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This paper examines the impact of a 12-episode television series, “Families”, on disruptive child behavior and family adjustment. This media intervention comprises the first of a five-level early intervention parenting and family support strategy, known as Triple P (Positive Parenting Program). Fifty-six parents of children aged between 2 and 8 years were randomly assigned to either watching the television series or to a waitlist control group. Compared to the control group, parents in the television viewing (TV) condition reported significantly lower levels of disruptive child behavior and higher levels of perceived parenting competence, immediately following intervention. Prior to intervention approximately 42.9% of the children in the TV condition were in the clinically elevated range for disruptive child behavioral problems. This had reduced to 14.3% following intervention. In addition, a high level of consumer acceptability was reported by parents in the TV condition. All post-intervention effects were maintained at 6-month follow-up. Implications for public health approaches to family mental health are discussed.

Keywords: Behaviour problems, outcome, prevention, child, parenting, media.

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Behavioral family intervention (BFI), based on social learning principles, has been demonstrated to be an effective strategy for reducing behavioral problems in young children and an effective prevention strategy for children at risk of developing severe conduct problems (Kazdin, 1995; Patterson, 1982; Sanders & Markie-Dadds, 1996; Webster-Stratton, 1997). In addition, BFI has been shown to be associated with positive benefits including reduced levels of parental conflict (Dadds, Schwartz, & Sanders, 1987), depression and stress (Webster-Stratton, 1994), and increased parental efficacy and sense of competence (Connell, Sanders, & Markie-Dadds, 1997; Wells, Griest, & Forehand, 1980). However, these programs are not readily available within the community. In Australia, although approximately 18% of children experience an identifiable mental health problem, only 2% of these children receive any form of treatment from specialist mental health practitioners (Zubrick & Silbern, 1994). Furthermore, only 10% of parents participate in parent education programs (Sanders, Tully, et al., 1999). One way to disseminate effective parenting interventions more widely is by using the mass media.

The mass media plays an important role in providing health information for the general public (Egger, Donovan, & Spark, 1993), and television acts as the primary source of mass media in today’s society. Television has been shown to have the capacity to influence awareness and to change attitudes, beliefs, and behaviors, making it potentially one of the most powerful educational resources available at the present time (Hofstetter, Schultz, & Mulvihill, 1992; Zimmerman, 1996). For example, evidence from the public health field has shown that televised media strategies can successfully increase community awareness of the risk and protective factors impacting upon health and wellbeing, promote health-preserving behaviors such as wearing seatbelts and abstinence from alcohol when driving, and be instrumental in modifying potentially harmful behaviors such as cigarette smoking, poor diet, and lack of exercise (Biglan, 1995; Sorensen, Emmons, Hunt, & Johnston, 1998).

Although the mass media has been used widely in the health promotion field, little is known about its effectiveness in the field of family intervention. Sanders (1999) has argued that the media should play an important role in the development of a comprehensive preventively focused parenting and family support strategy. There are several potential advantages of using media strategies such as television as an information source for parenting and family issues.

Television can be seen to have a pervasive influence on modern families. Australian adults watch approximately 3 hours of television per day (Nielsen, 1998), 47% of Australian adults rate television as the best medium for accurate and reliable news, 61.8% choose to obtain news and information from the television, and 79.6% report it
to be the most influential advertising source (Federation of Australian Commercial Television Stations, 1995).

A televised parent education program has the advantage of being able to be accessed, in the privacy of the home, by a large proportion of the population, some of whom, such as parents living in rural and remote locations, may otherwise be difficult to reach. As an early intervention/prevention strategy, it has the potential to significantly decrease costs associated with accessing professional services. Alternatively, it may assist parents to recognize early warning signs of behavioral and emotional problems in children and encourage them to seek professional advice early when a minimal level of intervention may be sufficient to address recent onset, discrete child behavior problems (Sanders & Markie-Dadds, 1996). Moreover, a televised parent education program could promote and increase community awareness of effective parenting strategies and understanding of the role family relationships play in the health and wellbeing of young children (Sanders, 1999). Media interventions of this type have the capacity to create a social milieu that is supportive of parent education and family change (Flay, 1987), which could be used to counter alarmist, sensationalized, or parent-blaming messages (Sanders, 1999). An added advantage of a television-based parent education program is that any behavioral change achieved by watching the program is likely to be attributed to one’s own efforts (Flay, 1987), thus increasing parent’s feelings of personal competence.

To be most effective as a mechanism of behavior change, rather than operating purely as a strategy for raising public awareness, it has been argued that a media intervention needs to provide information about both the problem behavior and how to deal with it effectively (Andrews, McLeese, & Curran, 1995; Flay & Burton, 1990; Owen, Bauman, Booth, Oldenburg, & Magnus, 1995). For example, Parloto, Green, and Fishman (1992) found that efforts to teach mothers about the general principles of nutrition were less successful in changing infant feeding patterns than programs that pinpointed food-related behaviors and gave specific skill-based information such as teaching mothers how to prepare their infant’s food adequately. Similarly, for the mass media to be a successful medium for the promotion of effective parenting skills and the modification of parental behavior, information about functional strategies for promoting competence in children and for dealing with problem behavior would need to be provided. Behavior change would then require parents to adopt a self-regulatory process that involved self-monitoring, self-identification of personal strengths and weaknesses, and personal goal setting (Halford, Sanders, & Behrens, 1994; Webster-Stratton, 1992).

There is some evidence to suggest that interventions which use methods that promote self-regulation, such as the provision of videotaped models or written workbooks with self-directed exercises, can be successfully employed to address child behavior problems (Connell et al., 1997; Webster-Stratton 1990a, b, 1991a, 1992, 1994; Webster-Stratton et al., 1988). For example, Connell et al. (1997) found that mothers who received a general parenting text (Sanders, 1992) and an accompanying workbook containing personalized exercises that encouraged self-monitoring and personal goal setting (Every parent’s workbook; Sanders, Lynch, & Markie-Dadds, 1994), in combination with minimal therapist contact via telephone, reported a decrease in child behavior problems and dysfunctional parenting style, and an increase in parental competence, compared to mothers in a waitlist control group. Further evidence in support of the efficacy of self-administered programs has been demonstrated by Webster-Stratton and colleagues (Webster-Stratton 1990a, b, 1991a, 1992, 1994; Webster-Stratton et al., 1988). Through a series of studies, these researchers demonstrated that self-administered videotaped programs (with no therapist consultation) resulted in significant parent and child behavior change compared to a waitlist control group and almost as much change as a therapist-led group discussion parenting program. Similarly, in another study that compared self-administered videotape training with and without brief (two-session) therapist contact, Webster-Stratton (1991a) found that the addition of therapist contact to the self-administered program resulted in only a very slight advantage over the self-administered program only. Taken together these studies demonstrate that interventions which rely upon the provision of clear information and the adoption of a self-directed process of change have demonstrated success in addressing child behavior problems.

Although previous studies have demonstrated the effectiveness of self-help interventions, using written and videotaped materials, none have evaluated the effectiveness of an intervention delivered in the format of an “infotainment” style television series. The present study represents an attempt to fill this gap in the literature and extend previous research by evaluating the effectiveness of a brief cost-effective “infotainment” style television intervention “Families”, which was delivered to parents entirely in the home with no therapist contact.

“Families”, a public health and community education strategy, was designed to provide empirically validated parenting information in an interesting and entertaining format. It was also designed to provide parents with specific information and an accurate model that would enable them to put suggested strategies into practice. It aimed to normalize the challenge of being a parent and to raise parents’ expectations that positive change in child behavior could be achieved. In addition, the program aimed to raise community awareness of the significant role positive family relationships play in the health and wellbeing of young people across the life-span.

The “Families” program was developed as a media component of Triple P (Positive Parenting Program), a BFI intervention strategy. Triple P consists of a tiered multilevel system of parenting and family support designed to allow tailoring of information and professional support to meet the individual needs of families (Sanders, 1999). The model consists of five levels of intervention ranging from relatively brief, low cost, self-help programs, providing specific parental advice and guidance for minor developmental and behavioral problems (level 1), to more intensive, multi-component interventions for severe child behavior problems that are complicated by additional family risk factors, such as marital conflict and problems with parental adjustment (level 5), (see Sanders, 1999, for more detailed information about the program).

The effectiveness of Triple P interventions delivered as face-to-face and self-regulatory written programs has been demonstrated in previous research (Connell et al., 1997; Sanders, Markie-Dadds, Tully, & Bor, 1999). However, it is not known if Triple P interventions will be effective when delivered in the format of an “infotainment” style media production designed for television
(Sanders & Markie-Dadds, 1992). Thus, the aim of the present study was to evaluate the impact of “Families”, a 12-episode, self-help, media component of Triple P on parent and child behavior. It was hypothesized that relative to a waitlist control condition (WL), mothers who watched the television series would report (1) fewer behavioral problems in their children, (2) higher levels of parental competence, (3) lower levels of dysfunctional parenting styles, (4) lower levels of anxiety, stress and depression, and (5) lower levels of disagreement with their partner about child-rearing post-intervention. Finally, it was hypothesized that parents in the TV condition would maintain positive changes at a 6-month follow-up.

Method

Participants

Fifty-six mothers with children aged between 2 and 8 years were recruited through a media release in a metropolitan daily newspaper and by the distribution of information brochures at kindergartens, preschools, and childcare centres in the metropolitan region of an Australian capital city. To be eligible to participate, the target child needed to have no chronic illness or disability and not be in receipt of treatment for behavioral or psychological problems. On meeting selection criteria participants were randomly allocated to either a TV condition or a WL control condition. The demographic characteristics of the two groups are presented in Tables 1 and 2.

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<thead>
<tr>
<th>Table 1</th>
<th>Demographic Characteristics of the Sample</th>
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<td></td>
<td><strong>TV condition</strong></td>
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<td></td>
<td>Mean</td>
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<tr>
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<td>Number of children</td>
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<th>Table 2</th>
<th>Demographic Characteristics of the Sample (Frequencies: N = 28)</th>
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<td>Variables</td>
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correlate significantly with observational measures of dysfunctional discipline and child behavior problems (Arnold et al., 1992). To provide an overall measure of dysfunctional parenting the Total Score was used in the present study.

Parenting Sense of Competence (PSOC; Johnston & Mash, 1989). The PSOC was used to assess parental perception of personal competence in the parenting role in the present study. The PSOC is a 16-item questionnaire that assesses parental perceptions of their competence on 2 dimensions, namely, satisfaction with their parental role and feelings of efficacy as a parent. It yields a Total Score as well as Satisfaction and Efficacy scores. All three measures have been shown to have satisfactory levels of internal consistency (α = .79, .75, and .76, respectively) (Johnston & Mash, 1989). The Total Score from this measure was used to assess parents’ sense of competence in the present study.

Depression-Anxiety-Stress Scales (DASS; Lovibond & Lovibond, 1995). The DASS is a 42-item questionnaire, which assesses symptoms of depression, anxiety, and stress in adults. Factor analytic studies have shown satisfactory reliability for the Depression (α = .91), Anxiety (α = .84), and Stress (α = .90) scale scores as well as good discriminant and concurrent validity (Lovibond & Lovibond, 1995). Scores from each of the factors of the DASS were used in the present study.

Parenting Problem Checklist (PPC; Dadds & Powell, 1991). The PPC consists of 16 items measuring inter-parental conflict over child rearing. This measure assesses parents’ ability to cooperate and work together in the parenting role. Six of the items measure the amount of disagreement between parents over rules and discipline for child misbehavior. A further six items assess the amount of open conflict over child-rearing issues. The final four items assess the amount to which parents undermine each other’s relationship with their children. The PPC yields a problem score, which indicates the number of areas of disagreements parents have experienced over child-rearing issues in the past month. The PPC has demonstrated high test–retest reliability (r = .90) and moderately high internal consistency (α = .70). This measure was used to assess inter-parental disagreement over child rearing in the present study.

Abbreviated Acceptability Rating Profile (AARP; Tarnowski & Simonian, 1992). The AARP is an 8-item questionnaire measuring a unitary acceptability factor. It assesses parental acceptability of information that is presented to them. Each item is rated on a 6-point Likert-type scale ranging from 1 “strongly disagree” to 6 “strongly agree”. Higher scores represent higher consumer acceptability. The AARP has demonstrated high test–retest reliability (α = .97) and high internal consistency (α = .98).

Design

This study used a randomized group design of the pre-test, post-test type where subjects were allocated to one of two conditions: television viewing (TV) or waitlist (WL).

Procedure

Participants completed each of the assessment measures and were then randomly allocated to either the TV or WL condition. All mothers signed a consent form indicating that they understood what was entailed in program participation and that it was completely voluntary.

TV condition. After completing the questionnaires mothers were provided with 12 videotapes, each containing a different episode of the “Families” television series. Parents also received 12 written self-help information sheets (tip-sheets). One tip-sheet corresponded to each Triple P segment of the “Families’ videos.

Each episode of “Families” was of approximately 20–30 minutes duration and consisted of six primary segments. These were a feature story, which presented brief discussions on a number of family issues, such as school involvement and the role of fathers; a segment in which a celebrity family discussed a range of issues concerning the functioning of their family; family health care tips; animal care and integrating the pet into family life; interesting facts and figures about the current state of families in society; and a Triple P segment. The Triple P segments were of approximately 5–7 minutes duration and presented parents with guidelines and clear instructions for using a range of parenting strategies designed to address common behavioral problems (e.g., whining and tantrums), to prevent problems from occurring, and to teach children new skills and help them master difficult tasks (e.g., brushing teeth). In addition, each Triple P segment presented the viewer with a modelled demonstration of suggested strategies.

Specifically, the Triple P segment from the first episode of “Families” outlined briefly the principles and aims of Triple P, provided brief examples of the causes of child behavior problems from a social learning perspective, and provided information on how to keep track of child behavior problems by monitoring. The segments from the second episode explained how to use the strategies of descriptive praise, positive attention, and providing engaging activities to encourage desirable behavior in children, while the third episode explained how to cope with difficult behavior by using a range of management strategies such as rule setting, directed discussion, planned ignoring, and the provision of clear instructions that are backed up by either logical consequences, quiet time, or time-out. Segments from the next four episodes presented parenting plans that integrated the parenting strategies introduced in episodes two and three for dealing with sleeping difficulties, whining, disobedience, and temper tantrums, respectively. The segment in the eighth episode presented parents with ideas on how to promote children’s creativity, and episode nine offered advice on how to encourage children’s involvement in sport and physical activity and how to deal with inappropriate sporting behavior. Segments in the final three episodes discussed the topics of aggressive behavior and encouraging cooperative play; understanding and dealing with children’s eating difficulties; and assisting children with homework, respectively. Each video had an accompanying information sheet (tip-sheet), which provided a written version of the information from the Triple P segment. This was presented on either a single or double sheet of A4 paper printed on both sides.

Mothers were instructed to watch two videotaped episodes of the television series (in their own home) each week, at a time convenient to them, and to read the accompanying tip-sheet. To track program integrity each mother was given an episode checklist on which they recorded whether or not they had viewed each of the episodes. A parent was considered to have maintained treatment integrity if at least 8 of the 12 episodes had been viewed (i.e. 66% completion rate).

WL control condition. Mothers in the WL condition completed the first set of questionnaires and then, after a 6-week period that had elapsed, completed a second set of measures. To comply with ethical requirements, all mothers in the control group were given the videotaped television series to view, and the accompanying tip-sheets to read after they had completed the second set of questionnaires.

Follow-up. Six months after completion of the viewing period, mothers in the TV condition were recontacted and asked to complete a third set of assessment measures. Mothers in the WL control group were not included in this follow-up as they had viewed the television series at post-intervention.

Results

Preliminary Analyses

Preliminary analyses were conducted to confirm that random assignment had resulted in comparable groups in terms of sociodemographic variables and pre-intervention measures of child behavior, maternal parenting style, parenting competence affect, and parental conflict.
Univariate ANOVAs were conducted to compare groups on continuous variables, and chi-square analyses were used for group comparison on categorical variables. The only significant between-group difference on sociodemographic variables was found for fathers’ age. However, as mothers rather than fathers were the respondents to questionnaires, it was decided that differences in fathers’ age did not need to be statistically controlled for in further analyses. No significant differences were found between groups on any of the pre-test parental report measures. Nevertheless, to control for possible differential regression to the mean across groups, pre-test measures were used as covariates in all subsequent analyses.

Descriptive data indicated that 24 of the 28 (86%) mothers in the TV condition reported that they had watched all 12 episodes of the “Families” series. The remaining 4 mothers had viewed at least 8 of the 12 episodes.

**Short-term Intervention Effects**

To assess the short-term impact of the intervention on maternal reports of disruptive child behavior, a between-groups MANCOVA was conducted. Post-intervention ECBI problem and intensity scores were the dependent variables entered into this analysis. To control for differential regression to the mean across groups, pre-intervention scores on the ECBI problem and intensity scales were entered into the analysis as covariates. Results of the omnibus analysis revealed a significant effect for group, $F(2, 51) = 3.22, p < .05$. Univariate $F$ scores indicated that mothers in the TV condition reported significantly fewer problem behaviors relative to mothers in the control condition, $F(1, 56) = 7.43, p < .01$. There was no significant difference between intensity scores across groups. Means and standard deviations for the problem and intensity scales pre- and post-intervention together with $p$ values for between-groups comparisons post-intervention are presented in Table 3. A series of between-group ANCOVAs were conducted to assess differences across groups post-intervention on measures of parental competence (PSOC), parenting style (PS), parental disagreement over child rearing (PPC), and maternal depression, anxiety and stress (DASS). For each of these analyses, to control for differential regression to the mean across groups, pre-intervention scores on the dependent measure were entered as a covariate in the analyses. The means and standard deviations for each of these measures at pre- and post-intervention and $p$ values for group comparisons on post-intervention scores are presented in Table 3. Significant group differences were found only for the measure of parental competence (PSOC), $F(1, 53) = 5.81, p < .05$.

Mothers in the TV condition reported a higher level of competence post-intervention than mothers in the WL control group. No significant differences between conditions were found for mothers’ reports of depression, anxiety or stress, parenting style, or parental conflict over child rearing.

**Clinical Significance of Improvement in Child Behavior**

The clinical significance of change in child behavior for children in the TV condition was examined by calculating the percentage of children in this group with ECBI scores above the clinical range recommended by Eyberg and Pincus (1999); specifically those children with ECBI intensity scores $\geq 132$ and ECBI problem scores $\geq 15$ at pre-intervention, and children below this range at post-intervention and follow-up. At pre-intervention 42.9% of the children in the TV condition group had scores in the clinical range. However, at post-intervention only 14.3% of the children and at follow-up 9.5% of the children in this condition had clinically significant scores.

**Consumer Acceptability**

An overall mean acceptability rating of 4.74 (on a 6-point scale) was reported by mothers in the TV condition, indicating a high level of program acceptability. Table 4 documents mean scores for each item on the AARP.

**Maintenance Effects**

At 6-month follow-up, data was available for 21 of the 28 mothers in the TV condition. To assess maintenance of
positive change in child behavior across time, a repeated measures MANCOVA with post-intervention and follow-up scores on the ECBI problem and intensity scales as the within-subjects variables and pre-intervention scores on these measures entered into the analysis as covariates, was conducted. Results indicated no significant difference between post-intervention and follow-up scores.

A repeated measures ANCOVA with post-intervention and follow-up scores on the PSOC as within-subject variables and pre-intervention scores on this measure entered as a covariate, was conducted to assess maintenance of positive change in parental competence across time. Again results indicated no significant difference across time.

Means and standard deviations for maternal reports of disruptive child behavior and parental competence pre- and post-intervention and at follow-up are presented in Table 5.

Discussion
This study demonstrated that a self-directed minimal intervention, delivered in the format of a media-based television series with accompanying parenting tip-sheet for each episode, significantly reduced parental perceptions of children’s disruptive behavior and significantly increased self-reported competence of mothers in the television viewing condition. Similar results were not evident in the waitlist control group.

These findings support and extend previous research that has demonstrated that intervention strategies relying on parental self-regulation (Connell et al., 1997; Webster-Stratton, 1990b, 1992, 1994; Webster-Stratton et al., 1988) can be effective in reducing child behavioral problems. Previous research in this area has typically involved a minimal level of therapist contact to achieve positive change in child behavior. However, the present results demonstrated a significant decrease in maternal reports of disruptive child behavior, in the absence of therapeutic contact, when a television series was viewed in the privacy of the home. Furthermore, there was evidence that this positive outcome was maintained across a 6-month time-frame.

Parents in the active intervention condition also reported an increased sense of competence post-intervention relative to mothers in the WL condition. Again there was evidence that this positive outcome was maintained across time. This reported increase in parental competence may have resulted from mothers gaining knowledge of effective management strategies from the viewing of the “Families” series, which in turn increased the extent to which parents felt competent and confident in handling child problem behavior. Alternatively, it could be argued that information presented in the program helped parents to recognise that they were more competent in their parenting role than they previously believed. Anecdotally, many of the mothers in the study reported that the realisation that they were doing some things “the right way” was one of the most salient outcomes of the program.

Nevertheless, regardless of how parental feelings of competence were increased, this is a positive outcome. Competence in the parenting role, or the expectation that one will cope successfully in up-coming child management situations, has been shown to function as a moderator of parent–child interactions such that increased competence is associated with more effective management of difficult child behavior (Bugental & Shennum, 1984). Alternatively, competence related to an inability to cope is proposed to result in parents experiencing self-blaming attributions and poor persistence (Bandura, 1982), which may hinder the use of effective management strategies.

Interestingly, despite the fact that mothers in the TV condition reported significantly fewer child problem
behaviors than mothers in the control group post-intervention, there was no evidence of group differences in self-reported parenting style after involvement in the active treatment condition. This failure to find group differences in parenting style post-intervention suggests that reported reductions in problematic child behavior could not be attributed to identifiable change in parenting style. This is contrary to predictions, as it was assumed that change in disruptive child behavior would be a direct result of increased parenting skills as a result of the intervention. This failure to find group differences in parenting style change makes it more difficult to explain the mechanism through which positive change has occurred. One explanation may be that subtle changes in parenting behavior did occur as a result of involvement in the intervention, but the measure of parenting used in the current investigation was not sensitive enough to detect those changes. More sensitive measures of parenting behavior need to be employed in future investigations of this nature.

Unfortunately, funding limitations precluded the collection of independent observational data in the current investigation, and results were based entirely on maternal reports. Thus reported change in child behavior may purely reflect a positive change in maternal perceptions of the child rather than actual behavior change. Without doubt observational data or self-report data from independent observers such as the child's father or preschool teacher would have strengthened and substantiated present results. Nevertheless, previous studies have found that parent ECBI scores typically do correlate quite highly with observed child behavior (Eyberg & Robinson, 1983). Furthermore, parent report measures are valuable in their own right. For example, interventions that fail to produce a change that is perceptible to the parent can be seen to be of questionable ecological validity (Bronfenbrenner, 1977). Therefore evidence of parent-reported change in personal competence and child behavior in the present study cannot be discounted out of hand. Rather these results, together with evidence of high acceptability of the program, should be seen as preliminary evidence that within an Australian context the “Families” program may be an appropriate and enjoyable way for parents to access parenting information that leads to positive family outcome. Further research that includes independent, objective measures to confirm treatment-related improvement in child behavior is warranted.

Contrary to expectations, no between-group differences were found on mothers’ reports of depression, anxiety, or stress. The failure to find differences across groups on these measures may reflect a floor effect, however, as scores on these measures were in the nonclinical range prior to intervention. It was also interesting to note that involvement in the intervention did not significantly impact on inter-parental disagreement over child rearing. No significant group differences were found on this measure. However, as the present study did not specifically monitor whether or not fathers were involved in the viewing of the television program or whether mothers discussed the program with their partner, it is difficult to determine what the lack of group difference on the measure of couple conflict reflects. If only one parent was involved in the viewing of the video series, it could well be that as this person’s knowledge of appropriate parenting strategies increased, the discrepancy between what they and their partner perceived as effective child management strategies could also increase. In turn this could result in an actual increase in parental conflict, which could only be addressed by the mother sharing her knowledge with her partner. Research that investigates the role of fathers’ in this level of media intervention would be of benefit in the future.

**Implications for Clinical Practice**

Results of the present study have several important implications for clinical practice. First, as the “Families” program is media-based, it has the potential to reach and assist a large proportion of the population, including those who may have ordinarily been excluded from accessing information of this type. The televised broadcasting of “Families” may also serve to inform health and child-care professionals, such as child health nurses, general practitioners, and teachers about the effective parenting strategies parents can use to manage problem child behavior. In turn, these professionals may further extend the reach of the program, by passing information gleaned from their personal viewing to parents during regular consultation. Program impact could also be increased by the strategic provision of service support systems, such as telephone information contact lines or parenting resource centres, which could be advertised as part of a coordinated media strategy planned to coincide with the airing of the television program. These services could provide information and back-up resources, such as parenting tip-sheets, to parents seeking further advice after viewing the program. Staff at these centres could also identify and refer families who may need more intensive help.

A second implication for clinical practice is the fact that viewing of the television series brought effective change in the absence of therapeutic contact. As discussed above, the current evidence that parents can adopt a self-regulatory model of behavior change and achieve positive family outcomes, without therapist involvement, extends previous findings (Connell et al., 1997; Webster-Stratton, 1990a, b, 1991a, 1992, 1994). This has important implications for service delivery. A self-regulatory approach such as this, which can be made available to the community as a whole, has the potential to free up existing resources, which often have difficulty meeting the demand for tertiary assistance that is associated with child behavior problems (Zubrick & Silbern, 1994). Furthermore, offering “Families” to the general community as a first approach may have other potential advantages. For example, by viewing the program prior to seeking professional help, parents could gain a general understanding of social learning principles, and effective parenting strategies designed to foster children’s pro-social positive behavior and manage difficult behavior. If further assistance was then sought, practitioners could build on previous knowledge by clarifying areas of misunderstanding and/or addressing other risk factors, such as parental conflict or problems with personal adjustment, which may be contributing to the maintenance of child behavior problems in certain cases (Webster-Stratton, 1992). A clinician’s time could thus be spent more efficiently “fine tuning” parenting skills and assisting parents to tailor interventions so that personal parenting concerns were being addressed (Webster-Stratton, 1992). Such an approach would act to empower families, and give parents credit and responsibility for their own learning.
Limitations of the Present Research

The present study had several limitations that deserve comment. Sample size was small and may not have been representative of the target population of a media-based intervention strategy (i.e., the general population), given that 42.9% of children in the active treatment condition were above the clinical cutoff on the ECBI at the start of the program. Obviously larger trials of this level of intervention are required before results can be generalized to the Australian population as a whole. However, despite this, recent research has shown that a media-based intervention strategy like “Families” represents an early intervention/prevention strategy, which could be seen as best suited to parents of children with minor developmental and behavioral problems, it was encouraging to note that children within the clinical range of child problem behavior also benefited from the program (42.9% pre-intervention to 14.3% post-intervention and 9.5% follow-up). Unfortunately, the small sample size precluded any pre- and post-intervention comparisons between children with high and low levels of behavior problems. Nevertheless, the results indicated that at least some families with a clinically significant level of problem child behavior benefited from this brief, self-regulated, media-based intervention strategy. This is in contrast to findings from previous research, which have demonstrated that families with clinical levels of child problem behavior require intensive therapeutic input before positive change can be either achieved or maintained (Webster-Stratton & Herbert, 1994). Further research that investigates the characteristics of families who are most likely to benefit from this type of brief intervention should be a priority for the future. Research of this nature is required before the extent to which the current results generalize to either a clinical or community population can be determined.

Furthermore, as the current sample consisted of Caucasians, it is not possible to tell whether or not the “Families” television program would be beneficial to members of minority ethnic groups. This is important to determine as relatively few members of ethnic minority groups, including the indigenous population of Australia, access available health services and many existing services do not cater to the needs of these populations (Sanders & Duncan, 1995). Members of these communities may be more likely to access a media-delivered service.

A further limitation of the present study, which calls into question the generalizability of the results, was the fact that videotaped episodes of the “Families” series, which parents could watch at a convenient time, rather than a commercially aired television program in a fixed time slot, was the viewing medium. Thus it is not possible to determine if the “Families” program broadcast on commercial television would yield the same outcome. However, assessing the program’s effectiveness under optimum viewing conditions can be seen as the first step that needs to be taken in ascertaining whether or not the program would be of value. Once success under optimal viewing conditions has been demonstrated, steps can be taken to assess the program’s potential when aired commercially. Nevertheless, although the use of videotaped episodes is not directly equitable to a commercially aired television program it may not be very far removed from reality. A video recorder can be found in most Australian homes. Therefore, irrespective of the time “Families” went to air, a vast majority of Australian parents would be able to videotape the program and view it at a personally convenient time or consult it again at a later date if they so desired. Thus even with a commercially aired program many parents have the resources to create optimum viewing conditions with minimal effort.

An additional difference between the current investigation and a true media-based intervention was the provision of written tip-sheet information to accompany the video. Parents watching the series as a broadcast program may not have immediate access to this written material. Nevertheless, given the increasing sophistication of strategies for speedy access to written information (e.g., electronic mail, internet web-sites, and fax) it is not difficult to envisage the development of a coordinated media strategy that would enable interested parents to have easy access to written information either by electronic media or by contacting a telephone information line or parenting resource centre as suggested earlier. Furthermore, a logical extension of the current research would be to investigate whether or not the provision of written information is a necessary component of this type of media intervention.

One further limitation of the current study was that the study design did not allow between-groups comparison at follow-up. Evidence that the active treatment condition remained significantly different from waitlist at follow-up would have considerably strengthened the present results and further substantiated long-term treatment effects. Nevertheless, the finding of no significant change from post-intervention to follow-up for the treatment group provides preliminary evidence to support the maintenance of treatment outcome across time. As discussed earlier, the study was also limited in that it relied entirely on maternal self-report. The inclusion of observational or self-report data from an independent source would have further strengthened and substantiated the present findings.

Nevertheless, despite these limitations, the present study does provide preliminary support for the potential efficacy of a mass media intervention. These interventions, when used to their full potential, may represent a viable, cost-effective, and time-efficient approach for behavioral family interventions. In addition, it could be argued that a population-based universal parenting intervention such as “Families”, which can be delivered via the mass media, may serve as a preventative strategy that has the potential to decrease the prevalence of child behavior problems across time.

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