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Fostering secure attachment in low- and middle-income countries: Suggestions for evidence-based interventions

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ABSTRACT

Children struggling with the effects of trauma in low- and middle-income countries (LMIC) face a substantial mental health resource gap that limits their opportunities for positive psychosocial development. Multidisciplinary interventions working to close this gap may benefit from incorporating an empirically supported treatment (EST) into their approach that targets a universal mechanism implicated in resilience, like attachment. ESTs should be selected based on their level of empirical support and cultural adaptability, and then modified on the basis of qualitative evaluations conducted with the local population and stakeholders. This paper will provide an overview of attachment as a mechanism of resilience, a critical analysis of existing attachment-based ESTs, and recommendations for overcoming EST implementation barriers in LMIC.

Throughout the world, children face extreme adversities such as war, displacement, soldiering, prostitution, HIV/AIDS, and violence and abuse (Belfer, 2008). Experiences like these put youth at risk for developing a range of mental health problems, including anxiety, depression, post-traumatic stress disorder, and externalizing disorders (e.g., Barenbaum, Ruchkin, & Schwab-Stone, 2004; Carlson & Earls, 1997; Cicchetti & Toth, 1995; Derluyn, Broekaert, Schuyten, & De, 2004; Lustig et al., 2004). Unfortunately, youth who live in LMIC[1] are often unsupported in their struggles with mental health. Although current epidemiological data suggests that rates of child mental health disorders do not differ among higher- and lower-income countries (Patel et al., 2007; Rescorla et al., 2007), the magnitude of this mental health burden is notably discrepant. In LMIC, only 0.16% of youth receive treatment (Patel, Chowdhary, Rahman, & Verdeli, 2011; World Health Organization, 2009a, 2009b).[2] LMIC experience a severe lack of mental health resources, with the median number of mental health professionals 6 per 100,000, and those few resources that are available unevenly distributed to cities and psychiatric hospitals rather than community settings (World Health Organization, 2009a). Comparatively, in higher-income countries, there is 70 times higher spending per capita on mental health, 24 times more beds per 100,000 in community inpatient units, 10 times more community outpatient contacts, and 8 times more mental health staff (World Health Organization, 2009a). In addition to the sheer number of children in need, the lower national priority on mental health, greater stigma associated with mental health concerns, and scarcity of knowledge about mental health in the general community create significant challenges for LMIC in providing necessary mental health care (Patel et al., 2007; Saraceno et al., 2007). This gap between needs and resources contributes to a significant burden on children, families, and public health.

Many intervention teams promoting early childhood development advocate for a multidisciplinary approach anchored in nurturing care (e.g., Britto et al., 2016). From this perspective, supporting the child involves supporting the family as a whole, including improving access to health and medical services, parenting skills, and social support on an interpersonal and policy level. A critical foundation of nurturing care is attachment, an underlying mechanism in child development and mental health. The attachment relationship is a universal, cross-cultural phenomenon with bases in evolutionary psychology (Bowlby, 1982, 1973). Specifically, secure attachment between caregivers and their children has been shown to foster positive social and emotional outcomes (Sroufe, 1983; Thompson, 2016) and is associated with resilience in the context of war and displacement

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[1] Low- and middle-income countries.
[2] World Health Organization.

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(Betancourt & Khan, 2008; Masten & Narayan, 2012). The importance of targeting this relationship to foster positive development has already been acknowledged in an international context. In 2009(b), the WHO issued a call to action in the name of child mental health, advocating for interventions that focus on parenting and encourage safe, secure, and nurturing relationships between caregivers and children. It would therefore be valuable for intervention teams to consider the benefits and fit of incorporating attachment interventions into their approach to global child mental health.

Although intervention implementation is resource-intensive, giving priority to ESTs[3] may be a valuable investment because they have a strong foundation of empirical support. Careful selection of interventions that have been tested with and adapted for populations similar to the beneficiary population can facilitate the implementation process. While many ESTs were developed in high-income Western contexts, sensitive technique modification and implementation strategies can contribute to their cross-cultural relevance and make them promising responses to children's mental health needs. Attachment-based ESTs may provide a useful way for teams to anchor multidisciplinary approaches to child development in nurturing care.

In this paper, we will make the case for incorporating early attachment-based interventions into child development intervention packages as a way to meet the great mental health needs of children and families who have experienced trauma and reduce the mental health gap in LMIC. We will then provide an overview of the DIME[4] model (Applied Mental Health Research (AMHR) Group, 2000)[5] as an example of an approach to treatment selection and modification. To facilitate implementation teams with the treatment selection process, we will follow with a critical analysis of existing attachment interventions and their cross-cultural adaptability and potential for effective implementation in LMIC. We will close with a description of barriers to EST implementation and suggestions for overcoming those barriers.

1. Attachment and development

The sensitivity and responsiveness of a caregiver toward an infant is most salient to a child during his or her first year of life, and cultivates a sense of security or insecurity in the attachment relationship (Bowlby, 1982, 1973). If the caregiver meets the child's needs in a sensitive and reliable manner, she becomes a secure base from which the child can explore the world and allows the child to develop secure attachment (Attachment Classification Type B). However if caregiving is unreliable and unresponsive, the child develops a sense of insecurity. Insecure attachment relationships can be characterized by avoidance of the caregiver (Attachment Classification Type A) or anxious resistance towards the caregiver (Attachment Classification Type C; Ainsworth, Blehar, Waters, & Wall, 1978). When children experience activation of both the fear and attachment systems in the presence of the caregiver, a general pattern of disorganized behavior can also be observed (Attachment Classification Type D; Main & Solomon, 1990).

A secure caregiver-child relationship is an important part of positive development (Ainsworth et al., 1978; Bowlby, 1982, 1973; see Thompson, 2016 for a review). Secure attachment is associated with adaptive outcomes such as positive emotional and behavioral functioning, academic success, effective peer relationships, and fewer behavior problems (Bureau, Easterbrooks, & Lyons-Ruth, 2009; Cicchetti & Roisman, 2011; Moss & St-Laurent, 2001; Sroufe, 1983). Attachment security is also related to differences in children's ability to regulate their negative emotions (Cassidy, 1994) and develop cognitive abilities such as literacy and metacognition (Meins & Russell, 1997; van IJzendoorn, Dijkstra, & Bus, 1995). Even the presence of a supportive relationship with a caring adult outside the home has been associated with better social and emotional outcomes in disadvantaged children (Werner, 1989). Given the substantial literature on the importance of attachment for positive development, it is a compelling mechanism to target through intervention work.

Conversely, attachment insecurity has been conceptualized as a risk factor for mental health disorders (Sroufe, 1983). Although more research is needed linking attachment insecurity to specific psychopathology, existing literature suggests it may confer significant vulnerability (DeKlyen & Greenberg, 2016; Fearon, Bakermans-Kranenburg, Van IJzendoorn, Lapsley, & Roisman, 2010; Groh, Roisman, van Ijzendoorn, Bakermans-Kranenburg, & Fearon, 2012). A number of process models have been suggested to explain how attachment contributes to the development of psychopathology. In one model, insecure attachments create internal representational models that suggest to children that others are unavailable and that they themselves are unworthy of consistent care (Bowlby, 1973; Crittenden, 1990). These negative social cognitions of themselves and others impact self-esteem and peer relationships (Richters & Waters, 1991), which put children at risk for psychopathology (Battle, 1987; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). A different model suggests attachment insecurity may influence children's emotion regulation and shape their later responses to challenging situations (Cassidy, 1994). Emotion regulation is implicated in a range of psychopathology (Chaplin & Cole, 2005; Izard et al., 2006), indicating early attachment patterns may play an important role in the etiology of disorder.

1.1. Attachment across cultures

Although family structures and caregiver-child interactions may differ across cultures, the phenomenon of attachment is universal. Early conceptualizations of attachment and subsequent research have identified its evolutionary base in nonhuman primates (Bowlby, 1982, 1973; Simpson & Belsky, 2016). The cross-cultural roots of Mary Ainsworth's classic attachment classification system (Ainsworth & Wittig, 1969; Ainsworth et al., 1978), created in Uganda (Ainsworth, 1967), lend further support to the universality of the infant-mother attachment relationship. Ainsworth's landmark study suggests that attachment security is determined by the continuity and quality of the caregiver-infant interaction, rather than the number of caretakers. These findings and others support the validity of attachment in cultures where children have multiple caregivers (e.g., Fouts & Lamb, 2005; Howes & Spieker, 2016; Konner 1977, 2005; Marlowe, 2005; Marvin, VanDevender Iwanaga, LeVine, & LeVine, 1977; Morelli & Trolnick, 1991).

When studying attachment in different countries, adaptations are occasionally made to common attachment measures to accommodate cultural contexts. In one study, for example, the Strange Situation paradigm was modified to include extra separations to account for the lack of a strange laboratory environment (Kermoian & Leiderman, 1986). Using this kind of methodological flexibility, researchers have been able to identify Ainsworth's three basic attachment classifications (Type A, B, and C; Ainsworth et al., 1978) in communities throughout the world (see Mesman, van Ijzendoorn, & Sagi-Schwartz, 2016 for an overview).

[3] Empirically supported treatment.
[4] Design, Implementation, Monitoring, and Evaluation.
[5] Applied Mental Health Research group.