The Challenge of Creating Thoughtful Research Agendas

Wanda K. Mohr and John W. Fantuzzo

This article is an affirmative rejoinder to a recent editorial calling for revitalizing psychiatric research and education. It reviews the shortcomings of our present knowledge- and research-base using the state of child psychiatry as an exemplar. It concludes that we, as a specialty, must be cautious in setting a course for a research agenda in the new millenium and posits that the most informative research and intervention will occur by using multiple measures and sources of information. As understanding of patients and their problems in development and in context grows, intervention research that will be useful, timely, and cost-effective must include cross-discipline teams of researchers and practitioners who will speak to these complexities.
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A RECENT EDITORIAL written by Krauss (1997) exhorted psychiatric mental health nurses to canvass the state of our theory and research. She posited that we are an aging group of professionals who must begin to examine and break through traditions, sacred cows, and dogmatic approaches that are rooted in a past that no longer exists—and whose practices may never return. We are called to self-examination and to take up the challenge of having to justify our value as professionals, lest we become psychiatry's endangered species.

Krauss' points are extremely well taken on all counts. Despite agitation and handwringing on a number of fronts in research and education, steps to radically change the way that we engage in research and prepare our students remain depressingly absent from the literature. To be sure, there have been initiatives to place students in community settings, to augment programs with courses on the biological basis of behavior, and to conduct intervention and outcome studies. But with few exceptions there has been little in the way of radical curriculum revision on the undergraduate level, and at the graduate level we remain stymied by the Clinical Nurse Specialist-Nurse Practitioner (CNS-NP) debate.

At this critical time, however, psychiatric nursing leaders need to heed the words of the English poet, Samuel Butler who wrote in 1664: "As the ancients say wisely, have a care o' th' main chance, and look before you ere you leap; For as you sow, ye are like to reap." (Bartlett, 1980, p. 291). They must consider carefully which major course promises the greatest potential for putting us back on the path of exuberance that characterized the specialty in the 1960s. Two distinctive paths lie before us: the path of least resistance or the pursuit of excellence. We can choose to tinker with traditional constructs in different combinations, or we can take a good, hard look at the problems that are inherent in the existing knowledge-base, our expert driven system of research, and the existing tools which we have to conduct our studies. There has been insufficient substantive discussion in our own journals about what should be examined in laying the foundations for a new research agenda.

In continuing the discussion initiated by Krauss, this article elaborates on some of the shortcomings of the present state of psychiatric research using our own area of child-adolescent psychiatric nurs-

From the School of Nursing and the Graduate School of Education, University of Pennsylvania, Philadelphia, PA.

Address reprint requests to Wanda K. Mohr, PhD, RNC, School of Nursing, University of Pennsylvania, 420 Guardian Drive, Philadelphia, PA 19104.
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ing for purposes of illustration. It also challenges psychiatric nursing researchers to "think big," to go beyond the comfort of the university setting, to go beyond quantity and toward quality, and in the interest of a lasting contribution to patients and families to move toward collective rather than single ownership of research studies. Only by being cognizant of past errors and by challenging "the way things have always been done" can we build a solid knowledge-base as well as intervention-outcome studies that will be meaningful, relevant, and that will stand the test of time.

THE STATE OF RESEARCH IN CHILD PSYCHIATRY

Those of us who work in child-adolescent psychiatry are aware that record levels of child poverty, child maltreatment, and community violence in the United States signal a plethora of harmful factors that threaten the psychological being of our young people. The response of the many disciplines that are involved with children to these enormous and complex social problems are complicated by some pressing realities. First, substantial changes in child demography render our current knowledge-base of child development inadequate to inform developmentally and culturally appropriate interventions for an increasingly diverse population of youth. Second, major government cuts in child welfare and health care programs significantly decrease the likelihood that our most vulnerable populations of youth will receive adequate mental health services. Third, research agendas in the area of child psychopathology can be criticized for being driven by prescribed technical intervention research rather than by theoretical paradigms (Kazdin, Bass, Ayers, & Rogers, 1990; Cicchetti, 1993; Shirk & Russell, 1996). These research agendas have been based on a pragmatic need to develop and deliver treatment and prevention services to vulnerable children. Although this process may facilitate the development of programs, in the long run it has hampered the development of a coherent and organized knowledge-base that would contribute to an overall understanding of fundamental principles of cause, intervention, and treatment.

Shortcomings of Current Outcome Research

With respect to mental health intervention research on children there is a dearth of well-designed intervention studies in child psychiatric nursing, as well as in other disciplines. Too often research on interventions focus on whole therapy approaches rather than operationalized techniques that target specific areas of maladaptive functioning. The difficulty with such approaches is that many brand name therapies consist of "nonstandardized package(s) of different treatment techniques that can be offered in many different sequences and permutations" (Durlak, Fuhrman, & Lampman, 1991, p.211).

Recent evaluations of meta-analytic reviews suggest that serious questions continue to nag the field of child intervention study with respect to the positive outcomes of psychotherapy. Serious concerns include the question of nonrepresentative study samples that may not be as profoundly disturbed as clinical populations. Another is concerned with the use of specially trained therapists who administer treatment in accordance to protocol guidelines and who, unlike their clinician counterparts, are monitored for treatment integrity (Weisz, Weiss, Alicke, Klotz 1987; Weisz, Weiss, & Bononberg, 1992; Matt, Shadish, Navarro, & Siegle, 1994).

Meta-analyses of some multisystem techniques that recognize multiple pathways to psychopathology (Mann & Borduin, 1991) seem promising but these are too few and suffer from methodological flaws. Despite the successes of psychopharmacology and other somatic therapies, the results of repeated meta-analyses of psychotherapeutic interventions have found multiple methodological flaws and inconsistencies, small sample sizes, and a lack of control across studies (Kazdin, Bass, Ayers, & Rogers, 1990). The relationship between specific techniques of therapy and treatment outcomes has been a neglected field of research. Patterns of therapist-child interaction and their relation to outcomes have not been studied.

Studies conducted on specific therapies, for example cognitive-behavioral techniques, fail to establish significant correlations between effect sizes obtained across the domains of cognition and behavior (Durlak, Fuhrman, & Lampman, 1991). The absence of a significant relationship between cognition and behavior, raises questions about the underlying processes that result in behavioral change. In sum, the field suffers from a lack of well-designed and well-controlled research that can be replicated across studies. In their critique of the state of child psychotherapy Shirk & Russell (1996)

conclude that because of this, the rationales for linking pathogenic processes in children to specific psychotherapeutic techniques which are hypothesized to result in specific positive change at outcome have not been articulated in acceptable scientific detail.

Shortcomings of Foci

In lieu of secondary prevention that emphasizes early identification and intervention, much existing research focuses efforts on tertiary care that is concerned with rehabilitation and the reduction of disability. This tertiary care system assumes that disability has already occurred. Therefore, it conceptualizes children's mental health needs as mental disabilities to be catalogued in a psychiatric classification system—the Diagnostic and Statistical Manual of Mental Disorders (DSM).

Since its inception, the DSM has been a source of controversy. Recent critiques identify major inadequacies in the DSM's conceptualization of children's psychological adjustment including: (1) lack of a theoretical foundation, (2) failure to consider context, and (3) lack of consequential validity. The DSM is not grounded in an understanding of human growth and development. As a number of researchers have indicated, the DSM is predominantly a collection of symptoms that are downward extensions of adult psychosocial abnormalities (Jensen & Hoagwood, 1997; Richters & Cicchetti, 1993). The DSM categories are static and fail to take into account the unique ability of human beings to grow, adapt, regenerate, differentiate, or reorganize. The tacit assumption behind this categorization is that human beings do not vary with respect to their values, attitudes, experiences, and developmental trajectories.

The decontextualized nature of the DSM categories render them as unidimensional sets of behaviors that fail to consider human beings as open systems who transact with their environment (Jensen & Hoagwood, 1997; von Bertalanffy, 1968). Despite its putative attempt to give the categories more dimensionality, the multiaxial system of diagnoses remains deficiency-oriented, and neglects essential sources of competence and support within the child's environment. Neglecting the context and complexity of human behavior means that any attempt at explanation assumes that children react in similar ways for similar reasons, whereas the similarity of their patterns of functioning may be the result of very different influences. For example, "psychopathology" may actually reflect an individual's attempt to adapt to noxious influences within a broader environmental context. For these reasons, Richters and Cicchetti (1993) contend that the DSM system might in fact lend itself to misuse and misdiagnoses, particularly for minority children growing up in socially toxic, urban settings (Garbarino, 1985).

The DSM, unlike traditional textbooks of nursing, psychology, or medicine, is a book of lists that provides little guidance to create informed prevention or intervention (Stroufe, 1997). Behavior is seen as symptomatic of underlying disturbance within the individual, and treatment is not prescribed. Treatment, therefore, is the prerogative of the mental health expert researcher who makes value judgments and chooses the "appropriate" psycho-therapy. Much of the logic underlying these judgments is tautological (Fulford, 1994) in that what is seen as clinically relevant is based on what the expert deems clinically relevant. Therefore, this system is limited in its capacity to scientifically examine psychological needs in context and link the presumed beneficial components of psychotherapies to any underlying psychopathological or health processes.

Finally, the field of child psychology and psychiatry also continues to be nagged by several reanalyses of major outcome studies which suggest that who the therapist is accounts for more outcome variance than what the therapist actually does (Lambert, 1989). Furthermore, much child psychopathology research continues to reflect a unidimensional approach that fails to consider the contexts within which research is conducted and within which interventions must be implemented. Despite the familiarity of the multidisciplinary team approach to treatment, little attention has been paid to the notion of a multidisciplinary team as a vehicle to conduct strong and multidimensional research that reflects the complexity of the issues with which we are faced in clinical arenas.

Shortcomings of Existing Measures

Central to research that is useful and relevant is the idea of ecological (Bronfenbrenner, 1979) and consequential validity (Messick, 1995). There has been much discussion about these two views of validity in the psychology and education literature, yet the nursing research literature has not addressed

either. A search of the Cumulative Index of Nursing and Allied Health Literature (CINAHL) database yielded no articles that addressed either of these concepts.

Simply stated, ecological validity is that aspect of construct validity which refers to the degree to which there is a congruence between the environment as experienced by the subject and the properties of the environment the investigator assumes that it has. The concept of ecological validity is an important one because one of the objectives of treatment outcome research should be the evaluation of the efficacy and effectiveness of treatment across cultural boundaries. Cultural compatibility suggests that treatment is more effective when it is compatible with client cultural patterns (Tharp, 1991).

Consequential validity refers to the degree to which the interpretation of evidence (for example that of test scores) is significant in the real lives of patients. Consequential validity is linked to the ethical aspects of testing and measurement (Messick, 1982, 1995), the results of which can be either positive or negative in their impact on any one individual or group of individuals. Messick (1995) posits that, for example, low scores indicating incompetence in certain areas might occur because an assessment or an instrument is missing something relevant to the construct of interest, which if present would have yielded a different score and indicated competence.

This means that researchers must approach their use of all published instruments with caution. Evaluating existing measures on the basis of published validity and reliability is simply insufficient. Our own team's experiences with established instrumentation was that we were unable to address research questions until we could identify or develop promising measures and empirically determine their validity with this population. We undertook a process of weeding out ineffective measures, and identifying a battery of scientifically tested, culturally relevant measures of child and family functioning.

For example, a frequently used measure in the developmental literature, the Perceived Competence Scale for Children (PCSC; Harter & Pike, 1984), involves the construct of young children's peer-related competence, as well as self-appraisal of competence. One member of the team administered this instrument to a large sample of Head Start children in Philadelphia as an outcome measure for a peer-mediated intervention study (Fantuzzo & Sutton-Smith, 1994). Factor analyses and item analyses revealed that this measure was invalid for use with this sample because Head Start children did not understand the questions (Fantuzzo, McDermott, Manz, Hampton, & Burdick, 1996). Further investigation revealed that the initial normative sample for the PCSC consisted of 90 white children from one Western United States city (Harter & Pike, 1984). No additional reliability or validity studies were conducted despite extensive use within developmental research. These findings underscore the risk of using measures without testing their validity for diverse groups of individuals.

This risk is also applicable when using parent measures. One study that tested the psychometric quality of a parent questionnaire involved the Parent Sense of Competence Scale (PSOC; Johnston & Mash, 1989). This scale was developed to provide a measure of parental self-esteem, which plays an essential role in parent-child interactions. The original scale consisted of two subscales: a satisfaction scale and an efficacy scale. Factor analyses on a sample on nearly 300 parents replicated the factor structure reported by the test authors. However, further investigation detected that items on the scale were grouped together according to their valences, i.e., negatively worded items grouped together and positively worded items grouped together. These findings call into question the validity of this measure, and therefore we rejected the PSOC as an inadequate measure of parenting self-esteem.

In addition, in our preliminary discussions within Head Start populations in Philadelphia, the following measures were rejected by the Head Start Parent Policy Council on the basis of being deficiency-oriented and culturally insensitive; (1) Child Behavior Checklist (Achenbach, 1991), (2) Parenting Stress Index, (3) Child Abuse Potential Inventory (Milner, 1980), (4) Conflict Tactics Scale (Strauss, 1979), and (5) Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). This evidence added further support to and guidance in our pursuit of research efforts that would have ecological and consequential validity.

COMPREHENSIVE CONCEPTUAL MODELS: BLUEPRINTS FOR RESEARCH STUDIES

Although the argument can be made about the importance of conducting nursing research on nursing interventions, it is also true that few disciplines are structured by rigid boundaries, and

there is considerable interpenetration between what nurses and other professionals do in psychiatric clinical settings. Furthermore, no one researcher can bring expertise to every conceivable area within a complex study. Cicchetti (1993) posits that the lack of multi and cross-disciplinary research results in excellent measures of constructs in which the principal investigator has expertise, but less formidable measures of competing constructs. This can often result in research that is skewed and lacking in ecological validity.

Comprehensive team approaches to study and research that include professionals and patient families can be used to construct and implement intervention strategies, and evaluate their effectiveness. To guide such complex research, a conceptual model that transcends traditional, unidimensional, expert-driven and discipline specific approaches is needed to begin addressing children in context. To this end, developmental ecological theory can help to guide a research team in considering the influence of multiple systems on individual development, treatment, and outcome.

Human ecology is concerned with a broad conception of human beings in their environments. The ecological view suggests that people are open-ended systems constantly interacting with their environments. Bronfenbrenner (1979; 1988) first articulated ecology theory. It was not intended to be a new developmental theory, but rather a critique of trends in developmental research where content and method focused on objective analysis of development in controlled and artificial contexts. Bronfenbrenner argued that the conditions in which humans live (their ecologies) are not extraneous, but are integral to their development.

At the core of any mental health approach is a developmental perspective. In the case of children, this perspective emphasizes child competencies and environmental influences to children's adjustment and adaptation. A developmental ecological model developed by Cicchetti and his colleagues (Cicchetti & Lynch, 1993) draws on and integrates a number of ecological and transactional models to explain how prior development and risk and protective factors at multiple levels of a child's ecology contribute to our understanding of the processes that underlie maladaptive and resilient outcomes for low-income preschool children in high risk environments.

This conceptualization contends that risk and protective factors can be present at all system levels of the child's ecology. According to Belsky (1980), four distinct system levels describe influences operating in the child's environment. The two most distal levels of the environment are the macrosystem, which includes the beliefs and values of the culture, and the exosystem, which includes aspects of the community in which the family lives. The more proximal levels of the environment are the microsystem and ontogenic development. These systems exert the most direct influences on child development. The microsystem includes the immediate settings in which the child exists, most notably the family home and school. Ontogenic development consists of child characteristics connected to the child's own development and adaptation.

Risk factors at each system level of the model influence whether maladaptive outcomes will occur. In addition, factors within a given level can affect outcomes in surrounding levels of the model. At higher, more distal levels of the ecology, such as the macrosystem and the exosystem, risk factors may increase the likelihood of community violence, feelings of oppression, and racism associated with living in densely populated, low-income neighborhoods. In addition, factors occurring in these environmental systems may influence what happens in the microsystem. For example, poverty and unemployment, which are often concentrated in inner-city neighborhoods, can produce increased stress and frustration that affects the nature and quality of the parent-child relationship.

How children cope with the challenges posed by community and family stressors is evidenced in their ontogenic development. An increased exposure to risk factors at all ecological levels makes the successful resolution of stage-salient developmental issues more problematic for children (Cicchetti, 1989), resulting in an increased likelihood of negative developmental outcomes and psychopathology (Cicchetti, 1990). Conversely, such an ecological model also helps to account for resilient outcomes in some children. The presence of protective factors at any level of the ecology may help to explain why some children display successful adaptation in the face of high levels of social toxicity either within their communities or with their families (cf. Cicchetti & Lynch, 1993; Richters & Martinez, 1993).

Coupled with this ecological perspective is an organizational understanding of development, which offers a powerful theoretical framework for investi-

gating developmental processes and outcomes (Cicchetti, 1989). Furthermore, an organizational perspective focuses on the quality of integration both within and among the multiple domains of individual development. This approach conceives of development as comprising a number of age- and stage-relevant tasks. Although the relative salience of these tasks may decrease in relation to newly emerging issues, they remain important to adaptation over time (Cicchetti, 1989), and the successful resolution of an early stage-salient issue increases the probability of subsequent successful adjustment (Sroufe & Rutter, 1984). As each stage respectively becomes most salient, opportunities for growth and consolidation, as well as challenges associated with new vulnerabilities, arise. Thus, an ever-changing model of development is portrayed in which newly formed competencies or maladaptations may surface throughout the life course (Cicchetti, 1993). Because each stage-salient issue also entails reciprocal roles for caregivers, parental influence can either enhance or hamper a child's successful negotiation of these issues. Moreover, comprehensive early childhood interventions may offer compensatory factors that buffer children from adversities by providing environments that promote developmentally appropriate competencies, positive parenting practices, and supportive family social networks.

This model underscores the importance of recognizing that human development (both adaptive and maladaptive) is affected by the context in which that development occurs. With respect to intervention and outcome research, this model would posit that it is overly simplistic to believe that an intervention can be designed that fits every child and every situation. Furthermore, given that interventions are not applied in a vacuum, and that outcomes should be expected to generalize to some degree to nontreatment settings, it makes sense that research should include contextual variables that do, and will, inevitably mediate well beyond the clinical setting. These include variables beyond the immediate child and family and include those that may hinder generalization of newly acquired behaviors.

If we acknowledge that multiple pathways or contributions to child psychopathology and to child resources, even for those children who share the same diagnosis, then a standard, uniform application of interventions makes little sense. Brand name psychotherapeutic techniques shown to be efficacious in laboratory settings may not be sufficient to successfully ameliorate a child's problems, especially if the problem manifests itself across multiple domains with very different task demands (Kazdin, 1990). Rather, the selection of intervention methods hinges to a large degree on the assessment of specific events that constitute pathogenic processes that contribute to the child's psychopathology. It also hinges on selecting appropriate interventions for appropriate domains and contexts. Therefore, in researching children, it is critical that we examine the role of proximal and distal aspects of the environment in mediating, or influencing, the effects of treatment, particularly as they relate to the resolution of critical developmental tasks (National Research Council, 1993).

A PUBLIC NURSING APPROACH

An effective research agenda in psychiatric nursing must be (1) public, (2) multicontextual and nomothetic, and (3) collaborative. Public psychiatric nursing is nursing that is given away to the public. A public psychiatric nursing research approach must emphasize the need to base itself on the imperative to "go to." Being public means focusing on patient needs and an acknowledgment that the "psychotherapy" model of the past may be a thing of the past. Old assumptions of treatment in hospital settings or private practice may have to be discarded or at the very least modified as the inevitable changes of the marketplace have made all too apparent.

Nursing researchers (and again we use our own focus on child psychiatric research as example) must begin to go to the natural settings where children develop and they must design psychological services that are readily accessible to all children and families. This is in contrast to the psychiatric services delivery systems of the past that exclusively required a selected group of individuals to "come to" researchers. Following a willingness to go, is a commitment to "go many places."

The multicontextual and nomothetic principles define the significance of going many places. A multicontextual and nomothetic mandate underscores the importance of nurses having the ability to transact with the many salient contexts that shape the lives of children. The home, school, playground, neighborhood, religious institution, and community provide important sources of data

that can help us more fully understand human behavior and individual and group differences. Information from these multiple natural contexts can help us to obtain more contextually relevant assessments of needs and strengths and can help us to develop more potent and socially significant interventions.

The principle of nomothesis seeks a broader and more inclusive understanding of human development. This principle recognizes that without a broad understanding of experiences and consequences across many human beings, we have no way to judge their relative significance in the life of any one person. Nomothesis defines the systematic study of relevant factors across the lives of many persons. Inquiry is not limited to persons at risk, or those who suffer some disturbance. Rather, it is deemed important to study pertinent experiences and consequences across representative samples of the entire population. Thus, nomothesis, as the prefix nomo implies, means discovery of what is normal or natural variation. By knowing what is commonplace, or normal within certain populations, we are able to recognize and appreciate more fully what is truly outstanding or abnormal. Indeed, nomothesis enables one to learn not only whether pathology exists, but also how comparatively common and severe its sequelae are. Furthermore, nomothesis provides a framework for understanding the variability within subpopulations of persons, intergroup similarities and differences, and resiliency. Nomothesis guards against presuming that a psychological knowledge-base derived from one subpopulation of people (i.e., White middle-class people) can be readily applied to diverse groups of people without scientific scrutiny. Failure to collect the data on distinct groups of individuals will make researchers vulnerable to mistaking difference for deviance.

The principle of collaboration underscores the importance of forging dynamic partnerships with patients and families and natural helpers. This principle recognizes that the capacity of nurses to enhance the psychological well-being of patients in need is a function of their ability to gain entry to important contexts, to generate a genuine two-way exchange of information with patients and natural helpers, and to coconstruct and cooperate intervention with natural helpers. It is simply not acceptable to assume that a single Principal Investigator study that describes a single intervention, with a single group of individuals in a single hospital or community setting, at a single point in time constitutes a study of enduring value. In the words of Dante Cicchetti (1993): "By now it should be apparent that extreme positions (i.e., biological or psychological; cognitive or emotional) provide overly simplistic and incorrect accounts of the . . . process. I do not think that we can afford to tolerate such lapses in logic and experimental rigor if true and lasting advances are to occur" (p.484).

Increasingly, the major challenges facing patients—particularly vulnerable at-risk children—require nurses to team with other professional groups and natural helpers to design, implement, and evaluate intervention strategies that are relevant across the multiple contexts of childhood. Collaboration provides the relationship base that is essential for this coconstruction and cooperation (Fantuzzo, Mohr, & Noone, 1998). Fundamental to this kind of relationship is the respect that nurses show to patients and their families. This respect is manifest as nurses seek to understand how families facing the hardships of dealing with mental health challenges are making meaning out of their life experiences. Respect generates trust and builds teamwork. Instead of "one-shot," decontextualized interventions by uninformed experts, collaboration ensures that research is a process of listening to one another, trying, coming back together as a team, and trying again.

CONCLUSIONS

Intervention and outcome research focus has become the *sine qua non* of calls for future research studies and conference presentations. However, calling for these studies is insufficient without recognizing where we are in the process of such research. It is important to note that the knowledge-base that presently exists is a shaky foundation on which to base an intervention-outcome research agenda. In this era of limited research funds, we must be critical in our appraisal of what is in our methodological tool kits and learn to distinguish between the good, the bad, and the ugly.

In addition, because of the evolving complexity of child psychopathology research, future studies that will stand the test of time must involve more than a single researcher with a single intervention at a given point in time. Cross sectional approaches, regression analyses, and analyses of variance and covariance of the past must be re-

placed by more sophisticated designs that go beyond simple notions of acontextualized interventions and outcomes. These can generate misleading conclusions when they are used to sort out multiple interacting risk factors and reciprocal influences on outcomes. The elegance of theoretical ideas that include transactional and contextual factors necessitates more complex measurement and data analytic strategies.

We must not fall into the trap of thinking that we must be experts in every aspect of statistical analysis, or research design. Other disciplines can provide us with the expertise that we need and we can cross boundaries with them in the spirit of true collaboration and partnership (Fantuzzo, Mohr, & Noone, 1998).

In designing our studies, we must bear in mind that the functioning of human beings involves an interplay of child, family, and community factors over time that is difficult to capture empirically. Essential to meeting the demands of this complexity are several theoretical and methodological improvements. A well-established conceptual framework that can account for transactional processes over time, and an adherence to rigorous scientific standards are needed to address the multisystem level issues necessary to successfully understand significant events, interventions, and the outcomes of those interventions in a comprehensive way.

Maximizing research efforts, opportunities and dollars also means going beyond the dyadic approach in which the patient is the identified problem and the nurse (or other caregiver) is the "expert." We know that psychotherapy alone is not effective at keeping children out of restrictive settings when they are traumatized, or ill (Pires & Stroul, 1996). This lack of effectiveness is not surprising given that the focus of psychotherapy is contextually truncated. Research also indicates that family education and support services in the care of persistently mentally ill patients results in cost savings through relapse prevention, and better outcomes in terms of quality of life and patient satisfaction (Murphy & Moller, 1993; Moller & Wer, 1989). Much of this success can be attributed to engaging the families as partners and experts in care.

Applying the lessons learned in this clinical example to a research project likewise promises positive results. Families must be an integral part of the research team because, as statisticians are experts in analyzing the data, and nurses may be experts in nursing care, families because of their proximal position to the problems, are experts in their own experiences. Much wasted time (and thus money) can be avoided by including them from the inception of the research project.

Finally, a comprehensive conceptual model, such as the developmental ecological perspective shows great promise for improving our understanding of patients of all ages. Understanding and conceptualizing children, families, and communities through the lens of this perspective is valuable because it captures both individual and contextual variables, as well as transactions simultaneously. This perspective can help to examine phenomena that have short-term as well as long-term implications and it provides a way to begin to identify multifaceted intervention strategies that can be tailored to where patients and their families actually are—as opposed to where we think that they are.

REFERENCES

Achenbach, T. (1991). *Manual for the Teacher's Report Form and 1991 Profile.* Burlington, VT: University of VT, Department of Psychiatry.

Bartlett, J. (1980). *Familiar Quotations.* 15th Edition. Boston: Little, Brown, & Company.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 9,* 295-302.

Belsky, J. (1980). Child maltreatement: An ecological integration. *American Psychologist, 35,* 320-335.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1988). Foreword. In A.R. Pence (Ed.), *Ecological Research with Children and Families: From Concepts to Methodology* (pp. 2-4). New York: Teachers College Press.

Cicchetti, D. (1989). How research on child maltreatment has informed the study of child development: Perspectives from developmental psychopathology. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 16-41). New York: Cambridge University Press.

Cicchetti, D. (1990). The organization and coherence of socioemotional, cognitive, and representational development: Illustrations through a developmental psychopathology perspective on Down syndrome and child maltreatment. In R. Thompson (Ed.), *Nebraska symposium on motivation,* Vol. 36 (pp. 36-60). Lincoln: University of Nebraska Press.

Cicchetti, D. & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry, 56,* 96-118.

Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review 13,* 471-502.

Durlak, J., Fuhrman, T., & Lampman, C. (1991). Effectiveness of cognitive-behavioral therapy for maladapting children: A meta-analysis. *Psychological Bulletin, 110,* 204-214.

Fantuzzo, J.W. & Sutton-Smith, B. (1994). *Play Buddy Project: A preschool-based intervention to improve the social effectiveness of disadvantaged, high-risk children.* Washington, DC: U.S. Dept. of Health and Human Resources.

Fantuzzo, J.W., McDermott, P.A., Manz, P.H., Hampton, V.R. & Burdick, J.L. (1996). The Pictorial Scale of Perceived Competence and Social Acceptance: Does it work with low income urban children? *Child Development, 67*(3), 1071-1084.

Fantuzzo, J.W., Mohr, W.K., & Noone, M.N. (1998). Making the invisible victims of violence against women visible through university/community partnerships. *Journal of Aggression, Maltreatment and Trauma.* (in press).

Fulford, K.W. (1994). Closet logics: Hidden conceptual elements in the DSM and ICD classifications of mental disorders. In J.Z. Sadler, O.P. Wiggins, & M.A. Schwartz (Eds.), *Philosophical perspectives on psychiatric diagnostic classification* (pp. 211-232). Baltimore: Johns Hopkins University Press.

Garbarino, J. (1985). An ecological approach to child maltreatment. In L.H. Pelton (Ed.) *The social context of child abuse and neglect* (pp. 28-45). New York: Human Sciences Press.

Jensen, P.S. & Hoagwood, K. (1997). The DSM-IV in context. *Development and Psychopathology, 9,* 231-249.

Johnston, C. & Mash, E.J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology, 18*(2), 167-175.

Kazdin, A.E. (1990). Psychotherapy for children and adolescents. *Annual Review of Psychology, 41,* 21-54.

Kazdin, A.E., Bass, D., Ayers, W.A., & Rodgers, A. (1990). Empirical and clinical focus of child and adolescent psychotherapy research. *Journal of Consulting and Clinical Psychology, 58*(6), 729-740.

Krauss, J. (1997). The future of advanced practice psychiatric nursing. *Archives of Psychiatric Nursing, 11*(4), 165-166.

Lambert, M. (1989). The individual therapist's contribution to psychotherapy proces and outcome. *Clinical Psychology Review, 9,* 217-224.

Mann, B.J. & Borduin, C.M. (1991). A critical review of psychotherapy outcome studies with adolescents, 1978-1988. *Adolescence, 26,* 506–535.

Matt, G.E., Shadish, W.R., Navarro, A.M., & Siegle, G. (1994). *Generalizing from the research lab to clinical practice: A re-analysis of psychotherapy meta-analyses.* Paper presented at the American Evaluation Association Annual Meeting, November 1994, Boston, MA.

Messick, S. (1982). Test validity and the ethics of assessment. *Diagnostica, 28*(1), 1-25.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist, 50*(9), 741-749.

Milner, J. (1980). *The Child Abuse Potential Inventory:Manual.* Webster, NC: Psytec.

Moller, M.D. & Wer, J. (1989). Simultaneous patient/family education regarding schizophrenia: The Nebraska model. *Archives of Psychiatric Nursing, 3,* 332-337.

Murphy, M.F. & Moller, M.D. (1993). Relapse management in neurobiological disorders: The Moller-Murphy symptom management assessment tool. *Archives of Psychiatric Nursing, 7,* 226-235.

National Research Council. (1993). *Understanding child abuse and neglect.* Washington, DC: National Academy.

Pires, S.A. & Stroul, B.A. (1996). Family issues in health care reform. In C.A. Heflinger and C.T. Nixon (Eds.) *Families and the mental health system for children and adolescents.* (pp. 1-17). Thousand Oaks, CA: Sage Publications.

Richters, J.E. & Cicchetti, D. (1993). Mark Twain meets DSM-III-R: Conduct disorder, development, and the concept of harmful dysfunction. *Development and Psychopathology, 5,* 5-29.

Richters, J.E. & Martinez, P. (1993) NIMH community violence project: Children as victims of and witnesses to violence. *Psychiatry, 56,* 7-21.

Shirk, S.R. & Russell, R.L. (1996). *Change processes in child psychotherapy: Revitalizing treatment and research.* New York: The Guilford Press.

Sroufe, L.A. (1997). Psychopathology as an outcome of development. *Development and Psychopathology, 9*(2), 251-269.

Sroufe, L.A. & Rutter, M. (1984). The domain of developmental psychopathology. *Child Development, 55,* 17-29.

Strauss, M.A. (1979). Measuring intrafamily conflict and violence: The conflict tactics scales. *Journal of Marriage and the Family, 41,* 75-88.

Tharp, R.G. (1991). Cultural diverslity and treatment of children. *Journal of Consulting and Clinical Psychology, 59,* 799-812.

von Bertalanffy, L. (1968). *General systems theory.* New York: Braziller.

Weisz, J.R., Weiss, B., Alicke, M.D., & Klotz, M.L. (1987). Effectiveness of psychotherapy with children and adolescents: A meta-analysis for clinicians. *Journal of Consulting and Clinical Psychology, 55,* 542-549.

Weisz, J.R., Weiss, B., & Bononberg, G.R. (1992). The lab versus the clinic: Effects of child and adolescent psychotherapy. *American Psychogist, 47,* 1578-1585.