The Baby TALK Research Series

Applied research to inform practice using the Baby TALK model

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A Report on Risk Characteristics Among Young Children and Families in the Baby TALK Demonstration Program
2008-2010, with Select Comparative Local, State, and National Data from 2003-2010.

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Background

Baby TALK, Inc. is a nationally recognized organization, known for its innovative intervention model that supports young children and their families. In 1986, the Baby TALK model was developed in Baby TALK, Inc.'s largest demonstration program in Decatur, Illinois. Since then, the model has been replicated in early childhood programs within 36 states and Canada. Additionally, the Illinois State Board of Education has approved the use of the Baby TALK model in statewide early childhood settings because of its research-based, intensive approach for serving young children birth to three years in age.

This publication is the first installment of a series of reports and scholarly articles that will examine the Baby TALK model, the various components of the model, and the ways in which the model is used to aid high-risk families. In this research brief, we examine the risk characteristics of children and families in the Baby TALK demonstration program[1] and compare those characteristics with demographic data at the county, state, and federal level. In short, this brief provides empirical evidence indicating the Baby TALK model *does* identify and serve a high-risk population in the demonstration program.

Why are the early years and early intervention so important?

The first three years of a child's life is a critical time of development that will set the stage for development across the lifespan (Shonkoff & Phillips, 2000). Because the early years are so important, early intervention is necessary when a young child demonstrates delays that may impact both academic and non-academic outcomes. Early childhood interventions have been proven to influence early development and promote long-term prevention against risk factors that inhibit

successful social-emotional, cognitive, and language developmental, and academic outcomes (Kirp, 2007; Olds, Sadler & Kitzman, 2007; Henry, Henderson, Ponder, Gordon, Mashburn, & Rickman, 2003). Participation in early childhood programs have been linked to closing the academic gap between children of low-income and high-income families (Copple & Bredekamp, 2009; Kirp, 2007; DHHS-ACF, 2005).

Additionally, long-term social benefits can be gained for children accessing early childhood resources. As adults, at-risk children who have received early intervention are at reduced risk of educational disability, unemployment, school drop-out, and even dependence on welfare assistance (Schweinhart, Barnes, & Weikart, 1993).

How does the Baby TALK model identify at-risk families in need of early childhood intervention resources?

The Baby TALK model uses a community-level approach to reaching families in need of early intervention services. The model starts with assembling a group of early childhood professionals who receive training on the Baby TALK model and related early childhood curriculum. These professionals are then strategically placed in early childhood programs and locations throughout the community where they may encounter families with young children.

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[1] *All future references to Baby TALK's program/model reflects data from the home program in Decatur, Illinois. Risk characteristics and participation levels may differ in other programs using the model.*

The next element of the model is universal screening. All families within a given community are identified and screened. Based on the identified level of risk and need, Baby TALK professionals create a trustworthy system of care around the child and family unit, coordinating the appropriate services and making referrals to programs that could help support the family holistically. At each intervention step within the Baby TALK model, extensive protocols are used to guide the professional-parent relationship. Additionally, research-based child development curriculum is shared with parents so that parents can better anticipate and support each developmental milestone met by their child.

Among the valuable components of the Baby TALK model, we believe the *approach* to identification is the reason high-risk families are identified. The strategic placement of trained professionals throughout the community is a unique feature of the Baby TALK model and the strategies employed in the demonstration program are illustrative. In Decatur, Baby TALK professionals are prenatal clinics and hospital units where they locate expectant mothers who may be in need of pre- and post-natal support services. Baby TALK professionals are also placed in high schools to identify pregnant teens.

By placing trained early childhood professionals throughout the community, there are increased opportunities to encounter populations who may otherwise remain below the radar when it comes to social and educational services. This approach also enables the early identification of families.

Again, the idea is to place Baby TALK professionals in locations frequented by high need families and connect these families with services in those locations. This strategy, as will be demonstrated in this brief, supports the identification of families with high-risk qualities.

Characteristics of Population Served

Income level, education level, marital status, and employment status were analyzed to understand the risk characteristics among Baby TALK families; criteria in-line with state and federal definitions for risk. Mother-specific data on these four areas was pulled from the Baby TALK database, which houses records of over 10,000 participants from 2008 to present, and compared with similar data reflected in local, state, and federal databases. Specifically, the Baby TALK data was compared with the Illinois Early Childhood Asset Map (IECAM)[2] and the U.S. Census Bureau, which provided data at the county-level (Macon County) and state-level (Illinois). The Baby TALK data was also compared with the Head Start Family and Child Experiences Survey (FACES) 2003 database[3]. The FACES database contains information on participants enrolled in Head Start, the nation's largest federally funded early intervention program for low-income children. These comparisons placed the risk characteristics of Baby TALK participants in the context of the wider community.

Sample sizes vary for each dataset and are noted in each table. The Baby TALK sample reflects responses from participants in the program. Macon County samples reflect information on all members living in the county (Table 3). Lastly, the Head Start data reflect a representative sample of all federally funded Head Start programs across the country.

[2] *All future references to county-level trends reflect data from the IECAM or the U.S. Census Bureau.*
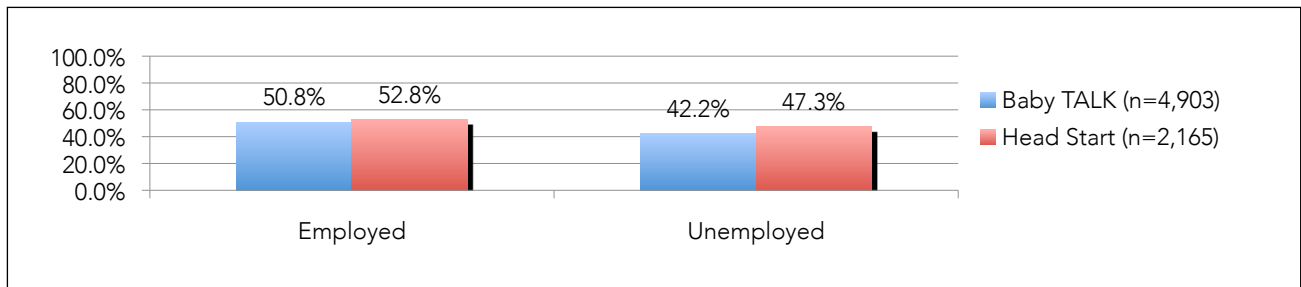[3] *All future references to* Head Start *reflects data from the FACES 2003 database.*

DATA COMPARISONS: PROGRAM-LEVEL, COUNTY, AND NATIONAL-LEVEL DATASETS, 2003-2010

Maternal Education: Baby TALK vs. Head Start

Table 1 illustrates levels of education among Baby TALK participants in comparison to federal Head Start programs. While Baby TALK has a higher rate of participants with a Bachelor's degree or above compared to the federal trends (16.3% versus 3.7%), the data also shows Baby TALK is able to identify a large percentage of mothers with less than a high school diploma (19.1%). Thus, the Baby TALK model identifies adolescent mothers who are *not* enrolled in a high school setting. Instead, these mothers were likely encountered in the community such as prenatal clinics, hospitals, or local social service agencies.
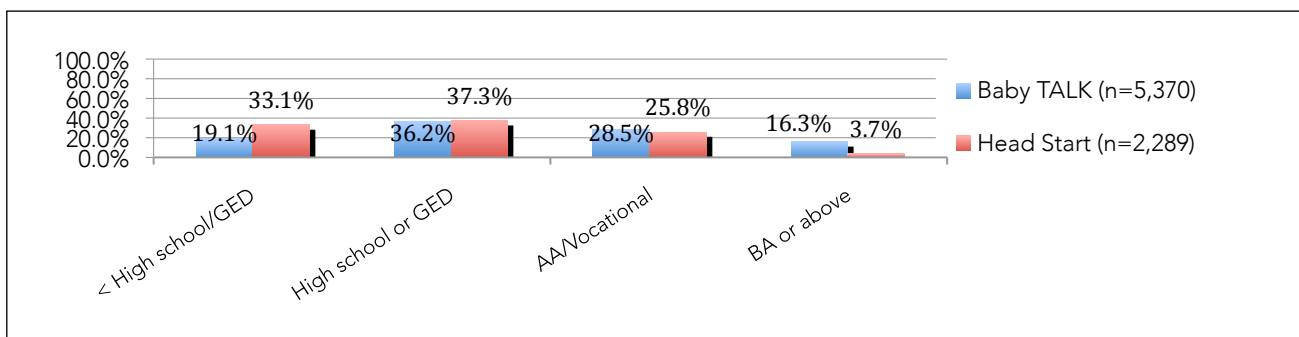
Table 1: Education Level of Mother

Chart: Employed — Baby TALK 50.8%, Head Start 52.8%; Unemployed — Baby TALK 42.2%, Head Start 47.3%. Baby TALK (n=4,903), Head Start (n=2,165)

Maternal Employment Status: Baby TALK vs. Head Start

Table 2 illustrates similar employment rates between Baby TALK participants and Head Start participants, with a slightly lower rate of both employment and unemployment for Baby TALK participants.

Table 2: Employment Status of Mother
(* Remaining percentages reported "other;" or "self- employed or student")

Chart: < High school/GED — Baby TALK 19.1%, Head Start 33.1%; High school or GED — Baby TALK 36.2%, Head Start 37.3%; AA/Vocational — Baby TALK 28.5%, Head Start 25.8%; BA or above — Baby TALK 16.3%, Head Start 3.7%. Baby TALK (n=5,370), Head Start (n=2,289)

Marital Status: Baby TALK vs. Macon County vs. Head Start

Table 3 illustrates a comparison between Baby TALK participants, Macon county rates (county-level data), and Head Start trends. The most striking numbers are reflected in those who identified as single/never married. 53.1% of Baby TALK participants identified as single in comparison to 22.8% in all of Macon County and 40.9% reporting from Head Start.
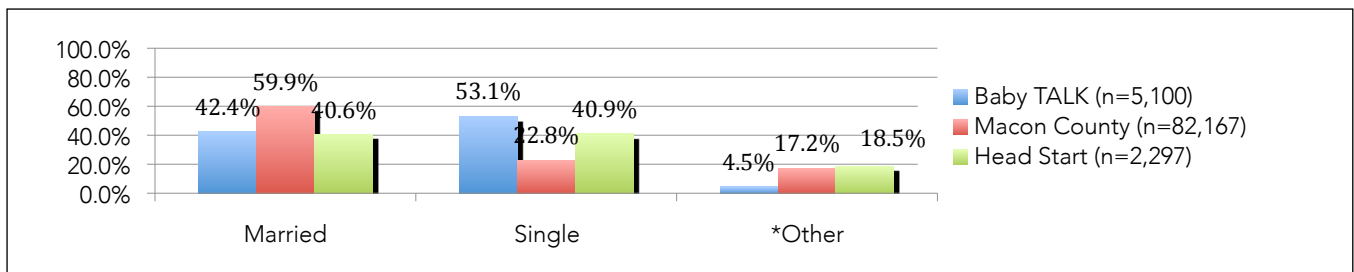
Table 3: Marital Status of Mother

(Chart showing income brackets with Baby TALK (n=2,960) and Head Start (n=2,315))

Income	Baby TALK	Head Start
Less than $10,000	34.1%	35.8%
$10,000-$19,999	13.9%	34.7%
$20,000-$29,999	10.7%	17.2%
$30,000-$39,999	9.6%	6.6%
$40,000-$49,999	7.6%	3.2%
$50,000 and over	24.1%	2.6%
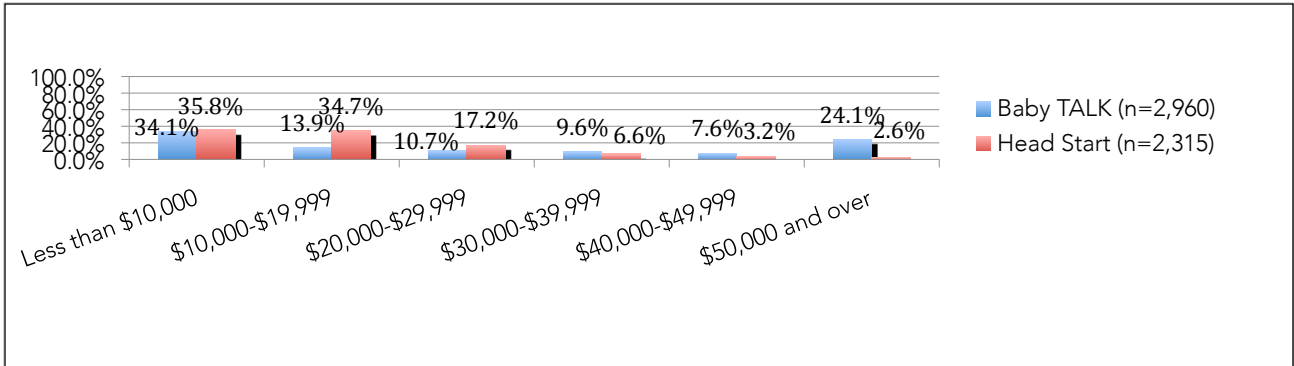
Income Level: Baby TALK vs. Head Start

Table 4 provides an illustration of varying income levels across Baby TALK participants and Head Start participants. Parallel to Head Start trends, a high percentage (34.1%) of Baby TALK participants live on less than $10,000 in annual income. Baby TALK participants in other income categories remained behind Head Start income rates. Interestingly, the Baby TALK findings suggest the program is serving a wide range of participants with varying degree of needs. To illustrate, the Baby TALK model identified families making more than $50,000 a year (24.1%) who needed and accessed early intervention services.

Table 4: Income Level of Mother
(*Remaining percentages reported Divorced, Separated, or Widowed)

(Chart showing marital status with Baby TALK (n=5,100), Macon County (n=82,167), Head Start (n=2,297))

	Baby TALK	Macon County	Head Start
Married	42.4%	59.9%	40.6%
Single	53.1%	22.8%	40.9%
*Other	4.5%	17.2%	18.5%

Relevance for Early Intervention Models

In sum, the Baby TALK model has demonstrated an ability to identify a high-risk population of families with young children. The findings confirm that the demonstration program is identifying and serving a high percentage of mothers who are low-income, unemployed, single, and have low levels of education. Additionally, the level of risk presented among Baby TALK participants is either at equal or greater levels of risk when compared with local, state, and federal program trends. Overall, these results point to critical populations with young children across the country that can benefit from early childhood intervention services.

Identification, however, is key if these high-risk families are going to access valuable resources early and the Baby TALK model provides an identification approach that produces results. The numbers are compelling, showing the Baby TALK model's ability to reach a range of families with diverse needs. The range includes low-income mothers with less than a high school education to educated, high-income earners; two different groups but both in need of early childhood resources that the model provides.

Given this model's ability identify target populations; the implications for other early childhood intervention models are evident. The strategic placement of trained early childhood professionals is a strategy that can be adapted to other early intervention models without being cost prohibitive to programs. Baby TALK, Inc. provides the necessary training and materials for replicating the program, thus programs do have options for tailoring their intervention strategies with families.

Final Thoughts

The utility of the Baby TALK model is in its design. The training, the curriculum, and the strategies were developed in a manner emphasizing the importance of context and flexibility when supporting families with young children. Baby TALK representatives provide training materials and technical assistance to those interested in using the model to their specific early childhood settings wherein program and communities are able to adapt the model in ways that would address challenges and opportunities unique to each community. For example, a community with a high population of teen mothers could concentrate efforts by placing representatives in high schools and prenatal clinics, and tailor curriculum to focus on teen parenting and intensive home-visits pre- and post-deliver.

The Baby TALK model allows for this level of adaptation because the approach to identification is flexible and the education materials can be delivered to parents in a manner that a program finds appropriate whether in the high school setting, in prenatal clinics, or in the home. While the Baby TALK model cannot solve every early intervention problem encountered in field (and no model can), the model does provide concrete tools for assessing needs and creating solutions irrespective of specific funding sources and program settings.

Moving forward, we will delve deeper into the Baby TALK model focusing on its strategies for family recruitment, strategies for maintaining family engagement, active ingredients for effective home visits, and building connections to early childhood services. We will also look at the other elements of the model – the protocols, the early childhood curriculum, and the "trustworthy system of care" – that contribute to child and family outcomes. Ultimately, our goal is to share research findings with the greater early childhood community and increase dialogue around Baby TALK's innovative model of intervention.

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The Baby TALK Research Collaboration

In January 2010, the Baby TALK Research Collaboration was established to support the organization's mission – to positively impact child development and nurture healthy parent-child relationships during the critical early years – through applied research. The Research Collaboration houses a broad range of evidence-based materials relevant to the Baby TALK model. Research efforts focus on the implementation of the Baby TALK model in various communities, the participants identified and recruited using the model, and specific programs that serve high-risk families with young children. The Collaboration also houses research on child and family outcomes tied to the Baby TALK model, and serves as an informational hub for those interested in relational models for serving vulnerable families.