# Parenting the First Year Newsletter Series: Do Parents in Racine County Find the Project Helpful?

#### A Report by University of Wisconsin-Extension

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### **EXECUTIVE SUMMARY**

The Racine County UW-Extension strategic planning committee in 1989 identified the need for teaching effective parenting skills, which included concerns of the eroding family unit and child abuse.

A newsletter series project, *Parenting the First Year*, was implemented in Racine County starting in 1989 to address parent education needs. The series begins at the birth of the child and continues monthly through the first year. It was written by UW-Extension to accomplish two goals: to prevent child abuse and neglect, and to encourage competent child rearing.

An evaluation of the newsletter project, utilizing a questionnaire survey, received a participation rate of forty-two percent. It indicated the newsletter series was rated "very useful" as a source of parenting information by sixty-one percent of respondents, which was higher than other information sources, including doctors and nurses, relatives, other parents, and other written materials.

Most parents reported that reading the newsletters caused them to change their child-rearing behaviors in six key areas, each of which is predictive of child development gains. Of special interest for Racine County, first-time parents reported the most positive change.

Continued support and funding of this parent education project is recommended.

## INTRODUCTION

The first year of life is a critical period, both as a foundation for later child development and as a period in which new parents establish their patterns of child rearing.

If we want to help parents do their best at raising intelligent school children or respectful teenagers, the best strategy might be to go all the way back to the beginning, the infancy period, helping new parents establish effective childrearing styles right from the start.

Many factors influence one's child-rearing style. These range from the kind of parenting one received as a child to the stresses one currently faces in life. Most of these sources of influence are extremely difficult to change, but one exception is information that comes in written form. Printed matter is a preferred form of childrearing information for most parents. Research confirms that most parents would rather read a pamphlet at their leisure than attend a meeting on the same topic (Ateah, 2003; Clarke-Stewart, 1978; Simpson, 1997; Sparling & Lohman, 1983). This is true regardless of the parent's socioeconomic level, educational level (excepting those who cannot read), and race (Gotta, et al., 1977; Cudaback, et al., 1985).

We also know that highly incompetent parents --in particular those who abuse their children-- have inaccurate beliefs about children's abilities. They lack knowledge about what children are really like, and often have attitudes that are harmful to competent parenting, when compared to non-abusing parents (Okagaki & Divecha, 1993; Steele, 1980; Stevens, 1984). For example, they sometimes become angry when a baby spills her food, or wakes up crying at night. Since lack of knowledge is one cause of incompetent parenting, and since new parents seek child-rearing advice from printed materials, perhaps we could use a newsletter to fill these deficits in knowledge and attitudes. This was

the insight that led to UW-Extension's statewide instructional newsletter project.

A newsletter has several advantages as a parent education method. Since this newsletter is "age paced" (keyed to the infant's age) and offers small amounts of information at a time, it can reach parents at a "teachable moment."

It is also low in cost, especially compared to other methods of reaching parents (such as home visits or classes). Because of its low cost, it can be used to reach every new parent in the community. And because it arrives free, in the mail, it can serve hard-to-reach families, those who would be least likely to come to parent education programs. Thus it is well suited as a community-wide intervention for new parents (Riley, et al., 1991).

Over 50 evaluation studies of the *Parenting the First Year* newsletter series (Riley, et al., 1996) have supported its effectiveness at promoting competent parenting. These studies have consistently found that parents rate the newsletter "highly useful" for parenting advice more often than any other source of child rearing information. They report that reading the newsletters caused them to change their child rearing methods in specific ways that we know (from earlier research) should lead to better child development.

A randomized trial of the British edition of this newsletter has also found signifiant impacts. As reported in the journal Pediatrics, parents receiving the monthly newsletters had more appropriate expectations of their infant's behavior and lower "daily hassles" with their baby (Waterston et al., 2009).

### THE NEWSLETTER

Parenting the First Year is a 12-issue set of eight-page newsletters, each keyed to a specific month in a newborn's first year of life.

Thus the parents of a 5 month-old receive a newsletter that describes age specific information such as: the physical, intellectual, and social skills being developed by 5-month olds; activities parents can do with them; when immunizations are recommended; and how to introduce new foods. Each newsletter also contains information that is less time specific, such as how to select good childcare, test well water for nitrates, or live with children who have difficult temperaments.

The newsletters were written by University of Wisconsin Extension, with the dual aim of preventing abusive parenting and encouraging competent parenting. They were written at the fifth-grade reading level (estimated by the Flesch formula, 1948) so that ninety-one percent of American adults can read them. The newsletters are periodically reviewed and updated.

## THE RACINE COUNTY PROJECT

The Racine County UW-Extension strategic planning committee in 1989 identified the need for teaching effective parenting skills, which included concerns of the eroding family unit and child abuse.

Parenting the First Years newsletter has been distributed in Racine County since 1989. Racine County UW-Extension strategically partnered with several organizations that serve new parents to increase utilization of the newsletter among the target population. These partners have been critical in promoting and raising awareness of the newsletter among expectant and new mothers. Key partners include: the Central Racine County Health Department, the City of Racine Health Department, the Western Racine County Health Department, and Wheaton Franciscan Hospital. The United Way of Racine County also has been a past supporter of the newsletter

The series consists of a monthly newsletter sent directly to parents, one per month, at no charge to them. Parents residing throughout Racine County can have the newsletters emailed to them. In addition, thanks to the generosity of the Kiwanis Club West Racine that supports the postage and printing of the newsletter, parents residing east of Interstate 94 have the option of having the monthly newsletter mailed to their home as well

Racine County UW-Extension plans to seek additional funding to expand mail delivery to Western Racine County parents. Please note that this evaluation only includes respondents receiving the Parenting the First Years Newsletter via mail delivery.

Given the considerable effort to produce and distribute these newsletters, we should cautiously ask if our effort is worth it. To determine the answer an evaluation of the newsletters' effectiveness in Racine County has been completed. In 2010 we mailed a survey questionnaire to every parent as they received their twelfth month newsletter. A total of 256 questionnaires were distributed, and 108 returned, for a forty-two percent return rate. Compared to most mailed surveys this is a good return rate, allowing us to say that the results reported here are not due to a small, vocal minority of parents, but rather are representative of most new parents in Racine County. The results are based on the 82 questionnaires with complete and valid data.

Electronic data entry was completed in the Racine County Extension office. Statistical analyses were conducted at UW-Madison, and this report was co-authored by faculty from UW-Extension and the Madison campus.

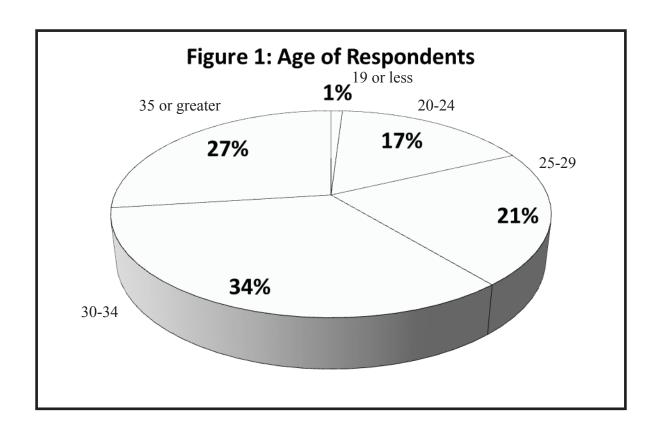
#### RESULTS

Prior to looking at the results, it is useful to take a look at the kinds of families who answered the survey.

All but two of the respondents were mothers. They ranged in age from 19 to 51, with a median age of 31. One percent were teenagers, while 27% were aged 35 or older. Most (55%) were in the age range from 25 to 34. See Figure 1 below.

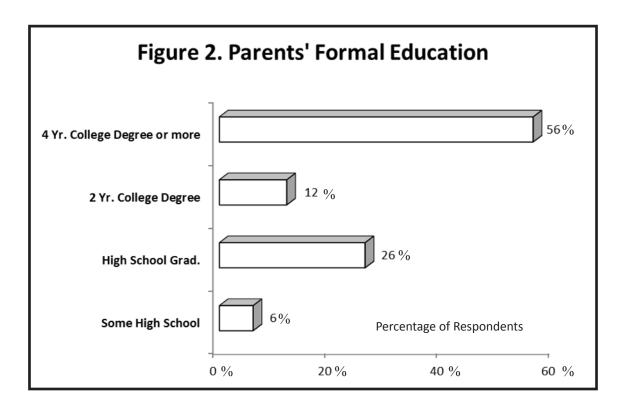
All but five parents (6%) had at least a high school diploma. See Figure 2. Slightly over one fourth of the respondents had stopped their education at high school graduation, while at

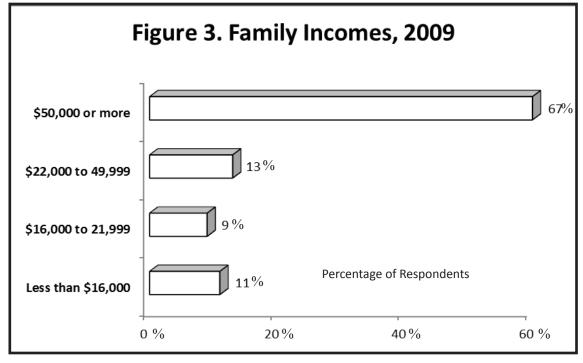
the other extreme fifty-six percent had a 4-year college degree (or more). Figure 3 shows that eleven percent of the sample reported family incomes (for 2009) of less than \$16,000, and another nine percent reported less than \$22,000, approximately the poverty threshold for a family of five. Two thirds of respondents (67%) reported incomes of \$50,000 or more.



Fully ninety percent of the sample families were composed of spouses living together (whether married or not). Of the single parents, five lived with the child's grandparents, and three lived alone.

For two-thirds of the sample (67%), the baby was the first child. At the time of the survey, twenty-one percent of respondents had two children, and the remaining twelve percent had from three to five children.





### How Useful Are the Newsletters?

The parents were asked to rate the usefulness of a number of common sources of child-rearing advice, all on the same 3-point scale (not useful - somewhat useful - very useful).

The *Parenting the First Year* newsletter was included last on this list, so that its usefulness would be clearly gauged in relation to the other sources. Figure 4 charts the percentage of parents who answered that each source was "very useful."

Surprisingly, the newsletter was rated very useful more often than advice from doctors or nurses, one's relatives, friends, and other written materials. A total of sixty-one percent said the newsletter was "very useful." Parents wrote comments on the questionnaires that were consistent with this finding:

"The newsletters have been very helpful. They have provided me with the assurance that I am raising my son to the best of my ability. Thank you!"

"I love this newsletter! It always has great insight on how we, as parents, can better understand what our babies are going through."

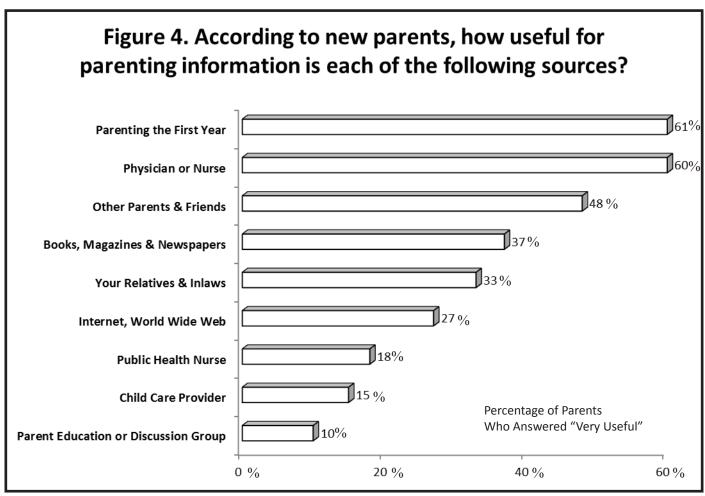
"I love receiving these newsletters. They are very helpful. I'm very excited to receive them until he (my son) is three."

"I have truly enjoyed getting the Parenting Newsletter. I look forward to getting them and saving them. I have looked back at info as I needed it. I look forward to continuing to get them for the next two years." One question asked parents to specifically compare the newsletter to the educational literature supplied by their hospital. Figure 5 shows that most parents (72%) found *Parenting the First Year* somewhat or much more useful than "other written information I received from my hospital following the birth of my child." This could be due, at least in part, to the age pacing of the newsletter, upon which some parents commented:

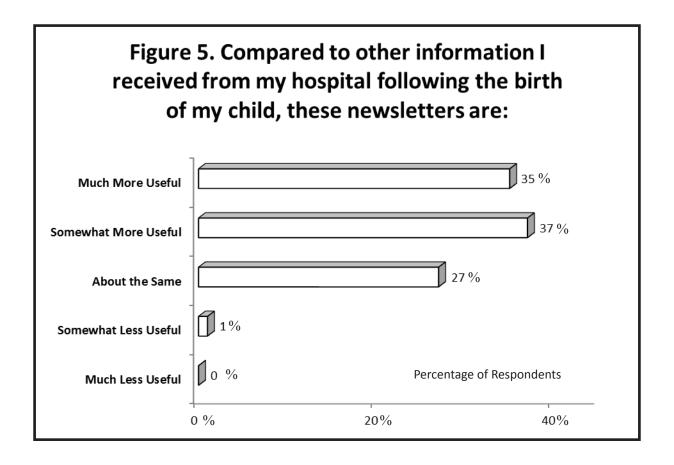
"I like having a quick developmental update and all related articles in an easy format. I'm much more likely to read this newsletter than the thick volume on the shelf... I use that for references and specific concerns."

"Kudos! I loved getting the newsletters. It helped me to know where my son should be developmentally."

"Thank you so much for the newsletters. They helped me and my husband out so much. We couldn't wait to see what she would do next!"



NOTE: Other possible responses were "Somewhat Useful" and "Not Useful".



## Readership of the Newsletters

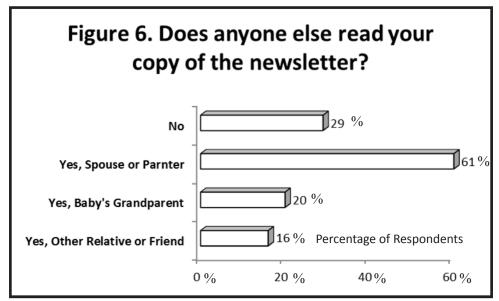
The majority of parents (96%) reported they read "most or all articles in all issues" of the newsletters.

When parents were next asked, "What do you usually do with the newsletters?" Fifty-seven percent said they "keep and file" them, and twelve percent said they give them to someone else to read. One-third (31%) said they "throw them away."

When asked if anyone else reads their copy of the newsletter, seventy-one percent of respondents said yes. The most common subsequent readers are shown in Figure 6. In over half of the families (61%), the spouse or partner reads the newsletters. Many of the questionnaires had comments on this point:

"A very good newsletter and very helpful information even for a fourth time mom. My husband is a first-time father, and he found it very informative."

The newsletters were read by the baby's grandparents in twenty percent of cases and by other relatives or friends sixteen percent of the time. In all, at least 162 readers were reported for the 82 newsletters, indicating that readership nearly doubled by sharing.



NOTE: Percentages add to greater than 100% because respondents could share newsletter with multiple people.

# Have the Newsletters Caused Improvement in Child-Rearing Behaviors?

One of the major goals in distributing the newsletters was to influence positive behavior changes in new parents. Before asking parents any specific questions, we first asked them to tell us, in their own words, if "reading the newsletters led you to do anything differently with your baby?"

More than two-thirds of the parents (68%) responded to this prompt, telling us about a wide variety of things they believed they had learned from the newsletters. Here is a small sampling of the kinds of things they wrote:

"When I read the How I Grow, Talk, Respond, Understand, Feel and Help Me Learn section, I try to incorporate more of that in daily activities. It helps me to understand him more at each age."

"The newsletter gives me ideas on different thing I can try with my baby that I may not have thought of."

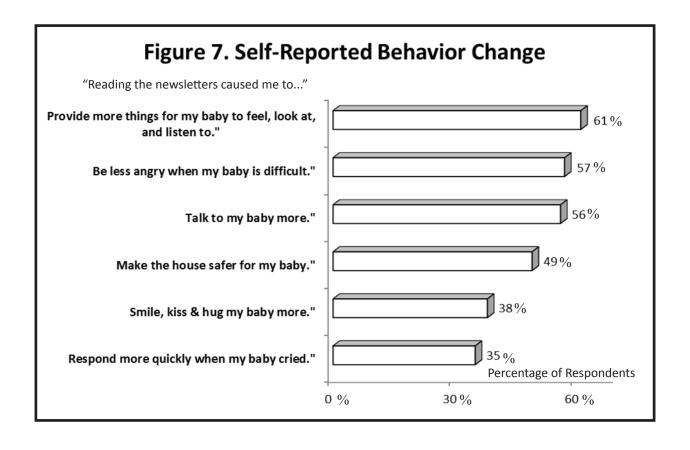
"The newsletter encourages me to try new activities with my child. It has helped me to understand what they might be feeling and how they may react to different circumstances."

"The newsletter teaches us what to expect and it has helped to establish a routine and with eating and sleeping."

"The newsletter has helped confirm some of the decisions I've made for my baby, and has helped me to feel confident with my decisions." Parents' comments were consistently about topics that had, in fact, been addressed by the newsletters. For example, the newsletters contain information on baby's development each month and include sections on why babies cry and ways to comfort crying babies. In addition, there are articles on ways to stimulate baby's development, such as playing games and talking with baby, and on childproofing your house to keep baby safe.

Parents were next asked if "you believe the newsletters influenced your behavior with your baby" in six key areas. These six specific parental behaviors were selected because prior research has shown they predict better intellectual, emotional and social development in infants and young children (Belsky, et al., 1984; Bornstein, 1995; Clarke-Stewart, 1977; Pettit, Bates & Dodge, 1997). These child-rearing behaviors relate to providing infants with language interaction, safe exploration, emotional nurturance, responsiveness, and perceptual stimulation.

The self-report items are listed in Figure 7 on the next page, which shows the percent of parents who reported the newsletter caused each positive behavior change. As can be seen, approximately one-third to two-thirds of the respondents felt they were doing more of each behavior as a result of reading the newsletters. The importance of each of these parenting behaviors will be described on the following pages.



# 1. Benefits of providing a stimulating environment for baby.

According to the majority of parents (61%), the newsletters had the greatest impact on prompting them to "provide more things for my baby to feel, look at, and listen to." This is important because early experience has a big effect on children's later abilities.

Since babies' brains are not fully grown at birth, the stimulating experiences parents provide actually change the way the brain grows.

Research clearly indicates that an enriched, intellectually stimulating environment enhances early brain development (Shore, 1997). We know, for example, that the experiences babies have listening and looking help to develop areas of the brain associated with vision and hearing (Imbert, 1985; Neville, 1985). The availability of safe toys also engages the infants' senses as he mouths and handles each object. One study found that six-month-old infants developed better eye-hand coordination when mothers provided them with appropriate toys (Parks & Bradley, 1991). Moreover, when mothers were more actively involved, in addition to providing appropriate playthings, their babies were significantly more advanced in social and language development, compared to babies whose mothers were not involved. In contrast, when infants had few toys, the amount of maternal involvement (i.e., high vs. low) made little difference in social or language development. An earlier study by Clarke-Stewart (1973) also showed that when mothers provided stimulating toys and played with their infants, babies were higher in cognitive development. Taken together, these studies suggest that babies get more benefit from their toys when parents play with baby.

On the other hand, researchers Wachs and Chan (1986) looked at the effects of the physical environment on 12-month-old infants' communication skills, independent of their social environment. Babies who had decorations in their room, changes in room decorations over time, and new toys were more advanced in vocabulary development. These researchers maintained that variety or change in stimulation was the key for enhancing development. In a study of low, middle and high socioeconomic groups, however, the quality of stimulation in the home was associated with infants' general development only for those of low socioeconomic status (Parks & Smeriglio, 1986). This may have been because parents in the middle and high socioeconomic groups already provided more stimulating home environments for their infants. Finally, a recent large scale study that included several ethnic groups, showed that infants and toddlers who lived in more stimulating home environments, with appropriate toys and books, were higher in early motor and social development (Bradley, Corwyn, Burchinal, McAdoo & Coll, 2001). Parental responsiveness (e.g., talking, hugging) also enhanced development.

Appropriate stimulation, moreover, appears to benefit preterm infants. One study found that preemies who received gentle stroking (tactile stimulation) and movement of limbs gained weight faster, had more mature ratings on the Brazelton Neonatal Assessment Scales (NBAS) and were hospitalized for fewer days, as compared to control group infants (Field, et al., 1986). Researchers and clinicians, however, point out that the amount of stimulation must be tailored to the individual needs of each infant

(Brazelton, 1987; Carey & McDevitt, 1995; Lester, 1987; Turecki & Tonner, 1989). Some babies, such as preemies or those with highly sensitive temperaments, are more sensitive and require less stimulation in their environment.

Parenting the First Year newsletters encourage parents to make their baby's world an interesting and stimulating place. They emphasize the importance of providing things for baby to see, hear and touch. For example, young babies like to look at "bright colors, high contrast patterns and shiny things." Suggestions are made for putting up pictures, wall hangings and mobiles in baby's room, or setting baby's crib so she can see things outside her window.

The newsletters also point out that babies may be soothed by soft music and enjoy the feeling of being cuddled, held and rocked. They tell parents "babies learn through touch. Give your baby different textures to feel - soft, hard, smooth and rough. Let baby listen to music on the radio or CDs. Talk and sing to your baby."

Providing interesting and safe toys gives baby a chance to feel and learn about different objects. Suggestions for using household items as toys are presented, such as using plastic mea-

suring cups or food storage bowls to help baby learn "bigger and smaller and in and out." The newsletters also suggest giving older babies the chance to "try new and different foods" to stimulate their sense of taste, as well as safe things to smell, like soap, perfume or flowers. In addition, parents are encouraged to take their babies on outings to the store, zoo or park to experience new sights, sounds and smells. However, parents are reminded that babies are individuals and some babies need less stimulation than others. Some "babies may be extra sensitive to the world around them. For this type of baby, try to reduce the stimulation level." Parents made comments about providing things for their baby to touch, look at and listen to:

"I follow the How Can You Help Me Learn section... The activities are easy, fun, and relevant."

"Household items like cups, bowls, and spoons are just as good as toys at keeping baby entertained and interested."

"Feeling textures, listening to music, and picture dictionaries."

"I play more music and dance with her."



## 2. Benefits of being less angry with baby.

The newsletters also caused parents to "be less angry when my baby is difficult" (57%), according to the parents' own reports.

When baby cries or gets into things, some parents respond sensitively with appropriate guidance, while other parents get angry and may even spank baby. Although there are a number of reasons for the differences in how parents respond, research has found that adolescent mothers who have less knowledge of child development and inappropriate attitudes about parenting, before baby is born, perceive their infant and parenting role more negatively at six months postpartum (Miller, Miceli, Whitman, & Borkowski, 1996), and are at higher risk for abusive parenting (Dukewich, Borkowski, & Whitman, 1996). Some studies have shown that abusive parents have unrealistic expectations for their child's behavior (Azar, Robinson, Hekimian, & Twentyman, 1984; Azar & Rohrbech, 1986; Bavolek, 1984). For instance, they may believe infants are capable of mature behaviors, such as eating without making a mess or using the toilet.

When baby is unable to live up to these unrealistically high expectations, parents are likely to attribute negative intentions to their infant's behavior (Dix & Grusec, 1985). For example, parents may think baby is crying, getting into things, or messing his diaper on purpose to upset them. Mothers with an authoritarian parenting style (high demand, low warmth) were also shown to be more likely to believe children's negative behaviors were intentional, compared to non-authoritarian mothers (Dix & Reinhold, 1991; Dix, Ruble & Zambarano, 1986). And when parents think their child is doing these behaviors on purpose, they are more likely to get angry (Dix, et al., 1989; Dix & Reinhold, 1991) and to report a preference for stern discipline (Dix, et al, 1989). Parents who abused their children were also found to have fewer ideas about how to handle children's problem behaviors (Azar, et al., 1984) and to use punishment more often as a disciplinary method than comparison group parents (Tricket & Kuczynski, 1986). The research suggests that educating parents about child development and alternative parenting ideas and strategies may help parents develop more realistic expectations of their infant's behavior (so they don't get as angry) and learn more effective ways of guiding children's development.

The *Parenting the First Year* newsletters tell parents what behaviors to expect from their infants each month, so parents are less likely to have unrealistic ideas of what baby can do. For instance, each issue starts with a section called "Baby wants you to know" which explains baby's growth in physical, cognitive, social and emotional development. Parents learn how baby grows, talks, responds, feels and understands at each age. The newsletters also provide parents with alternative cognitions or ways of thinking about the reasons for baby's behavior. For example, parents learn why babies cry because they are hungry, lonely, too cold or hot, over stimulated, colicky, etc. Baby "cries only when in need, and can't stop until those needs are met...don't take your angry feeling out on baby - he can't help it." Parents are informed, "research shows that a baby this young is not able to control her actions long enough to do what you tell her...so spanking or slapping her hand will only confuse her and won't help at all." Parents are also told to "Never hit or shake a child! Tiny babies don't do things on purpose

to annoy you."

The newsletters also provide parents with many ways to positively guide their baby's development, and effectively handle negative behavior. The issues for months 5 through 12 each have a section on some aspect of child guidance. For example, parents learn that discipline really means teaching, not punishing. A list of ways to teach baby acceptable behavior is included, such as praise baby when she does things you like, ignore misbehavior that isn't dangerous, prevent problems by child proofing your home, and show baby what you want her to do. The sections on child guidance also let parents know to keep calm when baby does something they don't like, since small babies don't do things on purpose to annoy them. In addition, parents are advised to use words to help baby behave, to reward good behavior, and to set limits. By using words parents help baby learn why he can't behave in certain ways: and by setting limits baby learns rules about behaviors. Suggestions for how to set limits are presented.

Parents are told that teaching baby to behave is more a matter of making it easy for baby to do the right thing. Parents' comments suggested they listened to this advice:

"I never get very angry, but the newsletter makes you realize that the baby is just a baby. Right now he can only cry to let us know what he needs."

"I'm more likely to be patient much longer with the baby."

"I no longer wonder, "why are you doing this?" Now I know how the behaviors help him to learn."

"It reminds me that he doesn't understand that what he is doing is wrong."



## 3. Benefits of language interaction.

Parents also reported that the newsletters encouraged them to "talk more with my baby" (56%). Early verbal stimulation is essential since research shows that parents who talk more with their babies have babies who learn language better. And oral language skill lays the foundation for later reading skill.

Babies come into the world ready to learn language. Although infants first communicate by crying, babies soon begin experimenting with making different sounds. At about two months of age babies begin "cooing" or making vowel sounds (e.g., ahh), and around six months they start "babbling" or producing consonant-vowel sound combinations such as dada or mama (Fabes & Martin, 2001; Puckett & Black, 2001). By the end of their first year most infants are starting to say a few "real" words. Around the world, people use "parentese" or child-directed speech when talking to babies, where they raise the pitch of their voice, speak slowly in simple phrases or sentences, and repeat words. Speaking this way helps focus baby's attention, which makes it easier for baby to learn language.

Early research by Clarke-Stewart (1973), with a group of low-income mothers, showed that the total amount mothers talked to their infants and the variety of words used predicted their children's language ability, as well as overall competence. A review of the research revealed a large number of studies that consistently found a significant correlation between the amount mothers talk with their children and the children's language development (Clarke-Stewart, 1988). We also know that adolescent mothers who talked less frequently to their four-month-old infants, compared to a matched group of adult mothers, had infants who were less vocally responsive at 12-months of age (Barratt & Roach, 1995). One longitudinal study of early language development showed that the vocabulary of one year-olds grew more rapidly

when mothers talked with baby about people or objects that were present for baby to see or handle (Menyuk, Liebergott & Schultz, 1995). Furthermore, mothers who allowed their babies and toddlers to take turns in conversations, had children who were more skilled in their language development at age three. Mothers used their baby's nonverbal (e.g., gestures) and verbal cues (e.g., babbling) as a starting point for these early conversations. In this study of middle class families, the amount of maternal talking did not affect language growth. However, another recent longitudinal study found that one-month-old infants whose mothers talked more with them, had higher IQ's when they were adolescents; but this was only the case for infants who habituated (adapted) quickly to visual stimuli (Sigman, Cohen & Beckwith, 1997). One study showed that mothers who imitated their one-year olds' vocalizations had infants who were higher in language competence (Hardy- Brown & Plomin, 1985). Additionally, mothers' frequent use of directives, that followed their 13 month-old infants' focus of attention, predicted a larger vocabulary at 22 months of age (Akhtar, F. Dunham & P. Dunham, 1991).

Beginning with the second month, the *Parenting the First Year* newsletters emphasize the importance of parents talking with their babies. The newsletters state, "Research shows that parents who talk more to their babies have babies who talk more and learn language better." Parents are also encouraged to "take turns" when talking with baby, by pausing and giving baby a chance to respond. The newsletters suggest using everyday situations, such as bath

or mealtime to teach baby language, for example by saying "toes" as you wash baby's toes. "This practice helps baby learn the meaning of words."

Parents are also encouraged to use imita-

tion by repeating sounds that baby makes. "Your imitation excites him and may cause him to repeat the sounds." When parents respond to baby's own sounds this helps him learn language. Reading to baby is another activity that is suggested. Directions for making a book for baby are included, along with ideas for pages to make, such as pictures of baby and family members and pictures of familiar animals or toys cut from magazines. Reading books together not only promotes language devel-



opment, but also helps baby feel good about reading. Parents commented on ways they talked more with baby:



"I explain what I am doing such as giving baby a bath."

"I interact with him a lot to hopefully help him develop language skills."

"I am constantly talking about what we are doing, where we are going, and people we know."

## 4. Benefits of being more affectionate with baby.

Just over one-third of new parents (38%) reported that the newsletters encouraged them to "smile, kiss and hug my baby more." Parents who respond to their infants with smiles, hugs and kisses are showing their love for baby in concrete ways. According to attachment theory, infants have a biological need to develop loving, affectionate bonds with their caregivers (Bowlby, 1979).

Attachment behavior, such as crying or babbling, shows baby's need for comfort and contact with caregivers. Through their interactions with parents infants begin to develop "internal working models" or expectations for their relationships with people (Weinfield, Sroufe, Egeland, & Carlson, 1999). Thus, babies whose parents respond sensitively and lovingly to their needs learn to expect their caregivers will be available when needed, and learn to feel they can have an impact on their world. These infants develop secure attachments to their parents and therefore feel confident to explore and learn about their world. Infants with secure attachments

grow into children who are more independent, more positive in affect, more competent in their relationships with peers, more empathetic toward others, more self-confident, and more competent at completing tasks (Sroufe, Carlson & Shulman, 1993). When parents provide insensitive care, babies develop expectations that their caregivers will not be responsive to their needs, and thus become more dependent, more negative, less competent with peers, less empathetic, less self-confident, and less competent at tasks.

Sensitive, warm parenting also serves another biologically protective function (Shore, 1997). Infants who receive sensitive, loving caregiving are more able to regulate the amount



of cortisol (a hormonal steroid) that is produced in their bodies as a response to minor stresses. This makes them less vulnerable to the detrimental effects of stress both during infancy and later in life.

When parents respond warmly to their baby with smiles, hugs and kisses they are demonstrating their love and acceptance of their child. Research has looked at the effects of parental rejection versus acceptance on the child. Parental rejection can be exhibited as angry/negative behavior toward the child, or simply as indifferent (lacking warmth) or neglectful behavior (Rohner, 1986). Cross-cultural research shows that, around the world, children who experienced parental rejection were found to be more hostile/aggressive and lower in self-

esteem/self-efficacy, as compared to children who experienced warmth/acceptance (Rohner, 1975, 1986). As adults, rejected children continued to be more hostile/aggressive and lower in self-evaluation. They also had difficulty forming close relationships and nurturing others, were less emotionally stable, and had a generally negative view of the world.

The Parenting the First Year newsletters emphasize the importance of parents showing their love for baby. In the second month, parents are told that when they smile at baby they will be rewarded with smiles from baby. Parents are encouraged to show baby love by smiling and lovingly holding baby. However, they are reminded that "some babies cuddle more than others" because each baby is an in-

dividual. For example, highly sensitive babies may need very gentle holding, while very active babies may sometimes not want to slow down for cuddling. But "all babies want and need to be held lovingly sometimes." The newsletters explain that babies learn how much you care through touch, so parents should "give baby lots of hugs and kisses, pats, rocking, stroking and massages."

As one of the keys to guiding their baby's development, parents are encouraged to reward baby with loving smiles and hugs when she plays nicely, rather than only responding to misbehavior. The newsletters also inform parents that sharing lots of smiles, hugs and kisses with your baby tells him you think he's a wonderful child, and this builds your child's sense of self-esteem. Parents' comments indicated they understood the importance of showing affection:



"And now she is starting to kiss me and show me the love I show her. I just love that I had newsletters to show me how to parent."

"I am doing it from when she opens her eyes in the morning to when they close."

"I do all of those things. This newsletter reminds me to keep doing it as I was never really an affectionate person."

"I give her more attention than I used to."

## 5. Benefits of providing a safe home environment.

Forty-nine percent of the parents reported that the newsletters prompted them to "make the house safer for my baby." A safe environment is crucial to child development because a safe home allows more of the exploration that helps babies learn.

As we all know, infants are likely to put anything they grab into their mouths. And once they learn to stand and become more mobile their reach can be suddenly and greatly extended, so that homes that were safe last month become terribly unsafe this month. Some equipment designed for babies, such as walkers, also creates dangers, as does the improper use of equipment like car safety seats.

According to Dr. Jana Williams, a pediatrician at Texas Children's Hospital, "more young children die or are disabled from preventable injuries than from. . .any disease." She concludes that, "The easiest way to eliminate child-hood injuries is to prevent them... Childproofing a home is essential" (Kid Source On-line, 1998). The most common fatal injury to infants, accounting for 51% of fatalities, is caused by airway obstruction due to such things as small toys, or foods like peanuts, grapes or hot dogs. Burns are responsible for about 20% of fatal injuries to young children.

Accidental poisoning of young children is also a major problem. According to the American Association of Poison Control Centers more than one million children five years of age and younger were "exposed to potentially poisonous substances" in 2001, and nearly 30 young children die each year by accidental poisoning from household products (Poison Prevention Week Council, 2003). An alert by the U.S. Consumer Product Safety Commission warns that about 115 infants and toddlers drown each year from hazards in the home, like buckets of liquid, toilets and bathtubs (U. S. Consumer

Product Safety Commission, 2003). A study that looked at the causes of injury deaths for children aged 0 to 6 years in Louisiana (1994) and Alaska (1993-1995) showed that "inadequate supervision" accounted for 43% of these deaths (Landen, Bauer, & Kohn, 2003). And the highest rate of injury death was for infants under one year of age.

Unsafe or improperly used equipment is also responsible for many injuries to babies. In 1999, about 8,800 infants under 15 months of age were treated in emergency rooms for injuries related to the use of baby walkers, and one-fourth of these accidents involved severe injuries (American Academy of Pediatrics, 2001). Because of the increased mobility of infants in walkers, some of these injuries have involved poisoning and burns. In one study, baby walkers "accounted for 45% of falls down stairways causing head injuries in children" under two years of age. A Consumer Product Safety Review (2002) showed that 122 infants and toddlers under age two died while sleeping in adult beds between 1999 and 2001, most due to suffocation or entrapment. "Most deaths (97%) involved children 1 year old or younger." Another report by the same commission estimated that about 50 infants die from unsafe cribs each year, in most cases due to the use of older cribs (U. S. Consumer Product Safety Commission, 1996). One large national survey found that 13% of children age 4 and under were not restrained in car safety seats (National Safe Kids Campaign, 2002). Of the infants under one year of age who were in safety seats, nearly one-quarter (22.2%) of them were "inappropriately restrained." These statistics emphasize the necessity of making sure that homes are safe for babies, and that equipment is both safe and properly used.



Parenting the First Year newsletters emphasize the importance of making the environment safe for baby. In the first issue guidelines for crib safety are provided, such as making sure crib slats are no more than 2 3/8 inches apart. Co-sleeping is also discouraged because of the danger "that the baby might have trouble breathing if caught in soft pillows or blankets, or if parents roll over." The newsletters tell parents how to correctly use infant car seats and when a change to a different car seat is needed for older babies and toddlers. Parents are also warned about the danger of feeding honey to infants under one year-old, and are advised to check to see if their well water is safe for baby's formula. The newsletters list tips for choosing safe baby toys. For example, parents should "avoid toys with small parts that could come off, like plastic eyes on stuffed animals, and never give babies toys smaller than 1 1/2 inches on all sides" since baby could choke on small parts. Safety tips for storing baby's toys are also given. Parents are also warned about the danger of baby choking on round, firm, slippery foods like whole grapes, peanuts or pieces of hot dogs.

When baby gets up on his hands and knees parents are advised to remove crib toys that could present a strangling hazard. Once baby begins sitting up, the newsletters inform parents about high chair safety, such as always using the seat belt and crotch strap, and never letting baby stand in the high chair. Parents are warned about never leaving baby alone in the bathtub, or around any source of water. Before baby gets mobile parents are advised to baby-proof the house "to make baby's world a safe place for him to learn and grow." Parents are told to "think twice about baby walkers" since "babies in walkers have fallen down stairs - even with safety gates on the stairs." And as baby learns to stand and walk, parents are cautioned to "watch for new hazards" since baby "can reach farther and higher" and "when baby uses furniture to pull herself up, she may pull things over."

The newsletters also recommend that parents make a fire safety plan and check for potential sources of lead that can poison baby. A list of common household products that are poisonous is also provided to parents so they can lock poisons out of baby's reach. Parents who make use of the safety tips in the newsletters should provide more opportunities for their baby to explore and grow in a safe environment. Parents' comments indicated they made use of this advice:

"Made me think of additional things that could be potential safety issues that I had not initially thought of."

"Moved plants, added cupboard door latches, and made sure toilet lids are closed."

"I did not know about the toilet drowning until I read it here."

"Child proof cupboards that have chemicals, and remove items so I don't have to yell, "no!"

A second benefit of safe homes is that parents can then allow their babies more opportunity to explore, which researchers call "floor freedom." Letting infants explore safely enhances their "potential for intellectual growth, skills mastery, and self esteem" (Berger &

Thompson, 1996, p. 284). One famous scientist, the Swiss psychologist Jean Piaget, suggested that babies and toddlers are like "little scientists" who learn by actively experimenting with objects in their environment (Miller, 1993). "Locomotion provides children with new opportunities for learning about their world. They can manipulate objects and learn about size, form, and relationships of objects" (Brazelton, 1989, p. 226). The newsletters say, as research has found, that "to learn babies and children need to be able to explore and to experiment," and that "bright children were allowed to explore when they were babies."



## 6. Benefits of responding quickly to baby's cries.

Just over one-third of parents (35%) reported they "respond more quickly when my baby cried" as a result of reading the newsletters.

Infants use crying to communicate their basic needs for food, warmth, human contact and relief from discomfort or pain (Puckett & Black, 2001). Research has shown that the amount of crying decreases over the first year by about one-half (Bell & Ainsworth, 1972; Hubbard & Ijzendoorn, 1991, 1994), as other types of noncrying vocalizations become more common. This same research found that when mothers responded quickly infants stopped crying sooner. Over the course of the first year, mothers actually responded more quickly to their infant's cries.

But did quicker maternal responsiveness when babies were about three months old affect the amount of infant crying later in the year? The studies cited above report conflict-

ing results. For instance, Bell and Ainsworth (1972) found that when mothers responded more quickly to infant crying in the first three months, babies cried less later in the year. However, because of the small sample size in this study (26 mothers), the researchers were not able to statistically control for some confounding variables. Hubbard and Ijzendoorn's (1994) research with a larger sample (50 mothers) replicated this earlier work and used appropriate controls in the analyses. These researchers showed that mothers who were less responsive to infant crying in the first three months had babies who cried less in the first half of the year. But responsiveness by mothers did not lead to differences in crying later in the

year. Together these studies imply that responding quickly today helps babies stop crying faster today, but may have no impact on how much babies cry in the future.

The authors of this replication study suggested that mothers may respond differently to different types of cries (differential responsiveness). Mothers who are slower to respond or unresponsive to small (less intense) cries may teach babies to cry less, by not rewarding each cry or fuss. Nevertheless, when babies cry intensely and are clearly in distress this may be a different kind of cry (attachment cry) that requires a quick response on the part of the caregiver. Attachment theory proposes that when mothers respond quickly to their infant's distress, babies learn to trust that their needs



will be met and begin to realize they can have an impact on their world (Weinfield, Sroufe, Egeland & Carlson, 1999). This leads to a secure attachment with their caregivers and to the infant developing a sense of self-efficacy, both of which are known to predict later child competence. Overall the research suggests that parents need not respond to every instance of mild fussing - as long as baby's needs have been attended to - but certainly a prompt response is important when baby is in distress. Of course, no parent should stop themselves from comforting a baby any time they want to. There is no evidence that a parent can "spoil" a baby with too much attention.

Other research demonstrates the benefits of holding baby often. One experimental study showed that mothers who were induced to hold their babies more minutes per day had babies who cried less (Hunziker & Barr, 1986). Another study found that when mothers held and soothed their extremely fussy infants more at six weeks of age, their babies were rated lower in negativity by fifteen months (James-Roberts, Conroy & Wilsher, 1998). Babies who are often in close physical contact with their mothers may not have to signal their needs by crying and may feel more content. In many other cultures babies are held in close contact with their mothers most of the time.

The *Parenting the First Year* newsletters explain that babies cry to have their needs met and not to upset parents. Suggestions for ways to soothe baby's crying are provided, such as cuddling baby, rocking, providing steady sounds, removing sources of discomfort (e.g., wet diapers or scratchy tags on clothing) and wrapping baby to reduce startling. The newsletters also tell parents that responding promptly to baby's cries will often stop the crying sooner. Responding to every mild fuss is not necessary, and in fact, some babies need to fuss a bit before they can fall asleep. However, parents should always respond quickly when baby is clearly in

distress, as this teaches baby to trust that parents will meet his needs. Parents are also advised to spend as much time holding baby as they can, as this is likely to reduce how much baby cries. When baby's crying gets to be too much for parents, ideas are presented for how to handle this: take a break and get a friend or relative to watch baby; put baby in his crib and take a shower or vacuum so you can't hear the crying and check on baby again in 15 minutes; don't get angry and take it out on baby since he can't help crying - never shake baby!

Parents let us know by their comments that they listened to this advice:

"Taught me he needs the extra comfort. Lots of things can scare him and he needs me to reassure him."

"I learned that catering to his cries is OK and will not spoil him."

"Being responsive helps create a more independent child in the long run because he knows you are there for him."

## Which Parents Need Our Help the Most?

We have special concern for some parents, for whom early parenting might be especially difficult. First-time parents are often inexperienced, and therefore we might expect them to have more need for child-rearing information.

Indeed, studies have found that mothers of firstborns were less comfortable with their babies than were mothers of later borns (Wolkind & DeSalis, 1982), and that parental experience was related to increased maternal confidence (Zahr, 1991). Other studies have found that first-time mothers had more concerns about their infants (Kronstadt et al., 1979). For these reasons, we contrasted self-reported behavior changes of first-time and experienced parents.

Category	Number	Percentage
Experienced	27	33
First Time	55	67

### Effects on First-Time Parents?

The first-time parents reported more positive influence from the newsletters than the experienced parents in all six areas of behavior change, as we expected.

While first-time parents were more likely to report learning from the newsletters, the contrast with experienced parents was not statistically significant. For one behavior, providing more sensory stimulation for baby, the contrast was close to significant (p<.10), with first-time parents 19% more likely to report this behavioral change.

First time parents are inexperienced, and therefore it is no surprise they appreciated the newsletters. In fact, some parents' comments seemed to be telling us that the newsletters were helpful because they were first-time parents.

"Thank you so much for the information! I'm a first time mom and I was scared and nervous. Reading the newsletters helped me in more ways than one. There were a lot of things I would never have known if I didn't sit and read them."

"The newsletters helped me out a lot because this is my first child. I didn't know a lot about babies until the newsletters were coming in the mail to help me out each month. And now my child is so special to me."

"I loved this newsletter. As a first time mom, this newsletter confirmed my baby was developing on track. It reassured me that what he was doing was normal." But other, experienced parents told us it was helpful to them too:

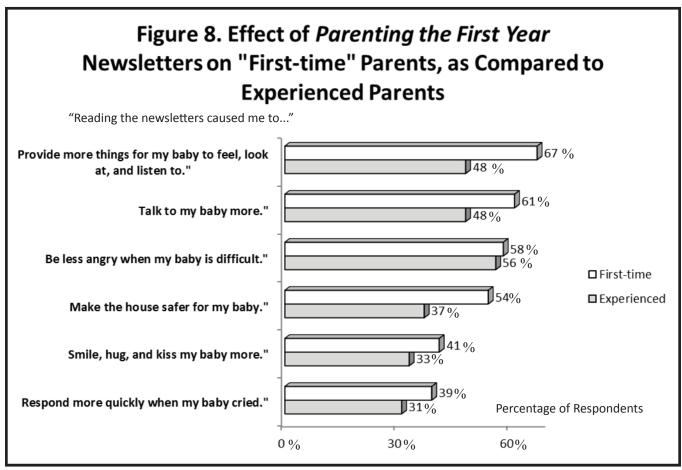
"Even though I am a mother of five, I really enjoyed and looked forward to the newsletters. They were very informative and were filled with great info. I think it is a great program and hope you continue it for a long time. Thanks again!"

"I already have two other children so I am always there for him, but I love to read your newsletter."

"It reinforces what I already know based on two other children that I have."

Even an early childhood professional found the newsletter valuable:

"I do believe this newsletter would be beneficial for most parents. It did give me another resource that reassured my parenting, but I do have lots of experience in the early childhood field that is why the newsletter was not the source of influence or change directly for me."



NOTE: The contrast of "Provide more things for my baby to feel, look at, and listen to" approached statistical significance at p<.10.

## Preventing Parents from Hitting Babies: Results of Other UW-Extension Research.

An experimental test of the *Parenting the First Year* newsletter in six southeast Wisconsin counties, including Racine County, has found that it prevents the hitting of babies by parents.

This evaluation contrasted over one thousand parents who gave birth in the same hospitals, and who differed only in that some received the newsletter series and some did not. They were all surveyed when their children were 14 months old.

Those who received the newsletters had childrearing beliefs that were significantly less like those of child abusing parents, as compared to parents who didn't receive the newsletters. They also reported actually hitting their children less often. When asked "About how many times did you have to slap or hit your infant last week?" most parents reported zero. But on average, those who received the newsletters reported hitting their children less, about one-half time per week less. Apparently those prone to physically hitting their babies did so less often if they received *Parenting the First Year*.

Reasonable people may disagree on whether a preschooler or school age child should be spanked by a parent, but it is difficult to defend the hitting of babies under any conditions. Child development experts tell us that discipline is essential to good child rearing, but that physical punishment is not essential. Indeed, children who are physically punished the most by their parents tend to become physically aggressive with their age mates, and high levels of spanking or hitting have been shown to be counterproductive in changing children's behaviors. Such hitting, of course, is never effective in making babies' behavior better; it only makes them cry more. That the Parenting the First Year newsletter series prevented, on average, an estimated twenty-six occurrences of babies being hit across the year, by each family, is an important impact. Based on this earlier research, we estimate that the distribution of the newsletter series prevented 7.800 occurrences of babies being spanked or slapped last year in Racine County.

### Can We Trust These Results?

How reliable are self-report answers, where people answer questions about themselves?

We know that such questions, if phrased carefully, can be accurate, but can also be prone to some well known sources of inaccuracy.

The two most common sources of error are Response Set and Social Desirability bias. "Response Set" refers to the tendency of some respondents to answer all questions the same way, for example with a "yes" response. "Social Desirability Bias" is the tendency of respondents to exaggerate their favorable attributes or pleasing responses (people like to report "good news" in their questionnaire responses). Depending upon how they are worded, questions can elicit greater or lesser amounts of this bias. People also differ in this regard: some are more likely to exaggerate their answers so as to provide a more pleasing answer, while others are less susceptible to this bias.

One way to check for the intrusion of social desirability bias into our results is with a "lie scale." Using this method, we inserted two items into our list of outcome questions. Each item asked about something that might have been in the newsletters, but wasn't. Here are the two items:

"Reading the newsletters caused me to change how I diaper my baby."

"Reading the newsletters caused me to change how I wake my baby in the morning."

If a respondent reported (incorrectly) having learned about both of these topics in the newsletters, then we would strongly suspect that their answers to these *and all other questions* were biased by either response set or social desirability bias, or by both biases.

In fact, only one respondent answered "yes" to both items, which suggests a low intrusion of these biases into our results. Data for this respondent was removed before completing the statistical analyses, to increase the accuracy of our results.

### Conclusions

Based on the evidence presented in this report, we advance the following conclusions:

- 1. Parents who responded to the survey found the newsletters useful. Most reported they read "most or all articles" in every issue, and then kept and filed them. They found the newsletters were more helpful than other sources of child-rearing advice we asked about, including doctors and nurses, relatives and friends.
- 2. The newsletters were not only used by the initial parent (usually the mother), but were passed on to others as well. In over 70% of households, an additional person (most often the child's father) regularly read the newsletter. The fact that parents would pass their newsletters along to others is confirmation that they find them useful. Multiple readership of each newsletter also argues for multiplication of effect, and cost efficiency of this method of parent education.
- 3. Parents reported that reading the newsletters led them to change their child-rearing behaviors in six key areas, each of which is predictive of child development gains. Of greater interest, the parents who most often reported behavior changes were those in greatest need: first-time parents. This suggests that the impact of the newsletters is greatest where the need is greatest.
- 4. Besides encouraging competent parenting, the newsletters may also be reducing child abuse in Racine County. Evidence from a large field experiment of the newsletter in Wisconsin, which included Racine County, has shown that receiving the newsletter prevents approximately twenty-six occurrences (per family) of parents spanking or slapping their babies across their first year. We estimate, therefore, that the newsletter prevented over 7,800 instances of parents hitting babies in Racine County last year.

## Recommendations

The continued distribution of the *Parenting the First Year* newsletters in Racine County seems well warranted by the evidence of this evaluation.

Families in Racine County are fortunate to have Kiwanis Club of West Racine, Wheaton Franciscan Healthcare All Saints, Central Racine County Health Department, Western Racine County Health Department, City of Racine Health Department, Next Generation Now, Safe Kids Kenosha-Racine, and Racine County Human Services Department and UW-Extension working together to provide the newsletter. This collaborative effort will require periodic communication to insure continuous delivery of parenting information that meets the needs of Racine County families.

Some Racine County citizens become new parents without giving birth: they adopt. Given the evidence of the value of the newsletter, the extra effort to identify and include these parents in the mailing lists may be warranted.

Parents in Racine County requiring additional information, can seek support from Human Services and Public Health Departments and UW-Extension.

A continuation of the newsletter into the second and third years of the child's life is available. Racine County UW-Extension is already distributing Parenting the Second and Third Years to families. All publications are available in both English and Spanish.

## References

- Akhtar, N., Dunham, F., & Dunham, P. J. (1991). Directive interactions and early vocabulary development: The role of joint attentional focus. *Journal of Child Language*, *18*, 41-49.
- American Academy of Pediatrics, Committee on Injury and Poison Prevention. (2001). Injuries associated with infant walkers. *Pediatrics*, 108(3), 790-792.
- Ateah, C. A. (2003). Disciplinary practices with children: Parental sources of information, attitudes, and educational needs. *Issues in Comprehensive Pediatric Nursing*, 26, 89-101.
- Azar, S. T., Robinson, D. R., Hekimian, E., & Twentyman, C. T. (1984). Unrealistic expectations and problem-solving ability in maltreating and comparison mothers. *Journal of Consulting and Clinical Psychology*, 52(4), 687-691.
- Azar, S. T., & Rohrbeck, C. A. (1986). Child abuse and unrealistic expectations: Further validation of the parent opinion questionnaire. *Journal of Consulting and Clinical Psychology*, 54(6), 867-868.
- Barratt, M. B., & Roach, M. A. (1995). Early interactive processes: Parenting by adolescent and adult single mothers. *Infant Behavior and Development, 18,* 97-109.
- Bavolek, S. J. (1984). *Handbook for the Adult-Adolescent Parenting Inventory (AAPI)* (Park City, UT: Family Development Resources, Inc.).
- Bell, S. M., & Ainsworth, M. D. (1972). Infant crying and maternal responsiveness. *Child Development*, 43, 1171-1190.
- Belsky, J., Lerner, R.M., & Spanier, G. B. (1984). *The child in the family*. Reading, MA: Addison-Wesley.
- Bornstein, M. H. (1995). Parenting infants. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol.1*. Mahwah, NJ: Erlbaum.
- Bowlby, J. (1979). The making and breaking of affectional bonds. London: Travisock.
- Bradley, R. H., Corwyn, R. F., Burchinal, M., McAdoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States. Part II: Relations with behavioral development through age thirteen. *Child Development*, 72(6), 1868-1886.
- Brazelton, T. B. (1987). Early intervention: What does it mean? In N. Gunzenhauser (Ed.), *Infant stimulation: for whom, what kind, when, and how much?* (pp. 157-169). Skillman, NJ: Johnson & Johnson Baby Products Company Pediatric Roundtable Series 13.
- Carey, W. B., & McDevitt, S. C. (1995). Coping with children's temperament: A guide for profes-

- sionals. New York: Basic Books.
- Clarke-Stewart, K. A. (1973). Interactions between mothers and their young children: Characteristics and consequences. *Monographs of the Society for Research in Child Development, 38* (6-7, Serial No. 153).
- Clarke-Stewart, K. A. (1977). *Childcare in the family: A review of research and some propositions for policy.* New York: Academic Press.
- Clarke-Stewart, K. A. (1978). Popular primers for parents. American Psychologist, 33, 359-369.
- Clarke-Stewart, K. A. (1988). Parent's effects on children's development: A decade of progress? Journal of Applied Developmental Psychology, 9, 41-84.
- Cudaback, D. J., Darden, C., Nelson, P., O'Brien, S., Pinsky, D., & Wiggens, E. (1985). Becoming successful parents: Can age-paced newsletters help? *Family Relations*, *34*, 271-275.
- Dix, T. H., & Grusec, J. E. (1985). Parent attribution processes in the socialization of children. In I. E. Sigel (Ed.), *Parental belief systems: the psychological consequences for children* (pp. 218-233). Hillsdale, NJ: Erlbaum.
- Dix, T. H., & Reinhold, D. P. (1991). Chronic and temporary influences on mothers' attributions for children's disobedience. *Merrill-Palmer Quarterly*, *37*(2), 251-271.
- Dix, T., Ruble, D. N., & Zambarano, R. J. (1989). Mothers' implicit theories of discipline: Child effects, parent effects, and the attribution process. *Child Development*, 60, 1373-1391.
- Dukewich, T. L., Borkowski, J. G., & Whitman, T. L. (1996). Adolescent mothers and child abuse potential: An evaluation of risk factors. *Child Abuse & Neglect*, 20(11), 1031-1047.
- Fabes, R., & Martin, C. L. (2001). *Exploring development through childhood*. Boston, MA: Allyn & Bacon.
- Field, T. M., Schanberg, S. M., Scafidi, F., Bauer, C. R., Vega-Lahr, N., Garcia, R., Nystrom, J., & Kuhn, C. M. (1986). Tactile/kinesthetic stimulation effects on preterm neonates. *Pediatrics*, 77(5), 654-658.
- Flesch, R. (1948). A new readability yardstick. Journal of Applied Psychology, 32, 221-233.
- Gotta, E. E., Coan, D. L., & Kenoyer, C. (1977). Developing instructional television products for effective parenthood: A national assessment of parent educational needs. Paper presented at the Annual Meeting of the American Educational Research Association (ERIC document no. ED136-788).
- Hardy-Brown, K., & Plomin, R. (1985). Infant communicative development: Evidence from

- adoptive and biological families for genetic and environmental influences on rate differences. *Developmental Psychology*, 21(2), 378-385.
- Hubbard, F. O. A., & van Ijzendoorn, M. H. (1991). Maternal unresponsiveness and infant crying across the first 9 months: A naturalistic longitudinal study. *Infant Behavior and Development*, 14, 299-312.
- Hubbard, F. O. A., & van Ijzendoorn, M. H. (1994). Does maternal responsiveness increase infant crying? Replication of the Baltimore study. In R. van der Veer, M. H. van Ijzendoorn, & J. Valsiner (Eds.), *Reconstructing the mind: Replicability in research on human development* (pp. 255-270). Westport, CT: Ablex.
- Hunziker, A., & Barr, R. G. (1986). Increased carrying reduces infant crying: A randomized controlled trial. *Pediatrics*, 77(5), 641-648.
- Imbert, I. (1985). In J. Mehler & R. Fox, (Eds.), *Neonate cognition: Beyond the blooming buzzing confusion* (pp. 69-88). Hillsdale, NJ: Erlbaum.
- James-Roberts, I. S., Conroy, S., & Wilsher, C. (1998). Stability and outcome of persistent infant crying. *Infant Behavior and Development*, *21*(3), 411-435.
- Kid Source Online. (1998). Stoop to snoop: Prevent household injuries by getting on a child's level. [On-line]. Available: http://www.kidsource.com/ kidsource/content4/household.safety.html.
- Kronstadt, D., Oberklaid, F., Ferb, T. E., & Swartz, J. P. (1979). Infant behavior and maternal adaptations in the first six months of life. *American Journal of Orthopsychiatry*, 49, 454-464.
- Landen, M. G., Bauer, U., & Kohn, M. (2003). Inadequate supervision as a cause of injury deaths among young children in Alaska and Louisiana. *Pediatrics*, 111(2), 328-331.
- Lester, B. M. (1987). Behavioral and Psychophysiological assessment of the preterm infant. In N. Gunzenhauser (Ed.), *Infant stimulation: for whom, what kind, when, and how much?* (pp. 81-88). Skillman, NJ: Johnson & Johnson Baby Products Company Pediatric Roundtable Series 13.
- Menyuk, P., Liebergott, J. W., & Schultz, M. C. (1995). *Early language development in full-term and premature infants*. Hillsdale, NJ: Erlbaum.
- Miller, C. L., Miceli, P. J., Whitman, T. L., & Borkowski, J. G. (1996). Cognitive readiness to parent and intellectual-emotional development in children of adolescent mothers. *Developmental Psychology*, 32(3), 533-541.
- National Safe Kids Campaign. (2002). Child passengers at risk in America: A national study of restraint use. [On-line]. Available: http://www.safekids.org/content\_documents/ACFD68.pdf.
- Neville, H. J. (1985). In J. Mehler & R. Fox, (Eds.), Neonate cognition: Beyond the blooming

- buzzing confusion (pp. 349-363). Hillsdale, NJ: Erlbaum.
- Okagaki, L., & Divecha, D. J. (1993). Development of parental beliefs. In T. Luster & L. Okagaki (Eds.), *Parenting: An ecological perspective*. Hillsdale, NJ: Erlbaum.
- Parke, R. D. (1972). Some effects of punishment on children's behavior. *The Young Child: Reviews of Research Vol. II.* Washington, D.C.: The National Association of the Education of Young Children.
- Parks, P. L., & Bradley, R. H. (1991). The interaction of home environment features and their relation to infant competence. *Infant Mental Health Journal*, 12(1), 3-16.
- Parks, P. L., & Smeriglio, V. L. (1986). Relationships among parenting knowledge, quality of stimulation in the home and infant development. *Family Relations*, *35*, 411-416.
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven year longitudinal study. *Child Development*, 68, 908-923.
- Poison Prevention Week Council (2003). FAQ's: Editors' fact sheet. [On-line]. Available: http://www.poisonprevention.org/main.html .
- Puckett, M. B., & Black, J. K. (2001). *The young child: Development from prebirth through age eight.* Upper Saddle River, NJ: Prentice-Hall.
- Riley, D., Salisbury, M. J., Walker, S. K., & Steinberg, J. (1996). *Parenting the First Year: Wisconsin statewide impact report*. Madison, Wisconsin: Cooperative Extension, University of Wisconsin-Extension and School of Human Ecology, University of Wisconsin-Madison.
- Riley, D., Meinhardt, G., Nelson, C. Salisbury, M., & Winnett, T. (1991). How effective are agepaced newsletters for new parents? A replication and extension of earlier studies. *Family Relations*, 40, 247-253.
- Rohner, R. P. (1975). They love me, they love me not: A worldwide study of the effects of parental acceptance and rejection. New Haven, CT: HRAF Press.
- Rohner, R. P. (1986). *The warmth dimension: Foundations of parental acceptance-rejection theory.* Beverly Hills, CA: Sage Publications.
- Shore, R. (1997). *Rethinking the brain: New insights into early development*. New York: Families and Work Institute.
- Sigman, M., Cohen, S. E., & Beckwith, L. (1997). Why does infant intelligence predict adolescent intelligence? *Infant Behavior and Development*, 20(2), 133-140.
- Simpson, A. R. (1997). *The role of the mass media in parenting education*. Cambridge, MA: Harvard School of Public Health.

- Sparling, J., & Lohman, B. (1983). Parent information needs as revealed through interests, problems, attitudes, and preferences. In R. Haskings, & D. Adams (Eds.), *Parent education and public policy* (pp. 304-323). Norwood, NJ: Ablex.
- Sroufe, L. A., Carlson, E., & Shulman, A. (1993). Individuals in relationships: Development from infancy through adolescence. In D. C. Funder, R. D. Parke, C. Tomlinson-Keasy, & K. Widaman (Eds.), *Studying lives through time* (pp. 315-342). Washington, DC: American Psychological Association.
- Steele, B. (1980). Psychodynamic factors in child abuse. In C.H. Kempe & R.E. Helfer (Eds.), *The battered child* (3rd edition, pp. 49-85). Chicago: University of Chicago Press.
- Stevens, J. H., Jr. (1984). Child development knowledge and parenting skill. *Family Relations*, *33*, 237-244.
- Trickett, P. K., & Kuczynski, L. (1986). Children's misbehaviors and parental discipline strategies in abusive and nonabusive families. *Developmental Psychology*, 22(1), 115-123.
- Turecki, S., & Tonner, L. (1989). The difficult child. New York: Bantam.
- United States Consumer Product Safety Commission. (2003). Safety alert: Prevent child in-home drowning deaths. [On-line]. Available: http://www.cpsc.gov/ cpscpub/pubs/drown.html.
- United States Consumer Product Safety Commission. (2002). Babies on adult beds. *Consumer Product Safety Review*, 7(2), 1-2.
- United States Consumer Product Safety Commission. (1996). CPSP saves lives through voluntary standards and mandatory regulation: Crib safety. [On-line]. Available: http://www.cpsc.gov/cpscpub/pubs/success/cribs.html.
- Wachs, T. D., & Chan, A. (1986). Specificity of environmental action, as seen in environmental correlates of infants' communication performance. *Child Development*, 57, 1464-1474.
- Waterson, T., Welsh, B., McConachie, H., Cook, M., Hammal, D., Parker, L., & Keane, B. (2009). Improving early relationships: A randomized, controlled trial of an age-paced parenting newsletter. *Pediatrics*, 123, 241-247.
- Weinfield, N. S., Sroufe, L. A., Egeland, B., & Carlson, E. A. (1999). The nature of individual differences in infant-caregiver attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications.* NY: Guilford Press.
- Wolkind, S. N., & DeSalis, W. (1982). Infant temperament, maternal mental state and child behavior problems. In R. Porter & G. M. Collins (Eds.), *Temperamental differences in infants and young children*. CIBA Foundation Symposium 89, pp. 221-239. London: Pittman.
- Zahr, L. K. (1991). The relationship between maternal confidence and mother-infant behaviors in premature infants. *Research in Nursing and Health 14*, 279-286.