Abstract:

The Preventive Ounce Temperament Program is an educational program for parents that aims to promote effective parenting and prevent behavior problems by providing individualized guidance for parents based on their child's temperament. To accomplish its goals, the temperament program works to help parents develop a "good fit" between their expectations and their child's temperament, which is defined as a child's inborn "style of behavior" or disposition. Participating parents complete a temperament questionnaire, which is then scored; in return they receive a copy of their child's temperament profile, a letter explaining their child's temperament, and suggestions for handling these behaviors. Pediatricians also receive a copy of the child's temperament profile so they can discuss parents' questions. Additionally, parents may consult with a temperament counselor if they have concerns about their child's behavior. Because the Preventive Ounce program seeks to enhance parental competence and improve the bond between parents and children, examining its possible positive and negative impacts on families may highlight not only the program’s strengths, but also areas for improvements. This family impact analysis suggests the Preventive Ounce Temperament Program promotes family well-being by providing parents with individualized information, strategies and support they need in their parenting role. However, the program might be strengthened by enhancing its accessibility, expanding efforts to build parenting networks, and involving both relatives and clinical providers in the program.

Introduction

Research has shown that parenting is the first and most important influence on child development (Bronfenbrenner, 1986; Sawhill, 1992). Yet most American adults think parenting is more difficult today (National Commission on Children, 1991). Changes in society and in families have left many parents without adequate social support and resources (Bronfenbrenner & Neville, 1994; Popenoe, 1990). A recent report states "There has been no time in the history of our country when the need for quality parenting education and meaningful family support is of greater urgency" (Carter, 1996). Many extant parenting programs offer similar advice for every parent, regardless of his or her particular parenting needs. Temperament-based parenting programs, on the other hand, emphasize that parenting advice needs to be tailored for each child’s individual temperament style.
Background

The Preventive Ounce Temperament Program is an educational program for parents that aims to promote effective parenting and prevent behavior problems. The program provides individualized guidance for parents based on their child's temperament. The program's creators believe that for parents to understand and effectively manage their children's behavior they need individualized information. Cameron and Rice (1986, p. 223) point out that for clinicians who work in pediatric settings, "the question is not whether to include considerations of temperament in daily practice, but how to do so." For example, parents of preschoolers with more intense and slow adapting temperament styles often complain about their children's refusal to comply with requests. Parents find it helpful to know that reducing their children's intensity is the key to raising their preschooler's adaptability and thus their ability to comply. Parents also find it useful to learn specific ways to reduce their children's intensity.

The program is designed to operate within health maintenance organizations (HMOs). In 1986, Kaiser Permanente of northern California began to offer the Temperament Program to its members. A 1995 evaluation by Kaiser Permanente found that two thirds (67%) of participating pediatricians and nearly three quarters (74%) of parents rated the program's impact as "valuable" to "very valuable" (Cameron, 1995). Only 1% of parents found the program "not valuable." Research also found the program to be cost effective based on the finding that parents of more active and fussy infants who received written guidance made fewer visits to the emergency room or pediatrician, compared to control group parents (Cameron, Rice, Rosen, & Chesterman, 1996).

To accomplish its goals, the temperament program works to help parents develop a "good fit" between their expectations and their child's temperament. In this case, temperament is defined as a child's inborn "style of behavior" or disposition. According to the program, there are nine different traits that make up a person's temperament: activity level, sensitivity, intensity, adaptability, distractibility, approach/withdrawal, mood, persistence, and regularity.

Longitudinal research conducted by Chess and Thomas (1984) has shown a "good fit" between children's temperament and parents' expectations promotes positive parent-child interactions and increases the likelihood of healthy development. On the other hand, children with more difficult temperaments have been found to be at greater risk for a "poor fit" and developing behavior problems (Chess & Thomas, 1984; Prior, 1992). Parents of children with difficult temperaments were shown to feel less competent (Sirignano & Lachman, 1985), and were more likely to experience increased stress (Gelfand, Teti, & Fox, 1992) and depression (Cutrona & Troutman, 1986). Not surprisingly, highly stressed or depressed parents were found to be less competent.

Some researchers have been concerned about the use of temperament information for clinical or educational purposes because "labeling" children as difficult may lead to a self-fulfilling prophecy (Bates, 1980; Carey, 1990; Kagan, 1982; Plomin, 1982; Rothbart, 1982; Thomas, Chess & Korn, 1982). However, screening for "temperamentally difficult" children is not the purpose of the program (Cameron, Rice, Hansen & Rosen, 1994). Clinicians and educators believe such pejorative labeling should be avoided and that temperament
information can be presented in more neutral terms as descriptions of temperament traits (Bates, 1989; Carey, 1989; Chess & Thomas, 1984/1986; McDevitt, 1989). The guidance program describes the child’s temperament to parents in terms of being high, low or moderate on various traits, rather then using value labels such as easy or difficult.

The Temperament Program is currently available to all parents of four-month-old infants who belong to participating health maintenance organizations (HMOs). Parents of children from 18 months to 12 years may also participate in the program if referred by their child’s pediatrician.

Parents who choose to participate in the program complete a temperament questionnaire, which is written at a 10th grade level. Once the questionnaire is scored, they receive a copy of their child’s temperament profile, a letter explaining their child’s temperament, and suggestions for handling these behaviors. Pediatricians also receive a copy of the child’s temperament profile so they can discuss parents’ questions. Additionally, parents may consult with a temperament counselor if they have concerns about their child's behavior.

The program has two different guidance components: anticipatory guidance and guidance for existing problems. First, anticipatory advice is provided for parents of infants (four-month-olds), toddlers (18 months), and preschoolers (three years) to help them understand what behaviors are likely to occur given their child's temperament, and how to handle these behaviors. Research has shown that it is possible to make reliable predictions, at least in the short-term (Cameron & Rice, 1986; Cameron, et al., 1996; Cameron, Hansen & Rosen, 1991). Anticipatory guidance may help parents to plan ahead, prevent problems, and develop more realistic expectations of their child's behavior. The anticipatory guidance for parents of toddlers and preschoolers has usually been offered in conjunction with guidance for current problems.

The anticipatory guidance program is now also available free to all parents of infants, toddlers and preschoolers through the Preventive Ounce Website (www.preventiveoz.org), which is supported by HMOs, foundations, and national sponsors. Parents may be encouraged by their health care system to use this interactive program, where they complete a temperament questionnaire on-line and immediately receive feedback. However, any parent with Internet access may use this program. Parents also contribute to the improvement of this site by completing an on-line evaluation.

Guidance for existing temperament-related problems is provided through participating HMOs for parents of children from 18 months to 12 years who are having difficulties handling their child's behaviors. Pediatricians refer parents to the program if they notice problems during regular clinic visits or if parents have concerns about their child's behavior. The program also provides temperament education for health care professionals who work with parents and children.

**Family Impact Analysis**

This section examines the various components of the Preventive Ounce Temperament Program from a family perspective. Because the Preventive Ounce program seeks to enhance parental competence and improve the bond between parents and children,
examining its possible positive and negative impacts on families may highlight not only the program’s strengths, but also areas for improvements. The Preventive Ounce program is examined in light of the six principles outlined in the “Checklist for Assessing the Impact of Policies and Programs on Families,” an analytic tool originally developed by the Consortium of Family Organizations (Ooms & Preister, 1988) and later revised by the Policy Institute for Family Impact Seminars (Bogenschneider, 2002).

**Principle #1: Family Support and Responsibilities**

- Policies and programs should aim to support and supplement family functioning and provide substitute services only as a last resort.

The Preventive Ounce program may help to support and supplement parents’ responsibilities toward their children, in that it enhances parents’ feelings of competence in handling child-rearing responsibilities. In one evaluation, more than three quarters (76%) of participating parents found the program valuable, especially in helping them understand, anticipate and cope with their child’s behaviors (Ostergren, 1997). Parents who understand their child's behavior is "normal" (for their temperament) find they are less likely to blame the child or themselves for the child's challenging behaviors, or to see their child as sick.

In addition, parents who understand how their child's temperament "works" (i.e., how it relates to various behaviors) may be able to develop parenting strategies to handle new behaviors that occur, and thus become more self-reliant (Cameron, personal communication, April 11, 1994). Because the program is free to parents of participating HMOs or through the website, no burden is placed on parents that might interfere with their ability to provide financial support for their families.

**Principle #2: Family Membership and Stability**

- Whenever possible, policies and programs should encourage and reinforce marital, parental, and family commitment and stability, especially when children are involved. Intervention in family membership and living arrangements is usually justified only to protect family members from serious harm or at the request of the family itself.

One of the program’s greatest strengths lies in its explicit aim to enhance parental competence and strengthen parents’ commitment to their children. To achieve this goal, the Preventive Ounce model is based on tailoring parenting advice to the needs of each child. Chess and Thomas (1986, p. 161) emphasize that, "for parent guidance to be effective, it has to be individualized to each particular child and set of parents." Most parenting information provided by books or pediatricians is based on a standard model of developmental stages (Cameron, et al., 1994). Parents of children with more challenging temperaments may not find generic advice based on the "typical" child very helpful. For instance, using "time outs" will not help children with slow adapting temperaments adjust more quickly to parents' requests to pick up their toys. Instead, letting children know ahead of time what to expect and allowing time for transitions between activities is more likely to help children adapt to changes, such as parents' requests. But even parents of more moderate temperament children seem to appreciate this individualized advice. For example, they value knowing that their children are less likely to test limits and more likely
to adjust easily to preschool or childcare. Although receiving the guidance may make parents of "easier" children more aware of behaviors they might otherwise have disregarded (Cameron, Hansen & Rosen, 1989), most seem reassured to know their children's behaviors are normal and that their perceptions of their children are accurate.

Parents of difficult children are also less likely to disagree about parenting issues, which may promote family stability. Research found that marital relationships were likely to suffer in families with temperamentally difficult children (Sheeber & Johnson, 1992). Thus, the program may also work to support marital commitment in addition to parental responsibilities.

Lastly, the Preventive Ounce Program is now being used to help facilitate the adoption process. At the University of California, Los Angeles, the TIES Program routinely generates a temperament profile on children waiting to be adopted, so that prospective parents can see as normal the unique temperament of each child. Not only might this information help prospective parents prior to adoption, but the continuing advice available through the program may assist parents, children, and extended family during the transition process of the adopted child’s adaptation to the new home.

**Principle #3: Family Involvement and Interdependence**

- Policies and programs must recognize the interdependence of family relationships, the strength and persistence of family ties and obligations, and the wealth of resources that families can mobilize to help their members.

The Temperament Program is based on the idea that the "goodness of fit" between children and their parents is necessary for healthy development. Thus, the well being of children and parents is viewed as interdependent. The guiding principle undergirding this process is that very young children have not developed the skills to accommodate to others' expectations, so the burden is on parents. However, as children grow older the burden of accommodation begins to shift to the child (appropriate to their level of development). Parents help children learn strategies to manage their own temperament. This is especially critical for children with more challenging temperaments who often lack certain skills.

While the program’s focus on enhancing parental competence is laudatory from a family perspective, there is less emphasis on involving extended family in this process. This may mean that the perspectives of some family members are overlooked in providing guidance for handling temperament questions or problems in children. While the questionnaire can be filled out by any family member, there is no way to ensure that the input of those most closely involved in caregiving will be considered, particularly if the caregivers do not speak or read the language of the questionnaire.

This being said, the Internet Preventive Ounce Program can make temperament information more available to extended family. For those families who take part in the online program, each case is assigned an identification number so that any family member visiting the site may enter this number and view the child’s temperament profile. Some
parents who have used this program have e-mailed this number to other relatives, care-
providers, or health professionals so that they too may benefit from insights into the child’s
profile.

The Preventive Ounce Program may help create a better "fit" for the child with the child
care environment. In some cases, counselors who work with parents of older children also
communicate with the child's teachers to help them understand and work better with the
child. However, such communications are subject to parent approval. Additionally, the
Preventive Ounce Program may enhance connections between participating families and
the health care system. The family's pediatrician receives a copy of each child's
temperament profile, as well as training about the program, so they can be supportive of
parents and children. The pediatric staff can discuss parents' concerns and take children's
temperament into account when they perform necessary medical treatments and exams.
For example, nurses are trained to note on the temperament profile in the child's chart
whether the child tends to withdraw from novelty or adapt slowly to intrusions or changes.
That information helps them know when to move in slowly with temperature readings, ear
inspections, and other medical procedures that might be strange or intrusive. This has the
potential to reduce parents’ and children's anxiety.

Parents may also find it easier to communicate with their child care providers, perhaps
because the program helps them understand their child and feel more confident in their
parenting role. They can explain to the caregiver "how" their child's temperament works
and what strategies work best with their child.

Additionally, in the winter of 2003, one of the Kaiser Temperament counselors in northern
California will host a radio call in show on a station that has a predominantly ethnic
audience. Parents will be able to phone in to speak to a temperament counselor and bring
up any parenting topic. When the issue is temperament-related they will receive relevant
temperament information. These on air discussions help build public awareness of how
parents can improve their handling of common, temperament-related issues and problems
by tailoring their approach to the child's temperament, which ultimately should increase
utilization of the free services of the Temperament Program.

As for efforts to build on informal support networks such as community, neighborhood or
religious organizations, the Preventive Ounce Program has established parent groups in
lower income neighborhoods where parents might feel more comfortable with group
discussions than with web sites or written materials. These discussions focus on typical,
temperament-related problems frequently brought to the attention of nurses and doctors
from those areas, on issues such as discipline and getting to sleep at night. Parents can
"drop in" to these groups any week they want, when the topic is of concern to them. Lists
of weekly topics are posted in the neighborhood, in places where parents are likely to stop
and read them.

Perhaps one of the greatest strengths of the program—its ability to be accessible when
convenient for parents—may also be its greatest drawback. Parents report securing
support most frequently through interpersonal channels, such as other parents (Clarke-
Stewart, 1978). By putting parents in contact with each other, parents can observe one
another's practices and familiarize themselves with community rules and standards for

The Preventive Ounce Program has the potential to form a unique source of social support—putting parents in contact with similarly-situated peers who are parenting a child with a similar temperament. In fact, evaluations of the program suggest the value of using the instructional materials in a group setting. While there has been no evaluation to determine if the program leads to a reduction in behavior problems over the long-term, parents who participated in a group temperament program did report a decrease in their children’s behavior problems (Sheeber & Johnson, 1994; Sheeber, Goldberg, Galvinhill, Hershberger & Sorenson, 1996). This study also showed that there was an improvement in family functioning as a result of the program and parents of difficult children felt less depressed, less anxious, more competent and more attached to their children.

**Principle #4: Family partnership and empowerment**

- Policies and programs must encourage individuals and their close family members to collaborate as partners with program professionals in delivery or services to an individual. In addition, parent and family representatives are an essential resource in policy development, program planning, and evaluation.

The Preventive Ounce Program works to establish partnerships with families by being accessible to all new parents who belong to participating HMOs. Parents are invited by letter to make use of Preventive Ounce program services. The website program is also advertised in each pediatric clinic so that all parents of toddlers and preschoolers, with Internet access, can participate. Those without Internet access can participate if they ask their pediatrician about the program. However, to see a Temperament Counselor or to receive information through the mail, parents of older children (up to age 12) need to be referred by their pediatrician. Thus, only in instances where the pediatrician notices problems or where parents express concerns will families of older children receive services. The program is not available to parents of adolescents.

To address issues of family empowerment, parents in the Preventive Ounce program are not just the "passive recipients" of advice. Rather they are active participants who contribute to the development of the program in two ways (Cameron, et al., 1994). First, parents are the experts who observe and report on their child's temperament via the questionnaire. Second, parents "recycle their experience" by completing an evaluation questionnaire that asks questions such as "what behaviors actually occurred" and "what guidance proved effective" (Cameron, et al., 1994, p. 229). This input by parents allows the advice delivered by the program to become more fine-tuned over time. However, the evaluation form parents complete does not state how important their feedback is to developing the program in ways that better meet parents' needs. Such a statement could be included so parents know they are partners in the program. The website evaluation form improves on the old form by telling parents that, "future development of the site will be determined by YOU, the users."
As for the program’s efforts to allow families to make their own decisions, the guidance information families receive provides a number of options for handling various types of behaviors. Parents can choose whatever strategy best fits their family's values and needs. By helping parents understand how their child’s temperament "works," the program strives to give parents the tools they need to develop their own strategies in the future. For parents who make use of counseling services, there is always the risk that some may come to rely too much on "expert" advice.

Participating families have autonomy as to the degree to which they would like to be involved in the program. Parents can choose to receive just written advice through the mail, but also have the option of using the temperament counseling services. Even though physicians may refer some parents to counseling services, parents are under no obligation to use these services. This being said, not all families would feel comfortable contradicting the advice of a physician or other health professional.

Additionally, access to services may pose a problem for some families. For one, the program is available primarily through participating HMOs, thus eliminating many families from access. While the free website broadens access for some, the technological skills required to navigate the Internet may not be widespread among some populations. The fact that the questionnaire that is the basis of the program is written at a 10th grade level may mean that those with poor or no literacy skills will be at a disadvantage.

Lastly, counseling services are not available in all clinics, which may discourage some parents from using these services, although parents do have the option of talking to a counselor on the phone rather than in person. Some parents also might be uncomfortable calling a temperament counselor. However, in cases where the child's temperament is more challenging, temperament counselors give parents a call to make sure parents understand the written materials that were received in the mail. The counselor also reassures parents that their child's behavior is normal and encourages them to call if they have any concerns in the future.

Another indicator of family supportiveness under this principle is whether or not the program prevents participating families from being devalued or stigmatized. Because the infant program is available to every new parent, this reduces the likelihood of any stigma being attached to participation. However, parents of older children who are referred to the program by their pediatrician could feel embarrassment, especially if they didn't ask for help. On the other hand, parents who ask for help may be relieved at having free access to temperament counseling, especially if their HMO has limited coverage for mental health services. Whereas the website program expands access to the anticipatory guidance program and eliminates the need for referrals, this service may still be out of reach for those without access to a computer or the skills to use one, both circumstances which could prove uncomfortable for parents to discuss with health care providers.
Principle #5: Family Diversity

- Families come in many forms and configurations, and policies and programs must take into account their varying effects on different types of families. Policies and programs must acknowledge and value the diversity of family life and not discriminate against or penalize families solely for reasons of structure, roles, cultural values, or life stage.

The Preventive Ounce program does not presume any particular family structure, although it targets its efforts primarily at parents and children. As mentioned above, any caregiver could fill out the questionnaire and return it for feedback. As for issues relating to race, class, and ethnicity, parenting groups are available in areas with diverse ethnic and socioeconomic backgrounds. The series of weekly group sessions is organized around topics that are of concern to the particular population being served.

In addition, the guidance materials provide parents with alternative strategies so they can choose the ones that fit best with their families' needs and values. Classes in Spanish are also available in Hispanic neighborhoods, and the website will soon have a Spanish version. However, the guidance materials themselves tend to be based on an "authoritative" view of parenting, where parents set limits for their child but are also warm and supportive. Different ethnic or religious groups may have different parental beliefs. For example, some may subscribe to an "authoritarian" parenting style, (i.e., parents who are highly demanding and less responsive to their children's needs and views), whereas others may subscribe to a "permissive" style (i.e., parents who plan place few demands on the child and are highly responsive to them).

The Temperament Program initially had some problems in reaching all eligible families. Many families, particularly those in lower socioeconomic areas, did not make use of the program. Participation rates may have been limited by the reading levels required for the materials and because the guidance was available only in English. Since some regions served by Kaiser’s HMO are ethnically diverse, it was important to find ways of increasing accessibility to all families. One strategy to address this situation has been to offer parenting classes in Spanish in areas with large Hispanic populations. Parents are divided up into smaller groups based on the similarity of their child's temperament, so the groups can focus on the particular parenting difficulties they have in common. In addition, a Spanish version of the Preventive Ounce Website will soon be available. Eventually, translating the temperament materials into other languages (besides English and Spanish) might increase the opportunity for more families to be involved.

Website use by parents who do not belong to participating HMOs may initially be limited until more parents become aware of the program's existence. Access to the Internet may also be limited for some parents. Although parents using the website program (who are not in participating HMOs) did not initially have access to temperament counselors, internet discussion groups for parents led by temperament counselors has recently been added and initial evaluation results on the use of these groups is forthcoming.
Principle #6 - Targeting Vulnerable Families

- Families in greatest economic and social need, as well as those determined to be most vulnerable to breakdown, should be included in government policies and programs.

The major goals of the Preventive Ounce program are to promote effective parenting and to prevent children from developing behavior problems, which may target parents in social need. However, because the program is only offered to parents through participating HMOs, those without access—many of whom will be at-risk economically or socially—are unable to take advantage of the program’s services. While the website makes the anticipatory guidance program universally available for those with computer skills and access, this also represents a serious barrier for those financially at-risk. The program does make efforts to reach economically, linguistically, and racially diverse clientele among the participating insured population. However, because many poor or otherwise vulnerable families lack health insurance coverage, the program does little for those with the fewest resources available to them.

The program does target efforts and resources at improving parental skills and competence, which may prevent family problems before they become serious or chronic. Because marital relations can suffer in families with temperamentally challenging children (Ambert, 1992), competent parenting may also have a salutary effect on marital or partnership commitment.

To expand the scope of the program to reach as many pediatric facilities and families as possible, the Preventive Ounce Program is now partnering with School of Nursing and Department of Extended Education at Arizona State University (ASU). Through this partnership, program staff have established two training web-sites to educate nurses and doctors about temperament counseling in general and the Preventive Ounce Program in particular.
Policy Considerations:

A family perspective on the Preventive Ounce Temperament Program reveals efforts to support parental and spousal commitment, to reach diverse clientele among the eligible population, and to include parental concerns in evaluating and improving program offerings. However, the narrow scope of eligibility, which privileges those with insurance, and the practical barriers presented by offering 'universal' access through a website, demonstrate that there is room for further improvement.

1. **Eligibility and program scope**: Since The Preventive Ounce Temperament Program appears to be successful in an HMO context, the program may be less accessible to poor or vulnerable families without health insurance. The potential exists for widespread promotion of this parent education program utilizing local or state sponsorship. Although the program is available to all new parents through participating HMOs and through the website, there is still a substantial population of parents and guardians who might benefit from program resources if they were aware of them.

2. **Family involvement**: The Preventive Ounce program does not limit the participation of extended family members and non-parental caregivers, but it also does not intentionally target efforts to include the perspectives of all caregivers. Because in many families the raising and care of a child is a collaborative process, more effort could be made to ensure that all family members and non-parental caregivers participate in the questionnaire and guidance process. The reading level required for participation may be a further barrier to participating families, even if program materials are available in other languages. Program staff may want to re-evaluate the language accessibility of the questionnaire and feedback provided, keeping in mind that social desirability may prevent parents from admitting that the reading level is too advanced.

3. **Parent support network**: Commendably, this program provides individualized parenting information. Yet the delivery of the materials does not need to focus only on the individual. Instead, delivery could be expanded to build informal parent support networks, which are one of the most powerful ways to learn about parenting. The Preventive Ounce Program could fill an important niche by offering parents opportunities to dialogue with other parents who have a child of the same temperament.

Conclusion:

A recent report states that "raising children is clearly the parents' responsibility, yet it may fall to policymakers to help create the conditions under which parents can do their best." Policies that support parent education programs help "provide parents with the knowledge, skills, and social support they need to do their best in raising children" (Riley & Bogenschneider, 1999, p. 11). Even the best-intentioned programs can benefit by carefully examining how their practices and procedures affect family well-being. This family impact analysis suggests The Preventive Ounce Temperament Program promotes family well-
being by providing parents with the individualized information, strategies, and support they need in their parenting role. While the program’s accessibility has its limitations, its focus on continued evaluation and modification to provide useful services to all families is a major strength.

References


Suggested Reference for this paper:

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7. Young, Linda. (2003). “A Family Perspective on a Program for Bone Marrow Transplantation of Adults.”