

Research Statement

Approximately 21 percent of U.S. children aged 9 to 17 have a diagnosable mental illness. Yet current estimates indicate that only one in five of these children actually receive treatment. Children with severe psychopathology, especially psychopathology that goes untreated, have significant learning problems, are more likely to drop out of high school, and have continued functioning problems throughout adulthood. Tragically, some of these children do not even survive to reach adulthood, as suicide is the third leading cause of death for youth 10 to 24 years old. My interest in children's mental health extends into two distinct lines of research: developmental influence on the experience and expression of psychopathology and school-based intervention programs.

Developmental Influence on the Experience and Expression of Psychopathology

Although trained diagnosticians can easily identify the presence of a psychiatric condition, parents and teachers may not be so adept at recognizing a disorder. If adults who interact with the child do not recognize a disorder appropriately, they may be less likely to refer a child to a professional for treatment. Misdiagnoses can often occur because children experience both internalizing (depressive) and externalizing (behavioral) characteristics at the same time. Externalizing problem behaviors, such as aggression, are extremely salient and often lead laypeople to believe a child has a behavior problem, rather than another disorder, such as depression. The amount of internalizing versus externalizing symptoms has been shown to be dependent on child characteristics. I am particularly interested in how one of these characteristics, intelligence, is related to psychiatric symptoms in children.

High IQ has been viewed as a protective factor which prevents the onset of psychopathology. However, contradictory evidence indicates that individuals with high IQ show high rates of specific types of psychopathology, such as depression. It is my contention that high IQ does not provide an immunity to psychopathology; rather, intelligence (which is a component of developmental level) merely alters the experience of psychopathology and, consequently, the expression of symptoms. Children at a lower developmental level (younger age and lower IQ) have limited cognitive abilities, which impact how they understand the stressors they experience in everyday life. In addition, children with a lower developmental level have difficulty communicating stress as they have a very restricted verbal and behavioral repertoire. I believe that children at lower developmental levels will exhibit externalizing (behavioral) psychiatric symptoms more often than internalizing symptoms. Within my dissertation, which is discussed within the next section, I am investigating this hypothesis.

I am also very interested in how developmental level relates to major depression and depressive symptoms in children. Depressed children do experience internalizing and externalizing depressive symptoms as adolescent and adults do, but they experience them in different proportions. Consistent with the developmental approach for general psychopathology, I believe that depressed children at a lower developmental level will show more externalizing symptoms of depression, such as aggression, irritability and behavioral changes, than children at a higher developmental level. I am currently testing this hypothesis within my dissertation project. At an inpatient psychiatric setting, children's records from the last several years are being reviewed for demographic information, IQ, psychiatric diagnoses and internalizing versus

externalizing symptoms of depression. Estimates of developmental level are made by assigning mental ages to each participant based on chronological age and IQ.

Depressive symptoms are identified by reviewing the child's entire psychiatric file and recording the presence of internalizing and externalizing symptoms. The correlation between mental age and an internalizing to externalizing ratio score will be calculated. The reliability of the record review techniques will be evaluated using a child self-report measure (Child Depression Inventory) in current and future patients during the data collection time period.

In addition to my dissertation, I am also preparing to perform a qualitative study in collaboration with Dr. Edward Zigler on the expression of depressive symptoms in individuals with mental retardation. Based upon the same theoretical formulations that I posed for children of typical cognitive ability, I believe that individuals with mental retardation will show predominantly externalizing symptoms of depression.

School-based Intervention Programs

My second main research interest is the creation and evaluation of classroom-based and after-school interventions designed to prevent and minimize mental health problems at school. Principals, teachers and parents are often very eager to help children with behavioral and emotional difficulties, but are commonly limited by a lack of psychiatric knowledge, staff, and time. For these reasons, children with serious psychological problems are commonly shifted from classroom to classroom while their problems stay the same or even deteriorate. Due to the separation between research and applied practices, communication between researchers and school teachers is often marginal. While many teachers have not been trained to work with children who

have psychiatric conditions, many researchers do not understand the limitations and stressors that occur in the daily school setting. In order to bridge some of the gaps between the research and the school context, I am planning a descriptive study which will investigate the mental health problems that members of the school community commonly encounter. This project, which will include surveys and interviews, is in the planning process.

In order to improve the education of children with psychopathology, schools need programs that are grounded in research, can be easily used within the school context, focus on the prevention of mental health problems, and capitalize on children's interests. In collaboration with my research group, I am currently developing a mental health in schools initiative, which consists of a training component (for teachers, principals, and parents) and preventative strategies to be used within the normal and after-school classroom. Bringing together research from art, music, pet, horticultural, and relaxation therapies, lesson plans are being created to illustrate how to capitalize on children's strengths and use interesting activities to help maintain a functioning classroom free of behavioral problems. Additionally, these programs are being designed to teach skills that build resilience in children. We are currently within the planning and creation stages of this project.

Within my research lab, we are also evaluating the effect of several after-school programs on children's social, emotional, and academic functioning. In a research project that began in 2003, we are specifically evaluating how these programs affect internalizing and externalizing problem behaviors in children. By using the Social Skills Rating System, children are rated by parents, teachers, and after-school program

coordinators in the fall and spring of every year for four years. Participation and attendance to the after-school programs are collected on all children. Additionally, coordinators rate how engaged the children are in the activities provided. The hypothesis of this study is that higher attendance and engagement will lead to less internalizing and externalizing problems. The interaction of attendance and engagement with gender, ethnicity, and socio-economic status will also be evaluated.

Future Research

After the conclusion of the projects currently in progress, I would like to answer additional questions in both areas of my research. Within my developmental psychopathology interests, I would like to conduct case studies as well as empirical investigations into the expression of depression in individuals with very low and very high IQs. I would also like to extend my dissertation study on internalizing and externalizing symptoms in depression using a non-clinical sample. In terms of the evaluation of school programs, I am eager to test the efficacy of the mental health in schools program once it is established. I would also like to include an investigation of how these programs affect children differently based on their gender, ethnicity and income level. Further research in both areas will not only assist in the proper diagnoses and treatment of children with psychiatric conditions, but it will help prevent these debilitating conditions which affect so many of our nation's youth.