

# Bringing Back the Child



Bringing Back the Child:  
Language Development  
after Extreme Deprivation  
(Children and Childhoods 4)

By

Lisa J. Brown and Peter E. Jones

With a Foreword by Joy Stackhouse

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**P U B L I S H I N G**

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(Children and Childhoods 4),

by Lisa J. Brown and Peter E. Jones

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Lisa would like to dedicate this book to the memory of her mother,  
Pauline Jane Brown, née Allen.



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## TRANSCRIPTION CONVENTIONS FOR CONVERSATIONAL DATA

{ }	Non-verbal activity
( )	Inaudible or unclear material
[[	Overlapping speech
—	Emphasis on syllables or words
_	Possible grammatical omission.
= =	Utterances that are latched with no gap (on either side of the = symbol).
:	Elongation of sound
hh	Audible exhalation of breath.
-	Sound cut-off or false start (e.g., “I thi-”).
(.)	Micropause mid-turn
(2)	Length of pause in seconds mid-turn.
?	Question intonation.
.	Statement intonation.
<i>{pause:}</i> Marks a break in the conversation or pause between turns and includes information about the context as in <i>{pause: A. is licking her lolly}</i>	

## FOREWORD

This longitudinal study of three Romanian orphans adopted at ages 7, 6 and nearly 4 years following extreme deprivation is an essential read for anyone interested in language development and the relationship between language and cognition in children. The children were 10, 11 and 13 years old at the beginning of a two year data collection period and so the study is unusual in providing detailed qualitative linguistic analyses of a less well researched older age range in parallel with standardized measures of language and cognition. As a result it is possible to examine the strengths and limitations of different perspectives on children with significant language delays, and the data raises questions about the nature of language “delay” versus “disorder” in such children. It is also unusual to have so much contextual information about the children’s lives – both past and in particular subsequent adoptive home life - which allows the role of positive as well as negative environmental factors to be considered.

Three clear questions are addressed in this book. The first focuses on how language develops in older children and includes analysis of conversation data. The second examines the notion of critical periods in development and specifically focuses on grammar. The third questions the existence of cognitive “modularity” and leads to a search for dissociations between linguistic and non-linguistic abilities. In short this is a fascinating and provocative theoretical study of children’s language development in unique circumstances and it should fuel further academic debate.

However, this book not only tackles conflicting theories and demonstrates a range of linguistic analyses. There are also some important messages for practitioners involved in identifying language delay in children from impoverished backgrounds. The limitations of standardized tests with norms derived from suppositions of what are “typical” children are highlighted in this study and fit with current concerns that such measures may not capture the true language abilities of children from areas of less extreme but still significant social disadvantage. Perhaps above all the reader will come away with a sense of hope for children with severe language delay and renewed energy to continue to support children’s language development well beyond the early years. This final message

may be helpful for speech and language therapists, teachers, and other professionals involved in securing funding to provide services for children with speech, language and communication needs, as well as reassuring for parents and carers.

Joy Stackhouse

Professor of Human Communication Sciences  
University of Sheffield, UK.  
March 2014





# BRINGING BACK THE CHILD: INTRODUCTION

## 1. Aims and scope of the book

This book gives a detailed account of the acquired linguistic competence of three Romanian orphan girls, Serena, Gabrielle and Ingrid, as they will be known here, who were adopted by British families after surviving prolonged global deprivation during their early years.<sup>1</sup> Serena was 7 years old, Gabrielle was 6 and Ingrid was nearly 4 when their new lives began. In bringing the girls back from the institutions where they languished for years, the girls' parents had given them back their childhood. Upon entering their homes, the girls were no longer mere “charges” requiring minimal routine maintenance but could, at last, *be children* - daughters of parents, sisters of siblings - with an identity to make and a future to forge. Here we will describe what the girls experienced in the orphanages and what happened to them when they were rescued. While our primary focus is on the language of the three girls, we will try to view their linguistic skills in the context of their overall development post-adoption.

Over the last 15 years, a substantial research literature has built up regarding the development of formerly institutionalized internationally adopted children, with a few studies focussing specifically on language (Chapter 1). However, our study of Serena, Gabrielle and Ingrid differs in key respects from this body of research.

Firstly, we are not directly concerned with issues of diagnostic assessment and therapeutic intervention, although we hope our findings may be of interest to clinicians and educationalists as well as to those working with internationally adopted children more specifically. Rather, our main

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<sup>1</sup> We use the term “global deprivation” to refer to living conditions which prevent or severely restrict *all* aspects of children’s development. The term “deprivation” is more apt than “isolation” since the girls were not kept on their own, although both ability and opportunity for interaction were minimal. The term “neglect” is perhaps a better fit for the girls’ circumstances although the “neglect” in question was the scheduled “care package” of the relevant institutions.

intention is to provide a detailed, longitudinal case study account of each of the girls, documenting their progress in transcending the awful privations of their early lives. Such a study is, we believe, of general interest for the insights it affords into human development in exceptional circumstances. Secondly, we are interested in drawing out the implications of the girls' linguistic abilities for our general understanding of language. To that end, we will discuss their linguistic and communicative proficiencies in the light of current theoretical perspectives on language and language acquisition, paying particular attention to the relevance of the "Critical Period Hypothesis" for language (Chapter 1). Thirdly, in contrast with virtually all other studies of the language development of internationally adopted children, we have employed *both* qualitative *and* quantitative methodologies (Chapters 2-7) to allow as rich a view of the girls' linguistic competence as possible. This, then, is the first and only study, to our knowledge, which has drawn on the insights of Conversation Analysis in order to explore naturalistic conversational skills in severely deprived children (Chapter 3). And it is the only study to critically explore the differences between the qualities of naturalistic speech and the picture of language competence which results from the use of standardized test procedures (Chapter 6). Indeed, the range of methods adopted affords, we believe, the most detailed and systematic qualitative study of linguistic ability in globally deprived children since Susan Curtiss's original study of Genie (Curtiss, 1977). Finally, this study is unusual in that it is entirely devoted to the experiences and acquired competencies of the *older* adopted child and may therefore contribute in some small way to addressing the "gaping hole" (Scott, Roberts and Glennen, 2011) in our understanding of the post-adoption progress of older children.

## 2. Background to the research

This book is based on the doctoral thesis of one of the co-authors, Lisa Brown (Brown, 2003).<sup>2</sup> The research participants were drawn from the population of children adopted from Romanian childcare institutions with an early history of global deprivation. The adoptive parents of the research

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<sup>2</sup> The doctoral research was conducted at the University of Sheffield. The original supervisory team comprised John Locke, then of the University of Sheffield, as Director of Studies with second co-author, Peter Jones, of Sheffield Hallam University, as First Supervisor. John Locke left the team in 2000 to be replaced by Joy Stackhouse of the University of Sheffield in 2001. Some of the data from the doctoral project has been previously presented and discussed in Brown (2006), Brown and Jones (2008), Brown, Locke and Jones (1999) and Brown et al. (1998).

participants were contacted through the Parent Network for the Post-institutionalized Child (PNPIC UK) in 1997. Parents who expressed an interest in participating were asked for brief biographical details of their adopted child or children. Preference was given to children who had spent longer than 3 years in a Romanian institution and who, to the parents' knowledge, did not have a history of neonatal trauma or a known genetic disorder. Because data were to be analysed qualitatively, only a small sample was required. Ultimately, six children (three who had clearly acquired some spoken language and three who had not) were initially selected as suitable for the study and their parents invited to participate in the research.<sup>3</sup> During the course of the study, it was decided to concentrate on Serena, Gabrielle, and Ingrid since their spoken language abilities were sufficiently advanced to allow the key research questions about linguistic development to be addressed.

Basic biographical details for Serena, Gabrielle, and Ingrid along with key dates for the research study are summarised in Table 1. A full account of the girls' early life histories and experiences after adoption will be given in Chapter 2.

**Table 1 Biographical details and key dates<sup>4</sup>**

	<b>Serena</b>	<b>Gabrielle</b>	<b>Ingrid</b>
Date Entered Adoptive Home	August 1994	October 1991	August 1991
Age at Adoption	7;5	6;3	3;10
Age at Data Collection Start	11;3	13;1	10;8
Time since Adoption	3;10	6;10	6;10
Age at Data Collection End	13;2	14;10	12;7
Time since Adoption	5;9	8;7	8;5

<sup>3</sup> For further details of the life histories and development post-adoption of all six children see Brown (2003).

<sup>4</sup> Participants' ages will be expressed throughout as "years; months". Thus 11;3 means 11 years and 3 months of age.

### 3. Conduct of the research

To begin with, parents were interviewed in order to obtain an accurate description of the girls' backgrounds and their lives in institutions. Reports, observations and assessments completed by health care professionals and schools together with parental reports and testimony were then examined in order to gain a detailed account of each child's history since adoption. Family contacts and personal visits were conducted by Lisa Brown with the permission of the parents at pre-arranged times. All meetings with the children involved informal interactions with them or direct observations of their behaviour during everyday activity, familiar routines or assessment tasks and were recorded on audio or videotape for later transcription and analysis. Data were collected in this manner at regular intervals for 2 years. All in all, an immense amount of data on the girls' behaviour and abilities was collected of which only a small selection is presented here. But it is to be hoped that readers will "hear" the girls, albeit at some distance, in the transcribed materials and will be able to come to their own judgements as to the levels of linguistic and communicative expertise on display.

The girls' linguistic, communicative and non-linguistic cognitive abilities were examined by close analysis of their naturalistic behaviours as well as by standardized tests. In addition, we compared the performances of Serena, Gabrielle and Ingrid on specific standardized tests of nonverbal cognition with those of younger, typically developing children between the ages of 3;6 and 8;0 (Chapter 7). While this procedure has no strictly scientific rationale, it was useful and interesting to see what similarities and differences could be observed between the test responses of Serena, Gabrielle and Ingrid and those of a group of flesh-and-blood younger children of varying ages.

### 4. Content of the book

The book is organized as follows:

Chapter 1, *Beginnings: life before and after adoption*: an account of the girls' early histories and their lives and development after adoption.

Chapter 2, *Language development after extreme global deprivation*: a review of literature on child development post-deprivation with a discussion of theoretical models of language and language acquisition,

followed by a statement of research questions to be addressed by subsequent chapters.

Chapter 3, *Life in conversation: talk in everyday settings*: a detailed examination of the girls' everyday conversational skills informed by Conversation Analysis.

Chapter 4, *Putting language to the test*: a presentation and discussion of the girls' results on a series of standardized language tests.

Chapter 5, *Words and word formation: the acquisition of morphology*: an analysis and discussion of morphological structures and morphosyntactic processes in the girls' spontaneous speech.

Chapter 6, *Speaking in sentences: the acquisition of syntax*: an analysis and discussion of syntactic structures in the girls' spontaneous speech.

Chapter 7, *Thinking without words: putting nonverbal cognition to the test*: presentation and discussion of the girls' results on standardized tests of nonverbal intelligence.

Chapter 8, *Bringing back the child: conclusions and implications*: a summary of the findings of previous chapters in relation to the research questions and a consideration of the implications of these findings for theory and for future research.

# CHAPTER ONE

## LANGUAGE DEVELOPMENT AFTER EXTREME GLOBAL DEPRIVATION

### 1.1 Introduction

The fate of children abandoned or isolated during their first years of life has held a fascination for many cultures since the most ancient times. What potential for learning and for language learning in particular will such children retain? What will be their prospects in life upon re-entering society? Traditional interest in this topic has usually centred on so-called “feral children”, left in the wild to fend for themselves or occasionally, at least according to legend, to be raised by friendly animals. In the late 20<sup>th</sup> century, scientific attention turned to the developmental progress of infants deprived of everyday social contact for prolonged periods, most famously Genie, the “modern day wild child” (Curtiss, 1977). Such cases then became a central focus of debate in linguistics, psycholinguistics and psychology over the relative contributions of “nature” and “nurture” in the acquisition of a first language. The process by which children learn language and the character of the linguistic knowledge thereby attained have become some of the most widely studied and hotly contested questions in the history of western science.

In this chapter, we set the scene for our later discussion of the linguistic abilities of Serena, Gabrielle and Ingrid by giving an overview of previous studies of the development of socially deprived and neglected children, including Romanian orphans, followed by a brief account of the theoretical debates on language and language acquisition relevant to the interpretation of the linguistic material to be presented.

## 1.2 Development after social deprivation

### 1.2.1 “Feral children”

Throughout history, there have been many reports of “feral” children, sometimes with accounts of attempts to rehabilitate them into civilised society (for reviews and discussion see Malson, 1972; McNeil, Polloway and Smith, 1984; Candland 1993; Comrie, 2000; Hoff, 2001). Perhaps the best known case is that of Victor of Aveyron, as documented by Itard, the 18th century French psychologist who took charge of Victor (Lane, 1976). There is also the intriguing case of Kaspar Hauser who mysteriously entered Copenhagen society in 1828 with little or no speech, having been socially isolated for the first seventeen years of his life (Clarke and Clarke, 1976, 2000; Simon, 1979). In addition there have been occasional reports of infants and young children reared by wild animals, such as that of the “wolf girls”, Amala and Kamala of Midnapore, allegedly discovered at the respective ages of 2 and 7 huddling in a den with a family of wolves (Singh and Zingg, 1939; Benzzaquen, 2001). Fujinaga et al. (1990) reported on the 1972 discovery in Japan of two animal-like children aged 5 and 6 who had been forced to live in an outside shed since infancy. Even more recently, the cases of Oxana Malaya in the Ukraine and “Alex the Dog Boy” in Chile (in 2001) (*Feral Child, 2014*) came to light, both children having allegedly spent their early years living with, and learning from, dogs, although there is little factual corroboration of these stories.

The linguistic outcomes in such cases, when reported, are usually very poor. Victor and the “wolf girls” apparently never learned to speak, despite many hours of careful tuition, while, at the other extreme, Kaspar Hauser regaled polite Copenhagen society in articulate language, kept poetic company with the aristocracy and even wrote his memoirs (Nicole, 1979). However, cases of “feral children” have been dismissed as scientifically irrelevant by scholars such as Bettelheim (1959) who argue that these children were suffering from learning difficulties, autism or emotional disturbances and had only recently been deposited by their parents in wild and remote countryside on account of these problems (Clarke and Clarke, 1976, 2000).

## **1.2.2 Global deprivation in childhood**

### **1.2.2.1 Deprivation in the family home**

Reliably documented reports of cases of childhood isolation and its aftermaths are discussed by Skuse (1984a, 1984b), Clarke and Clarke (2000) and Koluchova (1972; 1976; 1979, 1991) of which the most well known are those of the “Koluchova twins”, Isabelle, Alice and Beth, Louise, Anna, Mary and Genie.

The Koluchova twins were discovered in 1967 at the age of 7 after 5 and a half years in almost complete isolation (Koluchova, 1991). The boys’ speech was limited to a few words and they communicated using gestures and imitation. They could barely walk and fine motor coordination and play were severely compromised. Their developmental level was considered to be similar to 3-year old children and they were given a very poor prognosis. The twins’ progress was followed over the next 22 years using observation and psychometric tests. The twins were placed with a sympathetic foster family where they showed “an immense acceleration in development” (Clarke and Clarke, 1976, p.30) and their speech developed rapidly. At age 11, their expressive language was “quite normal both in form and content (Koluchova, 1991, p.24). At 18, the boys’ IQs of 114 and 112 were within the range that would be considered typical for their age. 12 years later, aged 30, the twins had IQs above the national average, were married and had professional careers. The twins’ cases are considered by Koluchova (1991, p. 27) to have “already proved the possibility of recovery from psychic deprivation and its durability.”

Isabelle (Mason, 1942) was discovered at 6;6 after having been imprisoned since infancy in a darkened room with her mother who was unable to hear and speak (Clarke and Clarke, 1976, p.41). When rescued, Isabelle could not walk or talk but used non-verbal gestures and showed curiosity about her surroundings (Mason, 1942). Her performance on an unspecified psychological test was equivalent to that of a 3 year old. Isabelle was observed for 2 years and her language development recorded in diaries. According to Mason, Isabelle’s language acquisition at 6;6 proceeded like that of a 1-2 year old child, though at a more rapid rate. At 8, Isabelle had a vocabulary of around 2000 words and had also learned to speak in full sentences, ask questions, sing and tell stories. She was also reported to be of “normal intelligence” (Skuse, 1984b, p.557). Clarke and Clarke state:



“The case is sufficiently well documented to make it clear that one child showed substantial recovery to normality from a level of severe retardation. Moreover, deprivation of language experience during the normal period of development of this function did not prove to be critical” (1976, p.29).

Twins Alice and Beth (Douglas and Sutton, 1978) were discovered at 4;11. Their development was assessed using standardized tests until at least 6;4 when their level of language was nearly age appropriate on the Reynell Developmental Language Scale, while their verbal and performance IQs were within the normal range.

Louise (Skuse, 1984a) was discovered at 3;6 and her development was documented until 14;5, at which time a school report described her expressive and receptive language as age appropriate (Skuse, 1984b).

These cases report considerable, if not complete, recovery of language learning ability after experiencing global deprivation until 3;6 and beyond. As Skuse (1984b, p.557) contends, once the children’s environments improved for the better, language developed rapidly and they “reached virtually age-appropriate levels within a few years.”

However, these positive reports are counter-balanced by accounts of relatively poor post-deprivation outcomes for Anna (Davis, 1940, 1947), Genie (Curtiss, 1981, 1988a, 1988b) and Mary (Skuse, 1984a), none of whom exhibited the rapid developmental catch-up of the previous cases and whose linguistic progress was reported to be minimal at best, although this has been disputed in the case of Genie which deserves special attention.

### **1.2.2.2 The Genie case**

By far the most well known case involving a globally deprived child is that of Genie (Curtiss, 1977). The “Genie case” has been treated to numerous re-tellings in academic and popular literature and media to the point where a particular, and arguably flawed, interpretation of the case has become part of linguistic and psycholinguistic mythology.<sup>1</sup>

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<sup>1</sup> The movie *Mockingbird Don’t Sing* (2001, Dorian Films) is a lightly fictionalized account of the Genie case which ends with the on-screen announcement: “Katie’s [i.e., Genie’s] inability to master a language proved the legitimacy of the Critical Period Hypothesis”.

The basic background facts are familiar to anyone with any acquaintance with the topic of language acquisition. Genie was discovered in 1970 at the age of 13;7. She was extremely neglected from infancy to adolescence, permanently restrained and beaten by her father if she tried to speak. Having reached adolescence without any appreciable linguistic ability, Genie was considered ideal material for an investigation of language development after prolonged isolation and, more particularly, as a test case for Lenneberg's Critical Period Hypothesis (see below), although Lenneberg himself, consistent with his expressed views on the scientific intractability of "feral children" cases (1967, pp. 141-142), "declined to participate, saying no definite conclusions could be drawn because the level of trauma associated with Genie's confinement and her father's beatings would be impossible to discern" (*Genie (feral child)*, 2013).

The case was further muddled from the outset by suggestions that Genie showed signs of neurological impairment which may have affected her linguistic development. Nevertheless, it has been argued, that, quite categorical evaluations of her linguistic progress and potential have been made by the principal linguistic researcher in the case. A picture has been repeatedly painted of a girl who was intellectually agile but whose language development was restricted to short and random combinations of uninflected content words as a consequence of passing Lenneberg's critical period deadline. However, as Jones (1995) argues, this picture is misleading and quite inaccurate on many points of detail if the account of Genie's progress in Curtiss's original study of Genie (1977) is to be accepted.

Via a detailed and systematic comparison of the data and analysis presented in Curtiss (1977), which Jones refers to as "the (1977 account)", with the accounts given by Curtiss in later publications ("the post-(1977) account"), Jones argues that the progress in Genie's language development reported in the former is underplayed without explanation or appears to have been misrepresented in the latter. A few examples will serve to illustrate Jones's point.

The post-(1977) account has it that Genie was unable to learn grammar and, consequently, that her language was "syntactically primitive and undeveloped" (Curtiss, Fromkin and Krashen, 1978, p. 29) while her "lexical and propositional semantic abilities" were "good" and "nonlinguistic cognitive function" was "relatively normal" (Curtiss, 1988b in Jones, 1977, p. 274). Genie was, in other words, a striking confirmation of a

revised, “modularized” version of Lenneberg’s Critical Period Hypothesis with “dissociations” both within language and between language and non-linguistic cognition (see below). It is this post-(1977) interpretation of Genie’s linguistic development that has become the fundamental “fact” of the Genie case as presented in most scholarly accounts (see, for example, Foster-Cohen, 1999). However, the original (1977) account tells a different story – *with the same data*. While noting that “Genie’s language is far from normal” (1977: 204), Curtiss “paints a picture of unusual, but steady, uninterrupted, and unfinished development in both morphology and syntax in Genie’s speech” (Jones, 1995, p. 264) over the 4-5 years of her study. Curtiss carefully charts significant milestones in Genie’s growing linguistic competence, from 2-word utterances in July 1971 and 3-word utterances with “all basic constituents” in November 1971, to “internal negatives” at the end of 1974 and embedded sentences (“now definitely acquired”) in 1975 (Jones, 1995, pp. 264-265). While describing Genie’s speech as still “largely telegraphic” (Curtiss, 1977, p. 193) at the end of the study, Curtiss cautions against superficial judgements about Genie’s underlying linguistic competence:

“in contrast to normal children, Genie’s utterances continued to appear ‘telegraphic’, even long after exceptional utterances revealed that she had acquired much of the morphological machinery omitted from these ‘telegraphic’ strings” (1977, pp. 196-197).

The most glaring discrepancies between (1977) and post-(1977) accounts are in the area of syntax. The post-(1977) account has it that “much of the grammar remained unacquired” (Curtiss, 1988b, p. 98). To illustrate her claim, Curtiss cites 11 of Genie’s utterances (undated and without communicative context) which demonstrate, amongst other things, “the inconsistent and ungrammatical order of subject, verb object” and “the omission of obligatory constituents” (p. 98). The (1977) account, on the other hand, has it that:

“Genie’s utterances, like those of normal children acquiring English, follow strict word order: Modifier-Noun, Possessor-Possessed, Subject-Verb-Object, Preposition-Noun Phrase. There are exceptions to S-V-O order, but as with data on normal children ... such order reversals are rare” (Curtiss, 1977, p. 193).

Furthermore, the “obligatory constituents” allegedly “missing” from Genie’s utterances are confidently listed amongst Genie’s linguistic acquisitions in Curtiss (1977) (Jones, 1995, p. 276).

Contrary to the later assertions of the post-(1977) account, the (1977) account, therefore, appears to demonstrate that “Genie was able to acquire the morphology and syntax of English and was still in the process of acquiring it when she was 18 years old” (Jones, 1995, p. 278).

Jones finds a simple explanation for the interpretative about-face in the circumstances of Genie’s life as reported for the first time in Rymer (1993). Genie, whose linguistic development was still continuing at the time (Jones, 1995, pp. 264-265), was removed from the care of a family (the Riglers) in June 1975 and was placed in a series of temporary foster homes where she suffered ill-treatment:

“Genie’s reaction to the regime was to regress, seemingly intentionally, shedding by degrees the skills in comportment and communication that she had developed over the previous several years” (Rymer, 1993, p.155).

In other words, Genie’s failure to maintain her linguistic progress was, in part at least, a response to the traumatic events which she experienced from the summer of 1975, a vital context which is missing from the post-(1977) account. The Genie case, then, actually tells us nothing about what Genie might have been capable of in different circumstances.

After nearly 20 years since its publication, Jones (1995) remains the only independent review of the linguistic evidence in the Genie case, despite the unprecedented attention that the case has attracted and its theoretical importance.

### **1.2.3 Institutionalized deprivation**

#### **1.2.3.1 Childcare institutions**

Children are also known to have suffered social deprivation, to various degrees, within childcare institutions, as longitudinal studies by Spitz (1945, 1946), Goldfarb (1943, 1945, 1947, 1955), Goldfarb and Klopfer (1944), Skeels (1937, 1945, 1965, 1966), Skeels and Harms (1948) and Skodak and Skeels (1947, 1949) have shown. Goldfarb found that the effects of early institutionalization were both pervasive and long lasting, affecting motor ability, social relatedness, personality, non-verbal intellect and language:

“There is cumulative evidence that an extensive period of deprivation of babies in an infant institution is profoundly detrimental to their psychological growth. There is also evidence that the pernicious effects of the early experience persist even in the face of careful placement in selected foster homes” (Goldfarb, 1945, p.32).

However, an opposing view is offered by Skeels (1966) whose longitudinal observations suggest that some children raised in orphanages, whose circumstances change for the better, can enjoy a wholly positive development as adults. Skeels concluded that the negative effects of institutionalization could be overcome with a move to a stimulating home environment. The positive effects of intervention and remediation within an orphanage setting have also been noted by Flint (1978), Provence and Lipton (1962), Dennis (1973) Batchelor, (1999) and Singh (2001) and particularly emphasised by Clarke and Clarke (2000).

### **1.2.3.2 Internationally adopted children**

#### **The Romanian legacy**

In 1989, with the fall of the Romanian dictator Nicolai Ceaucescu, the world was exposed to Romania's previously hidden secrets. The most tragic of these was the appalling degradation that many thousands of children were found to have suffered in state-run child care institutions (Chapter 2). These children existed in unprecedented conditions of social deprivation and squalor in which few or no attempts were made to encourage their development on any level. Many of these children were subsequently internationally adopted and their progress monitored and assessed. The mass scale of international adoptions of Romanian orphans combined with the severity of deprivation to which they had been exposed provided “an invaluable ‘natural experiment’” (Rutter et al., 2010, pp. 5-6) in which the effects of extreme global deprivation on subsequent development could be studied.

Published work to date on the development of children adopted from Romanian orphanages includes a substantial body of research which, taken together, provides a comprehensive overview of the profound developmental, behavioural and medical consequences of extreme deprivation (e.g., Macvei, 1986; Ames and Carter, 1992; Johnson et al., 1992; McMullan and Fisher, 1992; Rosenberg, Pajer and Rancurello, 1992; Kaler and Freeman, 1994; Chisholm, 1998, 2000; Handleyderry et al., 1995; Morrison, Ames and Chisholm, 1995; Johnson, 2000; Carlson, 1997; Carlson and Felton, 2000; O'Connor et al., 2000; O'Connor and Rutter,

2000; Rutter, Kreppner and O'Connor, 2001; Croft et al., 2001; Chugani et al., 2001; Gunnar et al., 2001; Thompson, 2001; Groza and Ryan, 2002; Wilson, 2003; Merz and McCall, 2010; Rutter et al., 2010).

A substantial body of research on the development of Romanian orphans, indeed on internationally adopted children generally, has been built up by Michael Rutter and colleagues of the English and Romanian Adoptees (ERA) Study which began in the early 1990s (Rutter, et al., 2010). 144 “institution-reared” children and 21 children “from a very deprived background” up to the age of 42 months were selected from the 324 children who were adopted by UK-resident families between February 1990 and September 1992 (Rutter, Sonuga-Barke and Castle, 2010, p. 7). Children were assessed at the age of 4, then at 6, 11, and most recently at 15 (p.13). The study employed “systematic, standardized measurements of key behavioral patterns that seem to be specific to institutional deprivation” (pp. 1-2).

On adoption, the children presented an extremely poor picture: “Even the oldest children were, to all intents and purposes, nonverbal in the Romanian language at the time of U.K. entry” (p.15). Furthermore, *all* aspects of cognitive development seemed to be equally affected by this institutional deprivation (Beckett et al., 2010, pp.125-142). However, most children began to quickly make the most of their new surroundings. In terms of physical development: “By age 6 years, there had been virtually complete catch-up in the children’s weight and height as judged by U.K. population norms” (Rutter et al., 2010, p.13). There was also a “major catch-up in psychological functioning in the first few years after adoption” although “cognitive deficits and other sequelae were still evident in a substantial minority of the children at ages 4, 6, and 11” (p. 13).

A major finding was the existence of a significant difference in outcomes between children adopted before and after the age of 6 months (Rutter and Sonuga-Barke, 2010). As Kreppner et al. (2007, p. 942) note:

“it seems that apparently full recovery usually occurs when the deprivation did not persist beyond the age of 6 months. What was surprising was the marked stepwise increase in the rate of multiple impairments for children whose institutional deprivation lasted for the first 6 months and beyond”.

A number of possible explanations for this finding were considered, including “biological programming” and “neural damage” as a result of the experience of deprivation itself (“how the environment gets under the