This study explored the possibility that family organization may moderate the impact of stressful events experienced in the home on adolescents' functioning. Participants were 80 African-American adolescents and their mothers in a large northeastern city. (47 one-parent and 33 two-parent families). A factor analysis was used to measure "stressful life events," forming scales in four areas: family disruption; work-related stress; health problems; and relationship problems. Findings reveal that the more that families experienced disruption and the more that mothers reported health problems, the lower the self-reliance and self-esteem of the adolescents. Mothers' health problems were also linked to an increase in adolescents' problem behavior and psychological distress. Findings also revealed some of the moderating effects of family organization on the association of stressful events with adolescent adjustment. In homes high in organization, an increase in disruption was associated with lower psychological distress, while in homes low in organization increases in disruption were associated with an increase in psychological distress. In highly organized homes, the stability and structure of the family environment may offset the impact of disruptive experiences. Some limitations of this research are discussed. (Contains 2 tables and 28 references.)
Mothers' Stressful Events and the Adjustment of African-American Adolescents: Moderating Effects of Family Organization

by

Ronald D. Taylor

1998
Publication Series No. 8
Mothers' Stressful Events and the Adjustment of African-American Adolescents: Moderating Effects of Family Organization

by

Ronald D. Taylor

1998
Publication Series No. 8

The research reported herein is supported in part by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education through a grant to the Laboratory for Student Success (LSS), the Mid-Atlantic Regional Educational Laboratory at Temple University Center for Research in Human Development and Education (CRHDE). The opinions expressed do not necessarily reflect the position of the supporting agencies, and no official endorsement should be inferred.
Introduction

Nearly half (46%) of African-American children under 18 years of age live in poverty (Bennett, 1995). Because of their economic disadvantage, African-American families and children are likely to be exposed to a host of stressful experiences. Research has shown a positive association between economic disadvantage and negative life events (Dohrenwind, 1970). Children from low-income homes are more likely to experience stressful events such as divorce, family moves, and school transfer (Garmezy & Tellegen, 1984). Indeed, McLoyd (1990) has argued that “individuals who are poor are confronted with an unremitting succession of negative life events (e.g., eviction, physical illness, criminal assault) in the context of chronically stressful ongoing life conditions” (p. 318).

Research has shown that negative life events reported by parents were associated with children’s emotional and behavioral problems (Fergusson, Horwood, Gretton, & Shannon, 1985; Holahan & Moos, 1987). For example, Holahan and Moos (1987) found that negative life events reported by parents were associated with children’s psychological maladjustment and physical health problems. Also, Thomson and Vaux (1986) found a significant relation between major life events and child affective balance. Ge, Conger, Lorenz, and Simons (1994) found that stressful events reported by parents were positively associated with boys’ depressed mood. This work also revealed that stressful events reported by parents were linked to depression in adolescents because parents’ exposure to stressful events was associated with disruption in parents’ parenting practices.

Given the level of economic disadvantage of African-American families and the association of economic disadvantage with exposure to negative life events, it is surprising that there is relatively little research on the link between negative life events reported by parents and the well-being of African-American children and adolescents. The available research has shown that mothers’ unemployment was positively associated with adolescents’ anxiety (McLoyd, Jayaratne, Ceballo, & Borquez, 1994). Chronic stressors such as low family income or a dangerous
living environment have also been linked to children and adolescents' adjustment. Exposure to a
greater number of chronic family stressors (e.g., low family income, overcrowding, parental
conflict) was linked to adolescents' internalizing and externalizing problems (Brody et al., 1994).
Also, work has shown that the more negative African-American mothers' perceptions are of their
neighborhood (e.g., physical deterioration, crime, lack of resources), the more their adolescents
exhibited problem behavior, low self-esteem, and psychological distress (Taylor, 1997).

**Moderators of Stressful Life Events**

Given the shortage of research on the effects of discrete stressors on African-American
adolescents, it is not surprising that there is little research on factors that may moderate or buffer
the impact of stressful experiences. A possible moderator of stressful experiences explored in
this study was family organization or stability. Family organization refers to the degree to which
parents provide children and adolescents with a home environment that is structured, organized,
and predictable. In research with younger children, family organization has been positively
associated with mental test performance and children's social competence (Bradley & Caldwell,
1976; Slater & Power, 1987) and negatively associated with behavioral problems (Slater &
Power, 1987). Clark (1983) has shown that family organization was a feature that differentiated
high and low achieving African-American adolescents. Parents of adolescents who did well in
school created a family environment in which there were daily and weekly schedules and family
routines. The adolescents had regular times for events throughout the day (e.g., individuals
leaving and arriving home, meals, homework, bedtime). Parents were also actively involved in
the adolescents' schooling through help with homework and visits to the school. In other recent
research, family organization was positively associated with African-American adolescents'
school performance and self-reliance, and negatively associated with problem behaviors and
psychological distress (Taylor, 1996).

In the present study we explored the possibility that family organization may moderate
the impact of stressful events experienced in the home on adolescents' functioning. The effects
of stressful experiences may be offset or dampened when adolescents live in a stable and consistent home environment. It was expected that recent stressful events or experiences would be negatively associated with adolescents' adjustment. It was also predicted that evidence for the moderating effects of family organization would be revealed as stressful events would have less impact on adolescent functioning in the context of a more organized family environment.

Methods

Participants

The participants in the investigation were 80 African-American adolescents and their mothers living in a large northeastern city. The adolescents were 39 males and 41 females whose ages ranged from 14.02 to 18.40 years, with an average age of 15.57 years. Mothers had a mean age of 39.27 years. The families consisted of 47 one-parent and 33 two-parent families, and had an average income in the prior year of $15,000 - $20,000. The families were recruited for participation through advertisements in local community newspapers, fliers in social service agencies, local markets, and recreation centers, and through presentations at home and school associations.

Measures

Stressful life events were measured with Psychiatric Epidemiology Research Interview (PERI) Life Events Scale (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978). In the questionnaire mothers were asked to indicate whether any of 35 different events happened to them or a family member in the past year. A factor analysis of the measure was used to identify items forming scales in four areas: (a) family disruption; (b) work related stress; (c) health problems; and (d) relationship problems.

Events in the area of family disruption (7 items; alpha = .77) concerned areas of difficulty or problems in the nuclear family such as a death in the family, family arguments, or the family moving to a new residence. Events in the area of work-related stress (5 items; alpha = .77) concerned stress associated with work such as trouble on the job. Events in the area of health problems (5 items; alpha = .73) concerned the experience of illnesses or other health problems or
physical conditions such as an injury, an accident, or an improperly treated physical illness. Events in the area of relationship problems (9 items; alpha = .74) concerned negative changes or difficulties with a spouse or “significant other” (for mothers in one-parent homes), such as a break up or separation. The total score for each of the event types is the sum total of the affirmative responses (1 = yes, no = 0) for events in the cluster.

Family organization (5 questions, alpha = .80) was measured with a series of questions (McCubbin, McCubbin, & Thompson, 1987) assessing the adolescents’ perceptions that their family was organized around a series of routines and a clear schedule. A sample question included, “My family has certain routines that help our household run smoothly.” The adolescents indicated their answers using a Likert response scale ranging from “4 = Strongly Agree” to “1 = Strongly Disagree.”

Adolescent adjustment was measured in the areas of self-reliance, involvement in problem behavior, feelings of psychological distress, and self-esteem. Self-reliance (10 items, alpha = .85) was measured using the Psychological Maturity Inventory (Greenberger, Josselson, Kneer, & Kneer, 1974; Greenberger & Bond, 1976). The measure assessed adolescents’ lack of dependency, sense of initiative, and control over events. Sample questions that were reverse coded included: “Luck decides most of the things that happen to me,” or “When I do something wrong I depend on my parents to straighten things out for me.” The adolescents indicated their answers using a Likert scale ranging from “4 = Strongly Agree” to “1 = Strongly Disagree.”

Problem behavior (15 items, alpha = .81) was assessed by obtaining the adolescents’ self-report of their frequency of involvement in delinquent activities such as physical assault, drug use, and vandalism (Gold & Reimer, 1975). The response format for the measure is a Likert scale ranging from “4 = Several Times” to “1 = Never.”

Psychological distress (20 items, alpha = .87) was assessed using the Center for Epidemiological Studies (CES) Depression Scale (Radloff, 1977). For this measure, the adolescents reported the frequency of mental or physical states, such as feelings of depression or
loss of appetite, etc., over the past month. The Likert scale for the measure ranged from “4 = Three or More Times” to “1 = Never.”

Self-esteem (10 items, alpha = .95) was assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This scale measures the self-acceptance component of self-esteem. A sample question is: “I feel that I have a number of good qualities.” The response format for the measure is a Likert scale ranging from “4 = Strongly Agree” to “1 = Strongly Disagree.”

Procedure

The mothers and adolescents were interviewed in the home separately by interviewers trained in the administration of the measures. The measures typically took one hour to complete. Mothers answered questions regarding stressful events and adolescents reported on family organization and the areas of adolescent adjustment assessed.

Analysis Plan

Our conceptual model postulated that family organization would moderate the association of stressful events with adolescent adjustment. Analyses followed Baron and Kenney’s (1986) recommendations for testing moderating effects. Moderating effects are tested by taking the product of the independent variable (stressful event) and the moderator (family organization). Moderator effects are indicated by the significant effect of the product term of (stressful event) x (family organization) while the effects of stressful event and family organization are controlled. Multiple regression techniques were used to conduct the analyses. Each dependent variable was regressed on stressful events, family organization, and the product term of (stressful event) x (family organization). In all of the analyses the variables, including income, family structure, and mothers’ age, were included to control for their effects.

Results

Demographic Analyses

Means and standard deviations for the major variables are shown in Table 1. The association between families demographic characteristics and the major variables was assessed.
Table 1
Means and Standard Deviations of the Major Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Organization</td>
<td>16.48</td>
<td>3.24</td>
</tr>
<tr>
<td>Disruption</td>
<td>6.02</td>
<td>4.87</td>
</tr>
<tr>
<td>Work Stress</td>
<td>4.25</td>
<td>3.19</td>
</tr>
<tr>
<td>Health Problems</td>
<td>4.53</td>
<td>3.37</td>
</tr>
<tr>
<td>Relationship Problems</td>
<td>6.72</td>
<td>4.89</td>
</tr>
<tr>
<td>Income</td>
<td>3.05</td>
<td>2.31</td>
</tr>
<tr>
<td>Self-reliance</td>
<td>12.73</td>
<td>4.66</td>
</tr>
<tr>
<td>Problem Behavior</td>
<td>19.41</td>
<td>7.92</td>
</tr>
<tr>
<td>Psychological Distress</td>
<td>26.35</td>
<td>11.55</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>24.43</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Findings revealed that older mothers were less likely to report relationship problems than younger mothers ($r = -.25, p < .05$). Also, there was a positive association of family income with adolescents’ self-reliance ($r = .32, p < .01$), and a negative correlation of family income with adolescents’ problem behavior ($r = -.31, p < .01$).

**Association of Stressful Life Events with Adolescent Adjustment**

Family disruption was negatively associated with self-reliance ($\beta = -.44, p < .05$), and self-esteem ($\beta = -.52, p < .05$). Health problems experienced by the mother were negatively associated with self-reliance ($\beta = -.34, p < .05$) and self-esteem ($\beta = -.39, p < .05$) and positively linked to problem behavior ($\beta = .40, p < .05$) and psychological distress ($\beta = .34, p < .05$).

**Association of Family Organization with Adolescent Adjustment**

Findings revealed that family organization was positively associated with self-reliance ($\beta = .31, p < .05$) and self-esteem ($\beta = .32, p < .05$). Family organization was also negatively associated with problem behavior ($\beta = -.40, p < .05$).

**Moderating Effects**

Evidence of moderating effects of family organization was revealed for the effect of the interaction of family organization and disruption on psychological distress ($\beta = -1.65, p < .01$).
The relation between psychological distress and disruption for different levels (high = +1 standard deviation, low = -1 standard deviation) of family organization was then tested. As shown in Table 2, the relationship between psychological distress and disruption was significant for adolescents in homes high in organization and for those in homes that were low in organization. Thus, for adolescents in highly organized homes increases in disruption were associated with lower levels of psychological distress. In comparison, for those in homes low in organization an increase in disruption was associated with an increase in adolescents' psychological distress.

Discussion

The findings of the present study help fill a void in the literature on stress and adjustment among low-income African-American families. Although African-American families suffer poverty at extraordinary levels, and although poverty is linked to the experience of stressful events and experiences, little research has examined how stressful events experienced in the family are associated with African-American adolescents' functioning.

Table 2

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>SR</th>
<th>PB</th>
<th>PD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Organization (FO)</td>
<td>.05</td>
<td>.10</td>
<td>.05</td>
<td>.12</td>
</tr>
<tr>
<td>Disruption (D)</td>
<td>-.44*</td>
<td>.40+</td>
<td>.29</td>
<td>-.52*</td>
</tr>
<tr>
<td>Work Stress (WS)</td>
<td>.01</td>
<td>-.12</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td>Health Problems (HP)</td>
<td>-.34*</td>
<td>.40*</td>
<td>.34*</td>
<td>-.39*</td>
</tr>
<tr>
<td>Relationship Problems (RP)</td>
<td>.09</td>
<td>.10</td>
<td>.07</td>
<td>.04</td>
</tr>
<tr>
<td>Income (I)</td>
<td>.33*</td>
<td>-.32*</td>
<td>.14</td>
<td>.09</td>
</tr>
<tr>
<td>FO X D</td>
<td>.22</td>
<td>.08</td>
<td>-1.65**</td>
<td>.27</td>
</tr>
<tr>
<td>FO X WS</td>
<td>.26</td>
<td>.01</td>
<td>1.03</td>
<td>.13</td>
</tr>
<tr>
<td>FO X HP</td>
<td>.30</td>
<td>.29</td>
<td>.26</td>
<td>.17</td>
</tr>
<tr>
<td>FO X RP</td>
<td>.17</td>
<td>.17</td>
<td>.08</td>
<td>-.17</td>
</tr>
<tr>
<td>FO X I</td>
<td>-.03</td>
<td>-.02</td>
<td>.06</td>
<td>.22</td>
</tr>
</tbody>
</table>

Note: Regression coefficients are standardized (betas).
Self-reliance (SR), problem behavior (PB), psychological distress (PD), self-esteem (SE).

+ p < .10
* p < .05
** p < .01
The findings revealed that the more that families experienced disruption and the more
that mothers reported health problems, the lower adolescents’ self-reliance and self-esteem. Also,
mothers’ health problems were linked to an increase in adolescents’ problem behavior and
psychological distress. When families face disruption or the poor health of a significant member
of the family, adolescents may be required to relinquish some of their self-reliance or
independence in order to help with family matters. The stress associated with negative
experiences as well as the possible changes in behavior required of them (lower self-reliance or
independence) may also be associated with lower self-esteem and high psychological distress in
the adolescents. The positive association between health problems and adolescents’ problem
behavior may indicate that when mothers’ health is compromised, control and monitoring of
adolescents’ behavior may suffer and adolescents may engage in problematic forms of behavior.
Indeed, past research (McLoyd et al., 1994) has shown that the effects of economic stressors on
adolescents’ functioning are mediated by mothers’ parenting behavior. Clearly, the processes
mediating the association between stressful events and adolescents’ adjustment need
investigation.

Our findings revealed some evidence of the moderating effects of family organization on
the association of stressful events with adolescent adjustment. The results revealed that in homes
high in organization an increase in disruption was associated with lower psychological distress,
while in homes low in organization increases in disruption were associated with an increase in
psychological distress. In highly organized homes, the stability and structure of the family
environment may offset the impact of disruptive experiences like a move or the loss of a family
member. In organized homes facing disruption, because some aspects of family life remain
predictable, adolescents may find the disruptive experiences less distressing. The routines and
organization of the family may be the “calm in the eye of the storm” for adolescents.

The question of why family organization moderates the effects of disruption but not other
stressful experiences is unclear. It may be that work-related stressors are removed far enough
from adolescents that they have limited association with youngsters’ functioning and need little moderation. It may also be that problems in relationships are emotionally charged enough that little moderation of their effects are possible through factors such as family organization.

There are several limitations in the research that should be noted when interpreting the results. First, the data were based on self-reports of the mothers and adolescents. Objective observers beyond mothers might report more or less stressful experiences. Also, reporters other than adolescents might characterize family organization differently. However, it was expected that mothers are likely the best source of information about stressors which they or their family members have experienced. Also, research has shown that adolescents are accurate reporters on family processes (e.g., Schwarz, Barton-Henry, Pruzinsky, 1985).

Second, the use of interviews with mothers and adolescents as the sole source of data introduces another potential limitation. It is possible that relations found were the result of shared method variance involved in the measures (Bank, Dishion, Skinner, & Patterson, 1990; Lorenz, Conger, Simons, Whitbeck, & Elder, 1991). A multiple method and multiple informant strategy would help overcome this problem. Thus, the relations found must be interpreted with caution.

Third, the causal direction in the relations among the variables is uncertain. For example, given the design of the investigation, it is not possible to tell whether family disruption leads to lower self-reliance among adolescents, or whether adolescents who are less self-reliant cause some of the disruption in the home. Longitudinal data are needed to assess the causal direction among the relations of the variables.

Finally, the sample was composed of economically disadvantaged, urban African-American mothers and adolescents. The results may not generalize to non-poor African-American families living in rural or suburban areas, or to adolescents of other racial or ethnic backgrounds.

Additional research is needed on the effects of stressful experiences on poor African-American and other disadvantaged groups. Indeed, for example, Puerto Rican families suffer
from levels of poverty similar to and sometimes exceeding that of African-American families in some urban areas. It seems highly likely that these families would be exposed to stressful experiences and the effects on their adjustment and possible moderators need investigation. A potential moderating variable for both African-American and Latino families is the support of extended family members. Indeed, the positive effects of kinship support on adolescent adjustment and parents' parenting practices in African-American (Taylor, Casten, & Flickinger, 1993; Taylor & Roberts, 1995; Taylor, 1996) and recently Puerto Rican families (Taylor, 1997) has been shown. The question of whether social support from the extended family also offsets potential negative effects of stressors is an important question. It is also important to assess whether other potential sources of support in communities (religious organizations) help moderate the effects of stressful experiences on families. Given the significant and consistently high levels of poverty experienced among ethnic minority families in the United States, it is imperative to identify factors within and beyond the family that may offset the impact of stressors linked to poverty.
References


The Laboratory for Student Success (LSS) is one of ten regional educational laboratories in the nation funded by the U.S. Department of Education to revitalize and reform educational practice in the service of children and youth. The mission of the Laboratory for Student Success is to strengthen the capacity of the mid-Atlantic region to enact and sustain lasting systemic educational reform through collaborative programs of applied research and development and services to the field. In particular, the LSS facilitates the transformation of research-based knowledge into useful tools that can be readily integrated into the educational reform process both regionally and nationally. To ensure a high degree of effectiveness, the work of the LSS is continuously refined based on feedback from the field on what is working and what is needed in improving educational practice.

The ultimate goal of the LSS is the formation of a connected system of schools, parents, community agencies, professional organizations, and institutions of higher education that serves the needs of all students and is linked with a high-tech national system for information exchange. In particular, the aim is to bring researchers and research-based knowledge into synergistic coordination with other efforts for educational improvement led by field-based professionals.

LSS Principal Investigators

<table>
<thead>
<tr>
<th>Margaret C. Wang</th>
<th>Aquiles Iglesias,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director, LSS</td>
<td>Associate Director, LSS</td>
</tr>
<tr>
<td>Professor of Educational Psychology</td>
<td>Professor and Chair of Communication Sciences</td>
</tr>
<tr>
<td>Temple University</td>
<td>Temple University</td>
</tr>
</tbody>
</table>

Lascelles Anderson  
Center for Urban Educational Research and Development  
University of Illinois at Chicago

Patricia Gennari  
Director of Special Projects  
Penn Hills School District

Sam Redding  
Executive Director  
Academic Development Institute

Ronald Taylor  
Associate Professor of Psychology  
Temple University

David Bartelt  
Professor of Geography  
and Urban Studies  
Temple University

Geneva Haertel  
Senior Research Associate  
Center for Research in Human Development and Education  
Temple University

Maynard Reynolds  
Professor Emeritus of Educational Psychology  
University of Minnesota

Herbert Walberg  
Professor of Education  
University of Illinois

Jennifer Beaumont  
Senior Research Associate  
Center for Research in Human Development and Education  
Temple University

Penny Hammrich  
Assistant Professor of Science Education, Curriculum, Instruction, and Technology in Education  
Temple University

Denise Maybank-Shepherd  
Project Implementor  
LSS Extension Services  
The College of New Jersey

Carol Walker  
Associate Professor of Education  
The Catholic University of America

David Bechtel  
Senior Research Associate  
Center for Research in Human Development and Education  
Temple University

Jeong-Ran Kim  
Senior Research Associate  
Center for Research in Human Development and Education  
Temple University

Sharon Sherman  
Associate Professor of Childhood Education  
The College of New Jersey

Robert Walter  
Professor Emeritus of Education Policy and Leadership Studies  
Temple University

William Boyd  
Professor of Education  
Pennsylvania State University

Jane Oates  
Director of Services to the Field  
Center for Research in Human Development and Education  
Temple University

Betty Steffy  
Dean  
School of Education  
Purdue University at Fort Wayne

Kenneth Wong  
Associate Professor of Education  
University of Chicago

Bruce Cooper  
Professor of Education  
Fordham University

Ruth Palmer  
Associate Professor of Educational Administration and Secondary Education  
The College of New Jersey

Floraline Stevens  
Evaluation Consultant  
Floraline I. Stevens Associates

William Yancey  
Professor of Sociology  
Temple University

Ramona Edelin  
President and Chief Executive Officer  
National Urban Coalition

Judith Stull  
Associate Professor of Sociology  
LaSalle University

Frank Yekovich  
Professor of Education  
The Catholic University of America

Fenwick English  
Vice Chancellor of Academic Affairs  
Purdue University at Fort Wayne

Suzanne Pasch  
Dean  
Education and Graduate Studies  
The College of New Jersey

William Stull  
Professor of Economics  
Temple University

Roger Weisberg  
Professor of Psychology  
University of Illinois at Chicago

For more information, contact Cynthia Smith, Director of Information Services, at (215) 204-3004 or csmith6@vm.temple.edu. To contact the LSS: Phone: (800) 892-5550  
E-mail: lss@vm.temple.edu  
Web: http://www.temple.edu/departments/LSS

BEST COPY AVAILABLE
NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☑ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").