Back pain concerns 30 to 50% of children and can appear as soon as primary school, mainly due to poor sitting position\(^1\). In addition, it seems that posture has an effect on school achievement\(^2\).

This study aimed to evaluate the influence of school furniture and postural education on schoolchildren’s sitting position, back complaints and attention in classroom.

18 children aged 6-7 years took part to this study. 9 of them constituted the experimental group (EG) and the 9 others (representative of the EG) a control group (CG).

This 2-school-year-follow-up study included 5 phases of evaluation:
- **E1**: Evaluation on old furniture unfitted to the children’s size;
- **E2**: Evaluation on new furniture fitted to the children’s size;
- **E3**: Evaluation on new furniture with a triangular cushion after a 2 months period of postural education;
- **E4**: Evaluation on new furniture of the long term effect of the cushion and postural education;
- **E5**: Evaluation on new furniture with the tringular cushion and a tilted desk after a second 2 months period of postural education.

The sitting position (SP) was assessed every 30 seconds during 30 minutes with a specific form.

An oral questionnaire about spinal pains were submitted to children at the beginning and the end of each school-year (Q1-Q4).

Adapted tasks of the Nepsy\(^3\) permitted to assess different children’s attention capacities as visual selective attention, listening attention and continued attention.

The intervention tends to decrease low back pain complaints. Attention level tends to improve more in the EG than in the CG, especially after both postural education periods.

Compared with the CG and except from E3 to E4, the children’s of the EG significantly improved their SP at each step of the study (p<0.02).

The children’s sitting position was improved using appropriate furniture and specific tools (triangular cushion and tilted desk) combined with a postural education intervention. This approach also tends to reduce back complaints and to improve attention. Further studies are needed to determine if this kind of programs is efficient to reduce the risk of LBP in adulthood and to really improve school achievement.

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\(^1\)Burton et al. 2004; \(^2\)Bourgeois et al. 2009; \(^3\)Korkman et al. 2003.