Title: Mental Health Impact of Participation for Vulnerable Youth with Special Healthcare Needs

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Introduction: Research indicates that up to 46% of youth with special healthcare needs (YSHCN) experience depression or anxiety (Van Cleave & Davis, 2006). Poor mental health outcomes in adolescence have been linked to exposure to adverse childhood experiences (ACEs), including physical or sexual abuse or neglect, parent mental illness, incarceration, or divorce, and financial hardship or neighborhood violence (e.g., Nurius, Green, Logan-Greene, & Borja, 2015). Compared to youth in the general population, YSHCN have a heightened risk of exposure to ACEs (e.g., Bethell, Newacheck, Hawes, & Halfon, 2014). Given this vulnerability, it is necessary to identify factors that may mitigate the negative effects of ACEs exposure. Among youth with disabilities, breadth of participation has been found to be protective in the association between victimization and depression (Berg, Medrano, Acharya, Lynch, & Msall, 2018). The present study sought to understand the role of ACEs and breadth of participation in the mental health of YSCHN. The study aims were to examine: 1) the association between ACEs and depression and anxiety and 2) the moderating role of breadth of participation (high versus low) in the association between ACEs and each of depression and anxiety.

Method: The present sample was drawn from the 2016 National Survey of Children’s Health, a nationally representative survey seeking to understand the physical and emotional health of children in the United States. In total, 5,862 youth, aged 12-17 years (\(M = 14.8, SD = 1.7\)), were identified as having a SHCN. Roughly half were female (48.3%), and the majority identified as white, non-Hispanic (74.5%). Specific diagnoses included intellectual disability (4.6%), autism spectrum disorder (9.5%), developmental delay (17.8%), learning disability (24.0%), and attention deficit/hyperactivity disorder (38.1%), among others. Caregivers reported on sociodemographic characteristics for the YSHCN, presence of anxiety and depression, the NSCH ACEs Scale (range 1-9), and whether the YSHCN participated in 5 types of activities over the past 12 months. Low breadth of participation was categorized as participation in 0-2 activities, and high breadth of participation was categorized as participation in 3-5 activities.

Results: Descriptive statistics indicated that approximately 40% of YSHCN had no exposure to ACEs. Roughly 38% and 20% had been exposed to 1-2 ACEs and 3+ ACEs, respectively. Just over half of YSHCN experienced high breadth of participation (53.7%). Approximately 20% and 33% of YSHCN experienced depression and anxiety, respectively, and just over 37% experienced either one or the other. Binomial logistic regressions indicated that increased exposure to ACEs was associated with a higher likelihood of depression and anxiety. Compared to YSHCN who had no exposure to ACEs, YSHCN who had been exposed to 1-2 ACEs and 3+ ACEs were 1.9 and 3.3 times, respectively, as likely to experience depression and 1.4 and 2.2 times, respectively, as likely to experience anxiety. YSHCN who experienced low (versus high) breadth of participation were 2.0 times more likely to experience depression and 1.7 times more likely to experience anxiety. Breadth of participation significantly altered both the association between exposure to ACEs and depression (\(p = .03\)) and the association between exposure to ACEs and anxiety (\(p = .03\)).

Discussion: Overall, findings indicate that increased ACEs exposure was associated with a significantly higher likelihood of depression and anxiety amongst YSHCN. Our findings also suggested that YSHCN who experienced low (versus high) breadth of participation were at greater risk of experiencing poor mental health. There is likely a bidirectional flow of influence between breadth of participation and mental health, yet while we were unable to pinpoint the timing of depression and/or anxiety vis a vis participation, it is evident that YSHCN who experience the additional context of exposure to ACEs are particularly vulnerable. Notably, breadth of participation significantly altered the association between ACEs exposure and mental health, such that YSHCN with high (versus low) breadth of participation had lower rates of depression and anxiety at all levels of ACE exposure. Our findings suggest that engagement in high breadth of participation may mitigate the deleterious effects of ACEs exposure on mental health. Findings indicate a need for services to increase the diversity and accessibility of organized activity contexts available to YSHCN for participation.
References:


