INTRODUCTION

Children in Germany show more and more frequently developmental disorders and/or -delays with negative effects on social activities, self-esteem as well as personal development. To prevent these and other negative effects, specific support is sensible. In this context a comparison between different interventions, combining aspects of music- and exercise therapy, is of particular interest. Especially the combination of drumming and exercise seems to be promising as mankind’s natural response to drumming has been drumming since the Late Neolithic. In the course of human history drumming has become extremely important in all human cultures (FISS, 2003). Hence a high compliance of the children is expected.

This study examined the effects of a DRUMS ALIVE® Intervention, which combines exercises with aspects of music therapy and is performed with drumming in children with developmental deficits (behaviour, motor skills, speech) compared to a control group of equal age.

THEORETICAL BACKGROUND

Brodmann-Areas

Limbic System:
- Emotions
- Smelling
- Autobiographic memory

Gooseflesh experience caused by music

Gooseflesh in order to listening to music is caused by the activation of the reward centre of the limbic system and causes similar activations as induced by Sex or Cocain.

METHODS

The aim of the presented study was to examine the effect of a DRUMS ALIVE® Intervention – a combination of Drumming on big gymnastic balls and exercise – on motor skills and behaviour in kindergarteners with developmental disorders in the area of motor function, concentration and impulse control. 49.6 ± 7 years, IG in comparison to children of normal development (n=10: 4.1±6.1 years, CG). The intervention was carried out twice a week over a duration of four weeks.

PROBANDEN

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<thead>
<tr>
<th>Institution</th>
<th>Age/ years &amp; n</th>
<th>Profile</th>
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<tbody>
<tr>
<td>Kindergarten</td>
<td>4-6.7 n = 10</td>
<td>2 Integrative child development: motor deficits in the field of motor function, concentration and impulse control</td>
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<tr>
<td>Elementary school</td>
<td>4-6.7 n = 10</td>
<td>With the above-named Handycaps</td>
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<tr>
<td>Kindergarten</td>
<td>4-6.1 n = 10</td>
<td>Kontrollgruppe</td>
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TESTPROFILE

Test & Post

Anthropometry

Documentation of behaviour

Intervention

The Alives (5 classes) were carried out twice a week (45-60 minutes) over a duration of four weeks, integrated in everyday school and kindergarten. This therapy differed of drumming and exercise patterns to age-appropriate music have been combined.

CONCLUSIONS

All children showed partly significant improvements in all subareas of motor function. Statements of the children and the also the monitoring of behaviour (compliance with rules, increased concentration and awareness as well as creativity) show the complex potential of DRUMS ALIVE®. Children can be reached on an emotional level and develop high enjoyment of learning. Therefore the support of the children to be achieved could possibly be more effective than by other measures/interventions. Based on the presented study a conclusive comparative assessment to different exercise-therapy interventions is not yet possible. However, the potential of a age-specific DRUMS ALIVE® Intervention should be further investigated.

REFERENCES

Blood and Zatorre: Intensively pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion, PNAS, 2001


Effects of a Drums Alive® Intervention in Children with Developmental Delays

Wright, P.R.1, Liebich, M.2, Langenkamp, H.3, Ekins, C.4, Schulz, H.1

1Chemnitz University of Technology, Sports Medicine; 2Kath. Kindergarten St. Theresien, Bochum; 3 Ruhr-Universität Bochum, Sport Psychology