

Understanding Families as Systems

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Abstract

In this article, we discuss recent research that has arisen from theoretical and conceptual models that use a systems metaphor for understanding families. We suggest that research stimulated by such models leads social scientists in new and important directions in understanding the social and emotional development of children in their families. These models view development as resulting from the dynamic transactions across multiple levels of family systems, which regulate a child's behavior. Thus, these models are important in considering multiple influences on development and adaptation.

Keywords

family systems; family processes; developmental theory

In response to family systems theory, there has been a change of emphasis in research on children and families. Previous research focused almost exclusively on the parent-child relationship. In contrast, more recently researchers have moved toward viewing individuals within the context of their larger family systems and considering the mutual influences among family subsystems, such as the marital relationship and the parent-child relationship. This change of emphasis has given rise to new lines of research, particularly over the past two decades. These new

lines of research follow from applying principles of a general systems theory to study of the family as an organized system. According to such theory, family systems are characterized by (a) wholeness and order (i.e., the whole is greater than the sum of its parts and has properties that cannot be understood simply from the combined characteristics of each part), (b) hierarchical structure (i.e., a family is composed of subsystems that are systems in and of themselves), and (c) adaptive self-organization (i.e., a family, as an open, living system, can adapt to change or challenges).

THE FAMILY SYSTEM AND THE INTERDEPENDENCE OF SUBSYSTEMS

Some of the first impetus for a broader consideration of development within the whole-family system came from the writings of family therapists adopting a family-system view. This work spurred interest in the interdependence between the marital relationship and the parent-child relationships within a family. Therapists had long noted that problems in the parent-child relationship were often associated with marital distress. As a result, parent-child issues were difficult to resolve unless problems in the marriage had first been addressed. Numerous studies have confirmed that marital and parent-child relationships are interrelated. That is, poor parent-child relationships often develop in the context of dis-

tressed marriages. These studies have been important in directing researchers to look beyond the mother-child relationship and to consider fathers and their relationships in the family in order to better understand children's development (see review by Cox, Paley, & Harter, 2001). More important, these studies have provided support for the idea that in order to understand children's development, one must gain a broad perspective on the whole family.

Over the past few years, researchers have made important progress in answering one particularly difficult question: How can one conceptualize and measure processes at the whole-family level? This type of research highlights the unique contribution of phenomena that arise at the family level. For example, Deal, Hagan, Bass, Hetherington, and Clingempeel (1999) found that parents behaved differently when the whole family was together than when they were interacting one-on-one with their child. When their child was present, couples were less hostile and less coercive in their behavior toward one another. However, they were also less warm, communicative, and self-disclosing. McHale and his colleagues (e.g., McHale & Rasmussen, 1998) have made valuable contributions in their investigations of how parents interact together with their child (often referred to as co-parenting), demonstrating that such interactions are predictive of children's adjustment. This relationship holds even in analyses that control for factors such as the mother's well-being, the overall quality of the marriage, the mother's and father's warmth when interacting with the child individually, and the quality of parent-child attachment. Clearly, considering interactions among both parents and the child adds information that is important for understanding a child's adjustment.

Other recent studies have advanced knowledge concerning aspects of the marital relationship that are associated with aspects of interactional processes at other levels of the family system, such as parent-child relationships, co-parenting relationships, and whole-family relationships. For example, we (Paley, Cox, Kanoy, Harter, & Margand, 1999) found that the tendency for a husband to withdraw during one-on-one interaction with his wife is related to several features of family-level interactions. Such withdrawal, for example, is associated with an increased likelihood of parent-child alliances within the family. Also, whole-family interactions have lower levels of positive emotions and higher levels of negative emotions and detachment in families characterized by this kind of marital relationship than in other families.

One of the most significant conceptual contributions in the study of family relationships has come from Cummings and his colleagues (e.g., Cummings & Davies, 1995; Cummings & Wilson, 1999). Their work on the emotional-security hypothesis moves beyond the dyadic focus of attachment theory in emphasizing the importance of the broader family context, rather than one-on-one interactions within the family, in shaping the child's sense of emotional security. In particular, they have found that destructive marital conflict (especially conflict that involves violence or aggression between partners or that remains unresolved) threatens the child's sense that he or she can feel safe and emotionally secure in the family. Their work indicates that emotional security is an important factor in the child's regulation and organization of emotion, key processes in the development of early competence in children (i.e., their ability to form positive relationships with others and their ability

to explore their environment in a meaningful way).

ADAPTIVE SELF-ORGANIZATION OF FAMILY SYSTEMS

Another important concept of family systems theory is that families have the capacity to reorganize in response to external forces. That is, families can adapt so that they can continue to function in the face of the new circumstances (Sameroff, 1983). This aspect of systems theory is important because it points to the need to consider how the family as a system responds to challenges, in addition to considering how each individual or subsystem responds. The property of adaptive self-organization suggests that there will be challenges to existing patterns of interaction at all levels of the family system during both normative transitions (e.g., birth of a child, a child entering school) and nonnormative transitions (e.g., departure of a spouse, entrance of a new spouse, untimely death of a family member). These challenges affect the family at multiple levels, and changes in activity at each level influence other levels, resulting in a feedback loop that leads to further change. Eventually new patterns emerge as an adaptation to the family's changed circumstances. Sameroff (1983) noted that adaptively reorganized systems are not necessarily more stable than the original systems. They may deal well with the forces that elicited the process of reorganization, but they may not be more resistant to all destabilizing factors in the general environment. Thus, there may be new vulnerabilities in a reorganized family system.

These ideas highlight the importance of looking at transition points in the family life cycle, and have

implications for understanding continuity and discontinuity in adult adaptation, child development, and family functioning. The research on the transition to parenthood is a good example of a body of work that has been profitably influenced by family systems theory. Research shows that the birth of a child and the need for the couple to adapt to their new caregiving role affects both spouses individually, as well as interactions between them. Changes at these levels then feed back into the family system. New parents are at increased risk for psychosis, depression, and the "blues" (Cowan & Cowan, 2000; Cowan, Cowan, Herring, & Miller, 1991). Gender roles become more traditional, with women taking over more household tasks and care of the child. Men and women develop diverging attitudes regarding their sense of self as "parent" and "worker" (Cowan & Cowan, 2000; Cowan et al., 1991). These new patterns may be appropriate to providing the child's care, but as Sameroff suggested, they may not be more resilient than previous patterns in response to all stressors or challenges in the general environment. In fact, researchers (e.g., Cowan & Cowan, 2000; Cowan et al., 1991) have found that these increased differences between the roles and attitudes of spouses in response to the task of child rearing set the stage for greater marital dissatisfaction and conflict during the early years after a first child's birth.

Moreover, there is good evidence that there are mutual influences among the quality of the adaptation in the marital subsystem, the development of the parent-child relationship, and the quality of the infant's development. The ability of parents to meet their infant's physical and emotional needs seems to be reciprocally related to the support the parents de-

rive from the marital relationship (Cox et al., in press). Qualities of the infant's early regulation (i.e., the infant's innate ability to modulate his or her physical and emotional states) also seem to interact with the caregiving system, with consequent implications for the child's development, particularly the child's social and emotional development. Belsky, Hsieh, and Crnic (1998) found that toddlers whose mothers responded to their irritability with negative affect and intrusive behavior (i.e., inserting their "own goals and agendas upon the child without apparent regard or concern for what the child was doing or feeling," p. 309) were more likely to go on to develop behavior problems than were children whose mothers responded to their irritability with less negative affect and less intrusive behavior or children who had not been irritable as toddlers.

This interplay between levels of the family system can also be seen in the work of Kochanska (e.g., 1995). Her work supports the idea that an infant's temperament affects caregiving practices in the family and also moderates the effects of caregiving on the child. Fearful toddlers may tend not only to stimulate gentle reassurance from mothers, but also to show internalizing behavior (e.g., sadness or anxiety) problems over time if they do not receive this kind of care. Less fearful children, conversely, appear to be less affected if their mothers' caregiving emphasizes power and enforcement rather than gentle guidance. The work of van den Boom (1991) shows similar findings in that mothers of children who were irritable in the first few days of life were more likely to show declining involvement with the infant during the first 6 months than were mothers of less irritable infants. Additionally, this declining involve-

ment was associated with infants' showing less improvement in emotional regulation (i.e., the ability to modulate emotions, especially negative ones such as anger or frustration) over time. Early et al. (2002) found that children who were judged to be extremely shy and withdrawn (top 15%) in response to novel situations at the end of their 1st year and whose mothers were highly sensitive and responsive to them during their preschool years were seen by teachers as no more shy and withdrawn in their initial adjustment to kindergarten than were children who were not classified as shy and withdrawn as 1-year-olds. In contrast, children who had been extremely shy and withdrawn as 1-year-olds and whose mothers were insensitive to their emotional signals during the preschool years were seen by teachers to be shy and withdrawn in the novel kindergarten setting.

Thus, there is evidence that transactions across the multiple levels of a family system are important in regulating a child's behavior and in understanding mothers' and babies' behavior at any one point in time. This evidence points to the limitations of static notions of "difficult temperaments" or "insensitive mothers," labels intended to highlight permanent qualities of an individual. As the research we have summarized shows, the metaphor of the system provides an important perspective on the notion of continuity and discontinuity in individual development. It suggests that continuity cannot be explained as a characteristic of the child. If the child is viewed as a part of an ongoing, dynamic system, then continuity can be located only in the relationship between the child and the family system or caregiving environment. Application of a systems perspective in this research also makes it clear why some individuals do not

develop along typical paths, and with good theory, these alternative paths can be seen as lawful. Changes can arise at any level of the family system, and a change at one level can stimulate further change in individuals, relationships, and the whole family system.

CONCLUSIONS AND NEW DIRECTIONS

Process-Oriented Research

These family systems models stimulate researchers to think about the processes of child development in families. There is a dearth of process-oriented research, especially research that considers multiple levels (from the individual up through the whole family) and the interplay between them. These models suggest that researchers should not look for effects at any one level without considering the context of other levels. For example, the work on emotional security in the family (Cummings & Davies, 1995; Cummings & Wilson, 1999) suggests that the extent to which parent-child attachment can support the development of good emotional regulation in a child may be affected by other variables in the family system. Families may differ widely in their interactions at other levels (e.g., marital, co-parenting, or whole-family interactions), and such differences may or may not threaten the child's sense of emotional security. Frightening marital aggression may make it difficult for a parent to foster a secure parent-child attachment, and even a secure parent-child attachment may not lead to a child's ability to regulate his or her emotions in response to the broader family environment if a threat to security is present. That is, the child may react to conflict in

the family with distress or anger, or by pushing the parents away (Cummings & Davies, 1995).

An ambitious agenda awaits researchers attempting to realize the potential of these theoretical models. But current research highlights the exciting directions that this work should take in looking at the dynamic interplay of influences at multiple levels over time. For example, Cicchetti and Sroufe (2000) noted that provocative research demonstrates the mutual influence between individual neurobiological development and the relationship experiences of the child. There is considerable work ahead with regard to discovering the processes of development; the central goal of this work will be to clarify the emergence, progressive unfolding, maintenance, and transformation of adaptation and maladaptation over time (Cicchetti & Sroufe, 2000) and at multiple levels of systems such as the family.

The Need for Progress in Measurement and Analysis

The type of research we have described requires good measurement that reflects all the levels of the family system. Researchers have come a long way in improving measurement, but there is more work to be done, particularly in developing methods to measure family subsystems beyond one-on-one relationships, such as parent-child or marital relationships. For example, researchers need to utilize behavioral observation coding schemes that capture the qualities of interactions among multiple members of a family. Studying whole-family interactions can provide important information not only about processes like co-parenting, but also about processes like children's attempts to mediate conflicts and the formation of coalitions or alliances within the family. These processes are

likely to have significant implications for children's development, but require a broader measurement of the family system than is seen in the traditional work emphasizing parent-child relationships.

Additionally, systemic models suggest that progress in understanding the development of individuals or relationships in families will come from longitudinal investigations. Such long-term studies are useful for observing and describing the causal processes that reflect the reciprocal influences of various levels of the family system. However, common statistical procedures are not well suited to this task. Advances in statistical techniques are needed. The task of realizing the potential of these models will require efforts in many directions, but, we suggest, will be worth the investment of effort.

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Note

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