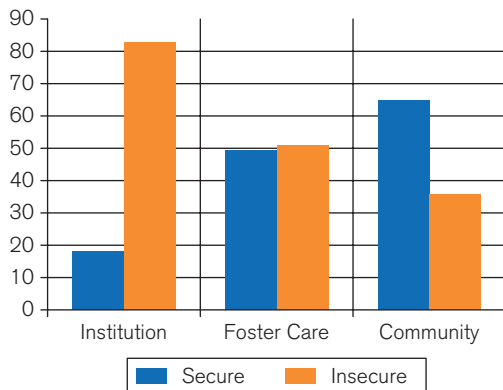


(Continued)

### ■ FIGURE 5.4 Does Foster Care Increase Secure Attachment?

At 42 months, children in foster care showed more secure attachment than those children who remained in the institution.



In addition to attachment, cognitive development (as measured in terms of IQ) was higher the earlier the child was placed in foster care. Physiological measures including stress responses, EEG, and brain volume were also shown to be influenced by type of caregiving situation. Those children reared in the institutional setting showed disruptions in their physiological responses to stress (McLaughlin et al., 2015). In terms of the brain, there was less of both gray and white matter in those children who grew up in the institution as compared with children

who had never been institutionalized (Sheridan, Fox, Zeanah, McLaughlin, & Nelson, 2012). Likewise, white matter connections were weaker in those who experienced neglect (Bick et al., 2015). Further, the institutionally reared children had more symptoms of anxiety, depression, ADHD, and disruptive behaviors (Slopen, McLaughlin, Fox, Zeanah, & Nelson, 2012). Overall, the majority (53%) of 4-½-year-olds who had been reared in the institution had a diagnosable mental disorder, whereas only 22% of those reared in the community had such a disorder.

Although we have known for over 50 years that institutional care was associated with cognitive and emotional problems, the Romanian study with its randomized design allowed for greater validity in the results. Children come into the world seeking interactions with others. This interaction helps with cognitive, emotional, language, and motor development. (See also <http://www.bucharestearlyinterventionproject.org/>)

**Thought Question:** There are many situations in the world where orphanages are the only good alternative for caring for children. From what you've read so far, what three principles do you think are most important in designing and running an orphanage that results in psychologically healthy children?

Based on Nelson, Fox, & Zeanah (2014). *Romania's Abandoned Children: Deprivation, Brain Development, and the Struggle for Recovery*. Harvard University Press.