

# Commentary: Developmental Psychopathology as a Unifying Context for Mental Health and Education Models, Research, and Practice in Schools

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A persuasive case is presented by Ringeisen, Henderson, and Hoagwood (2003) for the significance of school contexts in child development and the potential for improving child mental health and achievement through more sophisticated, integrative, multilevel, and multidisciplinary models of how schools and children change. This perspective reflects a transformation taking place in models of psychopathology in children and what to do about it, with implications for research, policy, treatment, and prevention efforts involving schools. The article underscores three fundamental tenets of developmental psychopathology with relevance to school-based practices and research: (a) children are living systems whose lives reflect complex interactions with other systems, including schools, which in turn are embedded in larger systems; (b) understanding positive adaptation and development is important for preventing and treating problems, particularly among children at risk for psychopathology; and (c) more complex approaches are required in order for interventions or research to accommodate the embedded multi-system realities of children's lives, and these approaches require collaborations at a much earlier and deeper level.

## **Schools as Dynamic Systems**

Over the past three decades, developmental psychopathology has emerged and

taken hold as an integrative framework for understanding behavioral and emotional problems in children and conceptualizing the processes by which such problems develop, change, and might be prevented (Cicchetti & Sroufe, 2000). Developmental systems theory has permeated this framework, emphasizing the dynamic nature of human development and the importance of many embedded and interacting systems at different levels of analysis for shaping the course of development (Ford & Lerner, 1992; Sameroff, 2000).

Bronfenbrenner's (1979) ecological model of embedded systems and their interactions has had a tremendous influence on models of etiology and intervention in developmental psychopathology. Figure 1 provides an illustration of the complex embedded nature of human individuals in interacting systems. Ringeisen et al. (2003) focus on the school context as a dynamic and complex system continually interacting and changing at many levels. Schools are contexts for children and for interventions, but schools also have contexts provided by larger systems such as school districts, communities, and national policies. These authors describe a three-level model of school dynamics that could influence the implementation and success of interventions or programs designed to improve mental health outcomes in children. In doing so, they illustrate one of the central implications of dynamic

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systems models for conceptualizing intervention and prevention. Insofar as change can arise (or be thwarted) in many different ways through multiple processes, it is important to consider the embedded contexts interacting with systems targeted for change. Researchers

moving their interventions from controlled academic settings to ordinary school settings have learned from experience, as have school reformers, that it is unwise to ignore the fact that schools have distinct system characteristics and answer to larger systems. Further, it is

**Figure 1. Illustration of embedded systems at multiple levels. Dashed lines represent interactions between systems or individuals within different systems.**

wise to consider the inherent stability (i.e., resistance to change) of established social systems when one embarks on a change mission.

Particularly compelling in this article is the point that mental health practice models and education models may differ so much that system change is required to bring them together effectively in the school context. The successful implementation of school-based mental health programs, as well as the sustainability of any school-based changes toward this end, may depend critically on attention to the nature and processes characterizing the school as a dynamic system interacting with other systems.

### **Integrating Competence, Resilience, and Psychopathology in Theory and Practice**

Also fundamental in the developmental psychopathology framework is the tenet that understanding positive pathways and processes is vitally important for theory, prevention, and treatment of psychopathology (Cicchetti & Hinshaw, 2002; Luthar & Cicchetti, 2000; Masten & Curtis, 2000). It is no coincidence that studies of resilience emerged in the scientific literature in the same era as developmental psychopathology; resilience research pioneers held out hope that studies of children who managed to make it under adverse rearing conditions could inform policy and practice aimed at fostering competence or protecting child development among children at risk for psychopathology. The ensuing studies of resilience have yielded important advances in knowledge, models, and applications (see Luthar, 2003), while at the same time the promise of a fully integrated science of adaptation and intervention remains elusive (Masten & Curtis, 2000). Advances as well as gaps in the integration of positive adaptation and processes in children's mental health research and practice are evident in this article.

Resilience theory and research underscored the importance of tracking how children were doing in the major developmental tasks expected for children at a given point in development in a given sociocultural and historical context. Resilience is typically defined

in terms of doing "OK" on these milestones of psychosocial development in spite of exposure to significant adversity (Masten, 2001; Masten & Coatsworth, 1998). As a result, these studies brought greater attention to the measurement of competence as well as symptoms in following the life course of children. Increasingly, longitudinal studies launched within a conceptual framework embracing developmental psychopathology include both kinds of measures. Data linking multiple domains of competence and psychopathology over time in prospective longitudinal studies are still limited, but the findings hold promise for aligning the goals of educators and mental health professionals.

A major impediment to developing effective models and programs of school-based services for children's mental health noted in the Ringeisen et al. (2003) article is the disconnection between educational models and educators focused on competence and achievement and mental health models and practitioners focused on psychopathology and treatment, often to the neglect of outcomes of greatest interest to educators. Yet longitudinal studies of competence and symptoms strongly suggest that there are causal processes linking antisocial behavior, academic achievement, social competence, and emotional symptoms over time, resulting in developmental cascades, with progressive or "snowball" effects (Hinshaw & Anderson, 1996; Masten & Coatsworth, 1998). Basic research findings suggesting such effects have been bolstered by experimental intervention studies that demonstrate how targeted changes in one domain result in improvements in other domains, as cascade models would predict. A number of these demonstrations have taken place in school contexts. Kellam, Rebok, Mayer, Ialongo, and Kalodner (1994) focused on reading and achieved predicted improvements in internalizing symptoms during first grade. Hawkins, Catalano, Kosterman, Abbott, and Hill (1999) focused on school bonding and achievement in a successful intervention to reduce risky behavior in adolescence.

Prevention science has embraced a more comprehensive approach to lowering risk for

mental health problems by promoting success in important developmental tasks, such as academic achievement and social competence with peers (Cicchetti & Hinshaw, 2002; Masten & Coatsworth, 1998). Noam and Hermann (2002) discuss the potential for innovative and effective practices and theoretical advances when "Education and Mental Health Meet." This shift holds great promise for bridging the gap that Ringeisen et al. (2003) have described between models and goals in education and children's mental health practice as well as the general gap between research and practice.

Resilience research has helped to transform the conceptual frameworks for assessment, diagnosis, and intervention (see Masten & Powell, 2003), bringing to greater salience the role of assets, protective processes, and success in developmental tasks for the etiology, prevention, and treatment of psychopathology. Reframing goals and models to focus on successful development and strengths or positive processes has great appeal to many stakeholders whose support is essential for implementing change. Academic achievement is viewed as a core developmental task in this literature and effective schools make the "short list" of most frequently observed protective factors for good development in children at risk due to psychosocial disadvantage and adversity.

Schools have considerable potential as a context for interventions to steer development along more positive pathways rather than troubled roads. The significance of academic and social achievements and the school context for successful transitions to adolescence and adulthood is a striking feature of the growing literature linking competence and symptoms, and also the resilience research to date. Schools also provide many opportunities to foster and mobilize some of the most powerful systems of human adaptation, in the form of relationships with competent and caring adults, building self-efficacy through mastery experiences, and honing the amazing problem-solving capacity of the human brain (Masten, 2001; Roeser & Eccles, 2000). Clearly, schools have come to the forefront of theory and action in developmental psychopathology, resilience, and prevention research.

### **Sooner and Deeper: Collaboration and Training for Better Practice and Science**

Developmental psychopathology and resilience perspectives call for integrated and multidisciplinary approaches to theory, research, and applied developmental science (Luthar & Cicchetti, 2000; Masten & Powell, 2003). No single discipline or individual has all the tools to understand or alter the course of development that arises from complex interactions among systems at multiple levels. Thus, as Ringeisen and colleagues (2003) emphasize, a deep level of collaboration is required for integrating models and methods of education and mental health in research and practice. This is likely to be easier to achieve if planning is collaborative early in the process, if there is some infrastructure in place for doing so, and if the individuals and organizations who will be involved in the endeavor are prepared. Our administrative bureaucracies and funding streams at every level are disconnected in many of the same ways noted in this article for mental health and education. Our higher education systems play a critical role as developmental contexts for the individuals expected to work together to translate research for practice or to transform schools and other contexts of child development. As Ringeisen, Henderson, and Hoagwood have succinctly concluded: context matters. Effective translation of research into practice or field experience back into theory and research, as well as daring new collaborative ventures, are likely to be facilitated by individuals and organizational leaders who have crossed campus bridges, eaten, learned, and worked together.

### **Summary**

Dynamic multisystem models of human learning, development, and psychopathology are transforming sciences, practices, and policies concerned with the health, success, and well-being of children and the adult citizens of society they will become. School contexts host many of the interactions that influence the course of child development and it is likely that schools will be central to innovative programs and interventions designed to promote educa-

tional success and mental health, while preventing or reducing problems. Data and theory emerging from developmental psychopathology and resilience-focused research indicate that school matters in diverse ways and that greater attention to processes unfolding in relation to school contexts will inform and improve the mental health and academic success of our children as well as the science and practice of changing systems and the course of development.

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