Following natural disasters, accidents, and shocking incidents, some children experience mental disorder. A respiration control method that relaxes the body and mind may efficiently prevent and improve mental disorder. Therefore, we developed a stuffed toy using two airbags to measure the respiration wave and lead a child's respiration using the up-and-down movement of the toy's abdomen to help them relax. After evaluating that children's respiration could be measured and guided by the stuffed toy, we then performed an experiment of relaxation effect. Participants in the experiment consisted of 9 healthy girls aged 8-10 years old. We measured the difference of heart rate variation between "Hug condition" (just hugging the stuffed toy) and "Respiration-Leading (RL) condition". The results showed that RL condition made children's heart rate variation lower than Hug condition. This means that the relaxation effect of respiration-leading by the stuffed toy is larger than just hugging it.