This study investigated the diverse family systems of Head Start children, specifically: (1) Do families of Caucasian and African American Head Start children experience parenting stress?; (2) Is perceived lack of parental competence associated with child-related stress in families of African American and Caucasian Head Start children?; and (3) Is there a relationship between African American and Caucasian mothers' perceived level of parental competence and educational level? Seventy mothers of African American background and 70 of Caucasian background were randomly selected from Head Start participants and administered the Parenting Stress Index and a demographic questionnaire. Findings showed that both African American and Caucasian mothers experienced parenting stress within the normal range; those mothers who felt more incompetent as parents felt more stressed; and African American and Caucasian mothers with more education felt more competent as parents. (Contains 17 references.) (EV)
Families of Head Start Children: What Do We Know?

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Niagara University
Niagara University, NY 14109

Presented at Head Start’s Fifth National Research Conference
Washington, D.C.
June 28, 2000

I am grateful to my colleagues, Geraldine Donovan, and Lynnette Haley of Niagara County Head Start Inc. for providing abundant support in data collection and being co-presenters at Head Start’s Fifth National Research Conference.
Introduction

Head Start is a federally funded program. It provides comprehensive developmental services to America’s culturally and economically disadvantaged pre-school children. The program focuses on children’s educational, psychological, nutritional, physical, and mental health needs. Since its inception in 1965, the program has served approximately 16 million children. And more recently, it has extended its services to disabled pre-schoolers irrespective of their socio-economic status (Zigler, 1994).

Family is an integral part of Head Start’s intervention. Parents are encouraged to participate in program planning and program delivery. However, interrelated problems of paternal absence, low literacy skills, and chronic unemployment prevalent amongst families of Head Start children, often interfere with their active involvement (Clennie, 1990).

Despite less than desirable family environments, research shows that Head Start exerts a positive influence on its children’s cognitive growth (Levite, 1993). Surprisingly, the positive effects of Head Start differ for African-American children. They fade away and they fade away rather quickly (Thomas, 1995). Researchers like Chalkley, Leik, Duane, Rarick, & Carlson (1991) ascertain that there are definite racial/cultural differences in Head Start’s impact.

Reviewing previous research, Leik, Chalkley, & Duane (1991) have noted that very little is known about the impact of Head Start on its children’s families. There are some reports of stress experienced by Head Start families (Leik & Chalkley, 1990). And researchers have cautioned that family stress
can attenuate the effects of Head Start (Chalkley & Leik, 1995; Chalkley, 1997). Clearly, there is need to know more about families of Head Start children (Clennie, 1990). Family is a powerful resource (Fewell, 1986).

The present study was designed to meet the pressing needs of current knowledge base. It aimed to investigate the diverse family systems of Head Start children. Specifically, the study addressed the following questions:

1. Do families of Caucasian and African-American Head Start children experience parenting stress?

2. Is perceived lack of parental competence associated with child related stress in families of African-American and Caucasian Head Start Children?

3. Is there a relationship between African American and Caucasian mothers' perceived level of parental competence and educational level?
Research Methods
This section describes the setting, sample, comparison group, instrumentation, and data collection procedures.

Setting
The present study was carried out in Niagara Falls in cooperation with Niagara County Head Start. Niagara County Head Start serves approximately 480 pre-schoolers of diverse racial and ethnic backgrounds. Children are served at five centers in the county. These centers are: 1. Lockport Center 2. Newfane Center 3. Niagara North 4. Niagara South 5. North Tonawanda. The enrollment at the five centers is illustrated in the Figure 1 below.

Figure 1. Head Start Centers
**Sample and Comparison Group**

Seventy mothers (n=70) of African-American background and seventy mothers of Caucasian (n=70) background were randomly selected from a master list of Head Start participating families. Families were informed about the study. Informed consent for participation was obtained from the selected families.

**Instrumentation**

The Parenting Stress Index (PSI) and a Demographic Questionnaire were selected for use in the present study. The PSI is a self-administered, 120-item instrument developed by Abidin (1995) to measure the magnitude of stress in the parent-child system. The PSI requires a reading level of 5th grade. The PSI scores yield a family profile that can be used to identify different needs of families. As shown in Table 1, the PSI has 13 scales. The Demographic Questionnaire was developed by the principal investigator.

**Table 1 Parenting Stress Index Scales**

<table>
<thead>
<tr>
<th>Child Domain</th>
<th>Parent Domain</th>
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<tbody>
<tr>
<td>Distractibility</td>
<td>Competence</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Isolation</td>
</tr>
<tr>
<td>Reinforces Parent</td>
<td>Attachment</td>
</tr>
<tr>
<td>Demandingness</td>
<td>Health</td>
</tr>
<tr>
<td>Mood</td>
<td>Restriction</td>
</tr>
<tr>
<td>Acceptability</td>
<td>Depression</td>
</tr>
<tr>
<td>Spouse</td>
<td></td>
</tr>
</tbody>
</table>
The PSI was chosen for the study because of its relevance for the research questions and its technical adequacy. Abidin (1995) reported internal consistency of .90 for Total Stress scale. Test retest reliability is also high, .96 for the Total Stress score.

**Procedures**

From the files of Niagara County Head Start, seventy (n=70) families of African-American background and seventy (n=70) families of Caucasian background were randomly selected using the table of random numbers. Families were sent a letter informing them about the purpose of study and inviting them to participate. Families were informed about the days when PSI had to be completed. Selected mothers completed PSI and a Demographic Questionnaire during their routine meetings & routine visits to their respective Head Start Centers. Data collection was completed in June, 1999.

**Results**

This section is organized into two parts: (1) Sample Description-basic demographic characteristics of families of Head Start children of African American origin and Caucasian origin; and (2) Research questions-the results for each of the research questions.

**Sample Description**

The demographic information on families has been covered under a separate heading for each one of the following variables: (1) Maternal age; (2) Maternal marital status; (2) Maternal employment; (3) Maternal educational level; and (4) Referent child’s age/gender.
Maternal Age

The average age of the mother is 27.6 years (SD= 6.42) in the African American group, and 29.8 years (SD= 6.00) in the Caucasian group (See Table 2). Results of a t-test indicate that the difference between the mean maternal age of African American families and Caucasian families is not significant (t= -1.48, df=69, p= .142).

Table 2

Maternal Age in African American and Caucasian Families

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>27.6</td>
<td>6.42</td>
<td>-1.48</td>
<td>.142</td>
</tr>
<tr>
<td>(N=31)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>29.8</td>
<td>6.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=41)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Maternal Marital Status
As shown in Figure 2, the majority of the mothers in African American group and Caucasian group are single. Twenty-five (80.6%) mothers in African American group and 21 (51.2%) mothers in Caucasian group reported that they were single. The results of a Chi square analysis indicate that there are significant differences between the families as far as mother’s marital status is concerned ($\chi^2 = 6.62$, df= 1, $P= .010$).

Maternal Employment
As shown in Figure 3, the majority of the mothers in both of the groups work outside the house. Nineteen (61.3%) of the mothers in African American group and 22 (53.7%) mothers in the Caucasian group reported that they work outside of the house. Also, 12 (38.7%) mothers in the African American group and 19 (46.3%) mothers in the Caucasian group tend the household only. A test of difference between the proportions supports the impression that there are no differences between the groups with respect to maternal employment ($\chi^2= .41$, df= 1, $P= .517$).

Maternal Educational Level
As shown in Figure 4, the majority of the mothers in African American group have some sort of postsecondary education. Of the total 31 mothers, 17 (54.8%) mothers have 1-3 years of college; 10 (32.3%) mothers have high school or GED; and 4 (12.9%) mothers have educational level of less than high school. In Caucasian group, the majority of the mothers have high school or GED. Of the total 41 mothers, 18 (43.9%) mothers have high school or GED, 17 (41.5%) mothers have some sort of postsecondary education, and 6 (14.6%) mothers have educational level that is less than high school.
Figure 2. Maternal Marital Status

- Single Mothers: 81%
- Married Mothers: 19%

African American Families (N=31)

- Single Mothers: 51%
- Married Mothers: 49%

Caucasian Families (N=41)
Figure 3. Maternal Employment

Figure 4. Maternal Education
Referent Child's Gender/Age
As Table 3 indicates, the two groups of families are similar in terms of the gender of their child who attends Head Start Program ($\chi^2 = .001$, df = 1, $P = .973$). The African American group has 16 (51.6%) female children and 15 (48.4%) male children. The Caucasian group has 21 (51.2%) female children and 20 (48.8%) male children. As shown in Table 4, as far as the age of referent child is concerned, 22 (71.0%) of the children in African American group are approximately 5 year old. And, 9 (29.0%) children are approximately 4 year old. In Caucasian group, 22 (53.7%) children are approximately 5 year old and 19 (46.3%) children are approximately 4 year old. The results of Chi-square ($\chi^2 = 2.22$, df = 1, $P = .135$) indicate that there are no significant differences between the two groups of families as far as the age of referent child is concerned.

Table 3

Gender of the Referent Child

<table>
<thead>
<tr>
<th></th>
<th>African American Families</th>
<th>Caucasian Families</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td>51.6</td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>48.4</td>
</tr>
</tbody>
</table>

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In summary, Head Start families of African American background and Caucasian background are similar on the variables of: Maternal age, maternal employment, maternal level of education and age/gender of their children who attend Head Start Program. The average age of mother in both groups of families is in late 20's. The majority of the mothers in both groups of families have at least high school education. Also, the majority of the mothers in both groups of families work outside the house. Families are also comparable as far as gender/age of their children who attend Head Start is concerned. Both of the groups have half boys and half girls who attend Head Start Program.

The two groups of families statistically differ with respect to mother’s marital status. The majority of the mothers are single in both groups of families. However, the number of mothers who are single in African American group is greater than that of Caucasian group.

Research Questions
The research questions will be the focus of this section. The research questions are followed by a summary of the findings.

Research Question 1
Do families of African American and Caucasian Head Start children experience parenting stress?

For the purpose of this study, parenting stress was operationally defined as a score obtained by the mothers of African American and Caucasian Head Start children on the Parenting Stress Index (PSI).

To address this question, the scores obtained by the mothers of African American and Caucasian Head Start children were first compared with the
norm score of the mothers of normative sample reported in the PSI Manual. This comparison indicated that majority of the families of African American and Caucasian Head Start children experience parenting stress, which is within the normal range of stress experienced by all of the parents. And then, comparison of African American families and Caucasian families was accomplished by computing the means and the standard deviations. As shown in the Table 4, the mothers of Caucasian children scored higher (M=225.00, SD=47.74) than the mothers of African American children (M=216.87, SD=36.11). A t-test for independent samples was utilized to ascertained if the observed difference between the group means was a real difference or if it was a difference by chance. The t-test resulted in a value of -.79 with P=.351, which is not significant, meaning that the mothers of Caucasian Head Start children do not perceive that they experience more parenting stress than the mothers of African American Head Start children.

Table 4

Parenting Stress Score for African American and Caucasian Families

<table>
<thead>
<tr>
<th></th>
<th>African American Families</th>
<th>Caucasian Families</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  M          SD</td>
<td>N  M          SD  t</td>
</tr>
<tr>
<td></td>
<td>31  216.8  36.11</td>
<td>41  225.0  47.74 - .79  .351</td>
</tr>
</tbody>
</table>
Research Question 2
Is perceived lack of parental competence associated with child related stress in families of African American and Caucasian Head Start children?

For the purpose of this study, lack of parental competence and child related stress were operationally defined as a score on the parenting Competence scale and Child Related Stress scale of the PSI respectively. This question aims to examine the relationship of mothers' perception of their competence as a parent and their perception of stress that they experience as they take care of their children on day to day basis.

To address the above question, the score obtained by mothers of African American group and mothers of Caucasian group on the Competence scale of PSI was correlated with their score on the Child Related Stress scale of the PSI. The Pearson product moment correlation coefficients (r) were computed. As evident from Table 5 and Table 6 respectively, a strong positive/direct relationship exists between perceived lack of parental competence and child related stress for African American mothers and modest positive/direct relationship exists between perceived lack of parental competence and child related stress for Caucasian mothers. That is, those African American and Caucasian mothers of Head Start children who feel more incompetent as a parent feel more stressed.
Table 5

**Relationship Between Perceived Lack of Parental Competence and Child Related Stress.**

African American Families (N=31)

<table>
<thead>
<tr>
<th></th>
<th>Pearson r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Lack of Parental Competence</td>
<td>.59</td>
<td>&gt;.005</td>
</tr>
</tbody>
</table>

Table 6

**Relationship Between Perceived Lack of Parental Competence and Child Related Stress.**

Caucasian Families (N=41)

<table>
<thead>
<tr>
<th></th>
<th>Pearson r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Lack of Parental Competence</td>
<td>.36</td>
<td>.019</td>
</tr>
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</table>
Research Question 3
Is there a relationship between African American and Caucasian mothers’ perceived level of parental competence and educational level?

For the purpose of this study, mothers’ perceived level of parental competence was operationalized as their score on the Competence Scale of PSI. Mothers’ educational level was the highest level of education reported by mothers on the Demographic Questionnaire.

To address the above question, mothers’ score on the Competence Scale of PSI was correlated with their highest level of education. Pearson product moment correlation was computed. As evident from Table 7 and Table 8, there is trend for African American and Caucasian mothers with more education to feel competent as a parent.

Table 7
Relationship Between Perceived Level of Parental Competence and Educational Level

<table>
<thead>
<tr>
<th>Perceived Level of Parental Competence</th>
<th>Pearson r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational level</td>
<td>-0.33</td>
<td>0.068</td>
</tr>
</tbody>
</table>

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Table 8

Relationship Between Perceived Level of Parental Competence and Educational Level

Caucasian Families (N=41)

<table>
<thead>
<tr>
<th>Perceived Level of Parental Competence</th>
<th>Pearson r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational level</td>
<td>-.30</td>
<td>.058</td>
</tr>
</tbody>
</table>

Summary of Findings

The preceding section addressed the research questions posed earlier in this paper (page 3). The analysis of data indicate that majority of the families of African American and Caucasian Head Start children experience parenting stress which is within the normal range of stress experienced by all of the parents. Further, a strong positive/direct relationship exists between perceived lack of competence and child related stress for African American mothers and modest positive/direct relationship between perceived lack of parental competence and child related stress for Caucasian mothers. That is, those African American and Caucasian mothers of Head Start children who feel more incompetent as a parent feel more stressed. And finally, there is a trend for African American and Caucasian mothers with more education to feel competent as a parent.
Limitations of the Study

The findings of this investigation should be interpreted with caution because of the following reasons. First, the non-respondents may have differed from the respondents in significant ways. For example, the non-respondents may have had little time to respond to the questionnaire that requires 25-30 minutes. Or, they may have felt hesitant in revealing their feelings. Second, the major findings of the study are based on maternal perceptions. Maternal perceptions are important, but do not necessarily reflect family realities. Third, many of the mothers responded to the questionnaires from their homes. They might have consulted with others in the household while filling out the questionnaires. As a result, the data could have been contaminated. And finally, participating mothers represent Niagara County Head Start. Because of various geographical/programmatic differences, the participating families may differ from the families of other geographical regions.

Conclusion

Despite some of the caveats mentioned, the present investigation is unique in that it has compared diverse family systems of Head Start children.

Implications

The findings of present investigation have implications for practice and research. These implications are discussed below.

Implications for Research

The participating mothers of the present investigation represent Niagara County Head Start of New York. These mothers may differ from the mothers of other regions/programs on critical variables. For a better understanding of the families of Head Start children, there is a need to replicate this study in different regions/programs. Perhaps National Head Start Association could
collaborate for such an endeavor. Also, data for this investigation was collected at the end of Head Start year. It might be beneficial to collect data from mothers in the beginning of the year and then at the end of year. This type of data collection is likely to yield strong evidence as to the impact of Head Start on its families.

**Implications for Practice**

First, the findings of this study show that African American and Caucasian mothers of Head Start children experience stress which is within the normal range of stress, experienced by all of the parents. Clearly, since data for the study was collected at the end of academic year, Head Start Programs need to continue with their family support services.

Second, since the findings of this investigation indicate that the more incompetent a mother feels as a parent, the more stressed she feels, there is need for Head Start programs to continue to support the parenting task of the families of Head Start children. Mothers need to feel competent in their parenting role. And finally, the findings of this investigation indicate a relationship between educational level and perceived level of maternal competence. Head Start programs need to continue encouraging mothers to strive for higher levels of education.
References


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<td>Delar K. Singh, Ph.D.</td>
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