

# Family Cumulative Risk and Its Impact Pathway on Social Adaptation in Children with Leukemia

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## Abstract

With advancements in medical treatments, the survival rates of children with leukemia have significantly improved, leading to increased attention on their long-term psychosocial outcomes, particularly social adaptation. However, the treatment period, which often coincides with a critical stage of psychosocial development, can severely disrupt their socialization processes. Families, as the primary environment for these children, play a crucial role in mitigating these challenges. While previous studies have examined the impact of single family risk factors on social adaptation, the cumulative effects of multiple risks remain underexplored. This study aims to address this gap by investigating the pathways through which family cumulative risk influences social adaptation in children with leukemia, with a specific focus on the mediating and moderating roles of psychological capital and coping styles. Using a cross-sectional design, data are being collected from a convenience sample of 256 children with leukemia (aged 8-18 years) and their primary caregivers, recruited from the hematology-oncology departments and follow-up clinics of five tertiary hospitals in Zhengzhou, China. The current calculated sample size is 256 cases. Inclusion criteria for children include a confirmed diagnosis of leukemia, stable disease status, and at least three months of home living since diagnosis. Children with severe cognitive impairments, critical illness, or communication difficulties are excluded. Primary caregivers must be the main caregivers during hospitalization and long-term cohabitants with the child, without severe physical or mental disorders. Structural equation modeling (SEM) will be employed to construct and validate a comprehensive model that elucidates the relationships among family cumulative risk, psychological capital, coping styles, and social adaptation. The study is expected to contribute to the theoretical understanding of social adaptation in children with leukemia by integrating family cumulative risk models with psychosocial development theories. Practically, the results will provide a foundation for developing targeted interventions that support families in managing multiple risks and fostering children's psychological resilience. By doing so, this research aims to improve the long-term quality of life for children with leukemia and their families.

## Keywords

Leukemia, Children, Social Adjustment, Family Cumulative Risk