Behaviour modification with children in the natural environment

Training parents and teachers as therapists.

Michael W. Griffin,*
B.Sc. (Hons). Dip. Clin.
Psych. M.A.P.A.
Psychology Clinic,
LaTrobe University

* Mr Griffin has recently completed a Masters degree in the area of parent training, using a correspondence approach. In addition to his work as a clinical psychologist, primarily with children and their parents, Mr Griffin is currently engaged in writing about parent training programs.

traditionally

Traditionally, when children were seen by their parents or teachers as exhibiting "problem" behaviors (e.g. tantrums, disobedience, stealing, reading difficulties, social withdrawal, incontinence) they were brought to the notice of a professional (often a psychologist) who proceeded to carry out "therapy" in a clinic or hospital. The child was seen as primarily the person with whom one should work, and the clinic as the setting where therapy should take place. Even in those cases where some form of "family therapy" was undertaken (Pool and Frazier, 1973), the emphasis remained on seeing the child in a clinical setting and rarely it seems was the parent or teacher taught specific behavior change skills (Berkowitz and Graziano, 1972).

Reasonable

It seems reasonable to say that a child's behavior is usually defined as a problem by the same person who seeks professional help for that child (Johnson, Wahler, Martin and Johansson, 1973). In many cases, that person is also the one who interacts with the child to produce the problem behavior (Patterson and Reid, 1970; Wahler, 1976). The environmental setting for this interaction is usually the home or school. As an example, consider a boy who is defined by his mother as behaving disobediently when she asks him to do a chore. The behavior occurs in the home and is only displayed when the boy and his mother interact in a certain way - she may ask him to wash the dishes while he is in the middle of watching a TV program and he either ignores her or perhaps walks out of the house. She sees his behavior as disobedient because he does not do what she wants him to do. He and his mother have interacted in at least three ways for his behavior to be called disobedient: i) she has asked him to do something, ii) he has refused or ignored her, and iii) she has found his response aversive.

Difficulties inherent

In considering this example, it becomes clear that there were difficulties inherent in the traditional approach to therapy. It would be more appropriate to attempt behavior change in the environment where the problem manifests itself rather than in a clinical setting, and it may be ultimately more efficient and effective to train the parent or teacher involved in the interaction to be the therapist, rather than for the professional to attempt therapy directly. A psychologist in a clinic is not the person who daily interacts with the child to help create and maintain problem behaviors, and he is not in the setting where those behaviors occur (thus presenting a problem of how insights and skills learned in the clinic will transfer across to the home or school environment). Furthermore, if the psychologist can train parents and teachers in groups to effectively bring about a worthwhile change in the child's behavior by altering the ways in which they and the child interact, then the psychologist will have the time to assist a greater number of clients than if he continues with the traditional individual approach.

In summary, it is suggested that when children are defined by their parents or teachers as exhibiting

the approach of choice ...

problem behaviors, the approach of choice is to train these people to effect a desired change in the child's behavior by altering the interaction between them, in the environment where the behaviors occur. This implies that the parent or teacher needs to accept responsibility for the part they play in creating and/or maintaining the undesirable behaviors, and hopefully it implies that the child takes an active and informed part in any program that is set up (Clement, 1974; Peterson, 1976).

Recent years

In recent years there has been a rapid increase in the number and complexity of studies which have attempted to train parents and teachers as therapists (Berkowitz and Graziano, 1972; Cone and Sloop, 1974; Griffin and Hudson. 1978; Johnson and Katz, 1973; O'Dell, 1974; Reisinger, Ora and Frangia, 1976). Beginning with individual case studies (e.g. Allen and Harris, 1966; Williams, 1959), often without controls, reliable data or follow-up, research in the area has moved towards greater methodological sophistication (see Gelfand and Hartman, 1968; Johnson and Bolstad, 1973), the use of group training methods (Kingsley and Shapiro, 1977; Rinn, Vernon and Wise, 1975; Rose, 1974; Sadler, Seyden, Howe and Kaminsky, 1976), relatively complex and structured training programs (e.g. Patterson, 1974; Walder, Cohen, Breiter, Warman, Orme-Johnson and Pavey, 1972), and some attempts to determine the specific factors contributing to a good training procedure (Eyberg and Johnson, 1974; Glowgower and Sloop, 1976; Nay, 1975). This paper is specifically concerned with the use of behavior modification principles in such programs, but it should be remembered that other models of therapy or training can (and have) been employed within the general framework of using change agents in the natural environment (Anchor and Thomason, 1977; Ginsberg, 1976; Tavormina, 1974, 1975).

Although a lot of group work has been attempted in recent years, especially with parents, individual training programs still appear in the literature with considerable frequen-(e.g. Arnold, Sturgis and Forehand, 1977; Pomerantz, Peterson, Marholin and Stern, 1977; Wulbert and Dries, 1977). Individual and group programs may be supplemented by laboratory training (e.g. Bernal, Durvee, Pruett and Burns, 1968; Doherty, 1975; Forehand, Cheney and Yoder, 1974; Walder, Cohen, Breiter, Daston, Hirsch and Leibowitz, 1969), where parents or teachers can be taught specifically how to act with a particular child by the psychologist observing their interaction through a one-way screen and cueing the parent on what to do from moment to moment. The psychologist can talk directly to the adult, who listens via an instrument much like a hearing aid, without the child's knowledge. ("Praise the child now", "ignore her now", "walk away", etc). Alternatively, the psychologist may signal instructions to the adult by means of differentcoloured lights, or a buzzer code. Perhaps laboratory training can be regarded as a type of individual training, where the psychologist devises a training program or teaches specific behavior modification skills to a single parent or teacher. In group programs, several adults are trained at once, usually over a number of sessions. The program cannot so readily be geared to the specific requirements of each parent or teacher, so usually a standard training procedure is used which aims to teach a range of basic principles and techniques. Each person can then select those skills which are applicable to his or her individual child, allowing various problems to be tackled in a number of different environments. Thus, one parent may select from the total training program the techniques required to decrease tantrum behavior in a four-year-old at home, while another parent in the program may tackle a reading problem in a thirteen-year-old both at home and through the school. A third parent may want to do something about her seven-year-old girl who is afraid to ride the escalators in a big department store.

An advertisement in the local newspaper can be used to attract parents for a group training program, or perhaps a group of teachers will attend an inservice training course. Considering a parent group as an example, the eight or ten parents might meet once a week for eight weeks, each session lasting between 90 minutes and two hours (although attempts have been made to decrease this investment of time, e.g. Pinkston and Herbert-Jackson, 1975). Usually, more mothers will attend than fathers, and only a few families will be represented by both parents. Each member of the group will probably have in mind a specific problem or probems that they believe is present

during the course . . .

in their children. During the course, they will receive training in how to define problems in terms of objective and readily understood behaviors. The parents will then be taught to systematically observe these behaviors and to keep a record of how often they occur and perhaps how long they persist (e.g. a three minute tantrum versus a fifteen minute one). It is worth noting that problem behaviors can be divided, for convenience, into those which are excesses (they occur too often) and those which are deficits (they don't occur often enough) (Ross, 1974). Aggression is an example of an excess behavior, while a reading problem would constitute a deficit behavior, because an increase in reading skills is required. The parents may be taught to look at behaviors in this fashion, because the classification often has implications for treatment.

Target behaviour

Once the target behavior has been defined and observed systematically, the parents will need to learn how events immediately before and after the target behavior can influence it. They will learn that every behavior has antecedents and consequents which can alter its frequency of occurrence and, more importantly, that their interaction with the child often involves these "before and after" events. The next step is to teach the parents some basic behavior modification principles (Bandura, 1969), and to illustrate ways in which each one can be used. Generally, the group members are acquainted with the principles of reinforcement and shaping as ways to increase the frequency of desired behaviors, or to encourage acceptable behaviors which are incompatible with the problem behaviors, thus decreasing the latter. Parents may also be taught the essentials of extinction and time-out from positive reinforcement, to decrease the frequency of unacceptable behaviors. Additional techniques, such as modeling, counterconditioning and contracting procedures, are also often taught. Throughout the program, each parent is required to apply their new skills in a real-life situation, and their efforts are discussed during the sessions. The instructional part of the program is often supplemented by the reading of special books for parents, the showing of videotapes, films or slides, and various "homework" assignments (e.g. Becker, 1971; Brown and Presbie. 1974; Peine and Howarth, 1975). Parents may role-play child-adult interactions with each other, or the psychologist might demonstrate various techniques to the group. Most programs thus offer a combination of instruction and practice (see Miller, 1975; Sadler Seyden, 1976).

Procedures

To make some of these procedures more readily comprehensible, it is perhaps best to take an example. Consider a parent in a group who has come primarily because her seven-year-old boy Bobby throws a tantrum whenever he can't get his own way. This is causing the family some concern because he often smashes things and generally disrupts the household whenever a tantrum occurs. The mother, early in the program, learns to define this tantrum behavior fairly exactly and to observe when and where it occurs. She discovers that father does not have this problem with the boy and that, in fact, she is the only person who seems to precipitate tantrum behavior. She finds that her thinking about the things her son does has been rather vague and so she carefully defines the target behavior as "Bobby hitting me, screaming at me, hitting and throwing nearby objects, or lying down on the floor and screaming, immediately after he has asked to do or have something and I have refused him". She begins to understand the antecedents of his behavior (the asking and being refused) and she learns that the consequences of the tantrum are usually that she gives in and lets him have what he wants for the sake of some peace and quiet. Bobby's mother is quite sure that this is an excess behavior and she wants to decrease its frequency and intensity (tantrums occur several times a day and often go on for a quite a while). She learns that, by eventually giving in to Bobby on most occasions, she is helping to maintain and even to strengthen the behavior because he has learned that if he keeps the tantrum up long enough he will get what he wants. This pay-off is defined as a reinforcer, and mother learns that Bobby's behavior is being reinforced by her actions in giving in. From the range of intervention techniques presented in the program, she decides to use positive reinforcement, time-out, contracting and modeling, in order to effect a worthwhile change in behavior.

Antecedants

Time-out is used initially to bring about a quick reduction in the frequency of behavior. Mother finds that, by placing Bobby in an unat-

behaviour diminishes . . .



Praising when no tantrums occur

tractive room for a minute or two each time his behavior becomes unacceptable, he soon ceases to have many tantrums. He no longer gets any reinforcement from the situation, so the behavior diminishes. Concurrently with this, Bobby's mother starts praising him for periods of time in which no tantrums occur. Bobby likes being praised (it is reinforcing for him) and so non-tantrum periods tend to increase. His mother has thus learned to reinforce incompatible behaviors as a way of reducing the tantrums. Before applying reinforcement principles to Bobby, however, his mother needed to learn that each child has a unique, idiosyncratic set of reinforcers (see Browning and Stover, 1971) and she had to observe her son carefully for a while to discover which objects and events are reinforcing for him. She had always assumed that pocket money was a strong reinforcer for him but has found out that Bobby really does not care whether he receives regular pocket money or not.

Because Bobby's brother tends to be quiet and well-behaved, even when he doesn't get his own way, mother makes a point of praising him for his even temper in Bobby's presence. She thus uses his brother as a model for Bobby, and by reinforcing the model in Bobby's presence, she hopes he will copy his brother's desirable behavior. Finally, mother and Bobby openly discuss the program, and Bobby says he dislikes the way in which she tends to veto most of the things he wants to do (an antecedent event which is influencing the tantrum behavior). They work out a contract, which states in part that mother agrees not to veto Bobby's requests so severely. Bobby, in turn, agrees to accept that he can't always have or do what he wants. Mother keeps a record of Bobby's tantrum behavior and finds that, as a result of the program she has instituted, his unacceptable behavior has markedly diminished and more acceptable behaviors have taken its place.

Although the example used above

involved parents, a similar training process could apply to a group of teachers. They might benefit from an emphasis on techniques applicable to a number of children at once and which could involve some or all class members as models, reinforcing agents or contractors, but the principles remain the same (Homme, 1974; Kazdin, 1975; O'Leary and O'Leary, 1972; Sulzer and Mayer, 1972). Wherever possible, the "target" child should be actively involved in the program (e.g. via a contract or by taking responsibility for changing his own behavior). Finally, if psychologists are routinely going to teach behavior change skills to parents and teachers, perhaps they should consider teaching them to the children involved as well, either so they can work on a selfmodification program (e.g. Watson and Tharp, 1972; Thoreson and Mahoney, 1974) or so they can in turn change the unacceptable behavior of their parents and teachers (Benassi and Larson, 1976; Fedoravicius, 1973; Graubard, Rozenburg and Miller, 1971; Sherman and Cormier, 1974).

Bibliography

ALLEN, K.E. and HARRIS, F.R. (1966) Elimination of a child's excessive scratching by training the mother in reinforcement procedures. **Behavior Research and Therapy**, 4, 79-84.

ANCHOR, K.N., and THOMASON, T.C. (1977) A comparison of two parent-training models with educated parents.

Journal of Community Psychology, 5, 134-141.

ARNOLD, S.T., STURGIS, E., and FOREHAND, R. (1977). Training a parent to teach communication skills: A case study. **Behavior Modification**, 1, 259-276.

- BANDURA, A. (1969). Principles of behavior modification. Holt, Rinehart and Winston, New York.
- BECKER, W.C. (1971). Parents are teachers: A child management program. Research Press, Champaign, Illinois.
- BENASSI, V.A., and LARSON, K.M. (1976). Modification of family interaction with the child as the behavior change agent. In E.J. Mash, L.A. Hamerlynck, and L.C. Handy (Eds). Behavior modification and families. Brunner/Mazel, N.Y.
- BERKOWITZ, B.P., and GRAZIANO, A.M. (1972). Training parents as behavior therapists: A review. **Behavior Research and Therapy**, 10, 297-317.
- BERNAL, M.E., DURYEE, J.S. PRUETT, H.L. and BURNS, B.J. (1968). Behavior modification and the brat syndrome. Journal of Consulting and Clinical Psychology, 32, 447-455.
- BROWN, P.L. and PRESBIE, R.J. (1974). **Behavior modification skills.** Research Media, Hicksville, New York. (A training kit in 5 units containing cassettes, slides and response books).
- BROWNING, R.M. and STOVER, D.O. (1971). Behavior modification in child treatment: An experimental and clinical approach. Aldine, Chicago, Illinois.
- CLEMENT, P.W. (1974). Parents, peers, and child patient make the best therapists. In G.J. Williams and S. Gordon (Eds.), Clinical child psychology: Current practices and future perspectives. Behavioral Publications, New York.
- CONE, J.D. and SLOOP, E.W. (1974). Parents as agents of change. In A. Jacobs and W.W. Spradlin (Eds.), **The group as agent of change.** Behavioral Publications, New York.
- DOHERTY, G. (1975). Basic life skills and parent effectiveness training with the mothers of acting-out adolescents.

 Journal of Clinical Child Psychology, 4, 3.6
- EYBERG, S.M. and JOHNSON, S.M. (1974). Multiple assessment of behavior modification with families: Effects of contingency contracting and order of treated problems. Journal of Consulting and Clinical Psychology, 42, 594-606.
- FEDORAVICIUS, A.S. (1973). The patients as shaper of required parental behavior: A case study. Journal of Behavior Therapy and Experimental Psychiatry, 4, 395-396.
- FOREHAND, R., CHENEY, T., and YODER, P. (1974). Parent behavior training: Effects on the non-compliance of a deaf child. Journal of Behavior Therapy and Experimental Psychiatry, 5, 281-283.
- GELFAND, D.M. and HARTMAN, D.P. (1968). Behavior therapy with children: A review and evaluation of research methodology. **Psychological Bulletin**, **69**, 204-215.

- GINSBERG, B.G. (1976). Parents as therapeutic agents: The usefulness of filial therapy in a community mental health centre. American Journal of Community Psychology, 4, 47-54.
- GLOWGOWER, F., and SLOOP, E.W. (1976). Two strategies of group training of parents as effective behavior modifiers. **Behavior Therapy**, 7, 177-184.
- GRAUBARD, P.S., ROSENBURG, H., and MILLER, M.B. (1971). Student applications of behavior modification to teachers and environments, or ecological approaches to social deviancy. In E.A. Ramp and B.L. Hopkins (Eds.) A new direction for education: Behavioral analysis. Lawrence, Kansas: Support and Development Center for Follow Through.
- GRIFFIN, M., and HUDSON, A. (1978). Training parents as therapists: The behavioral approach. Melbourne: P.I.T. Press.
- HOMME, L. (1974). How to use contingency contracting in the classroom. Research Press, Champaign, Illinois.
- JOHNSON, C.A. and KATZ, R.C. (1973).
 Using parents as change agents for their children: A review. Journal of Child Psychology and Psychiatry, 14, 181-200.
- JOHNSON, S.M. and BOLSTAD, O.D. (1973). Methodological issues in naturalistic observation: Some problems and solutions for field research. In L.A. Hamerlynck, L.C. Handy and E.J. Mash, (Eds.) Behavior change: Methodology, concepts and practice. Research Press, Champaign, Illinois.
- JOHNSON, S.M., WAHL, G., MARTIN, S and JOHANSSON, S. (1973). How deviant is the normal child? A behavioral analysis of the pre-school child and his family. In R.D. Rubin, J.P. Brady and J.D. Henderson (Eds.), Advances in behavior therapy. Academic Press, New York.
- KAZDIN, A.E. (1975). **Behavior modification in applied settings.** Dorsey Press, Homewood, Illinois.
- KINGSLEY, R.G., and SHAPIRO, J.A. (1977). A comparison of three behavioral programs for the control of obesity in children. **Behavior Therapy**, **8**, 30-36.
- MILLER, W.H. (1975). Systematic parent training: Procedures, cases and issues. Research Press, Champaign, Illinois.
- NAY, W.R. (1975). A systematic comparison of instructional techniques for parents. **Behavior Therapy**, 6, 14-21.
- O'DELL, S. (1974). Training parents in behavior modification: A review. **Psychological Bulletin, 81,** 418-433.
- O'LEARY, K. and O'LEARY, S. (1972).

 Classroom management. Pergamon Press, New York.
- PATTERSON, G.R. (1974). Interventions for boys with conduct problems: Multiple settings, treatments, and criteria. **Journal of Consulting and Clinical Psychology**, 42, 471-481.

- PATTERSON, G.R. and REID, J.B. (1970).
 Reciprocity and coercion: Two facets of social systems. In C. Neuringer and J. Michael (Eds.) Behavior modification in clinical psychology.
 Appleton-Century-Crofts, New York.
- PEINE, H.A. and HOWARTH, R. (1975). Children and parents: Everyday problems of behavior. Penguin Books, Suffolk.
- PETERSON, R.F. (1976). Power, programming and punishment: Could we be over controlling our children? In E.J. Mash, L.A. Hamerlynck, and L.C. Handy (Eds.) **Behavior modification and families**, Brunner/Mazel, N.Y.
- PINKSTON, E.M. and HERBERT-JACKSON, E.W. (1975). Modification of irrelevant and bizarre verbal behavior using parents as therapists. Social Service Review, 49, 46-63.
- POMERANTZ, P.B., PETERSON, N.T., MARHOLIN, D., and STERN, S. (1977). The in vivo elimination of a child's water phobia by a para-professional at home. Journal of Behavior Therapy and Experimental Psychiatry, 8, 417-421.
- POOL, M.L. and FRAZIER, J.R. (1973). Family therapy: A review of theliterature pertinent to children and adolescents. Psychotherapy: Theory, research and practice, 10, 256-260.
- REISINGER, J.J., ORA, J.P., and FRANGIA, G.W. (1976). Parents as change agents for their children: A review. Journal of Community Psychology, 4, 103-123.
- RINN, R.C., VERNON, J.C. and WISE, M.H. (1975). Training parents of behaviorally-disordered children in groups: A three years' program evaluation. **Behavior Therapy**, 6, 378-387.
- ROSE, S.D. (1974). Group training of parents as behavior modifiers. Social Work, 19, 156-162.
- ROSS, A.O. (1974). Psychological disorders of children: A behavioral approach to theory, research and therapy. McGraw-Hill, New York.
- SADLER, O.W., and SEYDEN, T. (1976). Groups for parents: A guide for teaching child management to parents. Journal of Community Psychology, 4, (Monograph supplement), 3-63.
- SADLER, O.W., SEYDEN, T., HOWE, B. and KAMINSKY, T. (1976). An evaluation of "Groups for Parents": A standardized format encompassing both behavior modification and humanistic methods. Journal of Community Psychology, 4, 157-163.
- SHERMAN, T.M. and CORMIER, W.H. (1974). An investigation of the influence of student behavior on teacher behavior. **Journal of Applied Behavior Analysis**, 7, 11-21.
- SULZER, B. and MAYER, G.R. (1972).

 Behavior modification procedures for school personnel. Dryden Press, Hinsdale, Illinois.

- TAVORMINA, J.B. (1974). Basic models of parent counselling: A critical review. **Psychological Bulletin**, 81, 827-835.
- TAVORMINA, J.B. (1975). Relative effectiveness of behavioral and reflective group counselling with parents of mentally retarded children. Journal of Consulting and Clinical Psychology, 43, 22-31.
- THORESON, C.E. and MAHONEY, M.J. (1974). **Behavioral self-control.** Holt, Rinehart and Winston, New York.
- WAHLER, R.G. (1976). Deviant child behavior within the family: Developmental speculations and behavior change strategies. In H. Leitenberg (Ed.) Handbook of behavior modification and behavior therapy. Prentice Hall, Englewood Cliffs, New Jersey.
- WALDER, L.O., COHEN, S.I., BREITER, D.E., DASTON, P.G., HIRSCH, I.S. and LEIBOWITZ, J.M. (1969). Teaching behavioral principles to parents of disturbed children. In B.G. Guerney, Jr. (Ed.), Psychotherapeutic agents: New roles for non-professionals, parents and teachers. Holt, Rinehart and Winston, New York.
- WALDER, L.O., COHEN, S.I., BREITER, D.E., WARMAN, F.C., ORME-JOHNSON, D. and PAVEY, S. (1972). Parents as agents of behavior change. In S.E. Golann and C. Eisdorfer (Eds.), Handbook of community mental health. Appleton-Century-Crofts, New York.
- WATSON, D.L. and THARP, R.G. (1972). Self-directed behavior: Self-modification for personal adjustment. Brooks/Cole, Monterey, California.
- WILLIAMS, C.D. (1959). The elimination of tantrum behavior by extinction procedures. Journal of Abnormal and Social Psychology, 59, 269.
- WULBERT, M., and DRIES, R. (1977). The relative efficacy of methylphenidate)Ritalin) and behavior modification techniques in the treatment of a hyperactive child. Journal of Applied Behavior Analysis, 10, 21-31.

CORRECTION

In the article "Parents and Children in Day Care" which appeared in the last issue a mistake occurred in the second last line of the second column on page 12. The sentence should read:

"How successful a family becomes in pursuit of its aspirations depends on the good health of its members, on customs and habits that involve the total life experience of its members and beliefs and *mores* which go back to previous generations."

We apologise to the author Barbara Potter for the error.

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