

## ABSTRACT

**Background:** The Neonatal Behavioral Assessment Scale (NBAS, Brazelton & Nugent, 1995) is an instrument conceived to observe the neonatal neurobehavior. Data analysis is usually performed by organizing items into groups. The most widely used data reduction for the NBAS was developed by Lester, Als, and Brazelton (1982).

**Objective:** Examine the psychometric properties of the NBAS items in a sample of 213 Portuguese infants.

**Method:** The NBAS was performed in the first week of infant life (3 days $\pm$ 2) and in the seventh week of life (52 days $\pm$ 5).

**Results:** Principal component analyses yielded a solution of four components explaining 55.13% of total variance. Construct validity was supported by better neurobehavioral performance of 7-week-old infants compared with 1-week-old infants.

**Conclusion:** Changes in the NBAS structure for the Portuguese sample are suggested compared to Lester factors in order to reach better internal consistency of the scale.