Editorial: *Journal of Pediatric Psychology* Statement of Purpose—Section on Family Influences and Adaptation

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Statement of Purpose

Research on adaptation in child health psychology has progressed over the past three decades moving beyond a straight-forward search for pathology to development of models that explain variation in adaptation. More recently, research has employed prospective designs and statistical methods that address the complex interplay of risk and resistance factors influencing adaptation over time. Although family influences have long been examined in the literature, improved assessment methods and use of multiple informants have expanded our understanding of how families function around child health conditions. The purpose of the *Journal of Pediatric Psychology*'s special section on family influences and adaptation is to present studies that incorporate: (a) Advances in theoretically and empirically based models of adaptation including examination of mediator/moderator models, in order to expand understanding causal mechanisms; (b) Innovative methods for assessment of resistance variables and for analyzing data from multiple informants including multiple family members (i.e. mothers, fathers, and siblings); (c) Incorporation of developmental and cultural considerations into research design and methodology. Meta-analytic studies and review papers that advance theoretical and empirical perspectives are encouraged. Invited commentaries and author rebuttals will be used to advance discussion of research and clinical implications.

Background

Because numerous reviews of the literature on the psychosocial adaptation of children with chronic illness suggest that youth are generally resilient (Lavigne & Faier-Routman, 1992; Wallander, Thompson, & Alriksson-Schmidt, 2003), risk and resistance variables have been identified that influence adaptation. Most pediatric psychology researchers would agree that family influences play a central role among these risk (e.g., family stress) and resistance (e.g., family cohesion and family communication) variables; however, delineation of family within the social ecology that includes childhood chronic illness and the mechanisms by which family influences adaptation are still not clearly understood. A decade ago, in his review of the pediatric literature, Drotar (1997) noted that although the associations of parent adjustment, family functioning, and children's psychological adjustment were established, several improvements in research design and methods were needed, in order to answer ''what we need to know'' about family influences (p. 149).

As a field, we have made progress on several of these recommendations. In addition to significantly increased attention to empirically supported treatments in pediatric psychology, there have been advancements in developing pediatric-specific measures of family functioning, conducting illness-specific research, and piecing together the puzzle of how risk and resistance factors interact to influence adjustment. While progress on these issues will continue to require focused empirical study, several other suggestions deserve more attention. The goals of the Section on Family Influences and Adaptation address these critical areas and propose advancing the research literature by increasing the representativeness of samples, particularly culturally diverse children and families, use of family-level data, and implementation of prospective designs to examine the contributions over time of risk and resistance variables to adaptation.

Advance Theoretically- and Empirically-based Models of Adaptation

Certainly, the first purpose of the Section on Family Influences and Adaptation has been propelled forward by the development of models that summarize and explain research findings regarding child and family adaptation in pediatrics most notably, the risk-resistance model of

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Wallander, Varni, Babani, Banis, and Wilcox (1989), Thompson, Gustafson, George, and Spock's (1994), transactional stress and coping model, Kazak's (1989) application of social ecology to children with chronic illness and their families, and Holmbeck and Shapera's (1999) developmental–contextual framework for the study of adolescents. Although some models were developed with specific populations, these theories have now been applied successfully across a broad spectrum of chronic conditions in childhood (e.g., risk and resistance in pediatric sickle cell disease, Barakat, Lash, Lutz, & Nicolaou, 2006; Brown, Doepke, & Kaslow, 1993). In addition, within the framework of these models, definitions of adaptation are expanding beyond a focused assessment of symptoms indicative of psychopathology. Outcomes encompassing functional abilities, social competencies, academic functioning, traumatic stress and growth, and quality of life are now considered, which better reflects the multiple layers of children's adaptive functioning and acknowledges family and other influences.

Moreover, with theoretical clarifications and improved statistical methodology, more accurate evaluation of the complexities outlined within the models, such as mediator and moderator effects is possible. Such studies, including those examining indirect effects of family functioning, are finding their way into the published literature (Bleil, Ramesh, Miller, & Wood, 2000; Logan & Scharff, 2005; Silver, Stein, & Dadds, 1996). For example, Silver and colleagues (1996) demonstrated that the association of illness severity and psychological adjustment among children with chronic illness was moderated by family structure. Testing alternative mediation and moderation hypotheses, Bleil and colleagues (2000) examined the role of parent–child relationship quality in the association of functional status with depression in children with asthma. Their findings supported mediation for mother–child relationship quality but found no significant results for father–child relationship quality. Although the field will have to tolerate inconsistency in findings in the short term, results from these and other studies examining mediation and/or moderation highlight the importance of examining direct and indirect family influences in adaptation for anticipated long-term clarification of these increasingly complicated models.

Expanded understanding of how risk and resistance variables influence adaptation is also imperative to development of effective interventions. The focus on empirical evaluation of interventions in the pediatric research literature, and expansion of these interventions to include family and to implement family treatment models, has made essential the accurate identification of family targets for intervention. For example, Wysocki and colleagues (2006) based the application of behavioral family systems therapy to improve treatment adherence and metabolic control on research suggesting that parent–child communication and family problem-solving skills were associated with these outcomes for children and adolescents with diabetes. Similarly, Kazak and colleagues' (2004) development and implementation of the Surviving Cancer Competently Intervention Program to address posttraumatic stress symptoms and family communication for survivors of childhood cancer and their family members were grounded in earlier research documenting posttraumatic stress symptoms as an outcome of childhood cancer treatment for multiple family members, and identifying family and social support as an important correlate. Central to these endeavors will be systematic efforts to confirm, expand, and generalize findings related to family influences, in addition to documenting changes in these variables within intervention research and delineating how variation in family variables moderates the effectiveness of treatments.

Develop Innovative Methods

Transition from general measures of family functioning to more specific aspects that tease out how family relationships are directly or indirectly affected by presence of chronic illness is necessary. This includes expanding aspects of family functioning that are measured to include parent–child communication, disease-related parenting stress, perceived burden and perceived responsibility for disease management, etc. Recent advances in measurement of family functioning are imperative to this goal. For instance, the addition of measures such as the Pediatric Inventory for Parents (Streisand, Braniecki, Tercyak, & Kazak, 2001), which assesses parenting stress associated with disease-related events including communication with health care providers, and Parent Experience of Child Illness (Bonner et al., 2005), which examines parent adjustment specific to their child's chronic illness and determines level of worry, unresolved sorry, and long-term uncertainty, to our armamentarium of assessment strategies allows researchers to highlight the experience of caregiving a child with chronic illness and examine how parent's experience may affect adaptation.

Moreover, application of observational assessment of family interactions, in the past focused on procedure-related pain (Blount, Bunke, Cohen, & Forbes, 2001) and now addressing other contexts (Holmbeck et al., 2003; Moens, Braet, & Soetens, 2007), provides another window on family functioning that may improve our explanation of outcomes. For example, Moens and colleagues' demonstration of discordance between caregiver self-report of mealtime behavior and observed interactions supports the utility of using data procured via varying procedures to better describe contributions and predict functioning. A discussion of assessment methodologies cannot ignore the need for pediatric psychology research to include multiple informants within research designs. Although more studies now involve at minimum one caregiver informant and one child informant, still unusual are studies that obtain information from multiple informants. The absence of fathers in the pediatric psychology literature was recently highlighted (Phares, Lopez, Fields, Kamboukos, & Duhig, 2005). However, as it has become clear that multiple informants, such as other family caregivers, teachers, health care providers, and peers, provide unique and essential information about different aspects of functioning (Renk, 2005), pediatric psychology research would be well-served by inclusion of multiple perspectives on family functioning (Barakat et al., 2007) as well as on children's adaptation (Barakat et al., 2003; Holmbeck et al., 2003).

This goal of the Section on Family Influences and Adaptation puts a premium on innovative methods to increase our understanding of family influences. However, because observational and multi-informant methods require significant resources, researchers should a priori incorporate strategies to integrate data from multiple informants (using guidelines such as those provided by De Los Reyes & Kazdin, 2005). Moreover, studies designed specifically to assess the validity of information collected from various informants across settings or to determine the implications of inconsistent reports of family functioning and child adaptation will serve to shore up the benefits of multi-informant assessment.

Cultural Considerations

Regarding the third purpose of the Section on Family Influences and Adaptation, acknowledgement of health disparities for children from ethnic minority backgrounds and of lower socioeconomic status is well-established (APA, 2007; NICHD, 2000). Research describing health disparities for children is emerging, and most is focused on structural, educational, cultural, and language barriers. Identification of macrosystem factors that impact the health of children is essential; however, examination of the ways in which culture, education, and language interact on the microsystem (for the child and his/her family) and the exosystem (child and family's relationship to other systems such as healthcare) levels will also further the cause of decreasing health disparities (Tucker, 2002). Rarely addressed, the scant work that examines how these variables interact with family functioning to explain health behaviors, health outcomes, and psychosocial functioning among children with chronic illness relies on ethnic minority status, family structure, and/or socioeconomic status as markers of culture and of structural barriers. Looking to the future, more direct assessment of culture/acculturation within families, the ways in which belief systems and acculturation influence health behaviors (including communication, problem-solving, disease management, and treatment adherence) in families, and how education/language/wealth affects caregiver interactions with the healthcare system should become a priority. In addition, elucidating how adaptive parenting and family functioning may vary based on contexts such as ethnic background, socioeconomic status, and culture, and studies that address family from outside the United States as well as those that address the wide diversity of American families, will contribute to progress in this area.

Developmental Considerations

The pediatric psychology literature has long attended to development as a central feature of responses to illness in childhood. This has primarily taken place by selecting samples focused on a particular period of development such as infancy and toddlerhood (Goldberg, Morris, Simmons, Fowler, & Levison, 1990; Thompson, Gustafson, Bonner, & Ware, 2002), middle childhood (Johnston et al., 2003), and adolescence (Wiebe et al., 2005). Oftentimes, these studies include explicit discussion of developmental expectations for this period and/or use matched comparison groups to account for typical development. However, developmental considerations in studies that examine family and other influences in adaptation will be more effectively delineated when longitudinal research designs and well-planned comparison groups are used to outline developmental trajectories for children with chronic illness. Efforts should also be made to incorporate an understanding of how these trajectories deviate from typical development and what risk and resistance variables serve to bring children

in line with or veer from that expected for their age. For example, DeLucia and Pitts (2006) presented findings on the application of individual growth curve modeling to describe emerging emotional autonomy for children with spina bifida and its association with child and family functioning variables. By including a comparison group and a prospective design (three assessment points over about 6 years), these researchers were able to identify differences in growth of emotional autonomy by group and by gender. Studies such as these will propel our understanding of family and other influences in the direction of increased relevance for clinical work and intervention research design.

Conclusion

Research within the sphere of the Special Section on Family Influences and Adaptation has long been and will continue to be the foundation of pediatric psychology research endeavors. Guided by the purposes outlined here, empirical attention to family influences and adaptation will expand our understanding and contribute to the advancement of other critical areas for pediatric psychology outlined by the incoming editor of *Journal of Pediatric Psychology*.

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