



Singapore Longitudinal EArly Development Study

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Pre-Pandemic Family Resources and Child Self-Regulation in Children's Internalizing Problems During COVID-19

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Luxi Chen (luxichen@nus.edu.sg), Research Fellow, Yong Loo Lin School of Medicine, National University of Singapore

Wei-Jun Jean Yeung (socywj@nus.edu.sg), Provost's Chair Professor in the NUS Department of Sociology & Anthropology and Yong Loo Lin School of Medicine; Founding Director of the Centre for Family and Population Research, National University of Singapore

This research brief summarizes Chen and Yeung's (2023) original research, entitled "Pre-pandemic family resources and child self-regulation in children's internalizing problems during COVID-19: A multi-level social-ecological framework for emotional resilience", published in Frontiers in Psychology. The authors investigated the roles of community-, family-, parent-, and child-level resources in Singaporean children's internalizing symptoms and resilience in the context the COVID-19.

Background

The global outbreak of the coronavirus disease (COVID-19) brought about unprecedented changes to individuals and families. As one of the most vulnerable populations to the negative impacts of COVID-19, children manifested an increase in externalizing symptoms (e.g., inattention, irritability, and hyperactivity) and internalizing symptoms (e.g., worry, fear, depression, and anxiety) during the pandemic across the globe (Bignardi et al., 2021; Duan et al., 2020; Francisco et al., 2020; Khoury et al., 2020). Researchers highlighted the importance of integrating multiple protective factors into studying resilience and longitudinal psychological outcomes of the pandemic (Chen & Bonanno, 2020).

Resilience, the process of using strengths, competencies, and resources to overcome contextual risks and maintain or enhance one's well-being, can be promoted with protective factors related to individual differences, family contexts, and community

characteristics (Bonanno, 2004). However, the complex mechanism regarding how diverse external and internal resources may work together to enhance children's resilience and psychological adjustment to adverse events remains less well understood. Moreover, a systematic investigation of children's mental health and resilience in the context of COVID-19 in Singapore has also been limited thus far compared to other countries.

Hence, it is crucial to explore multi-level environmental and individual-level protective factors against Singaporean children's internalizing symptoms during the pandemic. Chen and Yeung (2023) incorporated the well-established family stress family (Conger et al., 1994; Yeung et al., 2002) and the self-regulation development model (Kopp, 1982) in a single comprehensive framework. They proposed that parental resources in different forms (e.g., cognitive, psychological, and economic resources) and functional parenting strategies shape children's self-regulation during early childhood, which further acts as a child-level protective factor for social-emotional development, mental health, and resilience.

Data & Methods

Chen and Yeung (2023) used longitudinal data collected from a large, nationally representative sample of 2,619 young children (48.3% girls) and their primary caregivers (95.1% mothers) in Singapore over two waves—before the outbreak of the COVID-19 pandemic (Wave 1) when these children aged 3 to 6, and during the second year of the pandemic (Wave 2). These participants were a subset of the participants in the Singapore Longitudinal Early Development Study (SG LEADS; Yeung et al., 2020; Yeung et al., 2022).

Primary caregivers completed measures of verbal cognitive ability, self-control, economic stress, and positive and negative parental control in Wave 1. Children's self-regulation was assessed by the Delay of Gratification task in Wave 1, and their internalizing problems were rated by their primary caregivers in both waves. Other pre-pandemic family characteristics and community characteristics were collected as covariates.

Structural equation modeling was performed to examine the mechanism through which multi-level resources might influence child internalizing problems during the pandemic and changes in internalizing problems over time.

Results

The conceptual framework is illustrated in Figure 1. Detailed results can be found in Chen and Yeung's (2023) article. Self-control, verbal cognitive ability, and low economic stress were critical parental resources that directly or indirectly predicted fewer child internalizing problems during the pandemic and less aggravation of internalizing problems over time, through more positive parental control (e.g., limit setting) and less negative parental control (e.g., harsh discipline). In particular, parents with greater self-control and those who experienced less economic stress tended to use fewer

emotionally charged or punitive disciplinary strategies (such as scolding, threatening, or physical punishment) to overcontrol children's behaviors. Parents with more advanced verbal cognitive ability or those with lower economic stress tended to deploy more positive control, such as setting limits on their children's behaviors, accompanied by guidance and discussions. Functional parental control further predicted children's fewer internalizing symptoms and less aggravation of internalizing symptoms over time.

Furthermore, primary caregivers' self-control, verbal cognitive ability, and positive parental control predicted children's greater self-regulation (such as the ability to delay instant gratification in order to attain greater future rewards) during early childhood. Early self-regulation acted as an essential child-level protective factor that alleviated children's aggravation of internalizing problems over time.

Finally, multiple family resources and community resources (as covariates in this study) also influenced children's internalizing problems. Specifically, primary caregivers' psychological distress and single parenthood had a longitudinal negative impact on children's mental health. Family socioeconomic status (including parental education and family income) protected children from an intensification of internalizing problems under adversity. Having a live-in domestic helper predicted fewer child internalizing problems and less aggravation of internalizing problems over time, possibly due to the alleviated daily hassles in the family. Contrary to the hypothesis, living with grandparents was longitudinally related to more child internalizing problems during the pandemic and a large increase in internalizing problems over time, possibly due to disagreements in parenting or intergenerational conflicts. At the community level, neighborhood quality (e.g., safety and cohesion) also predicted children's fewer internalizing problems during the pandemic.

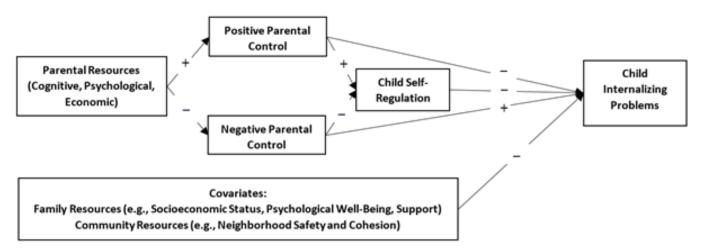


Figure 1. The conceptual framework linking multi-level resources to children's internalizing problems.

In conclusion, it is critical to activate multi-level resources in young children's social-ecological systems, including community-, family-, parent-, and child-level resources, so as to promote their resilience and psychological adjustment to future stressful or challenging circumstances.

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