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Economic Disadvantage in Complex Family Systems: Expansion of Family Stress Models

Melissa A. Barnett

University of New Orleans

Abstract

Economic disadvantage is associated with multiple risks to early socioemotional development. This paper reviews research regarding family stress frameworks to model the pathways from economic disadvantage to negative child outcomes via family processes. Future research in this area should expand definitions of family and household to incorporate diversity and instability. This expansion would be particularly relevant for research among low-income ethnic minority families and families with young children. This line of research would highlight specific pathways to target to prevent the onset of early parental and child dysfunction.

Keywords

economic disadvantage; poverty; parenting; family processes; early childhood

Child poverty is a persistent critical problem in the United States. In 2006, almost 17% of children (approximately 13 million) in the United States were poor (National Center for Children in Poverty, 2008). Young children face the highest poverty rates, as 20% of children under age 6 in the United States live in families living below the poverty level (National Center for Children in Poverty, 2008). Poverty constitutes a pervasive developmental hazard that exposes families and children to multiple sources of risks at it works in concert with individual, family and sociocultural characteristics to create an ecology in which child development unfolds. The main effects of poverty or low-income are difficult to isolate because economic disadvantage is associated with a host of other disadvantages that threaten child development. Often the goal of developmental scientists studying poverty is to identify mediators that account for the effects of poverty on children. Family process or family stress models have examined the family-based mechanisms through which poverty influences children, often focusing on parenting behaviors and parent-child relationships.

It has been well-established in the extant literature that growing up in poverty places children at risk for multiple socioemotional disadvantages. Economic adversity has been linked to a wide range of negative child outcomes, including elevated risks for insecure attachment relationships (Lyons-Ruth et al., 1997), psychosocial morbidity (Costello, Keeler

& Angold, 2001; Evans & English, 2002), behavior problems (Brooks-Gunn & Duncan, 1997; Evans & English, 2001; Hanson, McLanahan & Thomson, 1997), reduced social competence (Bolger et al., 1995), lower-levels of self-regulation (Brody & Flor, 1997; Evans & English, 2002) and elevated physiological markers of stress (Evans & English, 2002). Research has aimed to identify the mechanisms that link poverty to these disadvantages in order to identify targets for effective interventions and policies. The family is a crucial system in which to explore how economic disadvantage impacts young children.

This paper begins by reviewing the large body of research focusing on family stress or process models that explore family-based pathways through which economic disadvantage is associated with negative child outcomes. This work has fundamentally advanced the field, and it is crucial to the development of effective programs and policies for poor families. This paper highlights the importance of expanding these models to incorporate broad and flexible definitions of family and to account explicitly for instability in family, household and relationship structures. These expanded lines of research are particularly relevant to studying young children and racial/ethnic minority families. Ultimately, these complex and dynamic models may lead to the development of ecologically grounded research and subsequent targeted interventions for poor families with young children.

Family Stress Models

Family stress models describing the processes through which poverty influences child development have gained wide acceptance. Early family stress models grew out of the seminal work of Glen Elder (Elder et al., 1985; Elder, 1996) who studied the influence of economic loss during the Great Depression on paternal behaviors and child outcomes. Rand Conger's (Conger & Conger, 2002; Conger et al., 1992; Conger et al., 1993) research group studying Iowa farm communities experiencing economic downturns in the 1980's further supported and expanded upon Elder's work. The primary tenet of family stress models holds that economic disadvantage triggers feelings of economic pressure, which in turn lead to psychological distress in parents that ultimately negatively impacts child development through two different reciprocal pathways. A large body of research has demonstrated the robust relationship between psychological distress, especially depression, frustration, anxiety and anger, emotion states associated consistently with poverty and/or economic loss, and less sensitive, nurturing, responsive parenting (Aber, Jones & Cohen, 2000; Magnuson & Duncan, 2002; McLeod & Shanahan, 1993; McLoyd, 1998; Petterson & Albers, 2001). Some studies take a more family-systems oriented perspective by considering the role of marital/partner conflict within economically disadvantaged families. In these models, economic pressure and psychological distress are linked to conflict in the marital system, which may in turn negatively impact parenting and child behavior. The bi-directional relationship between stress and marital conflict is central, as both marital conflict and psychological distress are independently associated with negative parenting behavior. As will be discussed later, this concept of marital conflict should be expanded beyond the marital or parental dyad to include more relationships between adults playing significant roles in children's lives.

Economic Disadvantage

There are multiple ways to conceptualize economic disadvantage. Traditional family stress models suggest that perception of financial strain mediates the relationship between income and psychological distress. In other words, the subjective experience of economic disadvantage is proposed to have a greater influence on parenting and child outcomes than the objective experience of being poor (Conger & Donellan, 2007; McLoyd et al., 1994; Mistry et al., 2004). Measures of financial strain introduce an individual level variable by tapping the parents' perceptions of financial problems. Accordingly, there should be considerable individual variability of financial strain levels within a single income bracket that is likely to be influenced by other family and individual factors, including social support, parental mental health and cultural beliefs. Furthermore, differences in resources, opportunities, and perceptions or casual attributions of economic loss or disadvantage may influence the impact of financial strain on parental functioning and parenting behaviors (Beiser et al., 2002; Elder et al., 1995; McLoyd, 1990).

Another common approach to studying economic disadvantage is direct measurement of household income. Poverty is often measured according to the cash income guidelines established by the federal poverty threshold. Many studies measure family income and then determine the percentage above or below the poverty threshold that a particular family falls. Other studies operationalize income according to an income-needs ratio, a more sensitive measure of income-based poverty that reflects a household's standard of living, by dividing the household income by the federal poverty threshold for that household size. Hanson, McLanahan & Thomson's (1997) analysis of a national data set of children and parents found stronger relationships between income to needs ratios and child well-being than household income and child well-being.

Some studies directly exploring the influence of family poverty on parental psychological functioning, parenting, and child outcomes have found similar results to those studies in which financial strain is hypothesized to be a key mediating variable (Linver et al., 2002; Mistry et al., 2004). Living in chronic poverty may regularly present such challenges to parents that there is limited variability in financial strain. In these contexts experiencing economic pressure may be an expected way of life that is not captured by measures of behavioral or cognitive adaptations to financial pressure (McLoyd et al, 1998; 2006). In addition, extreme and chronic poverty may exert more direct extra-familial influences on parents and children than episodic poverty (Brooks-Gunn & Duncan, 1997; McLoyd, 1990).

Economic disadvantage is sometimes used interchangeably with socioeconomic status (SES), which takes into account income as well as parental education and occupation. It is important to distinguish between SES and poverty, for although low socioeconomic status may increase the likelihood of experiencing poverty, the two concepts are not synonymous. Family SES is often construed as a global concept or risk/protective marker (Bradley & Corwin, 2002; McLoyd, 1998). Income may be less reflective of a family's resources than SES, as it does not take into account potential for earnings or other resources that more educated parents who lack substantial income may gain access to for their children. Moreover, SES may be more stable than income, and hence carry the possibility of greater influence on children (McLoyd, 1998). Above and beyond income, maternal education is

often the most significant predictor of parenting behaviors (Hoff, Laursen & Tardiff, 2001). Using SES as a marker for economic disadvantage relies on a social capital approach to understanding economic disadvantage. Other approaches consider the synergistic relationship between income and socioeconomic status (Conger & Donellan, 2007).

Although the goal of this review is to focus on family processes, it is important to note that the definitions of economic disadvantage may vary across studies, thus obscuring general conclusions regarding the impact of economic disadvantage on family processes and child outcomes. While acknowledging the negative impact of situational or temporary disadvantages, this review focuses on chronic poverty because chronic poverty may exert more direct extra-familial influences on children than episodic poverty (Brooks-Gunn & Duncan, 1997; McLoyd, 1990). Poverty that is chronic and deep is associated consistently with the strongest negative effects on children across a range of ages and measures (Bolger et al., 1995; Dearing, McCartney & Taylor, 2001; Mistry et al., 2004; McLeod & Shanahan, 1993). For example, Mistry et al. (2004) tested separately the influences of income and income instability in their analysis of parenting and 36-month child behavioral and cognitive outcomes. They found no effects on family processes or child development when income instability was used, but they found that income was predictive of parenting, and thus indirectly of less-optimal child outcomes among the poorest families in the sample.

The importance of these distinctions for research and policy has been discussed in detail by others (see for example, Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997; Roosa et al., 2005; McLoyd et al., 2006). The degree to which particular conceptualizations of economic disadvantage differentially relate to family functioning, and most relevant to the current review, whether these different conceptualizations are systematically related to incorporation of complex and dynamic family relationships remain empirical questions that are beyond the scope of this review.

Psychological Distress

Family stress models posit that psychological distress is a key mediator in the relationship between economic pressure and parenting behaviors. Psychological distress is generally operationalized as depressive symptoms, although efficacy (Elder et al., 1995; Mistry et al., 2002), self-esteem (Brody & Flor, 1997), anxiety (Murry et al., 2002) and more global mental health (Kotchick et al., 2005; Linver et al., 2002) have also been examined. Parental psychological distress may be most harmful for low-income families given the constellation of other risks these families face (Petterson & Albers, 2001; McLoyd, 1998).

Social support has emerged as a critical moderator in the relationship between economic disadvantage, or economic strain, and parenting practices. For example, high levels of social support have been associated with more sensitive parenting of infants among low-income parents (Raikes & Thompson, 2005). Although social support is an important resource for all parents, it may be especially important for parents living in poverty because they may face more stress and lack financial resources to purchase support (i.e., child care) (Hashima & Amato, 1994; McLoyd, 1998; Orthner, Jones-Sanpei & Williamson, 2004). The particular mechanisms through which social support influences family processes in diverse low-income families remain unclear and warrant future investigation. Understanding the benefits

and burdens of support derived from and contributed to social and kinship networks is a fruitful area for future research that can be explored within models that expand the definition of family beyond the nuclear family paradigm.

Parenting

Family stress process models have measured parenting in a variety of ways, including parental self-report (Elder et al., 1995; Kotchik et al., 2005; Murry et al., 2002), observational coding (Brody & Flor, 1997; Conger et al., 1994; Mistry et al., 2004) and combinations of these methods (Jackson et al., 2000). In general, positive parenting is conceptualized as behaving in emotionally supportive and nurturing ways. Negative parenting is generally characterized as being coercive, harsh or unresponsive. Research has demonstrated consistently that economic disadvantage is associated with less positive and more negative parenting across the spectrum of parenting behaviors, ranging from less sensitive and responsive parenting, harsher discipline and the use of fewer-child-oriented approaches or parenting beliefs (Bradley & Corwin, 2002; Hoff, Laursen & Tardiff, 2001, Magnuson & Duncan, 2002; McLeod & Shanahan, 1993; McLoyd, 1998; McLoyd et al., 2006). These parenting behaviors in turn are linked to less positive cognitive and social outcomes for children of all ages.

Despite the considerable challenges, many parents living in poverty exhibit effective, sensitive parenting behaviors. This positive parenting can serve as an important resource or protective factor for children facing the other risks associated with poverty (i.e., dangerous neighborhoods, failing schools). In fact, poor children may benefit more from effective parenting than their wealthier peers (Hanson, McLanahan & Thomson, 1997). Identifying the processes through which poverty compromises parenting, while simultaneously identifying the mechanisms that preserve effective parenting in the face of economic adversity are critical goals for researchers (Florsheim, Tolan & Gorman-Smith, 1996; Klein & Forehand, 2000; Magnuson & Duncan, 2002; McAdoo, 1999; Orthner, Jones-Sanpei & Williamson, 2004). Moving beyond simple models of parental (usually maternal) influence to include other adults and changes over time in family structures may illuminate particular risk and protective factors that threaten the parenting of some parents and enhance the parenting of other parents.

Generalizability of Family Stress Models

Although there may be some differences in magnitudes of effects and specific pathways, the major processes and links between income, parental psychological functioning, parenting behavior and child outcomes have stood up across samples. These models have informed both research and practice by identifying the general mechanisms through which child development may be compromised in economically disadvantaged families. This area of research could be enhanced by using more fine-grained and ecologically informed lenses in order to include explicit considerations of family structures that may shape family processes.

Definitions of Family

Initial studies applied family process stress models in two-parent married families (Elder, Nguyen & Caspi, 1985; Conger et al, 1992), although the models have been expanded and supported in single parent families as well (e.g., Conger et al., 2002; Body & Flor, 1997). In general, most research on parenting and child development among economically disadvantaged families focuses on single-mother households. Residing in a single-mother family is itself a risk factor for poverty. Marriage rates are lower and out-of-wedlock birth rates and divorce rates are higher within low-income populations (Fein & Ooms, 2006). The cumulative nature of risks associated with poverty is illustrated by the fact that the children of younger, single mothers are the most vulnerable to poverty, and at the same time may be the most at risk for exposure to less than optimal parenting (Brooks-Gunn & Duncan, 1997). However, according to a recent analysis by Foster & Kalil (2007) there is considerable diversity of parenting and child development within low-income in single-mother households, thus future research should focus on delineating variations in family processes within household types rather than comparing child outcomes or processes across household types. Expanding the definition of family to move beyond the single-mother paradigm would contribute to this endeavor. Some single mothers may receive considerable caregiving assistance while others may truly parent on their own, thus potentially accounting for some of the variability in child outcomes among children from structurally similar yet functionally different family structures.

The processes through which economic hardship impacts child outcomes may vary by family structure. When Conger and colleagues (2002) replicated the family stress model in a sample of African Americans they expanded the concept of marital conflict to include conflict and withdrawal in the relationship between two caregivers, even if they were not married. In these families, maternal depressive symptoms were not associated with relationship conflict, but these depressive symptoms were directly related to less-involved parenting behaviors. Mothers' relationships with their children may operate more independently of their co-parent relationships when the other adult is not the father. In addition, elevated depressive symptoms among the secondary (non-maternal) caregivers were directly associated with reduced caregiver relationship quality, less nurturing parenting behaviors and poor socioemotional adjustment (Conger et al., 2002).

The factors that influence psychological distress and secondary caregiver-child dynamics must be explored in greater detail. These findings suggest that transactions across levels of family-systems may vary in non-marital and/or non-parental families. Including only mothers or only mothers and their partners in technically single mother families may lead to the omission of other important individuals in the lives of the parents and children. These individuals may provide buffers against the hardships associated with poverty, or alternatively they may exacerbate familial disadvantages. Understanding the dynamics in these diverse family forms is essential to the development of effective family support programs and policies.

Very limited research, however, has moved beyond the single mother or mother-father paradigm to explore the relationships between economic disadvantage, psychological

distress, parenting and child outcomes. Many young children, including those living in single-mother families, participate regularly in interactions with adults other than mothers. Other central adult figures include fathers, grandmothers, mothers' romantic partners, other relatives, or family friends. These other adults are rarely incorporated into studies linking parenting behavior to child socioemotional development, yet the quality of interactions between these individuals and mothers, and between these individuals and children, may be linked to socioemotional development, particularly when these adults engage in regular and sustained relationships (Jones et al., 2007). Expanding family stress models to include explicitly the roles of these other adults in the lives of mothers and children is especially important for research geared towards illuminating points for successful interventions. Understanding who is a part of the family and how that individual may be related to maternal well-being and thus indirectly to child well-being via maternal parenting, or directly to child well-being via interactions with the child would provide crucial information for the design of effective family-based interventions aimed at preventing the development of behavior problems.

Fathers

Research on family processes in low-income communities often focuses on mother-child interactions and omits fathers, especially when they are absent from the household. Emerging research on fathers from the broader field of family relationships and child development suggests that above and beyond the influence of mothers' parenting, fathers' harsh parenting during early childhood predicts the emergence of behavior problems (Kaczynski et al., 2006; NICHD ECCRN, 2004), and fathers' sensitive parenting predicts the development of social competence (Isley, O'Neil & Parke, 1996; NICHD ECCRN, 2003, 2004) and language skills (Magill-Evans & Harrison, 1999; Ryan, Martin & Brooks-Gunn, 2005; Shannon, et al., 2002; Tamis-LeMonda et al., 2004). Although research on low-income fathers has been framed as a problem of father absenteeism (Coley, 2001), lack of parental marriage does not imply lack of paternal involvement. Going one step further, lack of paternal residence also does not imply lack of paternal contact, or contact with father-like figures. When fathering among low-income populations is studied, it is usually done so in isolation from the rest of the family system, and/or fathering is measured in quantitative or simplistic ways (i.e. the provision of material resources) that fail to capture the dynamic ways in which fathers help shape child development (Amato & Gilbreth, 1999; Brophy-Herb et al., 1999; Coley, 2001; Coley & Chase-Lansdale, 1999; Glikman, 2004).

The support provided by low-income fathers may buffer the negative influences of poverty on children either directly through the provision of financial resources and sensitive parenting, or indirectly through the provision of maternal social support. Paternal employment and education have been associated with greater involvement and time spent with children, higher quality interactions, and positive child cognitive and socioemotional outcomes (Black et al., 1999; Coley, 2001; Coley & Chase-Lansdale, 1999; Glikman, 2004). Studies that do not include fathers would fail to capture this important source of support within poor single mother households that may directly impact factors (i.e., maternal psychological distress) that in turn are linked to parenting.

Relations within the parental and parent-child relationships interact with each other to shape family processes (i.e., Cox & Paley, 1997; Minuchin, 1985). The quality of the mother-father relationship both within and outside of romantic relationships is another consistent predictor of the quantity and quality of paternal involvement among residential and non-residential fathers (Cabrera et al., 2000; Coley & Lansdale, 1999; Corwyn & Bradley, 1999; Doherty et al., 1998; Glikman, 2004). These findings speak to the importance of incorporating mother-father relations in models exploring family functioning in low-income families, even when the mother and father are neither married, nor romantically involved, nor co-habiting. Similarly, mothers' partners, even if they are not the biological fathers of the focal children should be included in studies of family processes and child outcomes.

Studying the roles of fathers in low-income families, however, presents additional conceptual challenges tied to defining or identifying fathers. Non-residential biological fathers, residential co-habiting biological fathers, step-fathers, maternal co-habiting partners or members of the mother's or father's kinship network may fill paternal roles. In many single-mother headed homes a father may not be available to provide caregiving. Very little work has included other adults identified by mothers as playing key roles in family processes. The identity and relationship status of the father figure or other caregiver may influence the impact of interactions with the child on child development. Very limited research has incorporated these non-conventional adults into family process models, let alone begun to tease apart the implications of the quality of relationships from the identities of the relationships.

Social fathers

An important yet limited line of research examines how social fathers, men other than biological fathers identified by mothers as playing a significant role in a child's life, influence child behavior. Given low marriage rates, high co-habitation rates and cultural familial patterns, the presence of social fathers in African American children's lives is common (Coley, 1998; Jayakody & Kalil, 2002; Tamis-LeMonda & Cabrera, 2002). These social fathers may or may not live with the child, and they are not likely to be included in research (or interventions) in single-mother families unless mothers are asked explicitly about their involvement. In their examination of the role of social fathers in predicting school readiness among urban African-American, low-income pre-school children, Jayakody and Kalil (2002) found that the presence of social fathers who were male relatives (i.e. grandfathers, uncles) was positively associated with greater social-emotional school readiness, while the presence of social fathers who were mothers' romantic partners was negatively related to social-emotional adjustment. The presence of social fathers, and not the actual parenting of social fathers or mothers, was investigated.

In her study of third and fourth graders from single-mother families, Coley (1998) found that child reports of warmth and responsiveness in a relationship with a significant male figure were positively related to academic performance if the male was the biological father. Warmth and responsiveness in relationships with father figures (i.e., uncles, mothers' partners) was positively related to prosocial peer behavior, and negatively related to teacher-reported behavior problems. These relationships were particularly strong for African

American versus white children. However, the actual parenting behaviors of mothers and male adults were not observed. Consequently, little is known about how the quality of social father-child interactional processes, especially in the context of mother-child interactions, influences children's social emotional development.

Cohabitation and Marriage

Moving beyond the mother-father/husband-wife family paradigm may be especially important when studying low-income children. Even in communities where marriage rates are low, co-habitation rates may be high, suggesting that in order to attain a greater understanding of family processes, the definition of family must be expanded. In fact, nonmarital births are increasingly taking place within co-habiting unions (Fein & Ooms, 2006; Manning, 2004). In general, child outcomes from cohabiting families are intermediate to those from married and single mother families (Fein & Ooms, 2006; Manning, 2002). However, the differences in child outcomes are primarily accounted for by differences in parental characteristics, rather than differences in family structure (Fein & Ooms, 2006; Manning, 2002; Osborne, McLanahan & Brooks-Gunn, 2005). Findings from the Fragile Families study, for example, reveal that stable co-habiting versus married mothers are more disadvantaged across a range of economic and health measures prior to the birth of the child. These differences accounted for the higher levels of aggressive, withdrawn and anxious/depressive behaviors reported among three year-old children in non-married households (Osborne et al., 2005). It should be noted, however, that parenting behavior was not measured as a potential mediator of the relationship between parental characteristics and child outcomes.

Family systems models and research examining divorce and remarriage suggest that the presence of a spouse or partner in the household may be a buffer against some financial burdens, and potentially provide a source of maternal social support, but increased conflict between the spouses and/or the introduction of step-parent-child conflict can cause disruptions in the parent-child relationship. Additionally, if the second partner in the household is unable to find employment, and thus to contribute to household income, he may become an additional burden on the family. Both marital discord and single-parent status can be linked to elevated rates of maternal psychological distress (McLoyd, 1990), which in turn impacts parenting behaviors. Future research must continue to explore these relations in cohabiting families.

Multi-generational and Extended Family Networks

Despite the prevalence of multigenerational households and extended kinship networks among low-income communities, these family patterns are rarely incorporated into psychological investigations of family functioning in general, and even more rarely included in applications of family stress process models. Intergenerational childrearing strategies and reliance on extended family networks have been considered adaptive family system responses to disadvantage (Hunter, 1997; Jones et al., 2007; Pearson et al., 1990). The processes influencing the roles family members play in multi-generational households, and more broadly speaking in African American extended kinship networks, remain unclear (Hunter & Taylor, 1998; Pearson et al., 1990). These extended family networks may provide

social support to buffer against the negative influences of poverty, or alternatively they may serve as additional burdens on families who are dispersing diminished psychological and economic resources across a number of family members. One implication of the centrality of kinship networks is that children are influenced by multiple adults and caregivers, so that studying family processes in these families may require complex models that move beyond the boundaries of nuclear families or households to include adult-adult and adult-child relationship dynamics (Garcia Coll, 1990; Jones et al., 2007).

Grandparents

The use of extended family networks, and in particular the important roles of grandmothers in young children's lives are sometimes seen as compensatory for the lack of paternal involvement. Grandmothers are conceptualized as buffering mothers and grandchildren from the adverse influences of poverty and single-parenthood. For example, Patterson (1997) found a positive association between the amount of awake time 3-year-old children spent with their grandmothers and secure grandmother-grandchild attachment status. Interestingly, time spent with mothers while awake was not related to mother-child attachment status. Moreover, grandmothers were found to serve a compensatory role for children insecurely attached to their mothers. Specifically, in comparison to children with secure mother-child attachments, children who were insecurely attached to their mothers were 4.5 times more likely to be securely attached to their grandmothers. This risk-resiliency perspective on mother-grandmother families, however, ignores individual differences. In reality, there is great diversity in the roles grandmothers play (Pearson, Hunter, Ensminger & Kellam, 1990). Very limited research has explored the relationship between grandmother parenting behaviors and child development (Chase-Lansdale et al., 1994; Smith & Drew, 2002; Patterson, 1997). Furthermore, among low-income populations, both the mother and grandmother are likely to experience the strains associated with poverty such that the parenting behaviors of both generations may be compromised by the psychological distress associated with living in poverty. However, grandmothers are seldom included in studies of low-income single mothers and their children so the factors influencing their parenting behaviors remain unknown.

Family Stability

The potentially dynamic roles of extended family networks in children's and mothers' lives across time may be related to their influence on child development. Stability is an often over-looked dimension of family structure that influences parents and children. Economically disadvantaged families are particularly likely to experience family instability, and thus this instability may represent an important pathway through which child development is compromised (Ackerman et al., 2004; Adams, 2004; Seecombe, 2000). Relationship and household residence instability may influence each path of the family stress model, as shifts may influence the degree of economic disadvantage, the perception of this disadvantage (i.e., economic pressure), as well as levels of psychological distress and availability of social support. Each of these aspects is in turn linked to parenting and child behavior. In addition, relationship disruptions may have direct effects on child outcomes, especially when these disruptions involve adults in close relationships with children and when these disruption involve environmental changes to which the children must adjust.

The instability hypothesis, as proposed by Fomby and Cherlin (2007) suggests that instability in family and household structure is more related to negative child behavioral outcomes than specific household structures. In other words, although residing in single-mother households may present a risk to child development, an even greater risk may be presented by residing in households that shift from single-mother, to two parent (married or cohabiting) and to single-mother again. Jarrett & Burton (1999) conclude from qualitative research in various low-income African American communities that consistent change “depletes family energies” (182), thus interfering with successful parenting and monitoring.

Maternal relationship status and household residence are often far more dynamic than typically operationalized. Some of the disadvantages related to growing up in a cohabiting versus married family are in fact tied to greater levels of instability in cohabiting unions (Fein & Ooms, 2006). However, cohabiting units in which both members are the biological parents of the target child are characterized by greater stability and more positive parenting than cohabiting units in which one partner is not the biological parent (Manning, 2002). The protective nature of relationship stability is noted in Hossain & colleagues (1997) examination of father behaviors among low-income residential African American and Hispanic-American families in which, regardless of marital status, length of time in the relationship with the mother was positively related to playing with infant, perhaps suggesting that stability in the caregiving relationship was associated with more emotionally supportive and engaging parenting.

Maternal relationship instability has been linked to negative socioemotional outcomes, including externalizing and internalizing (Ackerman et al., 1999; Ackerman et al., 2002; Fomby & Cherlin, 2007; Martinez & Forgatch, 2002; Najman et al., 1997). For example, in Ackerman and colleague’s (2002) study of low-income urban families, chronic maternal relationship instability was the strongest predictor of externalizing for boys and internalizing for girls among third graders. Similarly, in a national sample, Fomby & Cherlin (2007) reported that the number of maternal relationship transitions was positively related to mother-reported externalizing problems among 5–14 year-olds, and the number of transitions was positively related to self-reported delinquency among 10–14 year-olds for white (but not black) families. Some researchers suggest that maternal relationship dissolution may be less disadvantageous to African American children given that they may be more likely to be embedded in a stable extended family support network (Mcloyd et al., 2000; Wu & Thomson, 2001), although shifts in household composition beyond maternal romantic relationship status have received little empirical examination.

Mounting research indicates that maternal relationship instability acting in combination with household structure is implicated in maladaptive development. For example, while Fomby and Cherlin (2007) report unique effects for the number of maternal relationship transitions, controlling for maternal and child characteristics, they also found that residing in a single mother households for 75% or more of the first four years of life is an independent risk factor for the development of externalizing problems for Black and White children. These findings suggest that instability and household structure should be studied together because they likely form dynamic associations that influence parenting and child behavior. Moreover, the growing research base on family instability, especially among younger

children, tends to measure this instability in terms of maternal relationship transitions or in terms of household mobility (Adam, 2004). This perspective does not account for other household dynamics or transitions that may be more likely to occur among low-income families as family members may move into and out of each other's homes during times of need (Jarrett & Burton, 1999; Nelson, 2006).

The nature of relationship instability within and beyond household formation patterns points to the necessity of using ecologically-grounded longitudinal methods that specifically include the possibility of flexible family structures. Longitudinal studies of low-income adolescent mothers, for example, have demonstrated that early grandmother co-residence may be beneficial for children and mothers, but that prolonged co-residence is associated with less positive maternal and child outcomes (Chase-Lansdale et al., 1994; Moore & Brooks-Gunn, 2002). These family level or household shifts have rarely been studied among older mothers. Given the importance of the extended family as a safety net of sorts for low-income families, shifts in household membership may be normative common. For example, Nelson's (2000; 2006) qualitative research on single-mother families in rural Vermont suggests that there is considerable fluidity in household residence as mothers may reside in their households of origin at the birth of the child, and then move into and out of this household over time as marital/cohabiting relationships form and dissolve.

Although there is growing evidence suggesting that family instability is a risk factor for a number of child and adolescent outcomes, there is little research demonstrating the processes through which instability confers risk. A notable exception is the work of Martinez & Forgatch (2002) who report that positive parenting mediated the relationship between family transitions following divorce and emotional adjustment among elementary school boys. When mothers were able to maintain positive parenting during post-divorce transitions, their children experienced positive emotional adjustment. The applicability of these results to non-divorced low-income families and to girls is unclear. Further, the influence of instability on parenting behavior was not explored, yet understanding how relationship and family instability may undermine parenting practices, potentially via psychological distress, is crucial for the design of parenting interventions. More broadly, identifying specific processes is necessary for intervention development. While family-based interventions may not be able to prevent family instability, they may be able to interfere with detrimental processes that are triggered by these transitions.

Research to date testing and developing family stress models has rarely incorporated changes in family structure and/or maternal romantic relationships. Given the wealth of research suggesting the validity of the family stress process model to illustrate pathways from economic disadvantage to negative child outcomes, it seems logical to explore how family instability, broadly defined according to maternal and child relationships and household configurations, may be related to the family stress model paths, and thus be associated with child risk.

Research Directions to Incorporate Complex and Changing Family Structures

Research must account for the important roles other adults, including grandmothers, non-residential fathers and father figures may play in children's and mothers' lives. The quality of mothers' social support networks and relationships beyond the parent-child dyad can buffer some of the negative influences of poverty by promoting positive parenting. Further, the relationship between these other adult caregivers and the children may directly impact child development. From a basic science perspective, failure to include the important members of a family stress model may yield inconsistent or inaccurate results. Using these findings to inform the development of practice may lead to the implementation of shortsighted and thus ineffective interventions. Evaluations of interventions and policies may fail to account for the true effects of these programs on family functioning when family is narrowly defined as a mother and child or as a stable household unit. Moreover, failure to expand the concept of family may lead to overlooking a source of strength around which effective interventions can be designed.

Including non-traditional family members in research studies, especially when the primary sample consists of single-mother families, poses multiple obstacles relating to recruitment, measurement, retention and analyses. Perhaps the first challenge is identifying who the important family members or other adults are in the lives of children and families. The key family members to include may not be evident to the research teams, and these members may not fall into simple categories. Directly asking the mothers about the important adults in their lives could yield the most ecologically valid results. Researchers should allow flexible formats for participants to decide who should be included in their own definitions of family and household. Anthropologists and sociologists could contribute to the development of measures in this regard.

Social networking techniques (e.g., Tracy & Abell, 1994) may be adapted to measure extended family involvement to determine through maternal self-report the size, composition, frequency and duration of social support contacts as well as maternal perceptions of the availability and helpfulness of those support network members (Roditti, 2005). Although surface level questions to ask about extended kinship networks would represent improvement, truly understanding how family processes are influenced by extended kinship networks require tapping a deeper dimension to determine the actual roles those family members play. For example, Harknett & Knab (2007) demonstrated in the Fragile Families Study that multipartner fertility ostensibly provided more available extended family members. In reality, however, multipartner fertility was associated with limited provision of child care, financial and housing assistance from kinship networks. In other words, the spreading out of kinship networks through multipartner fertility produced many kin, but those kin provided very limited support. These findings underscore the need to include process level measures of extended family networks that include parental perceptions.

Expanding the breadth and depth of family member incorporation into research does not lend itself to clean research, as within a single sample there may be multiple people playing

multiple roles that vary across families. However, until there is an established research base indicating which adults matter for whom and under what circumstances, all individuals deemed by the mother to be important to family functioning should be included. Again, recruiting and retaining these individuals poses challenges, however, establishment of a good rapport with the mother and offering direct financial incentives to the other adults would be helpful. Further, the applicability of measures of well-being and parenting that have been used successfully with mothers and with fathers who are in the household to other individuals of diverse roles and relationships is unclear at this point. Although these measures may not be perfect, they do provide a starting point. Further, measure development may benefit from the initial use of focus groups.

Fathers

Recruiting and retaining low-income fathers in research studies is highly challenging, but knowledge regarding the roles fathers or other male figures play in child development in economically disadvantaged communities is essential to understanding the risks and protective factors for child development. Including low-income non-residential fathers in research can present particular challenges, especially if the relationship between the mother and father is hostile and the child resides with the mother. Offering financial incentives directly to the father for participation is important under all circumstances, but perhaps especially in these cases. Obtaining data from these individuals may require data collection in different locations and times from data collection with mothers.

Although the father is often the default figure, researchers should consider the father along with a number of other possible candidates. Efforts to include fathers in research should not be limited to tracking biological fathers who may maintain tentative connections to their children. These fathers may be more difficult to enroll and retain in studies over time, and even more importantly, their influence on family processes may diminish over time with limited contact. If the biological father is not involved in the child's life, then identifying other male figures playing important roles in the lives of mothers and children (i.e., social fathers) becomes especially crucial. Incorporating these individuals into research, even if the specific identity of the individual varies over time, is paramount to understanding family functioning. In some households, these social fathers may be the mother's current partner, while in other households they may be uncles or grandfathers.

Instability

Incorporating family instability into research designs presents considerable related challenges, especially when the goal of longitudinal studies is to have very similar measures and participants across time in order to infer directionality. However, as previously discussed, ecologically valid tests of the family stress process model among chronically poor families may require measuring instability, as it may influence the relationships between the key variables of interest (i.e., psychological distress and parenting). Again, including flexible measures to assess who is important in each family system is essential to advancing knowledge in this area. These measures should be reintroduced at each wave of data collection. Scheduled periodic update or check-in phone calls with family members may

also be necessary both to retain the most transient families enrolled in the study, and to document instability over shorter time periods in families.

Instability may be operationalized in a variety of ways. Depending on the distribution of instability in the sample, analyses could be conducted to predict patterns of instability, instability indices could be created, or a composite measure of instability could be added to a general risk index. For example, Ackerman and colleagues (2002) created an instability composite measure in their longitudinal analyses relating maternal relationship instability to the behavior problems displayed by elementary school children. In contrast, Adam and Chase-Lansdale (2002) used specific indicators of residential instability and parental separation in their study of adolescent adjustment. In yet another approach, Fomby & Cherlin (2007), Martinez & Forgatch (2002) and Cavanaugh et al. (2006) counted the number of maternal relationship transitions. This is a wide open area for research, thus the optimal methods to operationalize family instability are unknown at this point (Adam, 2004). Interdisciplinary collaboration that incorporates the work of anthropologists and sociologists is welcome. Prospective longitudinal studies that include multiple markers of family instability are warranted (Keller et al., 2006).

Young Children

Delineating the family-based influences of poverty is a particularly important goal for researchers interested in early childhood. Early in life the family generally regulates interactions with the environment, and thus poor young children may experience disadvantage as it is filtered through family systems. Young children may be particularly vulnerable to poverty (Duncan & Brooks-Gunn, 1997), and at the same time may be especially influenced by family processes (Aber et al., 2000; Linver et al., 2002). Early exposure to poverty may place children at risk for following a trajectory of diminished opportunities.

The bulk of research applying family stress process models has targeted adolescents (Conger et al., 1994, 1997; Conger & Donellan, 2007; Elder et al., 1995; McLoyd et al., 1998), although the models have been tested in studies with participants in middle childhood (Brody & Flor, 1997; Brody & Flor, 1998; Murry et al., 2002). Some researchers have applied a modified version of this framework to the study of poor young children, generally including measures of income, and not financial strain. Again, however the focus has been on pre-school children, and not toddlers or infants. These studies have reported robust relationships between income, maternal psychological distress and less optimal early childhood socioemotional outcomes (Jackson et al., 2000; Linver et al., 2002; Mistry et al., 2004; Yeung et al., 2002). For example, in their analysis of a subset of data from the Infant Health and Development Project, Linver, Brooks-Gunn & Kohn (2002) noted that the family process mediated influence of poverty on child socioemotional development was of a greater magnitude than the effects found in studies with adolescents.

Higher rates of psychosocial morbidity for children from low-income families tend to emerge in the early school years (Bradley & Corwyn, 2002). These emotional and behavioral disadvantages probably develop over time as a result of processes that begin

early in a child's life. Understanding the early processes that may give rise to later disadvantages or deficits, therefore, should be a priority of researchers. It remains unclear whether these deficits manifest in the early school years as a result of long-term impacts of early developmental processes, or whether these negative outcomes reflect cumulative exposure to developmental risk that ultimately manifests for biological or environmental reasons in the early school years. Both types of mechanisms are probably at play for different outcomes. Individuals from adverse circumstances tend to be exposed to numerous negative life events across the life course. The sum of these adverse events can account for more negative outcomes. At each juncture, the possibility for positive development or for turning on a positive trajectory becomes more limited (Magnusson & Cairns, 1996). Understanding the specific processes that lead to negative outcomes early in life is essential in order to prevent the successive accumulation of risks and narrowing of opportunities. Identifying the nature of developmental cascades that may place young children at risk for the development of later problems provides insight into the appropriate timing and nature of interventions (Masten & Obradovic, 2006).

The fundamental role of sensitive, responsive parenting in early emotional development, and the risks of low maternal socioeconomic status to parenting and the development of emotional regulation are well-established (see for example, Sroufe, 2000). However, this perspective on parenting early in life has received little attention in family stress models that explore explicitly the roles of family members beyond mothers and residential fathers, and that account for family instability over time. Illuminating these complex pathways could suggest targets for interventions to bolster parenting and child outcomes. Identifying early targets to deflect parent and child development onto positive trajectories is a crucial goal for researchers interested in improving the life chances of families in poor communities.

Applying expanded versions of family stress models to the development of young children may be especially important because the mothers of young children may rely on informal caregiving arrangements by other relatives because the children are not in school, and they may be unable to afford child care with flexible hours. In addition, family and household instability may be especially relevant to development during early childhood. First, development of consistent caregiving relationships has been linked to positive social and emotional development. For example, studies of children's attachment relationships suggest that, while children can develop multiple attachment relationships, children benefit from attachment relationships that are stable, long lasting, and secure (e.g., Thompson, 2000). Relationship instability and family transitions may represent a risk to social and emotional development because that instability may interfere with the development of security and trust (Fomby & Cherlin, 2007). Those developmental tasks are particularly salient during early childhood. Further, children who are too young to be enrolled in school may not be buffered from the impact of family instability by predictable, reliable school routines and relationships. In fact, Fomby and Cherlin (2007) suggest that the lack of relationship demonstrated between maternal relationship transitions and academic achievement in their national sample of 5 to 14 year-olds may in part be accounted for by the consistency of the school environment. Children who are too young to enter school may thus be more greatly impacted by family transitions.

Research to date has not focused on the relationship between family instability and social and emotional development during the toddler and pre-school years. With the notable exception of the work by Ackerman and colleagues (Ackerman et al., 1999; Ackerman et al., 2002) and Najman (1997), most research explicitly considering the role of family instability on child development has focused on samples of adolescents or school-aged children (Adam & Chase-Lansdale, 2002; Cavanaugh et al., 2006; Keller et al., 2002). For example, Cavanaugh and colleagues (2006) reported that the number of maternal relationship transitions was negatively related to high school college track course enrollment. Further Keller et al., (2006) showed a relationship between parental figure transitions and juvenile delinquency among early adolescent children of substance abusers. In addition, family transitions have been predictive of pre-marital births (Wu & Martinson, 1993) and early onset of sexual activity (Wu & Thomson, 2001). Certainly exploring the relationship between family instability and child development early in life is warranted by these demonstrated effects among older children.

Racial/Ethnic Contexts

Family structure, family processes and child outcomes are often inextricably tied to the racial/ethnic contexts in which those dynamic systems operate. Evidence is mounting that the general family stress models may be applicable to diverse racial and ethnic groups (Conger et al., 2002; Elder et al., 1995; McLeod & Nonnemaker, 2000; McLeod & Shanahan, 1993; McLoyd et al., 2000; Mistry et al., 2002; Parke et al, 2004). Family stress process models have been tested with white (Conger et al., 1992; Conger et al., 1993.) African American (Brody & Flor, 1997; Conger et al., 2002), Mexican American (Parke et al., 2004) and multi-ethnic (Linver et al, 2002; Mistry et al., 2004) families. Economic disadvantage appears to engender similar pathways to child socioemotional development across racial/ethnic groups. Mistry and colleagues (2002) suggest that in high poverty samples, economic factors may be more influential on family processes and child outcomes than cultural factors. Although poverty may be such a powerful developmental hazard that it engenders similar processes across populations, it is important to understand sociocultural nuances in order to design effective studies and interventions.

Emphasis on replicating family stress models among populations of color may serve to mask important cultural or contextual variations, and in doing so simultaneously fail to highlight social structural vulnerabilities and community or family-based strengths and resources. Searching for the same general mechanisms or processes is likely to yield similar results, but these approaches do not account for the possibility of different intervening processes that may vary as a function of race/ethnicity (Garcia Coll et al, 1996; McLoyd, Hill & Dodge, 2005; McLoyd & Smith, 2002). While the pathways may be similar across racial/ethnic contexts, the experiences shaping those pathways, and hence the mean outcomes, effect sizes, and most importantly, the effective routes for family-based interventions may vary by racial/ethnic group.

Mounting evidence indicating lower rates of psychological distress among low-income African American mothers and/or weaker relations between psychological distress and parenting among these families may reflect the omission of important sources of support for

mothers and children that help buffer the influences of economic disadvantage (Brody & Flor, 1997; Elder et al., 1995) (Bolger et al., 1995; Costello et al., 2001; Johnson, 2000; McLeod & Nonnemaker, 2000). This social support may stem from extended kinship networks. In fact, perhaps one reason for the weaker relationships between harsh parenting by mothers and child behavior problems among African American children is that the children are exposed to positive parenting by other adult caregivers beyond the mother-child dyad. Perhaps interactions with these other adults buffer children from the poor outcomes associated with negative maternal parenting. Understanding these potential interactions between the parenting of mothers and other caregivers and child behavioral outcomes is essential to the development and implementation of ecologically valid effective interventions. In highly adverse environments marked by chronic poverty and adult psychological distress the parenting behaviors of all adult caregivers may be compromised, and thus parenting interventions to support increases in warm parenting and decreases in harsh parenting among all relevant caregivers could entail significant benefits for children.

African American children are more likely to reside in single-mother households as a function of higher divorce and non-marital birth rates among African Americans (McLoyd, 1998; Murry, 2001). Some researchers have suggested that single motherhood may be less disadvantageous for African American children (Garcia Coll, 1990). While single-parenthood, due to divorce or out-of-wedlock birth, often presents a pathway into poverty for white women, many single African American women are already poor when they become single parents (Dill & Thornton, 1992). As Jarrett and Burton (1999) suggest, the classification of low-income African American household structures as intact (two parents) versus single-mother confounds family relations, with implied social support, and household configurations.

The processes influencing the roles family members play in African American extended kinship networks remain unclear (Hunter & Taylor, 1998; Pearson et al., 1990). Ethnic minority mothers may technically be classified as single parents, but they may rely more extensively on extended kinship networks (McAdoo, 1999; Garcia Coll & Magnuson, 1999; Garcia Coll et al., 1996; Harrison, Wilson, Pine, Chan & Buriel, 1990; Johnson, 2000). Reliance on extended kinship networks may stem in part from long-standing cultural patterns. These networks also represent an adaptive strategy to share resources and to cope with the challenges of life as a member of an ethnic minority group (Garcia Coll, 1990; Harrison et al., 1990). Given the centrality of African American kinship networks, children are influenced by multiple adults and caregivers, so that studying family processes in these families may require complex models that move beyond the boundaries of nuclear families (Garcia Coll, 1990; Jones et al., 2007). For example, African American children may be more resilient to the influences of marital conflict because the extended family kinship networks more common among African Americans may serve as protective factors for children experiencing parental conflict (McLoyd et al., 2000). Reliance on kinship support, however, is not a solution to the disadvantages faced by African American children because multigenerational caregiving is only beneficial to children when social support is provided and extended family connections do not entail further sources of stress (McLoyd, 1990).

To date, one research group has examined the role of coparent support and conflict among single African American mothers and nonmaternal caregivers (Dorsey, Forehand & Brody, 2007; Forehand & Jones, 2003; Jones et al., 2005). However, coparent involvement was measured only as maternal ratings of relationship conflict and support. This research suggests that the quality of the co-parent relationship is related directly and indirectly (via parenting) to internalizing and externalizing behaviors during middle childhood and early adolescence (Dorsey et al., 2007; Jones et al., 2005). Moreover, a high quality coparenting relationship may be particularly protective for children in the context of high environmental risk (i.e., neighborhood danger) (Forehand & Jones, 2003; Jones et al., 2007).

Moving beyond household or marital status may be especially relevant to African American families. Lack of marriage or father residence may be less linked to paternal involvement for African Americans, perhaps in part stemming from the more normative nature of this arrangement (Rosman & Yoshikawa, 2001; Wilson, 1996). In their analysis of adolescent mothers participating in a welfare demonstration program, Rosman & Yoshikawa (2001) reported that in comparison to white and Latina mothers, African American mothers were less likely to be residing with their children's father, but were more likely to report higher levels of paternal support. Limiting investigation of these families to household members, as many studies often do, would have failed to illuminate this important pattern that could carry clear implications for parental functioning and child outcomes.

Further, there is growing evidence to suggest that family or relationship instability may present a greater risk factor for white than African American families, despite the fact that African American children may be more likely to experience maternal relationship instability, especially when dissolution of cohabiting relationships is measured (Raley & Wildsmith, 2004). For example, Wu and Thomson (2001) found that the number of maternal relationship transitions predicted earlier onset of sexual activity for white, but not for African American adolescents. Further, Fomby & Cherlin (2007) demonstrated that family transitions positively predicted externalizing and delinquency among white, but not African American 5–14 year olds. These relationships remain unexplored among other racial/ethnic groups. As stated previously, African American children may be less vulnerable to the direct negative effects of divorce and marital disruption because of the involvement of multiple adults within extended family networks to buffer the impact of maternal relationship instability (McLoyd et al., 2000).

Alternatively, the compounded stressors of low-income and racial/ethnic discrimination may exert such direct effects on ethnic minority mothers and children that the independent effects of relationship instability are difficult to detect (McLoyd et al., 2000). Studying family instability using broader definitions of family and household (i.e., beyond mother-father and divorce-remarriage paradigms), therefore, may be particularly relevant to the design of interventions for ethnic minority families. Disruptions in family relationships beyond maternal romantic relationships may be more common and/or more risky for ethnic minority children given the likely greater involvement of extended family members and substantial socioeconomic disadvantage. Further, clarifying if those supportive relationships with other adults buffer children from the impact of maternal relationship instability would present important information regarding protective processes within families at risk for maladaptive

child adjustment, and thus interventions could be built around strengthening these relationships with other adults.

Intervention Implications

Expanding family stress models to include diverse family structures and instability over time would inform the development and implementation of ecologically valid effective family-based intervention and prevention programs aimed at improving child social and emotional well-being by targeting parental psychological distress and parenting. First, in a resource limited environment, identifying the families who are most at risk and thus in need of intervention services is crucial. Patterns of extended family involvement and family instability may emerge from this research as key protective or risk factors for social and emotional development. Evaluating family need on the basis of these risk factors may lead to more efficient identification of those families the most at risk. Further, identifying these possible risk and protective factors could indicate the development of specific family interventions that could build on strengths and address weaknesses. Relatedly, identifying the key family members in the lives of parents and children may lead to the incorporation of these family members directly into the intervention. The effectiveness of intervention and prevention programs targeting mother parenting may be improved by including other adult caregivers. For example, if the mother and grandmother are essentially coparenting a child, then a parenting intervention aimed at the mother only would likely be less effective at improving child behavior than an intervention that includes both the mother and grandmother.

Conclusion

The wealth of research generated by family stress model approaches to demonstrate the processes through which economic disadvantage influences child outcomes has contributed invaluable to the field of developmental science. The validation of these models across populations suggests that they illuminate basic processes linking economic disadvantage, maternal psychological distress, parenting and child socioemotional development. Future research should build on this knowledge. Expanding these models to include variability in family structure that extends beyond traditional definitions of nuclear families and household configurations, and that accounts for changes over time would provide an important window into potentially key variations in family processes. These expansions may be particularly relevant to studying families with young children and racial/ethnic minority families.

Implementing the next generation of research involves multiple challenges, including the development of new measures, complex models, cross-discipline collaboration and longitudinal investigations. Collaborations among researchers studying family processes and economic disadvantage with those researchers focused on applied work with low-income families are warranted. Testing models that incorporate family complexity requires explicit recruitment of non-maternal caregivers including fathers of varying residential status and other influential members of kinship networks.

Future versions of family stress process models will be complex, as they must capture the inherent complexity that shapes the lives of poor families. These models must be informed by ecologically and culturally grounded conceptualizations of racial/ethnic contexts that acknowledge societal inequities, environmental adaptations and strengths and weaknesses. Ultimately, this research has the potential to lead to the development of effective, highly targeted ecologically authentic family programs and policies.

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