaluation was concerned with educational and social outcomes for both children and their primary caregivers. The process evaluation consisted of interviews carried out with primary caregivers, school personnel in the schools that HIPPY children attended and tutors and co-ordinators from the participating HIPPY centers (BarHava-Monteith, Harré, & Field, 1999). The results of three sub-studies concerned with the child outcomes are described in the present article. These studies were concerned with different aspects of early school adjustment. The first study was concerned with HIPPY children's educational achievement as measured by a standardised test of early reading ability. The second study assessed the school readiness of HIPPY children, and the third study was concerned with their school behaviour.

METHODS AND RESULTS

Selection of HIPPY Centers and Schools

Five HIPPY centers took part in the evaluation, four located in Auckland, a city of approximately 1 million inhabitants, and one located in Huntly, a small rural town. These locations were chosen to represent both the stressed urban environments as well as the poor rural areas in which the programme operates in New Zealand. In two of the five centers the population was predominantly indigenous Maori. In two others the majority of the population was of Pacific Island origin (such as Samoan, Tongan, Cook Island) and in one there was an ethnic mix of immigrants from Asia and the Middle East as well as Maori, Pacific Island and European participants.

The ten schools most commonly attended by children from the five centers of interest were approached for their willingness to participate in the study. All schools
agreed to participate. As HIPPY specifically targets communities under stress, the children from these schools tend to come from low-income households.

**Study 1: HIPPY Children's Reading Ability**

Participants and sampling

The first group consisted of all children who turned six between 1996 and 1998 from eight of the ten participating schools. The eight schools involved in this part of the study were those that regularly administered, to all their children, standardised educational tests developed to assess New Zealand 6-year-olds (i.e. children who had attended school for one year), known as the Reading Diagnostic Survey and the BURT Word Reading Test. Tests results were obtained from school records, for a total of 781 children, 77 of whom were HIPPY children. In order to preserve confidentiality, children's names were deleted with teachers marking the results as referring to a HIPPY or non-HIPPY child. This meant no gender or background information was available for this sample, and so it was not possible to measure if the two groups systematically differed in respect to their demographic characteristics.

The Reading Diagnostic Survey

The Diagnostic Survey was designed for New Zealand children to assess their need for remedial reading tuition (Clay, 1985). It consists of five sub-tests: Letter Identification, Concepts About Print, Word Test, Writing Vocabulary and Dictation. The survey was standardised using 282 urban children aged 6 to 7 in 1978 (Clay, 1985).

*Letter Identification:* This test has 54 items aimed at establishing the child's knowledge of all letters, both lower and upper case. The child receives a score if they either name the letter, provide a word beginning with that letter or can make the sound of the letter.

*Concepts About Print:* This sub scale consists of 24 items which are aimed at establishing the child's knowledge of concepts about print such as where the front of the book is, the first letter in a word, big and small letters and uses of punctuation.

*Word Tests:* This test is aimed at sampling the child's reading vocabulary. Word lists consisting of 15 words are compiled from the high frequency words in the reading materials of the school. The child is then asked to read out the words.

*Writing Vocabulary:* This sub test is aimed at exploring the writing behaviours of the child. The child is encouraged to write down all the words that s/he can.

*Dictation:* Simple sentences are used in this dictation task. The child is marked for each sound s/he writes correctly.

The BURT Word reading test

This test is individually administered and is said to measure the child's word recognition skills. The test consists of a card with 110 words printed in differing sizes and prints, graded by approximate difficulty level. The child is asked to read as many words on the card as s/he can. In conjunction with other data (such as
Table 1. Means and (Standard Deviations) on the Reading Diagnostic Survey for HIPPY Children and All Other Children

<table>
<thead>
<tr>
<th></th>
<th>Concepts About Print</th>
<th>Word Test</th>
<th>Writing Vocabulary</th>
<th>Dictation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(max score 24)</td>
<td>(max score 15)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>HIPPY children n=77</td>
<td>46.92 (9.90)</td>
<td>9.92 (4.10)**</td>
<td>14.01 (8.93)*</td>
<td>25.34 (18.60)</td>
</tr>
<tr>
<td>All other children n=704</td>
<td>45.04 (12.50)</td>
<td>8.51 (4.56)</td>
<td>11.60 (9.24)</td>
<td>21.71 (16.60)</td>
</tr>
</tbody>
</table>

*p < 0.05 (two tailed)
**p < 0.01 (two tailed)

the Diagnostic Survey) this test is said provide a broad estimate of the child's reading achievement (Gilmore Croft & Reid, 1981). This test has been found to have internal reliability of 0.96, and test retest reliability of 0.95 (Gilmore et al., 1981).

Results

Table 1 presents the means and standard deviations of the raw scores on each of the six tests from the Reading Diagnostic Survey for the HIPPY children and their school peers in the eight schools sampled in Auckland and Huntly. A series of two-tailed t tests were carried out to compare the performance of the two groups.

As Table 1 shows HIPPY children had consistently higher means on each of the six sub tests and the difference reached statistically significant levels for three sub-tests: concepts about print, word test, and the BURT.

Study 2: HIPPY Children's School Readiness

Participants and sampling

The study consisted of HIPPY and control group children who had attended one of the ten participating schools for a maximum of six months. They were therefore aged between 5–5½ years. A total of 58 children participated in this part of the study, 29 HIPPY children and 29 control children. Permission to assess children was obtained through their primary caregivers. In order to obtain HIPPY children, the coordinator at each HIPPY center was asked to approach the caregivers of all the children from the 10 schools who had been to school for a maximum of six months. Information received from the coordinators indicated that that no caregivers refused to participate.

In order to obtain control caregivers and children, an invitation to participate in the study was sent to caregivers of all new entrants and year one children at the ten schools. The invitations included a brief description of the research, as well as
an offer of a $10 food gift voucher for participating in the research. All HIPPY and Control children whose parents agreed to their participation were included.

Background information was obtained from primary caregivers. The two groups had fairly similar characteristics there were 15 girls and 14 boys in the HIPPY group and 16 control females and 13 control males. Approximately half of both groups were of Pacific Island origin and approximately 40% were Maori, with a small proportion in both groups (approximately 10%) of European descent. The two groups were different in that whereas 52% of HIPPY families spoke a language other than English at home, only 25.5% of control families did so.

Metropolitan Readiness Test Level One (1986)
The Metropolitan Readiness Tests (MRT) were designed in the US to assess the skills of children in their early school years (Nurss & McGauvarn, 1986). The MRT have been found to predict school success in the US (Chew & Morris, 1984), Canada (Meyer, Wilgosh & Mueller, 1990) and South Africa (Oosthuizen, Van Rensburg & Jordaan, 1997). The tests cover the four major areas that are seen to be essential for pre-reading and pre-mathematical learning. These areas are: Visual Skill, Auditory Skill, Language Skill and Quantitative Skill (Nurss & McGauvarn, 1986).

Four out of the six sub-tests on the MRT were selected (Auditory Memory, Visual Matching, School Language and Listening, and Quantitative Language) because of timing constraints. The two sub-tests that were not administered were reading tests, an area covered by the Reading Diagnostic Survey and the Burt.

Auditory Memory: This test measured the child's immediate recall of a series of words spoken to her/him. This test has been found to have internal reliability of 0.80, and test retest reliability of 0.68 (Nurss & McGauvarn, 1986).

Visual Matching: Here, the child's ability to discriminate among visual symbols such as letters, numerals and letter-like forms is measured. It was found to have internal reliability of 0.78, and test retest reliability of 0.64 (Nurss & McGauvarn, 1986).

School Language and Listening: Children's listening comprehension is assessed in this test by requiring children to integrate, organize and draw inferences from information. School Language and Listening was found to have internal reliability of 0.73, and test retest reliability of 0.82 (Nurss & McGauvarn, 1986).

Quantitative Language: Children's understanding of certain basic quantitative concepts such as size and number-quantity relationship is evaluated in this sub-test. It was found to have internal reliability of 0.66, and test retest reliability of 0.77 (Nurss & McGauvarn, 1986).

Procedure
Two trained senior Psychology Undergraduates administered the tests to children in groups of no more than three. The order in which the tests were administered was counter-balanced. Each testing session lasted no longer than 30 minutes.

Results
The mean scores and standard deviations obtained on each of the four sub tests of the MRT for the HIPPY and control children are shown in Table 2.
Table 2. Means and (Standard Deviations) Obtained by HIPPY and Control Children on the Four MRT Sub-Tests

<table>
<thead>
<tr>
<th></th>
<th>Auditory Memory (max score 12)</th>
<th>Visual Matching (max score 14)</th>
<th>School Language (max score 15)</th>
<th>Quantitative language (max score 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIPPY n=29</td>
<td>6.76 (3.03)</td>
<td>10.52 (2.92)</td>
<td>8.14 (3.36)</td>
<td>5.48 (2.26)</td>
</tr>
<tr>
<td>Control n=29</td>
<td>6.21 (2.51)</td>
<td>9.83 (3.30)</td>
<td>6.76 (3.69)</td>
<td>4.93 (2.42)</td>
</tr>
</tbody>
</table>

Although the means for HIPPY children on each of the four sub tests were consistently higher than those of the control children, there were no statistically significant differences between the groups on any of the four sub tests.

Study 3: HIPPY Children's School Behaviour

Participants and sampling

This study involved three groups: the HIPPY children from study 2, the control children from study 2, and all the other children who were in the same classes as study 2 participants, but who did not take part in the earlier study. The last of these groups was included to see how HIPPY children compared to all other children in their class, not only to the control sub-sample who were self-selected. Teachers in four of the schools who participated in study 2 completed a behavioural measure, the Behavioural Academic Self Esteem Scale (BASE) for all the children in their class. The four schools were selected because the majority of HIPPY children attended them and they were representative of the researched areas. BASE scores were obtained for 28 HIPPY children, 38 control children and 47 children who did not participate in the school readiness measure. Background variables were not available for the children who did not participate in study 2.

Behavioural Academic Self Esteem Scale (BASE)

The BASE is a behavioural evaluation scale designed in the US. The scale measures children’s academic self-esteem through the direct observation of their classroom behaviour by their teachers. The scale has a total of 16 items such as “This child shows self-direction and independence in activities” and “This child deals with mistakes or failures easily and comfortably”. The teachers rate children on a scale of one to five, one being “never” and five being “always”. The scale was found to have 0.83 internal consistency and a correlation of 0.71 when the same child was assessed by two different teachers using a US sample (Coopersmith & Gilberts, 1982). In the present study the scale was found to have an alpha of 0.92 and split half reliability of 0.90.

Results

The mean score (and standard deviation) out of a possible 80 was 56.54 (9.83) for the HIPPY children, 54.55 (13.98) for the control children and 47.26 (14.17) for the children who did not participate in the school readiness measure.
Analysis of variance carried out on the groups' means revealed a statistically significant difference between the three groups $F(2,110)=5.43$, $p<0.01$. Post Hoc mean comparisons (Tukey HSD) revealed that both the HIPPY ($p<0.01$) and control group ($p<0.05$) had significantly higher means than all the other children in their class. There was no significant difference between the HIPPY group and the control group on the BASE scale.

**DISCUSSION**

HIPPY children's performance on all 11 measures was consistently higher than that of their peers, whether they were compared to control group children, or other school peers. The difference reached statistical significance on four measures, in study 1 HIPPY children scored significantly higher than all other children in their schools on Concepts About Print, the Word Test and the Burt. In study 3 HIPPY children scored significantly higher than children whose parents did not participate in the research on the Behavioural Academic Self Esteem scale.

The results of the present study are very similar to those found in evaluations of HIPPY that have taken place elsewhere. Previous studies also found that HIPPY children obtained significantly higher mean scores than their peers on measures of reading and maths and received better teacher ratings (Bekman, 1998; Burgon, 1997; Kagitcibasi, 1996; Lombard, 1994).

Before discussing the results in detail and the implications they have for HIPPY in New Zealand, it is important to first discuss how differences between the non-HIPPY and the HIPPY children included in the studies may have affected the results. In study 1 (reading ability), the lack of background information about the children meant that there may have been undetected differences between the two groups, that impacted on the results. Given that HIPPY targets disadvantaged families, it is unlikely that these children were in some way privileged prior to participation in the programme, but this cannot be ruled out.

As outlined, studies 2 and 3 (school readiness and school behaviour) also could not use random allocation to intervention and control groups. The HIPPY children were self-selected through their caregivers' voluntary participation in the program itself. The control group children were also self-selected through their caregivers' willingness to participate in the research. Whereas in some situations non-random allocation may result in an intervention group that is generally more motivated and therefore likely to score higher on the relevant measures than the control group, in the current study there were reasons to believe the reverse may have been the case. That is, the control group children may have come from more educationally oriented families than the intervention group children, or the school population as a whole. It can be argued that when an intervention group targeted on the basis of need, is compared to a self selected control group, the intervention group may represent a more disadvantaged sub-group than the control. This has been found in previous studies including an evaluation of a youth employment programme (Grossman & Tierney, 1993) and in the original research on the Head Start programme (Lee et al., 1990).
Interviews carried out with school personnel as part of the larger evaluation of HIPPY revealed that the caregivers of control children were more likely to be visiting the school and participating in school-based activities than most other parents. The presence of a selection bias in the control group was supported by the finding that on the Behavioural Academic Self Esteem scale (the BASE), both the HIPPY group and the control group scored significantly higher than all other children in their classes. It must also be noted that while 52% of HIPPY families spoke a language other than English at home, only 23.5% of control families did so, suggesting perhaps a greater familiarity with the New Zealand school system amongst control families. Arguably, if HIPPY children were compared to a more similar control group, larger gains may have been found.

Possible Explanatory Mechanisms

It is suggested that participation in HIPPY may have benefited children in a threefold way. First, children's intellectual skills may have been enhanced through working on the HIPPY materials over the two-year period. Second, as a consequence of participation, these children may be more motivated to participate in educational activities and invest effort in their schoolwork. Finally, as it is primary caregivers that deliver the programme, it could be the case that caregivers became more aware of their child's educational needs.

It is possible that HIPPY directly enhanced children's intellectual skills through the program's materials. These were specifically designed to facilitate the development of memory, problem solving, classification, and expressive language ability (Lombard, 1994). Through successfully completing the activities it is also possible that HIPPY children gain a sense of competence, which subsequently enhances their motivation to invest effort in educational activities. This was supported by the findings on the Behavioural Academic Self Esteem Scale (BASE), where HIPPY children were rated as having higher Academic Self Esteem than their (non-control group) peers.

As described previously, the studies reported here were part of a larger evaluation which included interviews with HIPPY caregivers and school personnel. In these interviews, caregivers consistently made the observation that HIPPY children have enhanced motivation:

"I have two children, the old one didn't do HIPPY but the young one did, and there is a big difference between the two. When they both come home, only the younger one will give me her homework, the older one wouldn't, she'll chuck it on the side and leave it there 'til Thursday." (The speaker is a Maori Tutor).

The third mechanism by which HIPPY may have been effective is through increasing parents' awareness of their child’s educational needs which in turn leads to a home environment that is more supportive of learning. Involving parents in early interventions has long been argued to improve family functioning (Zigler, Taussig & Black, 1992), which in turn may allow for greater emphasis to be placed on children's educational advancement. Indeed an evaluation of an intervention program
which focuses on facilitating minority parents' functioning as teachers, demonstrated that intervention parents provided more educationally stimulating environments for their children (Johnson, Walker & Rodriguez, 1996). In the current study, parents in HIPPY reported that programme participation had led them to have greater awareness of their child's educational needs.

"I've been going to school now with my older boy and I'm more interested now. Doing HIPPY has helped me understand that education is very important and I have to play a bigger part in helping them, with my other children as well. I tell them to listen to the teacher. Being in HIPPY itself made me able help them more and want to know more about what they are doing in school and just keep up with them." (The speaker is a Pacific Island mother).

Furthermore, some parents also commented that they had reorganized their family life in order to give children's learning priority "HIPPY has taught me how to make a schedule, like I've got so many things to do and put priorities first and which one is important and spending time with my children." (The speaker is a European mother).

Implications of Successful Early Intervention

Early educational intervention has been found to reduce the total cost of education for children who participate. In the Perry preschool project it was found that intervention children were proportionally less likely to be assigned to expensive special education services, and if they were assigned, they were more likely to receive fewer years of remedial teaching than their non-participants peers (Berrueta-Clement et al., 1984). Early interventions have also been found to reduce the rates of grade retention (e.g. Reynolds, 1994). Although the current study did not investigate this issue specifically, it is notable that the Reading Diagnostic Survey, on which HIPPY children obtained significantly better results than their peers, is one of the key methods used in New Zealand to identify children in need of remedial reading. It is likely therefore, that HIPPY participation may reduce the need for children to receive this teacher-intensive, and thus costly service.

Study Limitations and Future Research

As discussed earlier, the study did not use random allocation, a method that could be considered in future evaluations to minimise self-selection and other forms of bias. However the use of random allocation may create some ethical tension between practitioners and researchers as it results, in the short term, in denying a service to some families who wish to obtain it. If random allocation is not possible, then it is proposed that children should be carefully matched on variables such as age, gender, ethnicity, single parent status, and income levels.

An alternative to random allocation may be the use of before and after measures. Assessing the home environment prior to joining the programme may be particularly
important. It has been suggested that differences often emerge between intervention and control groups only after family variables are taken into account (Sterling Honig, 1996).

The current study was somewhat limited in the range of outcomes considered. In particular, differences in children's mathematical ability as a consequence of programme participation were not assessed adequately in the present study. The only measure that assessed children's mathematical ability was the quantitative language sub-test on the Metropolitan Readiness Tests, where no significant differences were found. Given that internationally, improvements in the mathematical ability of HIPPY children were one of the most robust findings, it would be useful for future evaluations to focus more closely on this aspect.

The present study was limited to short-term outcomes of the programme. One of the main criticisms voiced with respect to early interventions is that initially positive cognitive effects gradually dissolve over the primary and high school years (Locurto, 1991a, b). Conversely, it has been argued that the use of short-term cognitive and achievement measures to assess the effectiveness of early interventions may be insufficient as their effects are often found in medium term outcomes. For example, improvements may be found in the child's assignment to special education services and grade retention (Berrueta-Clement et al., 1984; Reynolds, 1994; Reynolds et al., 1996; Slavin et al., 1993), school attendance (Seitz & Apfel, 1994) delinquency (Schweinhart & Weikart, 1997; Yoshikawa, 1994, 1995; Zigler et al., 1992) and even future employment (Berrueta-Clement et al., 1984; Schweinhart & Weikart, 1997; Zigler et al., 1992). It is suggested that future research on the programme look more closely at these outcomes. Indeed, longitudinal research on HIPPY children internationally demonstrated that HIPPY children were more likely to stay in school than their peers (Kagitcibasi, 1996; Lombard, 1994).

In conclusion, the results of the present study suggest that HIPPY plays a valuable role in enabling children from disadvantaged backgrounds to succeed in school. Programs such as this may help break the cycle of poverty in our disadvantaged communities.

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References


AN EVALUATION OF THE HIPPY PROGRAM IN NEW ZEALAND


