

EDUCATIONAL ACHIEVEMENT AND COGNITIVE DEVELOPMENT IN INTERNATIONAL ADOPTEES

Monica Dalen

Department of Special Needs Education, University of Oslo, Norway
monica.dalen@isp.uio.no

Abstract

Introduction

Cognitive functions in international adoptees have been highlighted in several studies during the last fifteen years (van IJzendoorn et al., 2005). The studies have had focus on *intelligence* (Becket et al., 2006; Chisholm, 1998), *language development* (Dalen, 2001, 2005; Glennen & Masters, 2002; Hene, 1988; Rygvold, 1999), *school performance* (Dalen, 2001; Kvifte-Andresen, 1992) and *educational achievement in general* (Lindblad, Hjern, & Vinnerljung, 2003).

Pre-adoption factors influencing cognitive development

There are many factors (pre-, peri- and postnatal) influencing children's cognitive development (Gunnar & Kertes, 2005). The same factors can affect children's development in general but may be over represented in internationally adoptees. However, the information about the pre-adoption conditions in the children's countries of origin is very often lacking or uncertain. To some extent, it may be possible to estimate the likelihood of risk by knowing the child's country of origin and circumstances prior to adoption.

The variety of pre-adoption factors constitutes a general problem of heterogeneity for adoption research. One way to approach this issue would be to focus on two factors explicitly: *age at adoption* and *country of origin*. They may both serve as proxies of aggregations of factors influencing cognitive development (Dennis, 1973; Howe, 1997; Rutter, 2005).

Age of adoption. Age of adoption has not been documented to be a strong indicator for adopted children's overall development (Cederblad, Höök, Irhammer, & Merke, 1999; Dalen, 2001; Juffer & van IJzendoorn, 2005; Kvifte-Andresen, 1992; van IJzendoorn et al., 2005). However, studies on children adopted from Romania have shown that age of adoption does have some effect on the children's further cognitive development (Becket et al., 2006). Other studies have also documented that adopted children with long term pre-adoption adversity are susceptible to delays in their cognitive and psychological development (Juffer & van IJzendoorn, 2005; van IJzendoorn & Juffer, 2005).

Country of origin. Children adopted internationally are representing countries with a great variety in terms of quality of pre-adoption conditions, adoption procedures and selection of children for adoption. The history of adoptions in the donor countries has been very different, and even to day there exist a large heterogeneity when it comes to adoption specific conditions.

South Korea has a special position among delivering countries (Selman, 2000). When this kind of adoptions started, South Korea was destroyed by war and had a very low GNP per capita. Today it is a wealthy country with a high level of education and a high fertility rate. However, there still exist a stigmatizing of unmarried mothers because of the absence of a comprehensive welfare system. This makes it even today very difficult for a single mother to keep her child.

Interestingly, South Korea also has a special position from another perspective. Korean adoptees seem to display better language skills and school performances

than adoptees from other donor countries (Dalen, 2001; Frydman & Lynn, 1989; 1999; Kim, 1995; Kim & Staat, 2004; Kim, Shin, & Carey, 1999; Kvifte-Andresen, 1992; Lindblad et al., 2003; Verhulst et al., 1990, 1992).

Adoption as a positive change

Adoption means a positive change for most children. They move from deprived institutional or unfavourable biological family settings to mostly more positive environmental condition in the adoptive family (Bohman & Sigvardsson, 1980; Dennis, 1973; Hodges & Tizard, 1989; Rutter et al., 2001; van IJzendoorn, Juffer, & Poelhuis, 2005). Strong effects on cognitive development have especially been found when the adoption has brought about radical changes of environment (e.g. Becket, 2006; also see Duyme, 1990; Duyme, Dumaret, & Tonkiewicz, 1999 for an example from national adoptions).

Educational achievement

Quite a few studies have shown that Internationally adoptees as a group are lagging behind in educational achievement (Dalen, 1995, 2001; Hoksbergen, Juffer, & Waardenburg, 1987; van IJzendoorn, Juffer, & Poelhuis, 2005; Verhulst et al., 1990, 1992). Furthermore, they have an increased risk of developing *learning problems* often related to language disorders and some kind of hyperactive behavior (Dalen, 2001; Kvifte-Andresen, 1992; Verhulst et al., 1990, 1992; van IJzendoorn et al., 2005). A higher percentage of international adoptees have also been given special needs education (Dalen, 2005; McGuinness et al., 2000; Van IJzendoorn et al., 2005).

Change of language. A potential risk factor for cognitive delays is the change of language inherent in most international adoptions (Dalen, 2001; Hene, 1988). The majority of the adoptees make rapid progress in acquiring their new language but one third of them do develop some language problems (Dalen, 2001; Glennen & Masters, 2002; Judge, 2004; Roberts et al., 2005; Rygvold, 1999; van IJzendoorn et al., 2005). Researchers have found a discrepancy between the children's mastery of day-to-day language and academic language. Studies show no significant differences between adopted and non-adopted children in day-to-day language (Dalen, 1995, 2001; Dalen & Rygvold, 1999). However, the adopted children scored lower on academic language, which theoretically puts them at risk for later literacy disorders.

Hyperactive behavior (ADHD). Hyperactivity is a common symptom among international adoptees (Dalen, 2001; Hoksbergen, ter Laak, van Dijkum, Rijk, & Stoutjesdijk, 2003; Kvifte-Andresen, 1992; Roy, Rutter, & Pickles, 1999; Verhulst et al., 1990, 1992). This kind of behaviour is often associated with neuropsychological disturbances like Attention Deficit Hyperactivity Disorders (ADHD) a diagnosis that more often is used among adoptees compared to non-adoptees (McGuinness, & Pallansch, 2000; McGuinness, McGuinness, & Dyer, 2000). Hyperactive behaviour and other symptoms related to children's executive functions put the adoptees at risk for developing learning difficulties (Baddeley, 2003; Gindis, 2005).

Parental expectations. Studies have documented that adoptive parents are more educated than other parental groups (Dalen, 2001, 2005; Hjern et al., 2002; Juffer & van IJzendoorn, 2005; Lindblad et al., 2003; Verhulst et al., 1990, 1992). However, in most studies parental education only seem to have marginal or modest effects on cognitive outcomes compared to the influence it plays for non-adoptees (van IJzendoorn et al. 2005).

Conclusion

Negative pre-adoption conditions may have persistent influence on cognitive development in international adoptees. However, the differences in cognitive functioning among adoptees may reflect the conditions in the country of origin more than ethnic differences. From a cognitive perspective – the prognosis may be quite good regardless of age of adoption if the quality of care before adoption has been “good enough” and the adoption selection procedure does not reflect an overrepresentation of environmental and/or genetic risk factors.

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