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Writing with a brush facilitates body balance control about twenty percent more than to writing with a pen.

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Introduction: There are two hand writing methods in the Japanese culture, writing with a brush and with a pen. We can use these hand writing methods for therapeutic activities as well as for every day activities.

Objectives: We studied the therapeutic effect of writing with a brush on sitting balance as compared writing with a pen. The purpose of this research was also to find out how much sitting balance was necessary for writing Japanese characters.

Method: Five healthy adults were asked to trace the Japanese character for "Spring" by using the traditional brush writing method and pen writing method. During the writings, the fluctuations of the center of gravity (FCG) were measured by a gravicorder. The fluctuation of gravity areas were analyzed by a one way analysis of variance, and the contribution rates of the factors were calculated.

Result: The FCGs during the brush writings were significantly larger than during the pen writings. The contribution rate of the writing methods showed about a 20% difference.

Conclusion: These two hand writing methods require different levels of sitting balance control. Brush writing facilitates body balance control more than the pen writings.

Contribution to the practice/evidence base of occupational therapy: This research showed numerically that the activity demands balance control. Traditional brush writing methods will require more than 20% control of balance than the pen writing method, and the brush writing method may be a good therapeutic activity for the improvement of writing ability in hemiplegic clients.