Shake it up baby!
Trauma and Tension Releasing Exercises (TRE®) as a new promising offering in promoting occupational health

GfA Frühjahrskonferenz Karlsruhe
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Trauma (and Tension) Releasing Exercises

- 7 exercises to evoke the natural trembling for releasing stress reactions after overwhelming life events
- Developed by David Berceli
- As a social worker in countries dealing with all kinds of crises (civil war in Lebanon, Afghanistan, Iraq ...)
- Validated with other samples, including veterans, refugees in camps, victims of earthquake in China or tsunami in Japan, ...
Content

1. Study design
2. Method
3. Samples
   - data of the pre study
   - comparison pre – post
4. Looking back and forward
1. Study design

- Online-questionnaire sent to all TRE-providers and all people interested in TRE communicating with NIBA eV Norddeutsches Institut für bioenergetische Analyse
  1. Pre-questionnaire between February - April 2014
  2. Post-questionnaire between October - December 2014

- Measurement
  - Questionnaire, developed by the IAB Institut für Arbeitsmarkt- und Berufsforschung in the 1990-ies to measure the change in work life while Western economies transform from production to service-centered industries
  - now the studies are done in Germany every five years by BIBB Bundesinstitut für Berufsbildung and BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, coordinated within 27 countries in Europe

- Results
  - Comparison of the whole pre sample of 173 participants to the post sample of n=78
  - Individual comparisons done, pre-post measurement of 70 participants
2. Sample

- Online questionnaire
  - Pre measurement
    526 individuals opened the questionnaire,
    273 answered at least one question, 173 data sets could be used for analysis
    (the questions on work conditions were answered only by about 100 participants working for an organization;
    self-employed participants felt the questions not relevant for their work situation),
    about 130 individuals were willing to participate in the post measurement
  - Post-measurement:
    - 155 individuals opened the questionnaire,
      87 had answered at least one question,
      78 data sets could be used for further analysis
  - 70 complete pre-post-data sets

- 80 % female, 20 % male

- Average age 48.5 years
  - Compared to the representative BIBB/BAuA sample individuals under 30 years are underrepresented,
  - Age group between 45-54 overrepresented

- Work situation
  - 25 % of the participants have a college or university degree (overrepresented compared to the BIBB data)
  - 40 % of the participants were self-employed or own a company (BIBB/BAuA 11 %)
  - 17 % pensioners (n = 42, only 7 above 65 years)
Let us shake it, Baby

### 3. Work satisfaction

<table>
<thead>
<tr>
<th></th>
<th>TRE pre, n=173</th>
<th>BIBB / BAuA (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work time</td>
<td>86 %</td>
<td>80 %</td>
</tr>
<tr>
<td>Job content</td>
<td>83 %</td>
<td>93 %</td>
</tr>
<tr>
<td>Working atmosphere</td>
<td>82 %</td>
<td>87 %</td>
</tr>
<tr>
<td>Environment</td>
<td>80 %</td>
<td>83 %</td>
</tr>
<tr>
<td>Supervisor</td>
<td>77 %</td>
<td>84 %</td>
</tr>
<tr>
<td>Training &amp; development</td>
<td>77 %</td>
<td>76 %</td>
</tr>
<tr>
<td>Work load</td>
<td>72 %</td>
<td>93 %</td>
</tr>
<tr>
<td>Use of capabilities</td>
<td>71 %</td>
<td>89 %</td>
</tr>
<tr>
<td>Income</td>
<td>66 %</td>
<td>72 %</td>
</tr>
<tr>
<td>Chance of being promoted</td>
<td>61 %</td>
<td>60 %</td>
</tr>
</tbody>
</table>
4. Stress caused by working conditions

- Work load (too much work to be done, high responsibility, ...) 33 vs. 33 % BIBB
- Work organisation (interruptions, difficulties in cooperation) 30 vs. 25 %
- HR management (lack of appreciation or necessary information, ...) 23 vs. 18 %
- Physical strain (repetitive operations, forced postures) 21 vs. 15%
- Work time (shift work, long shifts, over time ...) 13 vs. 18 %

- Good economic situation of the company 72 vs. 86 %
- Risk of becoming unemployed 14 vs. 7 %
5. Health complaints in the pre measurement in February 2014 (n=173)

- Prevalence of health complaints 44 % => more than 10 symptoms per participant, BIBB/BAuA representative sample => prevalence 17 % or about 4 symptoms

- Particularly high prevalence of stomach problems or digestion, sleep disorders, exhaustion, heart complaints, chronic fatigue, depression, respiratory distress

- 85 participants or 51 % of the sample report severe pain, 20 % of the sample feel seriously handicapped by their pain

- About 20 % report a pattern of sick leave which indicate a high risk of further sick leave or disability (3 or more sick spells or more than 15 sick days per year)

- Good health is reported by 76 % of our TRE sample vs. 86 % of the representative BIBB/BAuA sample
Comparison of the TRE-Sample to the representative BIBB-BAuA-Sample
# Effects of TRE (n=70)

<table>
<thead>
<tr>
<th></th>
<th>Amount of health complaints/participant</th>
<th>Amount of medical treatments</th>
<th>Pain score (1=not at all, 6=very severe)</th>
<th>Handicapped by pain (1=not at all, 6=very severe)</th>
<th>General health (6 point scale, 1=poor, 6=excellent)</th>
<th>Positive mood (almost always – hardly ever)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre</strong></td>
<td>10.39</td>
<td>3.84</td>
<td>3.47</td>
<td>2.49</td>
<td>2.79</td>
<td>2.87</td>
</tr>
<tr>
<td><strong>Post</strong></td>
<td>8.7</td>
<td>2.49</td>
<td>2.93</td>
<td>2.11</td>
<td>2.91</td>
<td>3.01</td>
</tr>
</tbody>
</table>
Comparison TRE samples pre – post (all vs. n=70)

- TRE, pre 2014 (n=173)
- TRE, post (n=78)
- TRE, pre 2014 (n=70)
- TRE, post (n=70)
Difference in number of health complaints pre – post (n=70)
## Effects of TRE

<table>
<thead>
<tr>
<th></th>
<th>Pre (n=173)</th>
<th>Post (n=78)</th>
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</thead>
<tbody>
<tr>
<td>Positive Mood</td>
<td>2.8</td>
<td>3.1</td>
</tr>
<tr>
<td>(5 point scale, hardly ever – always)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Health</td>
<td>76 %</td>
<td>85 %</td>
</tr>
<tr>
<td>(5 point scale excellent – poor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong pain</td>
<td>51 %</td>
<td>39 %</td>
</tr>
<tr>
<td>(6 point scale, no pain – very severe pain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being handicapped by pain</td>
<td>33 %</td>
<td>11 %</td>
</tr>
<tr>
<td>(6 point scale, not at all - very severe)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Qualitative effects of TRE at post measurement (n=78)

- Better perception of the own body (n=63)
  - 21 unspecific reports,
  - 42 specific changes, f.ex. feel more relaxed, more active, more optimistic

- Mental changes (n=36)
  - More clear in thinking and feeling, more self-efficient
  - Feeling more appreciated, more fun at work

- Positive changes in social relationships (n=10)

- Less negative feelings (n=12)
  - stronger, calmer, less anxiety

- Less specific health complaints like pain, tinnitus, prickling (n=5)

- Less medical treatments (physiotherapy, anti-depressants), less eating, less alcohol, less coffee (n=5)
Comparison of strength of pain pre – post (n=70)

Let us shake it, Baby

Number of Participants

- no pain
- very mild
- mild
- moderate
- severe
- very severe

pre
post
6. Conclusions on TRE in health promotion at the work place

- Very promising, but it should be embedded in a health promotion programm
  - Reduces prevalence of health complaints, increases quality of life
  - Reduces medical treatments
  - Improved self-efficacy, more confidence in own capabilities, more optimistic

- Focusing on positive body sensations + curiosity what kind of body sensations further trembling can evoke

- Low-shreshold service, economic, feasible almost everywhere
  - Easy to learn
  - Via internet or apps available
  - attracts high risk populations who don’t respond to „normal“ health promotion measures

- Further research is needed, especially to explain the difference of quite small quantitative effects and euphoric qualitative responses
HR Risk Management

Thank you for your attention