

Article 10: Human Development and Low or No Social Network

Research has shown a strong link between social networks and human development, given that low or no social network is often associated with several detrimental consequences across the lifespan. These consequences are especially apparent on individuals' **social and cognitive development** (Burke et al., 2022; Gazelle et al., 2024; Rubin et al., 2009), and **mental health** (Orben et al., 2020; Schinka et al., 2013; Wang et al., 2018).

Low or No Social Network and Social / Cognitive Development

Limited or absent social networks can negatively impact individuals' behavioral and social development in meaningful ways, often leading to relational difficulties and poor social skills. Hence, several U.S. studies have looked further into this phenomenon across different phases of life (Burke et al., 2022; Gazelle et al., 2024; Rubin et al., 2009).

For instance, a study examined early childhood social networks to understand how the size and structure of children's social environments relate to their social and cognitive development. The researchers focused on children aged 6 months to 5 years in urban settings in the United States, analyzing how many social connections children had, who those connections were with (e.g., parents, siblings, peers), and the frequency of interactions. Thus, they collected data from 280 children (and their caregivers) through structured questionnaires and parent-reported interactions, combined with observational assessments of social engagement (Burke et al., 2022).

Findings showed that children with larger and more diverse social networks demonstrated stronger socio-cognitive skills, better emotion regulation, and more advanced social development. Conversely, children with smaller or more restricted networks had less opportunity for varied social learning and exhibited fewer social skills. The researchers concluded that early social networks play a critical role in children's social and cognitive growth, emphasizing that fostering diverse and frequent social interactions during early childhood can support developmental outcomes and provide a foundation for later learning and social competence (Burke et al., 2022).

On that same note, an academic review examined how children who habitually withdraw from peer interactions fare emotionally, socially, and academically from early childhood through adolescence. Hence, the researchers looked at studies that employed observational data, peer and teacher reports, self-assessments, and long-term tracking to understand patterns, predictors, and outcomes of social withdrawal. They noted that withdrawn children were less likely to be included in social groups, had fewer friends and weaker peer bonds, and were often left out of important social exchanges. Given the limitations posed by these smaller or absent social networks, withdrawn children lacked the protective benefits of friendships—such as companionship, emotional support, and help navigating school challenges—which placed them at greater risk of peer rejection and victimization (Rubin et al., 2009).

Findings also revealed that weak social connectedness carried significant consequences. Particularly, children with few or no close friendships were more likely to experience loneliness, academic difficulties, school avoidance, and low self-esteem. Thus, the lack of a solid social network both resulted from and contributed to social withdrawal, creating a cycle of increasing isolation. Following that lead, researchers concluded that addressing social withdrawal early is critical, since helping

children build and maintain peer relationships can serve as a protective factor against mental health difficulties and poor adjustment later in life (Rubin et al., 2009).

Last of all, a systematic review and meta-analysis examined whether social withdrawal during childhood and adolescence predicts adult psychosocial outcomes. For this purpose, researchers analyzed data from 31 longitudinal studies involving 19,806 U.S. adults with childhood and adolescent histories of social withdrawal. The findings indicated that early social withdrawal was a medium-sized risk factor for adult social anxiety and intergenerational difficulties, and a small-sized risk factor for delayed adult developmental milestones, adult social withdrawal, and other behavioral disorders. The study suggested that interpersonal mechanisms, such as missing out on social experiences and poor relationship quality, contribute to these long-term effects (Gazelle et al., 2024).

The study also highlights the importance of early social networks in shaping long-term meaningful relationships. Thus, children and adolescents who experienced social withdrawal often had limited social interactions, which hindered the development of essential social skills and coping mechanisms. These early deficits in social networks may lead to difficulties in forming relationships and managing social situations in adulthood, thereby contributing to various psychosocial challenges (Gazelle et al., 2024).

Low or No Social Network and Mental Health

A lack of social networks (often resulting in social isolation, feelings of loneliness, and less social support) is a significant risk factor for various mental health issues across the lifespan. Particularly, loneliness and social isolation have been associated with higher rates of anxiety, depression, and suicidal thoughts in different developmental stages (Orben et al., 2020; Schinka et al., 2013; Wang et al., 2018).

For instance, a study aimed to identify distinct trajectories of loneliness experienced by children from ages 9 to 15, in order to examine how early-life factors influence these trajectories and their subsequent impact on mental health. For this purpose, researchers used data from the NICHD Study of Early Child Care. Additionally, they assessed predictors such as ethnicity, income, social skills, depression, and aggression at age 7, and evaluated outcomes like social skills deficits, depression, aggression, and suicidal ideation at age 15 (Schinka et al., 2013).

The findings revealed five distinct loneliness trajectories: stable low, moderate increasing, high increasing, decreasing, and chronic high. Factors such as lower social skills, higher depression, and aggression at age 7 were associated with trajectories of increasing or chronic loneliness. Furthermore, these trajectories were predictive of poorer mental health outcomes at age 15, including increased depression, aggression, and suicidal ideation. The study emphasizes the importance of early identification and intervention for children at risk of chronic loneliness to mitigate potential long-term mental health issues (Schinka et al., 2013).

Looking further into this phenomenon, an academic narrative study explored how social deprivation (isolation, loneliness, and reduced social contact) impacts adolescent development and mental health. Hence, it specifically considered the context of COVID-19 lockdowns, when many adolescents faced unprecedented levels of social restriction. Following that lead, researchers synthesized existing

findings from developmental psychology, neuroscience, and mental health research to build a conceptual framework. They also used datasets across different countries, including the National Comorbidity Survey–Adolescent Supplement (NCS-A) on adolescent mental health (U.S. data) and the Millennium Cohort Study on child/adolescent well-being (UK data) (Orben et al., 2020).

The following insights were found:

- Adolescents were especially vulnerable to social deprivation because peer interaction played a central role in identity formation and emotional development.
- Loneliness and isolation in adolescence were associated with a higher risk of depression, anxiety, and suicidal thoughts.
- Online communication and family connections helped mitigate some of the negative effects of social restriction, but they did not fully provide the benefits of in-person peer interaction.
- These associations remained significant after adjustment for age, sex, race/ethnicity, and other relevant factors.

Overall, social deprivation during adolescence had significant negative consequences for mental health and development in subsequent phases of life. The COVID-19 pandemic intensified such risks, making adolescent mental health a public health priority. Hence, researchers argued that adolescents' social needs are developmentally distinct from those of adults and children, and they called for more research on long-term effects of social deprivation in this phase of life (Orben et al., 2020).

Lastly, a study aimed to examine whether loneliness and perceived social support predicted poor outcomes among adults with mental health problems. Thus, researchers conducted a systematic review of 34 long-term quantitative studies that assessed the relationship between baseline measures of loneliness and perceived social support in connection to subsequent mental health outcomes (Wang et al., 2018).

Several of the reviewed studies indicated that individuals with depression who perceived their social support as poorer experienced worse outcomes in terms of symptoms, recovery, and social functioning. Although loneliness was investigated less frequently, some studies found that greater loneliness predicted poorer depression outcomes. Preliminary evidence also showed associations between perceived social support and outcomes in schizophrenia, bipolar disorder, and anxiety disorders. Hence, the researchers argued that loneliness and the quality of social support in adult depression are potential targets for the development and testing of interventions to help mitigate these issues. (Wang et al., 2018).

References

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