Three studies that examined children's processes of coping with expressions of anger between adults are discussed. Study 1 investigated children's responses to anger involving the mother as a function of marital history and history of interparent hostility. Study 2 investigated individual styles of coping with anger. Multi-dimensional aspects of responding, including behavioral, physiological, and verbal responses, were considered. Study 3 explored children's responses to different forms of the expression of anger. Findings indicated that: (1) children responded to parents' anger as a stressor; (2) a sensitization hypothesis may describe the ways in which children's coping patterns were altered by marital discord; (3) subjects were characterized by discrete patterns of response to anger for many social, emotional, and physiological response dimensions; (4) response organization was stable over time; (5) all forms of angry interactions were perceived as negative events and elicited negative emotions; (6) unresolved anger was perceived as a far more negative event than resolved anger and induced far greater feelings of anger and distress in children; and (7) boys consistently reported more angry responses than girls and girls tended to report more feelings of distress. Suggestions for further research are offered. (RH)
Children's Coping with Parents' Angry Behavior

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Overview

This talk is concerned with a line of research that examines in a programmatic fashion children's processes of coping with emotional expressions of anger between adults.

By way of overview, anger between adults is:

(1) A naturally-occuring event in children's everyday environments, one that occurs in virtually all family settings at least in some form and on at least some occasions.

(2) An important category of emotion expression within the family that may go a long way towards defining the child's perception of the emotional climate in the home. Other emotions may occur more often, but no other emotion has the potential to be so highly influential in shaping the child's perception of family life.

(3) Is an event that appears to remain a stressor throughout the entire age span of childhood. It might be noted that other important stressors of childhood, such as brief separations from parents in a strange situation, may only remain significant everyday stressors for children within a restricted age span, such as early childhood.

The focus of our work is on children's responses to anger between adults that children observe as bystanders. This represents an important class of emotion events in the home that act to define the emotional climate of the home even outside of the child's direct involvement.

This paper will report the results of 3 studies that have recently been completed by my colleagues and I at my laboratory at West Virginia University and represents a continuation of a programmatic line of research that I began 10 years ago while I was at NIMH in association with colleagues Carolyn Zahn-Waxler, Ronald Iannotti and Marian Radke-Yarrow.

The topics of the studies that I will report today are (1) first, a study of children's responses to anger involving the mother as a function of marital history and history of interparent hostility, (2) second, a study of individual styles of coping with anger based upon a consideration of multi-dimensional aspects of responding, including behavioral, physiological and verbal responses, and (3) third, a study of children's responses to different forms of expression of anger. Each of these papers has gone to press since I submitted this talk last Fall so I will be able to give exact citations for future reference. Before I turn to these studies, however, I would like first to consider the larger social problem that this research addresses and the process-oriented model that guides this research.
The Social Problem

Children's exposure to anger between parents is a socially-relevant issue, and may in certain circumstances constitute a social problem. Two basic facts are relevant here:

(1) First, marital anger occurs in virtually all homes, further, high rates of marital anger and discord are not infrequent. This latter point is supported by statistics documenting the high divorce rate in this country and also documenting marital dissatisfaction and problems of anger control even in many intact marriages.

(2) Second, literally decades of research testify to relations between marital discord and the development of behavior problems and emotional disorders in children. Bob Emery provides excellent reviews of this research in a 1982 Psychological Bulletin article and a 1989 American Psychologist paper focusing specifically on family violence.

Angry environments may mediate, in the context of a transactional model, the effects of divorce, alcoholism, parental depression and other family processes on the child. Michael Rutter, Byron Egeland and Mavis Hetherington, among others, have drawn attention to the role that marital discord may play in the transmission of psychopathology in children from a variety of risk environments.

This is thus an issue of significance to the general topic of children's development within the family and also likely to be an important element of models of developmental psychopathology for a variety of family-associated disorders.

A Process-Oriented Approach

In the past, studies of discord and child development have typically relied upon global assessments of family background and child outcome variables within the context of correlational research designs. This approach to research has significant, well-documented limitations. There is clearly a need for alternative approaches that provide avenues for greater understanding of process relations between variables within a complex family context. Our process-oriented strategy, which is described in a paper co-authored with my wife Jennifer in last year's Developmental Review, relies on experimental and quasi-experimental designs in an effort to systematically tease apart factors in these settings.

It is worth considering what we mean by a process-oriented approach as a background to the consideration of specific studies.

(1) First, we are concerned with the study of process as opposed to the study of outcome. This means that we are interested in multiple dimensions of responding: Both different response dimensions and different levels of analysis. This includes emotional and social responses shown in observable behavior, self-reported emotional responses and behavioral dispositions, physiological responses of heart rate, blood pressure and other such domains. We are also interested in the study of responding extended in time - this is particularly likely to be concern for clinical outcome studies. For example,
is the rate of aggression during the day following exposure to anger increased? At another level we are concerned with the meaning and interpretation of coherent patterns of responding - not just individual response dimensions, which can give a limited, if not distorted, picture of response processes. Our emphasis is thus on response patterns.

(2) Another, related, focus is on the study at the level of individual adaptation and maladaptation. We are interested in looking for broad coherences in responding across multiple response dimensions. A difficult issue here is where to enter the system. Where does one start in looking for patterns of responding? Our assumption in this has been that emotional responses provide an entree into broader organizations of coping processes. We have thus started with individual differences in basic characteristics of emotional response and examined what other aspects of responding were associated with this. This approach has its foundation in a functionalist approach to emotions that has been cogently outlined by Campos and Bretherton and their colleagues.

(3) Another specific interest is in the study of developmental processes. This includes normative age changes. Patterns of coping with anger are highly influenced by age. This also includes trajectories of individual continuity and change in patterns of responding. Individual continuities are of considerable interest to theories of development and provide valuable information. The study of individual trajectories is of great interest to approaches to a developmental psychopathology of angry environments.

(4) Finally, we are interested in the consideration of interactions between history of exposure to marital discord and other elements of the broader family system, including buffer/protective variables and variables that increase risk.

The long-term goal is an integrated model of family processes based upon the systematic study of parts of the system and the systematic integration of elements of the process over time in ever-more-complex models. This work is very much consistent with the movement towards developmental psychopathology outlined by Sroufe, Garmezy and Cicchetti.

Study 1: Marital Discord and Children's Processes of Coping with Anger

One issue is how family background relates to coping with anger as a stressor. First, what do children do in response to parents' anger? Second, how do coping patterns relate to history of exposure? Are there cumulative effects? Is sensitization or habituation at work? Are there logical links with clinical outcomes suggested by immediate response patterns?

In previous research we have found (a) that parents' reports of the incidence of marital discord in the home was related to greater emotional and social responding to any given incident of parents' anger, and (b) that repeated laboratory exposure to anger increased both emotional distress responses and aggressiveness in play with friends. More recently we have found that children's self-reports of distress responding in reaction to videotapes of anger between adults was positively associated with marital hostility. These results provide support for a sensitization hypothesis that
repeated exposure to anger results in higher amplitudes of stress induction, rather than habituation. An implication is that a reduced ability to modulate affect in response to stress may be a factor in the greater risk for behavior problems among children from angry home environments.

The study I will now discuss is first-authored by my wife Jennifer and is co-authored by David Pellegrini, Cliff Notarius and myself, and will appear in the October issue of Child Development.

The paradigm called for a trained actor to engage the mother in an emotionally expressive verbal exchange while the child was in the same room. The exchange was standardized within a seven-episode sequence that included an angry interaction initiated by the actor followed somewhat later by an extensive reconciliation and apology by the same actor. The parents’ report of marital distress, and histories of interparent verbal and physical hostility were obtained. Children were between 2 and 5 years of age.

The results were: (a) preoccupation, expressed concern and support-seeking and accepting of social responsibility (that is, providing physical or verbal comfort or support to the mother) were greater in response to anger than in response to positive emotion conditions, (b) the parents’ marital maladjustment was positively associated with expressed concern and support-seeking by children in response to anger, and (c) children whose parents engaged in physical aggressiveness in the home showed increased preoccupation, concern and support-seeking and social responsibility with increasing age.

Taken together these findings provided additional support both for the notion that children respond to parents’ anger as a stressor and further suggest that a sensitization hypothesis may describe how children’s coping patterns are altered by marital discord. Interestingly, marital dissatisfaction and physical aggression each had sensitizing effects, but in terms of different response domains. The increase with age in social responsibility taking could reflect either greater length of history of exposure to anger or the emergence of a greater coping repertoire with age. Once again there is a suggestion that some sort of overresponse process may be a mechanism for trajectories of risk in children from discordant homes, but this hypothesis needs more focused examination.

Study 2: Individual Styles of Coping with Anger

A second line of research relates to individual differences in coping styles. In my early work at NIMH with Carolyn Zahn-Waxler and Marian Radke-Yarrow we found evidence that individual differences in affective responsivity to anger in the home showed stability over a 5 year period. Later we found that there was stability in affective responsivity over repeated laboratory exposures to anger. These results suggested that individual differences in responding to anger might be robust, but left many questions about how these differences might best be characterized.

More recently I published a study that identified 3 styles of coping with anger based upon children’s behavior emotional responses to live simulations of anger between strangers. The approach to classification of styles was guided by the notion that emotions serve a primary organizing function for behavior and therefore should reflect broader differences in organizations or
patterns of coping with anger. The results, based on a sample of 4-5 year olds, supported this notion. Concerned emotional responders showed distress during anger and said in later interviews that they wanted to intervene and were most likely to report sadness, which might be seen as a form of empathy. Ambivalent responders showed both positive and negative affect during exposure to anger. In later interviews they reported strong feelings of emotional and behavioral arousal and showed increased social aggression towards peers. Unresponsive children showed no behavioral evidence of emotional response but later reported that they felt angry while the fight was going on. Elements of these styles were evident in responses to anger among these children 3 years earlier as toddlers.

The second study that I want to describe was intended as an extension and replication of this study with behavioral and verbal responses again examined and, in addition, data on physiological responses also collected. This study is first authored by Mona El-Sheikh, with Virginia Goetsch and myself as co-authors and is due out in the July issue of Developmental Psychology.

Behavioral and verbal responses of distress were again found and systolic blood pressure increased in response to anger. As in my earlier paper children's behavioral emotional responses to anger predicted other aspects of responding. The angry/ambivalent group showed a complex heart rate pattern, including a decrease in heart rate with the onset of anger. Concerned/distressed children, on the other hand, showed a heart rate increase in response to anger. Both groups reported more emotional distress (mostly anger) than unresponsive children, and angry/ambivalent children again also verbalized feelings of high behavioral arousal.

Our results provide support for the existence of discrete patterns of responding to anger across multiple social, emotional and physiological response dimensions and also some evidence for stability over time in response organization. Our speculation is that the angry/ambivalent style, which is a style of high behavioral and emotional arousal, is linked with greatest risk for the development of behavior disorders, but this remains for future research to examine further.

Study 3: Response to Anger a Function of Form of Expression of Anger

Anger is not a homogeneous stimulus, but can vary on a variety of dimensions and domains. This issue has been largely neglected in the marital discord literature but is surely of great importance. For example, it may not be how often parents fight that is important but how they fight or how they act towards each other after the fight is over.

The third study that I want to describe today examined the responses of 4-9 year old children to anger as a function of: (a) the mode of expression of anger (nonverbal, verbal and verbal-physical) and (b) whether or not anger between others was resolved. This paper was first authored by myself; Dena Vogel, Jennifer Cummings and Mona El-Sheikh are co-authors. It is due out in December in Child Development.

In this study children were presented with a series of videotaped segments of angry and friendly interactions and asked questions concerning their responses. The key findings were:
(1) All forms of angry interactions were perceived as negative events and elicited negative emotions. Nonverbal anger, which I like to call middle-class anger, was seen as just as negative as overt verbal expressions of anger and was noticed as such by children of all ages in this study. Anger involving physical contact, however, was clearly judged to be the most negative form of anger expression.

(2) Unresolved anger was perceived as a far more negative event than resolved anger and induced far greater feelings of anger and distress in children. In fact, resolution of anger seemed to largely ameliorate any negative impact of anger exposure. This suggests that if parents must fight, which we all must do at some point, we can do a lot of good by openly resolving the fight later on. This is clearly one of the most important messages to emerge from this line of research and we are currently doing research to follow-up on it.

(3) Boys consistently reported more angry responses than girls whereas girls showed a trend towards reporting more feelings of distress. This replicates the findings of some other studies suggesting that boys and girls may react to discord in different ways.

Conclusion

In conclusion, among the additional topics for future work are to (a) integrate the study of anger within a broader family systems model, (b) attempt to identify the specific mechanisms through which anger affects children, and (c) determine the more general significance of coping with anger vis-a-vis more general styles of coping with stress in childhood. Some of these topics I will address further in my talk on Sunday.

Finally, I like to close all my talks by trying to put all this into perspective: It is a natural part of life that individuals, including parents, become angry. Within certain ill-defined bounds exposure to anger between parents and other is unlikely to create difficulty for children and may even be a necessary experience in the development of adequate coping skills and abilities. However, cause for concern increases when these conflicts are frequent, very hostile, and are associated with the dissolution of marriages. Despite the near universality of anger in the home, we are only beginning to understand how children cope with it and the implications of these coping processes for risk for the development of psychopathology. The goal of our research is an expanded knowledge base concerning this socially important problem and also to stimulate other approaches to this problem.
References


