

## **RECOVERY AFTER INICIAL ADVERSITY. A STUDY OF INTERNATIONAL ADOPTEES IN SPAIN.**

**Jesús Palacios.**  
**Universidad de Sevilla**  
**jp@us.es**

### **Abstract**

In a sample of 289 children adopted in Spain and arriving from China, Colombia, the Russian Federation, Guatemala, India and Romania, physical and psychological development were studied on arrival and a few years later (average, 3 years). Physical and psychological development on arrival was assessed using parents as retrospective informants. Physical growth was assessed by height, weight and head circumference. Many parents had no records of head circumference on arrival and our information and conclusions on this aspect are more limited. Initial psychological development was assessed with Battelle scales. Current physical and psychological development was assessed by researchers. For physical growth, height, weight and head circumference were assessed. For psychological development, those younger than 6 years of age were assessed with Battelle scales and those older than 6 were assessed with WISC-r. Following World Health Organization (WHO) recommendations, severe delay was defined as  $-2$  z scores or less.

Mean age on arrival was 34.9 months. Children from Guatemala and China were the youngest on arrival (average around 18 months) and children from India and the Russian Federation were the oldest on arrival (average, around 4 years). Children from Romania and Colombia were in the middle (average, around 3 years).

The incidence of severe delays at the moment of adoption was very high: 37,2% was severely delayed in height, 32,4% in weight, 37,7% in head circumference and 43,5% in psychological development. Most of the considered variables (age on arrival, gender, country of origin...) were not related to physical growth. There was a significant negative relation between height and history of abuse and neglect, and a significant positive relation between head circumference and time spent with the biological mother (more time with the mother, less delay). As for psychological development, gender (boys more frequently delayed than girls), age on arrival, duration of institutional life and experiences of abuse and neglect were significantly related to severe delay (more frequent in children older on arrival, with a more prolonged institutional life and with early experience of abuse and neglect).

Those who were severely delayed on arrival in their psychological development were likely to have also arrived with severe delay in their physical growth. On the contrary, those who arrived with severe physical delay were not more likely to show severe psychological delay on arrival. In other words, those who arrived with severe psychological delay were likely to show an overall picture of delay, which was not the case for those who arrived with severe delay in growth.

Three years after adoption (average), the catch up of children with initial severe delays was remarkable. In height, for instance, median z score on arrival was  $-3.49$ , whereas current z score is  $-0.72$ . Recovery has been more striking in those who were more delayed on arrival. Those who arrived with no severe delay in height have improved 0.53 standard deviations, while those who arrived with severe delay have improved 2.77 standard deviations. The situation is not different in psychological development: those who arrived with severe delay have improved 7.28 months, whereas the others have only improved 0.91 months. After an average of three years with their adoptive families, differences between those who arrived with and without severe delay are no longer significant in weight and

height, but are still significant in head circumference and psychological development.

There were 27 children with a pattern of overall delay on arrival (severe delay in both physical growth and psychological development). Of these, after some years with their adoptive families 29% show no delay in any aspect; 15% are still severely delayed in height and 20% are still severely delayed in psychological development. The remaining group shows moderate delays (between -1 and -2 standard deviations) in one or more than one areas.

An index of recovery by amount of time with the adoptive family was created for each of the areas under study. In all areas considered, the greatest improvements happened within the first two years with the adoptive family. After the third year, improvements were small and, in some areas, negligible.

There seems to be a clear asynchrony in the pattern of recovery for the different areas here analyzed. So, recovery in weight happens first, then recovery in height comes, then in psychological development (lack of initial information on head circumference prevents forming precise conclusions here). Recovery in weight is complete before the second year with the adoptive family, recovery in height is complete after the second year with the adoptive family and recovery in psychological development here studied is not complete after 3-4 years in the adoptive family, with no significant gains to be expected thereafter.

In summary, in a group of 289 children internationally adopted in Spain, significant delays were observed on arrival in both physical growth and psychological development: between 32% and 44%, depending on the specific area, arrived with scores equal or below -2 standard deviations, which, according the WHO recommendations, is considered to be the threshold for severe delay. After some years with their adoptive families, all children have experienced significant improvements. Those who arrived with severe delay have gained more than those who did not. Recovery seems to happen more rapidly in some areas (e.g., weight) than in others (e.g., psychological development). Most of the recovery seems to take place in the first two years with the adoptive family, with no significant changes after the third year. Obviously, these conclusions refer to this sample and to the areas here studied. According to what is known from other studies, it is likely that recovery in emotional and social development continues beyond the first three-four years in the adoptive family.