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SYSTEMS OF CARE AND THE PREVENTION OF MENTAL HEALTH PROBLEMS FOR CHILDREN AND THEIR FAMILIES: INTEGRATING COUNSELING PSYCHOLOGY AND PUBLIC HEALTH PERSPECTIVES

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The purpose of this paper is to present systems of care as an example of how counseling psychology and public health overlap with regards to prevention and intervention approaches for children's mental health. A framework for prevention is presented as is the state of children's mental health promotion, with a particular focus on ecological and systemic approaches to children's mental health and how these approaches cut across multiple perspectives. Systems of care are highlighted as an example of the congruence of prevention and ecological or systemic approaches to address the mental health promotion of children and their families, with the potential to impact at the universal, selective, and indicated levels of risk. Results from a longitudinal outcome study of a school-based system of care are presented to exemplify the positive outcomes experienced by children. An increase in the awareness and implementation of systems of care across mental health perspectives is recommended, along with continued research from the public health and counseling psychology communities focused on which prevention and intervention services within systems of care work, why they work, and how they can be improved upon.

A Framework for Prevention & Promotion

Preventive interventions are typically classified into three categories: universal, selective, and indicated. Interventions directed at the whole population of interest are universal interventions, while interventions aimed at populations at increased risk are selective, and prevention programs targeting those at greatest risk or who have early signs of a disorder or problem are referred to as indicated (Kellam & Langevin, 2003). However, as Waldo and Schwartz (2008) highlight, recognizing that any intervention addresses all three categories allows for a maximization of benefits. Rather than placing interventions in discrete categories, it is better to describe the potential impact an intervention may have in each category.

The National Institute of Mental Health (NIMH, 1998, 2001) posits that the focus of prevention interventions and prevention research in the mental health field has broadened over time. As Figure 1 demonstrates, the first generation (1930s to late 1960s) of prevention focused on universal interventions for healthy populations; while the second generation (late 1960s to late 1990s) expanded focus to include selective and indicated interventions for individuals at risk for mental disorders, but without a diagnosed disorder. The NIMH reports that current prevention research is part of the third generation, which has expanded prevention research to minimize gaps between prevention and basic risk-factor research at one end of the spectrum, and between prevention and treatment at the other. This third-generation perspective encompasses basic research on antecedents and risk factors that can inform the design and implementation of prevention interventions, as well as research on clinical populations with acute or chronic mental disorders who are at risk of relapse, co-occurring mental, substance abuse, or physical disorders, or disability (NIMH, 1998, 2001). This perspective coincides with the proposed addition of risk-reduction strategies to the conventional tri-fold prevention framework (Romano & Hage, 2000). In a complementary trend, prevention research has also begun to emphasize the importance of protective factors, resilience, and

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health promotion. While the field of counseling psychology has been slow to incorporate prevention work, many argue that historical and demographic developments highlight the need for a prevention focus and how such a focus naturally overlaps with the central tenets within counseling psychology perspective, such as emphases on health, client strengths, diversity and multicultural issues, and context (Heppner, Casas, Carter, & Stone, 2000; Romano & Hage, 2000).

The Promotion of Children's Mental Health

Across all age groups, mental illnesses are the leading causes of disability worldwide (Substance Abuse and Mental Health Services Administration, 2007). The majority of mental health problems begin during childhood and adolescence. Research suggests that half of all diagnosable cases of mental illness begin by age 14, and 75% start by age 24. Reports estimate that 21.8 % of youth ages 12-17 receive treatment or counseling for emotional or behavioral problems and 10% of this age group experiences a mental health problem that causes significant impairment in functioning at home, school, or in the community. In contrast, it has also been estimated that 60 – 80% of children in need of treatment do not receive it (Hoagwood & Koretz, 1996). If early intervention does not occur, childhood mental disorders may intensify and persist, and can lead to school failure, poor employment opportunities, poverty, or long-term health and mental health consequences (Substance Abuse and Mental Health Services Administration, 2007).

The foundations of prevention in counseling psychology are based in the vocational guidance movement and the subsequent development of child guidance clinics, which targeted "at-risk" children and families (Vera & Reese, 2000). Since the mid 1960s, scientists have generated considerable knowledge about early factors that increase the risk of later mental and behavioral problems and disorders (Davis, 2002; Kellam & Langevin, 2003). The identification of malleable risk and protective factors is the crux of successful promotion and prevention efforts. Evidence suggests that prevention programs focused on enhancing strengths and resilience of

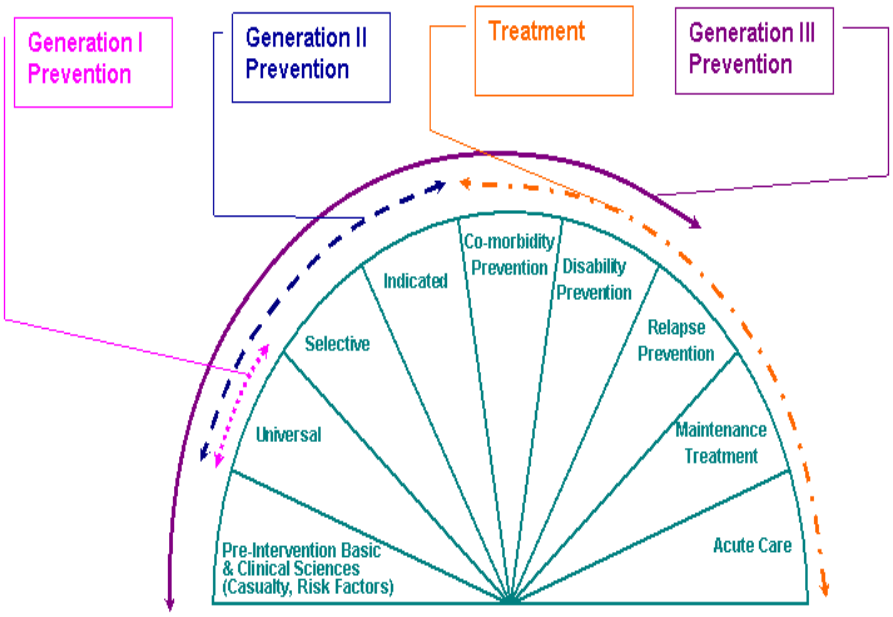


Figure 1. Source: NIMH (1998). Priorities for Prevention Research at NIMH: A Report by the National Advisory Mental Health Council Workgroup on Mental Disorders Prevention Research. NIH Publication No. 98-4321.

children and families may be particularly effective for families that have one or more risk factors (e.g., low-income, exposure to trauma, family history of mental illness) but are not yet in crisis and may not have had contact with child protective services or

Systems of Care

Systems of care were developed in response to the need for more appropriate and accessible preventive and treatment services for children with severe emotional and behavioral difficulties and their families. In 1992, the United States Congress established the Comprehensive Community Mental Health Services (CMHS) for Children and Their Families Program, which has provided funding to 126 communities over the past 14 years for the development of local systems of care (Foster, Stephens, Krivelyova, & Gamfi, 2007). The mission of the Substance Abuse and Mental Health Services Administration (SAMHSA)/CMHS is to facilitate the high-quality implementation of tested, effective prevention programs in communities throughout this country (Kellam & Langevin, 2003). A system of care is a coordinated network of community-based services and supports that is created to meet the challenges of children and youth at risk for or diagnosed with serious emotional disturbance (SED) and their families. Central to the philosophy of systems of care are community-based alternatives to out-of-home placements, family involvement, cultural sensitivity, and interagency collaboration (Stroul & Friedman, 1986). As a result, system of care communities offer an array of wraparound services individualized to each family's needs. These services vary by community, but may include assessment and evaluation, case management, outpatient therapy, inpatient services, intensive home-based care, respite care, therapeutic foster care, vocational training, and juvenile justice services.

More than 70,000 children and their families have received services through the CMHS Program (Miech et al., 2008). Research on these systems has shown some mixed effects. For example, one study revealed that although service access and amount increased in a system of care, children who did not receive any services improved at the same rate as children who received services (Bickman, Noser, & Summerfelt, 1999). In contrast, Foster and colleagues (2007) compared two system-of-care sites to two matched non-CMHS-funded communities and found that the system of care communities provided more family-focused care, supportive collaboration, individualized plans, adequate access, and less restrictive services. Similarly, another study demonstrated that the more a child and family reported that services were consistent with the system-of-care philosophy, the fewer internalizing and externalizing symptoms in the child and the greater the family's level of satisfaction one year after receiving services (Graves, 2005).

Systems of Care and a Prevention Framework: The PARK Project

Systems of care were designed with the ecological and systemic perspectives in mind; they challenge service providers to coordinate and create partnerships with each other and with families (Anderson & Mohr, 2003). Moreover, according to Hoagwood and Koretz (1996), prevention research fits well within a system-of-care approach. Prevention is a service, and systems of care are designed to include a variety of services, including preventive, remedial, and supportive.

Waldo and Schwartz (2008) argued that describing how interventions apply across categories – rather than identifying them as universal, selective, or indicated – is more comprehensive, accurate, and utilitarian. Systems of care answer this call because they have the potential to impact different populations at different levels of risk. As the lead evaluation team for a system of care, we have had the opportunity to look at the application of services at various levels of risk and prevention, as well as the effectiveness of the services for children and families served. Although systems of care tend to focus on children with severe emotional disturbance (SED), many systems offer services to individuals and families with varying levels of risk. One such system of care is the Partnership for Kids (PARK) Project, a school-based system of care in the Northeast. PARK was funded by the SAMHSA/CMHS from 2002 to 2008. During the years of its funding, PARK served 284 youth and their families, the majority of whom were youth of color (65% Latino/a;

33.5% African American). Youth and their families enrolled in the PARK Project received school-based care coordination services and an array of wraparound services individualized to each family's needs including – but not limited to – therapeutic after school, therapeutic mentoring, psychiatric consultation, outpatient therapy, family advocacy, and family and youth empowerment. Because family involvement is strengthened through methods of service delivery that are easily accessible to families, the school setting presents a key opportunity to reach parents and caregivers.

In the PARK Project, the universal level was addressed through Positive Behavior Interventions and Supports (PBIS), the selective level was targeted via school services for at-risk youth, and the indicated population was provided with wraparound services through funded programs:

- ***Universal*** – All youth enrolled in the PARK system of care attended a school where PBIS was implemented. PBIS emphasizes schoolwide systems of support for students including proactive strategies for defining, teaching, and reinforcing appropriate student behaviors to create positive school environments. PBIS schools employ a continuum of positive behavior support for all students within a school in classroom and non-classroom settings (e.g., hallways, restrooms, etc.). The PARK Project provided the support and funding which enabled the public school system to successfully adopt and implement the PBIS philosophy. Students in the schools implementing PBIS reported an improvement in overall school climate, student interpersonal relationships, and order and discipline. Their teachers also reported improvement in order and discipline. Additionally, schools that implemented PBIS to fidelity experienced a 50% reduction in office referrals for behavioral infractions and regained hundreds of hours of instruction time and administrative time, resulting in a significantly greater percentage of 6th- to 8th-grade students at or above proficiency on statewide math and reading tests (Kaufman, Griffin, & Whitson, 2009).
- ***Selective*** – Children and youth who were identified as "at-risk" for a mental health diagnosis were provided with selective services at school. Services were provided by school staff such as guidance counselors, school social workers and school psychologists and included social skills groups, anger management groups, peer mediation, and one-on-one supportive counseling
- ***Indicated*** – Through the PARK Project, children and youth who were diagnosed with a mental health disorder were provided with wraparound services from funded programs (e.g., care coordination, family advocacy, therapeutic mentoring, after-school services, and psychiatric consultation). The outcome of focus was the prevention and/or reduction of mental health symptoms and functional impairment. The impact of PARK services on children at the indicated level are presented below, as part of the longitudinal outcome study.

Outcome Study

As part of the system of care evaluation, all families who enrolled in the PARK Project were invited to participate in a longitudinal outcome study. This outcome study allowed for the examination of children's clinical problems over time while being served by the system of care. The purpose of the following study is to provide information regarding the children enrolled in the system of care and to assess if system of care services were associated with a decline in clinical problems.

Method

Families who elected to participate in the longitudinal outcome study were interviewed in their homes or a location of their choosing when they first entered services and then at 6-, 12-, 18-, 24-, 30- and 36-months. A total of 194 PARK families (68.3%), elected to participate in the longitudinal outcome study. The youth included in the outcome study were predominantly male (65.8%) with a mean age of 11.62 (SD = 3.58; Range = 4 – 18). The majority of the sample was youth of color: 61.9% were identified by caregivers as Latino/a, followed by 31.1% African American, 13.2% Caucasian, 2.5% Biracial, and 0.5% Asian or Pacific Islander.1 The following analyses present results from baseline through 30 months after entry into system of care services.

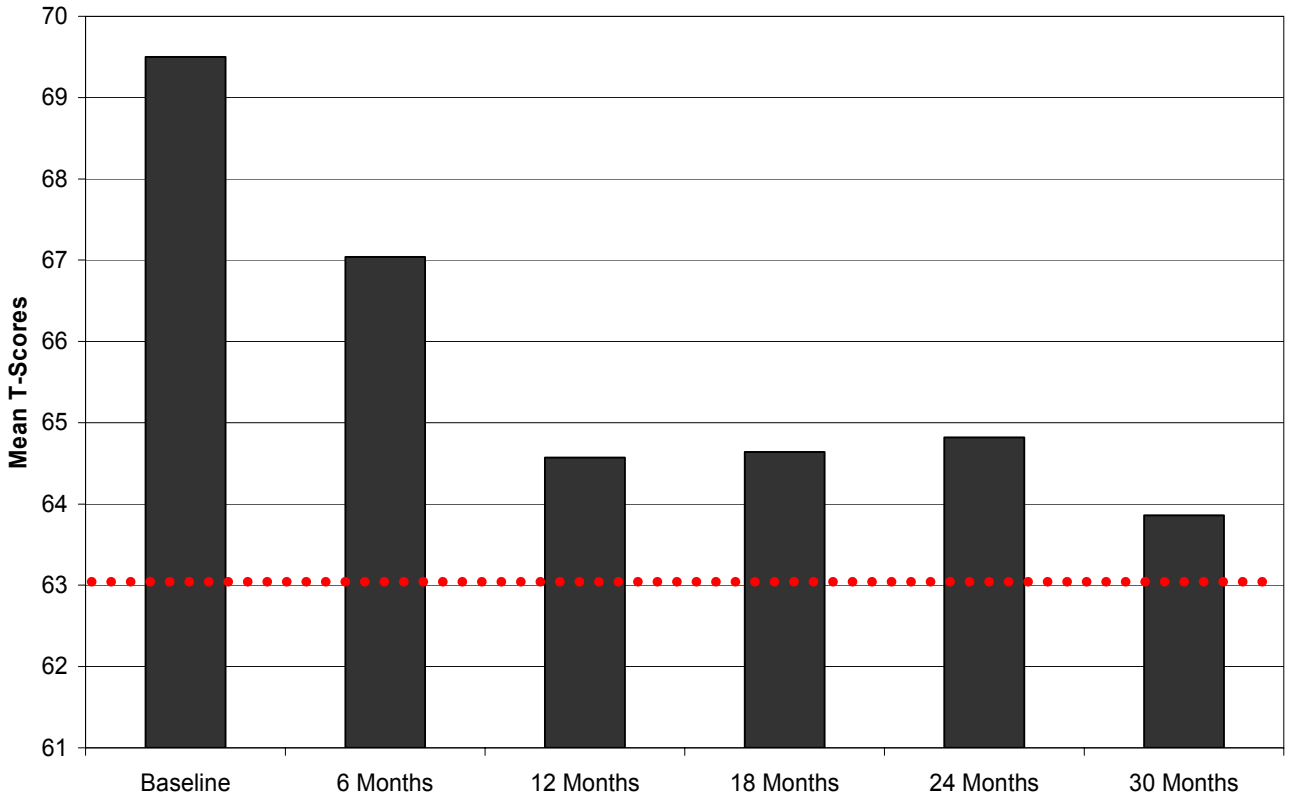
Child Behavior Checklist (CBCL); (Achenbach & Edelbrock, 1983). The CBCL is a well-established, empirically-derived, norm-referenced measure of problem behaviors in children and adolescents. It provides separate profiles for boys and girls between the ages of 4-18 and allows for standardized comparisons across individuals. Parents or caregivers are the respondents for this survey. For this analysis, the total problem scores scale was included. Each child or youth's score is reported as a weighted t-score that permits comparison of children at different age groups and genders. A t-score of 63 or above falls within the clinical range, indicating a severe level of problem behaviors or symptoms.

Results

A total of 69.5% of the youth enrolled in the outcome study scored in the clinical range on the CBCL when they entered the system of care. Figure 2 presents the results of a repeated measures general linear model comparing CBCL total problem behavior scores from baseline through 30 months. As is shown, total problem behavior scores decreased significantly (Wilks' $\Lambda = .38$; $p < .001$) from baseline to 30 months with a noticeable decrease in problem behaviors beginning 6 months after the youth entered the PARK Project, with these improvements continuing to 30-months after enrollment in PARK. Given that the average length of enrollment in the PARK Project was 9 months, these results demonstrate that the impact of PARK services was maintained nearly 2 years after services ended.

Implications for Prevention Research and Practice

Figure 2: CBCL Total Problem Scores



p < .001; Dotted line represents clinical cutoff.
Figure 2. CBCL total problem scores over 30 months for youth in the PARK outcome study.

For those who work directly with children at risk of mental health problems, the real-life benefits of promotion and prevention programs are obvious, particularly for children with multiple risk factors, including low family income. The costs of conducting these programs must be considered within the context of the costs of not conducting them. Prevention of even a small number of mental and substance abuse problems will result in substantial cost savings and improved quality of life for children, families, and communities (Substance Abuse and Mental Health Services Administration, 2007).

The critical next step is for more communities to be made aware of these programs and to begin implementing them, even while researchers continue to expand the knowledge base about what interventions work and why they work (Substance Abuse and Mental Health Services Administration, 2007). Expanding this knowledge base includes the identification of factors related to indicators of clinically significant change among children receiving mental health services and the need to pay increased attention to functional outcomes for children and youth. Moreover, a set of individual- and system-related outcomes for children with mental health problems needs to be identified and linked to publicly-financed public health strategies (Cooper et al., 2008; Huang et al., 2005).

In addition, researchers suggest that increased parenting and family supports in prevention, early intervention, and treatment are still needed (Cooper et al., 2008). Although many systems independently conduct child- and family-based programs, better coordination of programs across systems would maximize available resources (Substance Abuse and Mental Health Services Administration, 2007), reduce overlap, and avoid children and families falling through the cracks. Based on an ecological and systemic framework, a developmentally-appropriate system of care should provide age-appropriate family supportive services embedded across all service systems. Continued research on how to provide this support and increase family-based services would facilitate meeting this need.

Finally, programs such as systems of care demonstrate that counseling psychologists, in addition to community psychologists and public health professionals, can answer the call for a prevention-based agenda focused on: "greater use of systemic and integrative theoretical models and approaches; increased emphasis on early preventive interventions with children and youth; and prevention interventions that are sensitive to racial, ethnic, and other forms of diversity" (pg. 745, Romano & Hage, 2000). The profession can expand on this agenda by including a focus on prevention, and prevention services for children in particular, in training programs for future counseling psychologists (Vera & Reese, 2000). It is our hope that this paper illuminates the strong overlap between counseling psychology and public health with regards to prevention and intervention approaches for children's mental health, and that it expands awareness of systems of care as a promising prevention and promotion model that cuts across multiple perspectives to serve the needs of children and families.

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