



Family stress: Safeguarding young children's care environment

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Contents

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The nature and consequences of stress on families living in low-income countries

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This article is identifying a variety of stressors that can compromise both family functioning and children's development. However, not all families or children undergoing stress are affected to the same degree or in the same way. The impact of stress upon families and children will depend upon the family's level of resources, existing family problems, family coping strategies and the individual characteristics of both parents and children. Knowledge of what factors influence the ways in which families respond to stress offers a means through which interventions to deal with family stress can be designed and implemented.

Individual level stressors are traditionally defined as life events that have the potential to lead to high levels of emotional tension, interfere with normal daily activities and require behavioural and physiological adaptation (Thoits 1995). Stress refers to the individual's physiological, behavioural and emotional reactions to stressors (Vedhara et al. 2000). Three major types of stressors have been identified:

- Sudden unexpected life event changes which require major adjustments in a short period of time (e.g., divorce).
- Chronic persistent demands which require re-adjustment over long time periods (e.g., poverty).
- Hassles or low-level daily events that require small behavioural changes over the course of a day (Thoits 1995).

While stress is often studied separately in individuals and families, individual stress can lead to stress at the family level. For example, maternal stress in dealing with a child with developmental disabilities can result

in marital conflict on the issue of how to best manage the child (Patterson 2002). Similarly, the stress of parental job loss increases the risk of intra-family hostility and marital conflict (McKenry and Price 2005).

Family level stress occurs when there is an imbalance between chronic or daily demands (stressors) on the family and the family's ability to manage these demands (Patterson 2002). When such an imbalance occurs, there can be an adverse impact on family functioning, as seen in disruptions in the quality of parenting, family cohesion, routines, relationship structures and patterns of non-family relationships (McKenry and Price 2005). Such disruptions in family functioning can have a negative impact on children.

Stress, child development and family functioning

To understand how stress influences children's development and/or family functioning, two critical principles must be considered.

Variability in reaction to stressors

There is tremendous variation in how individuals or families react to stressors. The same stressor may be highly debilitating to some individuals or families, whereas for others it may be viewed as a challenge that can be overcome (McKenry and Price 2005; Thoits 1995). The degree to which a stressor becomes a stress will partly depend on the nature, intensity and timing of the stressor. However, even when these factors are taken into account, the impact of stressors can vary depending on a variety of other factors, including:

- The coping strategies used by individuals or families;
- How the stressor is appraised or understood by the individual or family;
- The availability of social support;
- Individual characteristics;
- The level of family coherence and/or family resources.

(Listing taken from: Lim and Zebrack 2004; Lester, Masten and McEwen 2006; Luther 2003; McKenry and Price 2005; Wachs 2000; Werner and Smith 1992; Ylven, Akesson and Granlund 2006).

Coping strategies are mental or behavioural efforts to deal with stressful demands or events. Emotional coping involves attempting to change the emotional meaning or significance of the stressor, whereas problem-focused coping strategies involve the use of rational techniques to directly deal with or change the stressor (Folkman and Lazarus 1988). The choice of which strategy to use depends, in part, on how the stressor is viewed. Emotional coping strategies are more likely to be used when the stressor is viewed

For families, the adverse impact of stressors will be lower when there is a high level of family cohesion.

as unchangeable, whereas problem-focused coping strategies are more likely to be used when the stressor is viewed as potentially changeable.

For individuals, the impact of a stressor also will vary depending on individual characteristics such as age, gender, temperament, intelligence and physical and mental health. For families, the adverse impact of stressors will be lower when there is a high level of family cohesion (shared trust, faith and values) but will be accentuated in families where there are pre-existing family problems (Patterson 2002).

The cumulative impact of stressors

Cumulative exposure to multiple stressors is particularly detrimental. Children exposed to multiple biological and/or psychosocial stressors are at far greater risk for compromised health and development than children exposed to only a limited number of stressors (Evans 2004; Lester et al. 2006; Luthar 2003). One reason is because exposure to cumulative stressors can compromise an individual's ability to make use of environmental supports or to effectively deploy coping strategies (Lester et al. 2006). For example, children who were reared for extended periods in orphanages and who were highly deprived were less likely to benefit from subsequent rearing in high quality adoptive homes than children who had spent less time in orphanages (Beckett et al. 2006).

Chronic stress can also lead to greater strain in family functioning (Lim and Zebrack 2004). This may be because the resulting continued disruption of family routines feeds on itself and becomes an additional stressor (Patterson 2002). For example, marital and economic strains in a family with a chronically ill child can increase the severity of the child's medical problems, which in turn can increase family marital and economic stress (Peebles-Kleiger 2000). As will be discussed below, the impact of chronic stress upon family functioning is seen most clearly for families living under conditions of chronic poverty.



Photo: Jim Holmes

Higher maternal education levels have been linked to a reduced likelihood of children encountering family economic stress, poor nutrition or illness

Sources of stress

Stressors that impact on families will also affect children in these families, leading to compromised child development. Also, many family stressors that impact upon children have the potential for being transmitted across generations. For example, poor nutrition and chronic poverty increase the likelihood of child school failure; school failure leads to reduced adult human capital, which in turn increases the risk status of the next generation (Engle et al. 2007). Known stressors that impact on the individual or family can be ecological, biomedical, psychosocial or societal, and include:

- Ecological disasters (e.g., floods, climate change);
- Food insecurity and nutritional deficiencies;
- Child or adult biomedical problems (e.g., genetic defects, chronic or severe physical or mental illness);
- Sudden severe economic loss or chronic poverty;
- Household crowding or poor housing quality;
- Marital problems;
- Exposure to family, neighbourhood or societal violence;
- Child developmental disabilities or behavioural problems;
- Child characteristics which do not fit well with family or cultural values and preferences (e.g., gender, temperament);
- Major societal changes;
- Societal discrimination.

(Listing taken from: Cook and Frank 2008; Evans 2004; Lim and Zbrack 2004; Luthar 2003; McKenry and Price 2005; Sheuya 2008; unicef 2004; Wachs 2000; Walker et al. 2007)

Following are some examples of how stressors operate at the child and family level.

Child illness or developmental disability

Having a child with a developmental disability or a chronic illness has been found to be a source of family stress in both high- (Ylven, Akesson and Granlund 2006), low- and middle-income countries (Azar and Badr 2006; Krulik et al. 1999). Regardless of country, mothers are most likely to feel stressed, since they are usually the primary caregivers of the affected children (Azar and Badr 2006; Krulik 1999). However, the stress of having a chronically ill or developmentally disabled child in the family is not restricted just to mothers. Time demands for dealing with a chronically ill or disabled child may lead to stress in spousal relationships or affect parenting of healthy siblings (Kruklik et al. 1999).

Although caring for a chronically ill or developmentally disabled child is a family stressor in many societies, the stress may be greater in societies where there is a social stigma attached to such conditions (Azar and Badr 2006). In such situations the child is more likely to be isolated from the outside world, thus cutting the child off from potential sources of help, while family members may be isolated from social support

networks that could help them cope with stress (Patterson 2002).

Chronic poverty

In both developed and developing countries, chronic poverty is strongly linked to both increased exposure to stressors and to reduced access to resources that could be used to deal with stress (Evans 2004; Grantham-McGregor et al. 2007). Chronic family poverty directly compromises children's development and increases parental and family stress, which in turn adversely affects the quality of child-rearing and subsequent child development (Beeber, Perreira and Schwartz 2008; Engle and Black 2008; McKenry and Price 2005). Chronic poverty can also compromise the family's ability to respond to stressors. Reductions in the ability to respond to stress in low-income families may reflect not just reduced resources, but also an increased sense of powerlessness and lack of control over external events in these families (Sheuya 2008; Thoits 1995). An example of the multiple ways in which chronic poverty can adversely impact upon both the family and the child are illustrated with reference to maternal depression.

In both developed and developing countries one of the significant consequences of family poverty is a sharply increased risk of maternal depression (Wachs, Black and Engle 2009). Poverty increases family stress and heightened family stress increases the likelihood of maternal depression (Beeber et al. 2008). When mothers

are depressed, children are less likely to receive adequate nutrition or preventative healthcare (Wachs, Black and Engle 2009) and are more likely to encounter insensitive, unresponsive, inconsistent or punitive parenting (Beeber et al. 2008). As a result, children of depressed mothers are more likely to have developmental problems such as insecure attachment, altered stress reactivity, social-emotional deficits and eventual behavioural disorders (Murray, Halligan and Cooper, in press). Particularly in low-income countries, lost work capacity and treatment costs resulting from maternal depression can significantly increase families' economic stress (Patel et al. 2007). Depression can also reduce the mother's ability to use existing intervention services (Beeber et al. 2008).

Crowding

Reviews of evidence from both developed (Evans 2004) and developing countries (Wachs and Corapci 2003) has shown that living under crowded conditions can result in increased social-emotional problems in children; reductions in children's task motivation and attention; reductions in the quality of parent-child interactions; increased negative family interactions; and increased levels of physiological stress in both children and adults.

Crowding is often defined in terms of living density (the number of people per room). Tolerance for living in crowded conditions varies across countries, but at a certain level, country-specific

tolerance thresholds will be exceeded. At that point, feelings of being crowded increase family stress levels. Heightened family stress adversely impacts on parent-child relations and subsequent child development. For example, findings from a study carried out in India showed that as home crowding increased there was greater parent-child conflict. Increased parent-child conflict in more densely crowded homes led to higher levels of behavioural and school adjustment problems in children (Evans et al. 1998).

Violence

In both developed (Wolfe et al. 2003) and developing countries (unicef 2004), all too many children encounter violence. In developed countries children encounter child abuse, domestic violence and community violence. In developing countries children encounter all of these plus an increased risk of exposure to societal violence (war). Exposure to violence in whatever form has been shown to result in a variety of child behavioural problems, including post-traumatic stress disorder and both internalising and externalising behaviour problems (Barenbaum, Ruchkin and Schwab-Stone 2004; Wolfe et al. 2003). The costs of exposure to violence for both children and families are compounded significantly when children and their families are forced to migrate to escape the violence (Lustig, in press).

While exposure to violence is a major risk that can compromise children's

development, not all children who are exposed to violence show long-lasting adverse consequences (Shaw 2003). Similar to what was presented earlier, the impact of violence on children will depend on other factors. One critical factor is family stability and parental reactions to the violence. To the extent that families can maintain their structure, routines and relationships, and to the extent that parents can be supportive of their children in the face of violence, the adverse impact of violence upon children's functioning will be lessened (Punamaki, Quota and El-Sarraj 2001; Shaw 2003). However,

problems or have been exposed to other cumulative stressors in addition to violence (O'Donnell, Schwab-Stone and Muyeed 2002).

Potential intervention strategies

Family stress may be universal, but the majority of research on interventions to deal with family stress comes from studies done in high-income countries (e.g., Beeber et al. 2008; McKenry and Price 2005; Ylven et al. 2006). All too often, resources that could help families cope with stress, such as mental health specialists or clinicians trained in stress management, are less

more appropriate – Cole, Bruschi and Tamang 2002). Alternatively, a family's choice of coping strategies may depend on existing realities. For example, active coping that requires the mother to seek outside help for herself or for her child may be difficult in cultures where women must be accompanied by adult family members (McConachie et al. 2001) or where there are social stigmas associated with developmental disabilities (Patterson 2002) or maternal depression (Beeber et al. 2008). However, certain validated intervention strategies to deal with individual or family stress may be generalisable across multiple societies.

Chronic poverty can also compromise the family's ability to respond to stressors.

family exposure to chronic violence or enforced migration – or societal violence resulting in the death or disappearance of family members – significantly weakens families' ability to maintain existing routines and relationships and the parents' ability to cope (Maksoud and Aber 1996; Lustig, in press). Children living under conditions of exposure to chronic violence are likely to be a double risk for compromised development, both as a result of the direct impact of violence, and as a result of the disruption of family structure and parental support. Disruption is even more likely to occur when families have a history of

available in low-income countries. Further, intervention strategies that have been developed and validated in high-income countries may have only limited generalisability to families in low-income countries. For example, as described earlier, there is a distinction between active problem solving coping strategies that attempt to deal directly with the source of stress and emotion-focused coping strategies that deal with emotional reactions to stress. In some societies, use of active coping strategies may be less feasible, due to predominant cultural values about the best way to deal with stress (e.g., in some cultures passive coping strategies are viewed as

Primary prevention strategies

Primary prevention strategies can reduce the likelihood of families encountering stressors. For example, providing infrastructure improvements such as increasing sanitation, access to clean water, or affordable housing can reduce the incidence of exposure to stressors such as illness and overcrowding (Sheuya 2008). Similarly, increasing the availability of early child development programs that combine nutritional supplementation, preventive medical care and cognitive stimulation can reduce the risk of offspring nutritional deficits, morbidity and subsequent school failure (Engle et al. 2007).

A third and most important primary prevention strategy involves promoting education for women. Higher maternal education levels have been linked to a reduced likelihood of children

encountering family economic stress (Boyle et al. 2006), poor nutrition (Kongsbak et al. 2006) or illness (Hatt and Waters). In addition, the incidence rate of maternal depression (Wachs et al. 2009) and maternal morbidity is lower for more educated women (Defo 1997). Such positive outcomes may reflect the fact that women who are better educated have more stress coping strategies available to them, are more likely to maintain a higher level of family cohesion, are better able to seek out and use available resources for their families, and are more likely to

when family cohesion and family resources are maintained. However, high levels of stress can significantly reduce the family's ability to maintain cohesion, routines and support children (Azar and Badr 2006; Lustig, in press; Patterson 2002). Under high-stress conditions, family cohesion and stability can be maintained when social support is provided to the family from friends, neighbours, relatives and neighbourhood or religious organisations (McKenry and Price 2005; Thoits 1995). Social support can involve providing needed resources to families to allow them to stabilise their environment (e.g., food and shelter). Support can also be emotional in nature, as when stressed family members are given the opportunity to 'tell their stories' (Lustig, in press). Social support can also occur in schools, which can provide a much-needed routine for children whose family routines have been disrupted (Barenbaum et al. 2004; O'Donnell, Schwab-Stone and Muyeed 2002). This is particularly so when teachers can be sensitised to the importance of supporting children living under major stress conditions.

In situations where stressors are widespread, friends, neighbourhood associations or schools may be less able to provide support. In these cases, support could be provided by outside civil, professional or non-governmental organisations. Given the limited resources of such organisations, a greater priority must be placed on identifying families that are under

A very important primary prevention strategy involves promoting education for women.

have a voice in family decision-making (Parrad, Flippen and McQuiston 2005; Robert et al. 2006).

Strategies to reduce the impact of stress

Obviously, removing children and families from acute stressors would likely reduce the level of family stress. However, in all too many situations this is unlikely to happen within a reasonable time frame (e.g., economic or societal disruption, climate change). When stressors cannot be easily removed, what can be done? As noted earlier, children can be protected against stressors when they receive social support from their parents and

particularly high levels of stress and who are unable to cope. However, identification of such families may be difficult in some cultures where there are cultural taboos against admitting family stress to an outsider or seeking outside help for stress (McKenry and Price 2005). Identification of vulnerable families and provision of outside support to these families can be facilitated when community health workers are sensitised to signs of family stress, such as maternal depression, or when intervention personnel are indigenous to the local community (Beeber et al. 2008).

One example of a successful outside support program involved mothers who were refugees as a result of societal violence (Dybdahl 2001). The intervention involved discussion groups led by trained pre-school teachers, which focused on support for the mothers as competent caregivers for their children in such difficult circumstances and on providing child-rearing information. Compared to mothers who received only medical care, those who participated in the group sessions showed gains in both maternal mental health and child functioning.

A second example of how identification and support can facilitate family functioning is seen in the case of maternal depression. As described earlier, under conditions of family poverty the risk of maternal depression is significantly higher; when mothers are depressed family functioning is

severely compromised and family stress increases significantly (Beeber et al. 2008). Unfortunately, particularly in low-income countries, primary healthcare workers are less likely to identify depressed mothers (Wang et al 2007). However, schools may be a potential resource, given evidence from a study done in rural Pakistan: it showed that identification of maternal depression was facilitated when children were given a brief module on mental health as part of their secondary school curriculum (Rahman et al. 1998). When depressed mothers are identified, a very effective treatment strategy is the use of existing health services to provide social support, either by mental health paraprofessionals, trained women from the community or through the use of group therapy (Wachs et al. 2009).

Note

1 Comments or requests for reprints may be sent to the author c/o Department of Psychological Sciences, Purdue University, West Lafayette, Indiana, USA, 47907, or via e-mail: wachs@psych.purdue.edu

References

- Azar, M. and Badr, L. K. (2006). *The adaptation of mothers of children with intellectual disability in Lebanon*. *Journal of Transcultural Nursing* 17: 375–380.
- Barenbaum, J., Ruchkin, V. and Schwab-Stone, M. (2004). *The psychosocial aspects of children exposed to war: Practice and policy initiatives*. *Journal of Child Psychology and Psychiatry* 45: 41–62.
- Beckett, C., Maughn, B., Rutter, M., Castle, J., Colvert, E., Groothues, C., Kreppner, J., Stevens, S., O'Connor, T. and Sonuga-Barke, E. (2006). *Do the effects of early severe deprivation on cognition persist into early adolescence?* *Child Development* 77: 696–711.
- Beeber, L. S., Perreira, K. M. and Schwartz, T. (2008). *Supporting the mental health of mothers raising children in poverty: How do we target them for intervention studies?* *Annals of the New York Academy of Sciences* 1136: 86–100.
- Boyle, M., Racine, Y., Georgiades, K., Snelling, D., Hong, S., Omariba, W., Hurley, P. and Rao-Melacini, P. (2006). *The influence of economic development level, household wealth and maternal education on child health in the developing world*. *Social Science and Medicine* 63: 2242–2254.
- Cole, P. M., Bruschi, C. J. and Tamang, B. L. (2002). *Cultural differences in children's emotional reactions to difficult situations*. *Child Development* 73: 983–996.
- Cook, J. and Frank, D. (2008). *Food security, poverty and human development in the United States*. *Annals of the New York Academy of Sciences* 1136: 193–209.
- Defo, B. (1997). *Effects of socioeconomic disadvantage and women's status on women's health in Cameroon*. *Social Science and Medicine* 44: 1023–1042.
- Dybdahl, R. (2001). *Children and mothers in war: An outcome study of a psychosocial intervention program*. *Child Development* 72(4): 1214–1230.
- Engle, P. L. and Black, M. M. (2008). *The effect of poverty on child development and educational outcomes*. *Annals of the New York Academy of Sciences* 1136: 243–256.
- Engle P., Black M., Behrman J., Cabral de Mello, M., Gertler, P., Kapirri, L., Martorell, R., Young, M. and the International Child Development Steering Group (2007). *Child development in developing countries 3: Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world*. *Lancet* 369: 229–242.
- Evans, G. W. (2004). *The environment of childhood poverty*. *American Psychologist* 59: 77–92.

- Evans, G. W., Lepore, S. J., Shejwal, B., and Palsane, M. (1998). *Chronic residential crowding and children's well-being*. *Child Development* 69: 1514–1523.
- Folkman, S. and Lazarus, R. S. (1988). *The relationship between coping and emotion: Implications for theory and research*. *Social Science and Medicine* 26(3): 309–317.
- Grantham-McGregor, S., Cheung, Y., Cueto, S., Glewwe, P., Richter, L., Strupp, B. and the International Child Development Steering Group (2007). *Child Development in developing countries 1: Developmental potential in the first five years for children in developing countries*. *Lancet* 369: 60–70.
- Hatt, L. and Waters, H. (2006). *Determinants of child morbidity in Latin America: A pooled analysis of interactions between parental education and economic status*. *Social Science and Medicine* 62: 375–386.
- Kongsbak, K., Wahed, M., Friis, H., and Thilsted, S. (2006). *Acute phase protein levels, T. trichiura, and maternal education are predictors of serum zinc in cross-sectional study in Bangladeshi children*. *Journal of Nutrition* 136: 2262–2268.
- Krulik, T., Turner-Henson, A., Kanematsu, Y., Al-Ma'aitah, R., Swan, J., and Holaday, B. (1999). *Parenting stress and mothers of young children with chronic illness: A cross-cultural study*. *Journal of Pediatric Nursing* 14: 130–140.
- Lester, B., Masten, A., and McEwen, B. (eds) (2006). *Resilience in children*. *Annals of the New York Academy of Sciences* 1094.
- Lim, J. W. and Zebrack, B. (2004). *Caring for family members with chronic physical illness: A critical review of caregiver literature*. *Health and Quality of Life Outcomes* 2: 50–58.
- Lustig, S. (in press). *An ecological framework for the refugee experience: What is the impact on child development?* In: Evans, G. W. and Wachs, T. D. (eds.). *Chaos and its Influence on Children's Development: An Ecological Perspective*. Washington, dc: American Psychological Association.
- Luthar, S. (ed) (2003). *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*. New York, New York: Cambridge University Press.
- Maksoud, M. and Aber, L. (1996). *The war experiences and psychosocial development of children in Lebanon*. *Child Development* 67: 33–45.
- McConachie, H., Huq, S., Munir, S., Kamrunnahar, Akhter, N., Ferdous, S., and Khan, N. Z. (2001). *Difficulties for mothers in using an early intervention service for children with cerebral palsy in Bangladesh*. *Child: Care, Health, and Development* 27: 1–12.
- McKenry, P. and Price, S. (eds) (2005). *Families and Change: Coping with stressful events and transitions, 3rd edition*. Thousand Oaks, California: Sage.
- Murray, L., Halligan, S. and Cooper, P. (in press). *Effects of postnatal depression on mother–infant interactions, and child development*. In: T. D. Wachs and G. Bremner (eds). *Blackwell Handbook of Infant Development: 2nd Edition Volume 2: Applied and policy issues*. Wiley-Blackwell, Oxford, uk.
- O'Donnell, D. A., Schwab-Stone, M. E. and Muyeed, A. Z. (2002). *Multidimensional resilience in urban children exposed to community violence*. *Child Development* 73: 1265–1282.
- Parrado, E., Flippen, C. and McQuiston, C. (2005). *Migration and relationship power among Mexican women*. *Demography* 42: 347–372.
- Patel, V., Chisholm, D., Kirkwood, B., and Mabey, D. (2007). *Prioritizing health problems in women in developing countries: Comparing the financial burden of reproductive tract infections, anaemia and depressive disorders in a community survey in India*. *Tropical Medicine and International Health* 12: 130–139.
- Patterson, J. M. (2002). *Integrating family resilience and family stress theory*. *Journal of Marriage and Family* 64: 349–360.
- Peebles-Kleiger, M. J. (2000). *Pediatric and neonatal intensive care hospitalization as traumatic stressor: Implications for intervention*. *Bulletin of the Menninger Clinic* 64: 257–280.
- Punamaki, R. L., Quota, S. and El-Sarraj, E. (2001). *Resiliency factors predicting psychological adjustment after political violence among Palestinian children*. *International Journal of Behavioural Development* 25: 256–267.
- Rahman, A., Mubbashar, M., Gater, R., and Goldberg, D. (1998). *Randomized trial of impact of school mental health programme in rural Rawalpindi Pakistan*. *Lancet* 352: 1022–1025.
- Robert, R., Gittelsohn, J., Creed-Kanashiro, H., Penny, M., Caulfield, L., Narro, M., and Black, R. (2006). *Process evaluation explains the pathway of success for a health center-delivered nutrition education intervention for infants in Trujillo Peru*. *Journal of Nutrition* 136: 634–641.
- Shaw, J. A. (2003). *Children exposed to war/terrorism*. *Clinical Child and Family Psychology Review* 6: 237–246.
- Sheuya, S. A. (2008). *Improving the health and lives of people living in slums*. *Annals of the New York Academy of Sciences* 1136: 298–306.
- Thoits, P. (1995). *Stress, coping, and social support processes: Where are we? What next?* *Journal of Health and Social Behaviour* 36: 72–82.
- unicef (2004). *The State of the World's Children 2005*. New York, New York: United Nations Children's Fund.
- Vedhara, K., Shanks, N., Anderson, S. and Lightman, S. (2000). *The role of stressor and psychosocial variables in the stress process: A study of chronic caregiver stress*. *Psychosomatic Medicine* 62: 374–385.
- Wachs, T. D. (2000). *Necessary but Not Sufficient: The Respective Roles of Single and Multiple Influences on Human Development*. Washington, dc: American Psychological Association Press.
- Wachs, T. D., Black, M., and Engle, P. (2009). *Maternal depression: A global threat to children's health, development and behavior and to human rights*. *Child Development Perspectives* 3: 51–59.
- Wachs, T. D., and Corapci, F. (2003). *Environmental chaos, development and parenting across cultures*. In: Raeff, C. and Benson, J. (eds). *Social and Cognitive Development in the Context of Individual, Social and Cultural Processes*. New York, New York: Routledge. pp. 54–83.
- Walker, S., Wachs, T. D., Meeks-Gardner, J., Lozoff, B., Wasserman, G., Pollitt, E., Carter, J. and the International Child Development Steering Group (2007). *Child development in developing countries 2: Risk factors for adverse outcomes in developing countries*. *Lancet* 369: 145–157.
- Wang, P., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M., Borges, G., Bromet, E., Bruffaerts, R., de Girolamo, G., de Graaf, R., Gureje, O., Haro, J., Karam, E., Kessler, R., Kovess, V., Lane, M., Lee, S., Levinson, D., Ono, Y., Petukhova, M., Posada-Villa, J., Seedat, S. and Wells, J. (2007). *Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys*. *Lancet* 370: 841–850.
- Werner, E., and Smith, R. (1992). *Overcoming the Odds*. Ithaca: Cornell University Press.
- Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., and Jaffe, P. G. (2003). *The effects of children's exposure to domestic violence: A meta-analysis and critique*. *Clinical Child and Family Psychology Review* 6: 171–187.
- Ylven, R., Bjorck-Akesson, E. and Granlund, M. (2006). *Literature review of positive functioning in families with children with a disability*. *Journal of Policy and Practice in Intellectual Disabilities* 3: 253–270.

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Investing in the development of young children

The Bernard van Leer Foundation funds and shares knowledge about work in early childhood development. The foundation was established in 1949 and is based in the Netherlands. Our income is derived from the bequest of Bernard van Leer, a Dutch industrialist and philanthropist, who lived from 1883 to 1958.

Our mission is to improve opportunities for children up to age 8 who are growing up in socially and economically difficult circumstances. We see this both as a valuable end in itself and as a long-term means to promoting more cohesive, considerate and creative societies with equality of opportunity and rights for all.

We work primarily by supporting programmes implemented by partners in the field. These include public, private and community-based organisations. Our strategy of working through partnerships is intended to build local capacity,

promote innovation and flexibility, and help to ensure that the work we fund is culturally and contextually appropriate. We currently support about 140 major projects. We focus our grantmaking on 21 countries in which we have built up experience over the years. These include both developing and industrialised countries and represent a geographical range that encompasses Africa, Asia, Europe and the Americas.

We work in three issue areas:

- Through “Strengthening the Care Environment” we aim to build the capacity of vulnerable parents, families and communities to care for their children.
- Through “Successful Transitions” we aim to help young children make the transition from their home environment to daycare, preschool and school.

- Through “Social Inclusion and Respect for Diversity” we aim to promote equal opportunities and skills that will help children to live in diverse societies.

Also central to our work is the ongoing effort to document and analyse the projects we support, with the twin aims of learning lessons for our future grantmaking activities and generating knowledge we can share. Through our evidence-based advocacy and publications, we aim to inform and influence policy and practice both in the countries where we operate and beyond.