# Improving Institutions: Can We? Should We? How?

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## Abstract

Throughout human history the family has been regarded as the best environment in which to rear children and promote their development. This is partly because the family typically has only a few children, mixed ages, and few relatively stable caregivers who provide consistent, frequent one-on-one interactions that are predominately warm, sensitive, contingently responsive, and child-directed. Unfortunately, an estimated 2-8 million children live in institutions worldwide that usually represent nearly the opposite environment, and resident children tend to be developmentally delayed in every domain. While rearing children without permanent parents is ideally conducted in an adoptive or foster family, it is unlikely that all low-resource countries worldwide will achieve this goal soon for all children. Fortunately, for those children who must remain in transitional or even long-term institutional care, the institutions do not have to operate in the way most do; a few stable caregivers within these institutions could provide more sensitive, responsive care in a more family-like environment. When this is accomplished, research shows children's physical, mental, behavioral, social, and emotional development can improve, sometimes very substantially.

Key words: institutions for young children, improving institutions, child welfare policy

## Improving Orphanages: Can We? Should We? How?

For nearly all of human history, there has been de facto consensus that the ideal environment to rear children is the family. But the typical family and most institutional environments are quite different, nearly opposite to one another, and so is the development of children who live there.

## The Family vs. Institution

### *The Family Environment*

The family has several characteristics that are widely believed to contribute to the healthy development of infants and children.

**Structure**. The family consists of a *small group*, especially a relatively few children. The children, if more than one, can be a *mix of different ages, genders, and typically developing or with special needs*.

**Caregivers**. The caregivers consist of parents, who usually are the *primary caregivers* responsible for raising the children. There may also be a small set of *secondary caregivers* – grandparents, aunts, and uncles. Ideally, these caregivers, especially parents, are *stable*-they have a *consistent* presence in their children's lives – and changes in caregivers as a result of death, divorce, and other circumstances are considered undesirable. Also, the *number of children per caregiver is relatively small*.

**Caregiver-child interaction**. Caregiver behavior tends to include a great deal of *one-on-one time* and *warm, sensitive, and responsive interactions*, although individual parents vary in the extent of such behavior. Further, parent interactions with children often tend to be somewhat *child-directed*, in which the child takes the lead and the parent follows or responds, versus predominately parent-directed.

**Children without permanent parents**. Worldwide, special circumstances have produced deviations in the otherwise predominate tendency for children to be reared in families. For example, some children lose their parents, perhaps by death (i.e., "true orphans," an estimated 18+ million worldwide; USAID, 2009) or because of social, behavioral, financial, and other circumstances in which children are abandoned, relinquished, or involuntarily removed from their parents (i.e., "social orphans," number unknown). Some of these children are raised by relatives of their biological parents (i.e., kinship families), by foster parents, or are adopted-rearing circumstances that are similar in structure to the family. But other children are reared in social groups (e.g., villages, kinship groups, refugee camps) and in institutions, which are typically less similar to the family in structure, caregivers, and caregiver behavior.

## *Institutions Worldwide*

Institutions (i.e., often but not always orphanages) have existed around the world at one time or another. While many high-resource countries have eliminated institutions except for special types of children, it is estimated that from two to eight million children reside in institutions worldwide, mostly in low-resource countries (Human Rights Watch, 1999; USAID, 2009). While institutionalized children represent a minority percentage of children without permanent parents, they are the most identifiable group living in organized governmental and non-governmental environments and thus the group most likely to be affected by practice and policy. Institutions vary in their nature both between and within countries, but a review of published accounts (Rosas & McCall, in press) reveals certain characteristics that are often present in institutions designed primarily for infants and young children.

**Structure**. Institutions tend to have *many residents*-small institutions house from 35 to 100 children and larger ones may have up to 600 children at any one time. Children are housed in rather *large groups*, approximately 9 to 16 per ward but in extreme cases up to 70 in a single dormitory. The number of children per caregiver during waking hours varies with the ages of the children but on average is *6-8 children per caregiver*, although in some institutions this is much larger. Most institutions are reported to *group children homogenously by age*, and children with *disabilities* are often placed in separate wards or institutions. Further, when children reach certain ages or developmental milestones, they often are "graduated" to a new group of peers and caregivers or even to another institution for older children.

**Caregivers**. Rarely are there primary caregivers but rather *many different and changing caregivers*. This may be because caregivers work long shifts (24 hours) and are off for three days, low pay may lead to high caregiver turnover, caregivers may be provided with as many as 56 days of vacation a year, and substitutes are assigned to any ward with a vacancy. In one report (St. Petersburg-USA Orphanage Research Team, 2008) all of these circumstances existed; and

although only 9-12 caregivers were assigned to a ward per week, the cumulative effect of these several conditions meant that children were exposed to 60-100 different caregivers during the first 19 months of residency and usually saw no caregiver today whom they saw yesterday or would see tomorrow.

**Caregiver-child interactions**. While most caregivers are women and many are mothers of their own children, they are frequently reported to behave differently than one typically expects of a parent. Impressionistic reports (but a few have actually measured caregiver behavior; see McCall, 2011a), suggest caregivers behave in a rather business-like, perfunctory manner with children. They perform their caregiving duties with relatively *little talking, nearly no one-on-one and face-to-face interactions* even during feeding and changing, and minimal amount of time playing with the children. Their interactions also tend to be very *caregiver-directed* – they tell or show children what to do rather than respond to children's initiatives. This lack of warm, sensitive, contingently-responsive interaction is often attributed to the fact that caregivers have limited amounts of time to care for many children, and some caregivers say they do not want to get close to children to avoid the pain of separation when the children leave the institution to go to foster care, adoption, or the next institution.

Clearly, as the italicized words above illustrate, the typical institution is nearly opposite in character to the historically preferred family environment with respect to structure, caregivers, and caregiver behavior.

## *Institutional Children's Development*

Common sense and academic theory (e.g., attachment theory, Bowlby, 1958, 1969; social learning theory, Bandura, 1977) suggest that children raised from infancy in such an institutional environment are likely to have delayed development and increased frequencies of social-emotional-behavior problems. Without consistent experience with a few stable caregivers, children have limited opportunities to develop and explore a relationship with an adult. Further, they have less experience with a consistent and contingently-responsive environment that is crucial to learning how to influence, interact, and relate to other people and how to do it appropriately and effectively. Such experience is also necessary to develop language and cognition.

**Children's developmental delays and deficits**. Not surprisingly, children residing in institutions are typically delayed in nearly every aspect of their physical, mental, and social-emotional development. While many children are delayed when they arrive at the institution, they remain delayed during their residency; others decline while in the institution.

However, once they transition to a foster or adoptive family they display immediate and substantial physical and cognitive catch-up growth, which is testimony to the depressing effect of the institution (Van IJzendoorn & Juffer, 2006). But even after years in a loving adoptive home, such children display higher rates of certain deficiencies and problems. These can include underdevelopment of the prefrontal cortex and atypical development of the amygdala, which are related to problems with attention, activity, memory, cognitive inhibition, rule following and shifting, emotional regulation, and externalizing and internalizing behavior problems (e.g., Gunnar, 2001; MacLean, 2003; McCall, Van IJzendoorn, Juffer, Groark, & Groza, 2011b). These effects may vary depending on children's genetics, experiences before being institutionalized, the nature and severity of the institution, the ages and length of time spent in the institution, and the age at which their behavior is assessed. Moreover, it appears likely that such deficiencies persist in one form or another into adulthood (Julian, 2009).

**Time in the institution**. Importantly, however, it does not take prolonged exposure to the typical orphanage to produce these long-term deficiencies and problems-as little as spending the first 6 to 24 months of life in such an institution depending on the severity of the institutional environment is sufficient to be associated with higher rates of long-term problems (McCall, 2011a; Zeanah, Gunnar, McCall, Kreppner, & Fox, 2011). And while data are lacking, the

children who remain in institutions until 18 years are widely thought to contribute disproportionately to crime, drug and alcohol problems, prostitution, and unemployment at substantial cost to their societies.

## The Future of Institutions

Several international governmental and nongovernmental organizations (e.g., UNICEF, USAID) urge low-resource countries to develop family care alternatives for children without permanent parents.

### *Phasing Out Institutions*

Many Western countries have closed almost all their institutions in favor of domestic adoption, foster care, kinship care, and small group homes. Generally children develop better in these family environments than in institutions (Julian & McCall, 2009; Nelson, Furtado, Fox, & Zeanah, 2009), and they are less expensive than institutions (Engle, et al., in press).

**Quality is important.** However, these comparisons likely depend on the quality of these alternatives – simply paying anyone to foster children without selection, training, monitoring, and support services may not be much better for children than living in a good institution. Similarly, institutionalized children reunified with their biological parents often do not develop better than those who remain in the institution (Julian & McCall, 2009), especially if the biological family had social and behavioral difficulties which were the cause of placing the child in the institution in the first place and if no social services exist to improve the behavioral environment of that family.

**Challenges to a system of family alternatives.** The Convention on the Rights of the Child (United Nations, 1999) urges retaining children in, or restoring them to their biological families, or placing them in adoptive or foster (kinship, non-relative) families. However, achieving the potential benefits of family care environments likely will require a well-organized, professional child welfare system of incentives, training, services, supports, and standards (Groza, Bunkers, Gamer, 2011; Engle, et al., 2011). While supporting and developing high quality systems of family care environments is certainly the preferred long-term strategy for most low-resource countries, achieving this ideal faces many challenges, and it often took several decades for high-resource countries to develop adoption and foster care systems for all children in need.

For example, some low-resource countries have historical, social, and religious aversions to fostering or adopting that make recruiting such families difficult. Although most studies show family environments are cheaper in the long run than rearing children in institutions, the administrative and financial policies and arrangements needed to encourage family alternatives may be complex (Groark, McCall, & Li, 2009). Sufficient numbers of selected and trained parents must be available, and the child welfare system must be able to place children in families as soon as possible to avoid even short stays in institutions. Further, many children residing in institutions are difficult to place in families because they are older (most families prefer infants and young children), have no documents, or have disabilities. Finally, effective family alternatives require professional social services which are often absent in low-resource countries, and it will take years to develop the training and professionalism to create a support system.

Thus, even when progress is being made in a country toward caring for children in family environments, the transition is likely to take many years and many children will still be raised in institutions. In the meantime, institutions could be made more family-like with fewer and more stable caregivers who provide more warm, sensitive, and contingently-responsive care than is

usually the case. While implementing such changes would cost some money, once implemented such changes often can be maintained on current or only slightly higher institutional budgets.

## *Changing the Institutions*

There are two kinds of changes that could be made to institutions to improve the development of resident children.

**Supplementary care.** The care provided by the current institutions could be supplemented. For example, voluntary or paid "grandparents" can provide infants and young children with supplementary nurturing, especially if these same people are consistently available to the same children over an extended period of time. Also, special rehabilitation services could be provided for children with disabilities residing in institutions.

Such programs can improve children's development to a certain extent. Various organizations worldwide provide supplementary care, but the benefits for children's development have not been formally evaluated. Instead, a literature exists describing additional stimulation provided to institutionalized children that shows children's development can be improved, especially if the developmental levels of the children are otherwise extremely low (e.g., DQ = 60-70). Indeed, for children who are that delayed, most programs providing additional stimulation or experience may produce a gain of 10-20 DQ points. But these children may remain substantially delayed, and the benefits tend not to persist if the supplement stops (Rosas & McCall, in press).

Thus, consistent and enduring supplementary care is better than no supplements and likely better than very short and inconsistent supplements often provided by volunteers. But if an institution or country is willing to organize, train, and monitor supplementary caregivers, they could do that for the regular institutional staff instead, and children may improve more with comprehensive changes within the institutions themselves.

**Comprehensive institutional change.** Institutions do not need to be operated with the typical structural, caregiver, and caregiver-child interaction characteristics described above. Instead of being operated like "an institution," they could be operated more like a "family." For example:

- **Structure**. Groups of children could be made smaller; instead of 12-14 children, for example, groups might have 6-7 children (which is still a large "family") or fewer. In addition, similar to families, groups could be composed of children of different ages, and children with disabilities might be present along with typically developing children in each group. Thus, there may be approximately two infants, two preschoolers, and two young children in the same group, some of whom may have disabilities including severe impairments.
- **Caregivers**. Two caregivers might be declared primary caregivers, and they might work at least 40 hours a week in staggered schedules so that at least one of them is present for most of the children's waking hours. Secondary caregivers and substitutes might also be assigned to a specific group and work a more consistent schedule. Further, because the groups are mixed with respect to age, children can stay in the same group with the same caregivers for several years, thus eliminating "graduations" to new groups of caregivers and peers. Such strategies reduce the number of different caregivers and make them more consistent across time in children's lives.
- **Caregiver-child interaction**. Caregivers can be trained and encouraged to provide children with more warm, sensitive, and contingently-responsive interactions, especially during routine caregiving, and to play with the children in a child-directed manner to a greater extent. They can be shown how to position and interact with children with disabilities. Further, they can take more time with individual children; because the group size is smaller, the number of children per caregiver is smaller, and a caregiver only needs to feed two infants while the older children play and she can play with the older children while the infants take naps. Most caregivers know how to behave this way with their own children; they need permission and encouragement to behave similarly with children in the institution.

## *A Successful Example*

Such changes are not the ideal, but they are much more similar to family life than most institutions. Moreover, they were actually implemented in an institution in St. Petersburg (Russian Federation), and the structure, caregiver behavior, and the development of children were very comprehensively and objectively measured. The results were dramatic (The St. Petersburg-USA Orphanage Research Team, 2008).

First, the *caregivers improved their behavior with the children* very substantially, including their responsiveness and involvement and the variety of opportunities they provided. The caregivers at first were apprehensive and concerned that such changes would create more work for them, and they were uncertain how to deal with children with disabilities. But eventually they reported that they experienced less work overload (presumably because of the smaller groups and age integration), less anxiety and mild depression, and they were more comfortable with children with disabilities.

Second, *children saw fewer caregivers*. Instead of 60-100 different caregivers in the first 19 months, the children were exposed to an average of 32 each, better but still too many.

Third, *children's development improved substantially in every domain*. Compared to children in another institution that did not receive the intervention, children in the revised orphanage increased in height, weight, and chest circumference. Because only caregiver-child behavior interactions were changed-not nutrition or medical care-this result demonstrated that improvement in caregiver-child social-emotional interactions alone can actually lead to better physical growth. Children also improved substantially in general behavioral development, displaying an average change in DQ from 57 to 92-possibly the largest improvement in general behavioral development ever reported. Further, the children had more mature social and emotional behavior, more engagement with caregivers, and more organized attachment relationships with their caregivers.

Fourth, *children with disabilities also improved substantially in essentially every domain*. For example, children with disabilities of nearly all kinds improved from 23 to 42 = 19 DQ points on average, 27% of children with disabilities increased more than 30 DQ points, and 14% increased more than 40 DQ points. These gains are also among the largest ever reported. They indicate that making these changes in social-emotional aspects of caregiver-child interactions and integrating children with disabilities with typically developing children can produce substantial improvements in children with disabilities. This result plus the improvement in physical growth may be viewed incredulously by the local medical community, which may operate the orphanages, if medical professionals have not been widely exposed to western behavioral pediatrics. On the other hand, when behavioral interventions improve physical growth and development, policy makers and others are often more likely to be persuaded such changes are "really" effective and worthwhile.

Fifth, *training only-without the structural changes-produced far smaller improvements in children's development*. Another institution was given only the same caregiver training but not the structural and caregiver work schedule changes. Consistent with other research on the effects of training alone, children in this orphanage improved but not substantially above the level of the no-intervention orphanage. Training works if it is practical not simply theoretical, it is followed with monitoring and encouragement by supervisors on the ward, and it is coupled with an environment that provides opportunities for caregivers to implement that training-in this case, smaller groups, age integration, and remaining with the same children for a prolonged period of time.

Sixth, such changes *do not need to cost a great deal of money*. Agreed, the project described above was well-funded, walls were built to divide groups, training was conducted by professionals and over 12 weeks, etc. But the essentials of the intervention are to get caregivers to behave with these children in the same way they would with their own children, and to structure the employment patterns and ward configurations to be more family-like with fewer, more consistent caregivers. Changing the institutional culture takes more commitment-of director and staff-than money, which is suggested by the fact that the intervention has been maintained for at least five years after the project ended on the institution's regular state-supplied budget.

## But Should We Improve Institutions?

Advocates argue that institutions should not be improved; they should be replaced by family alternatives, which are better for children and cheaper for governments. **In the long-term, we agree!**

But creating a modern child welfare system of family alternatives is not an easy task in many countries (Engle, et al., 2011; Groza, et al., 2011). As noted above, there may be historical, cultural, financial, administrative, professional, and sometimes religious challenges to family-care alternatives. It could take substantial up-front resources and many years to override tradition and social beliefs, train professionals, develop a system of professional services, select and support sufficient numbers of adoptive and foster parents, rewrite policies, etc.

When there is strong political will, substantial resources, a comprehensive long-range plan, and fewer of the above challenges, a system of family alternatives may be implemented in several years. But even when most of these positive circumstances are present, progress can be slow, such as in Ukraine, where after five years of intense effort approximately 5000 children were in new family-care homes but 45,000 remained in orphanages (Groark, et al., 2009).

Indeed, international children's rights declarations (CRC, Article 20; African Charter on the Rights and Welfare of Children, Article 25; UNICEF, 2006; United Nations, 1999) recognize that not all children will be able to have a family and that institutional care likely will be necessary and appropriate for some children. If so, those institutions should be as good for children as possible.

By all means, start and emphasize family-care alternatives and work toward a comprehensive child welfare system. Keep this goal as the first priority. But at the same time, if substantial numbers of children must remain in institutions, then also improve those institutions. Of course, efforts must be made not to allow such improvements to divert funds, energy, and political will away from developing family alternatives. Instead, since family alternatives are cheaper, the money saved as a system of family alternatives is developed could be invested in improving the institutions in which the remainder of the children must live.

If necessary, improve the institutions for infants and young children first, and develop policies and procedures to get these children to families as soon as possible. But simultaneously aim at improving the rearing environment for *all* children-all ages and genders, with and without disabilities or documents, and children of all racial/ethnic origins-not only the lucky ones to be placed in a loving family.

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