Possible Mechanisms of Long-Term Effectiveness

A. R. Nicol, I. Kolvin, A. Macmillan, F. Wolstenholme

Levitt must take credit for drawing attention to the need for systematic evaluation of child therapies. His reviews in the 1950s and most recently in 1971 threw down a challenge to us to demonstrate that child psychotherapies were effective. This challenge has not been diminished by the fact that Levitt's reviews have been so often and so justifiably criticized. In picking over the studies Levitt included in his reviews, Wright et al. (1976) came to an extraordinary conclusion: Not only was psychotherapy effective, but the effects could only be clearly seen if long-term follow-ups were carried out. This conclusion merits examination in a little detail.

Wright et al.'s conclusion comes from the analysis of three studies. The first is that of Lehrman. This was a case control study in which the control group consisted of 110 children whose parents had withdrawn them from treatment. In other ways, care was taken to ensure that the ratings of change were carried out independently and blind. There was significant further improvement of the treatment group between close and follow-up.

The Seeman et al. (1964) study was based on children selected as disturbed on classroom measures. There was random allocation to treatment and control groups but these groups were very small, i.e., n = 6 for each group at follow-up one year after the close of therapy. Although the outcome was indistinguishable at close of treatment, at outcome there was a significant difference on a reputation test.

Heinicke (1969) compared two levels of intensity of treatment on very small groups (n = 4 in each group). Again, significant findings emerged after a time lag of one and two years.

In comparing these three limited studies with others that did not show continued improvement of treatment effects at follow-up, Wright et al. noted that an important difference was that the treatment in these studies was more *intensive*. The problem is that with such limited numbers and difficulties in the selection of control groups, can we place much weight on these studies? Whatever the answer to this question, Wright's cau-

tious conclusion—that follow-ups are needed in any evaluation of psychotherapy—seems eminently sensible.

The more important the question, the more difficult it is to answer, and the more sparse the relevant research findings. This "inverse research law" typifies psychotherapy research. Thus, there are a lot of studies showing immediate effects on single cases with relatively minor disorders; but the more we approach genuinely handicapping disorders and look at practical ways of relieving them, the less confidently we can turn to research findings for help. However, it is important not to be too pessimistic, as there are now studies, particularly in the behavior therapy field, which have long-term follow-ups. Examples include Miller et al. (1972) on school phobia, Kirigin et al. (1975) (quoted in Ollendick, 1986) on achievement place programs—institutional treatment of delinquency by behavior modification.

The "Help Starts Here" Study

I turn now to the Newcastle study of treatment in schools that we have come to call "Help Starts Here" (Kolvin et al., 1981). It was carried out in the 1970s. A rapid presentation of the main outlines of this large-scale study is needed before we can look at the long-term findings.

The aim of the study was the prevention and treatment of maladjustment in the school environment. The study involved children of two age groups, 7-year-olds and 11-year-olds. Within each of these age groups, three treatment programs were set up, these, together with the number of subjects in each treatment group, are shown in Table 1.

The children included in the study were identified with a multiple-criterion screen that included a teacher questionnaire, sociometry, and a group reading test for the 7-year-olds, and a teacher questionnaire, self-report questionnaire, and sociom-

7-year-olds			
At risk controls (n=67)	Parent-teacher counselling (n=69)	Playgroups (n=74)	Nurture work (n=60)
11-year-olds			
Maladj. controls (n=92)	Parent-teacher counselling (n=83)	Senior groups (n=73)	Behaviour modification (n=74)

Table 1. The treatment regimes.

Table 2. "Help Starts Here" study (7-year-olds).

Features:
1) *School screen* in primary schools for children at risk
2) *Outcome measures:* Parent and teacher reports, peer choice, educational testing
3) *Random allocation* by class
4) *Treatments* (n=60 approx. per group)
➤No treatment control
➤Parent counselling—teacher consultation
➤"Nurture work"
➤Playgroups
5) 18-month and 3-year follow-ups.

Table 3. "Help Starts Here" study (11-year-olds).

Features:
1) *School screen* for maladjusted children in secondary school
2) *Outcome measures:* Parent and teacher reports, peer choice, educational testing, anxiety scales, attitudes to school
3) *Random allocation* by class
4) *Treatments* (n=60 approx. per group)
➤No treatment control
➤Parent counselling—teacher consultation
➤Behavior modification in classroom
➤Group therapy
5) 18-month and 3-year follow-ups.

Table 4. Assessments of change.

Two types:
1) A clinical assessment of all the evidence at each stage yielding a global diagnosis and measure of severity.
2) A statistical assessment of change scores on each separate measure using multivariate analysis of covariance.
Both methods took initial severity into account, the second factor other factors as well.

etry for the 11-year-olds. Some of the features of the methodology are shown in Tables 2 and 3.

Statistical analysis is a major issue in a project of this type. In this project, two types of analysis were undertaken, as shown in Table 4, which shows the ways that change was measured, to provide, on the one hand a clinically meaningful estimate and, on the other, a more technically sophisticated measure of outcome and improvement.

Table 5. "Help Starts Here" study: Trends in results (1).

In 7-year-olds:
➤Playgroups did best
➤Parent counselling—teacher consultation did little better than controls
➤"Nurture work" came in between.
In 11-year-olds:
➤Group therapy and behavior modification both did very well
➤Parent counselling—teacher consultation did little better than controls.

Table 5. "Help Starts Here" study: Trends in results (2).

Length of follow-up:
➤Longer follow-ups showed more dramatic results (although active treatment finished).
Generalization:
➤Anxiety-type measures affected early.
➤Wide spread of measures revealed generalization—more so later.
Therapist characteristics:
➤Open, extravert therapy effective.

Tables 5 and 6 concern the outcome of the project; they are presented briefly here in a non-quantitative form. It should be noted, in addition, that the therapies seemed to have a non-specific effect. They were not disproportionately helpful with any particular type of disorder.

This equivalence of therapies has been found in a number of studies and goes against the modern dictum that our therapy should be tailored to a specified problem with a defined patient group and under known circumstances. Miller et al. (1972) compared the value of counseling and a desensitization program for school phobia: Both differed from a no-treatment control group, but there was no difference between the two treatments.

The assessment of therapists' qualities was derived from the work of Truax and Carkhuff (1967), who developed a way of rating fragments of tapes for qualities of the therapist in the therapy session. In the "Help Starts Here" study, we rated therapists not only in the therapy session, but also from our impressions arising in the context of supervision. Truax and Carkhuff identified warmth and empathy as the key therapeutic ingredients, whereas we found extraversion, openness and assertiveness to be important (Table 7).

We can speculate that the qualities of the effective therapist may be very different in the hurly-burly of the large school than in the peaceful environment of the clinic.

Table 7. Important therapist qualities.

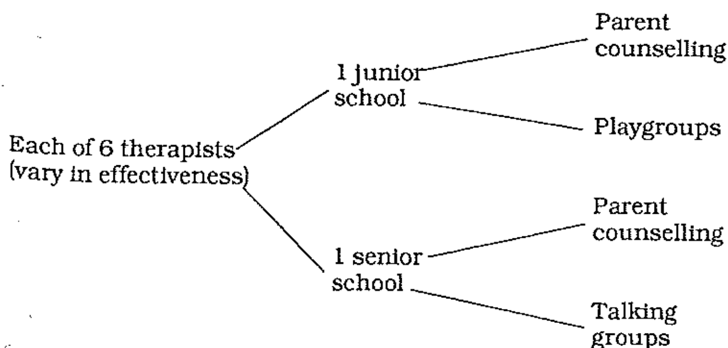
Strong positive correlations with:
➤Extraversion
➤Assertiveness
➤Openness
Negative correlations with some *outcome measures:*
➤Empathy
➤Warmth
➤Genuineness
➤Charm
➤Good relationships
➤Neuroticism

A recent interest in the United Kingdom has been in so-called "School Differences Research." Parents have always known that there are good and bad schools, but it is only more recently that scientists have come to agree with them. Table 8 lists some of the qualities of schools that have been associated with good reading progress, low truancy rate, and better behavior.

Table 8. Therapeutic characteristics of schools (Rutter et al., 1979; Reynolds et al., 1976).

➤Teachers prepare work
➤Mark homework promptly
➤Structure
➤Praise for good work
➤Good mix of children

Table 9. "Design" of enquiry into school and therapist effects.



Correlate the effectiveness of therapists with different regimes and schools.

From these findings we can conclude that schools play an important part in the emotional development of children. Thus, in the "Help Starts Here" study, we can identify two possible influences in the impressive long-term effects of the treatments: therapists' effects and school effects.

At this point the discussion becomes rather tentative and is aimed at showing factors that might be taken into account in future studies rather than firm conclusions that may be derived from the present study. Table 9 outlines a "post hoc" design that attempts to disentangle the effects of school, therapist, and type of therapy. It relies on the fact that each of the six therapists worked simultaneously in a junior school and a senior school, and that they each took part in two distinct treatment programs within the two schools (one junior and one senior) within which they worked. We know that the different schools probably, and that different therapists certainly, have different levels of their therapeutic effectiveness. It may be possible in this study to differentiate the effectiveness of the six schools and of the six therapists. Table 9 shows how this might be done.

Table 10. Rank correlations of the overall change scores of six therapists in four different treatment regimes.

	Base to midline (18 months)			
	1	2	3	4
	JPC	PG	SPC	SG
2	.94			
3	.89	.77*		
4	.26	.43	.43	

*Same therapist, different therapy, different school

Table 11. Rank correlations of the overall change scores of six therapists in four different treatment regimes.

	Base to midline (3 years)			
	1	2	3	4
	JPC	PG	SPC	SG
2	-.14			
3	.31	-.14		
4	.09	-.20	.88*	

*Same therapist, different therapy, different school

The effectiveness of the therapists and schools are calculated by correlating the improvement scores of children who attended the same therapist giving, on the one hand, different therapies and, on the other, working in different schools. The results are presented in Table 10 for the 18-month follow-up and in Table 11 for the 3-year follow-up. A rank correlation method was used, which means that the correlations are somewhat higher than in a product moment correlation.

The most clinically important results are marked in each case with a star. In Table 10 there is a high correlation between the same therapist applying different therapy in their two different schools. This might mean that the therapist quality is important. In Table 11, the high correlation is where the school is the same but the therapy different.

These findings must be regarded as tentative, but they are consistent with the idea that the therapist is of most importance in the early stages after the therapy is given, and that at a later stage (three years) the qualities of the school environment take over as of most importance. The great importance of these findings is that they might elucidate the process by which school-based therapy has long-term beneficial effects. As psychotherapists should we continue to work in the clinic or move our base to the school? It should be remembered that the "Help Starts Here" study was concerned largely with relatively mild disorders that were identified as part of a screen in school. The findings may be quite different for a clinical group. There can be little doubt that this is an area that merits further intensive investigation.

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