Virtual Reality Training for Professionals to Support Prevention of Patient Aggression Incidents in the Workplace: Preliminary Results in Mental Healthcare Employees

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BACKGROUND

- Aggression incidents are a major problem in healthcare settings, and may cause long-lasting mental health problems in involved employees.
- Current training methods often lack investigation on acceptability and validity.

**Aim:** Investigate the acceptability of a Virtual Reality de-escalation training and its potential impact on confidence in coping with aggression in healthcare employees.

INTERVENTION

- Interactive role-play in VR with soft- and hardware from CleVR.
- Behaviour (speech and movement) of avatar controlled by trainer or actor.
- Two role-plays with reflection moment in between.

RESULTS

- **Aggression incidents**
  - The prevalence of aggression incidents was related to PTSD symptoms $r = .45$, $p = .01$, and confidence in coping with patient aggression $r = .57$, $p < .01$.

- **Satisfaction, learning effects, awareness**
  - I am generally satisfied with the VR role-play
  - I will use what I have learned in my job
  - I am more aware of my own reaction on patients

- **Confidence in coping with aggression**
  - Confidence in coping with patient aggression increased directly after the VR role-play (T3), $t(30) = -3.19$, $p < .01$.
  - Professionals who were less often confronted with aggression, experienced a greater increase in confidence after the VR role-play (T3), $r = -.42$, $p = .018$.
  - One month after the VR training (T4) confidence in coping with patient aggression slightly decreased, but remained above baseline level.

PARTICIPANTS

- 31 mental healthcare professionals
- 74% female, mean age: 39 (SD = 11)

<table>
<thead>
<tr>
<th>Job title</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>12 (38.7)</td>
</tr>
<tr>
<td>Psychologist</td>
<td>4 (12.9)</td>
</tr>
<tr>
<td>Social worker</td>
<td>3 (9.7)</td>
</tr>
<tr>
<td>Forensic psychiatric worker</td>
<td>3 (9.7)</td>
</tr>
<tr>
<td>Activity worker</td>
<td>2 (6.5)</td>
</tr>
<tr>
<td>Other</td>
<td>7 (22.5)</td>
</tr>
</tbody>
</table>

- On average participants experienced 9 (±3) types of aggression in the past 12 months. Verbal aggression was most common, sexual harassment and physical aggression were also reported.

DISCUSSION

- Limitations: Lack of control group
- Future directives: Addition of physiological outcome measures, a randomized controlled design, and longitudinal studies into preventive effects of de-escalation VR training on prevalence of aggression incidents.

- Conclusion: The interactive VR role-play is an acceptable training method. Especially mental healthcare employees with less experience with aggression incidents in the workplace could benefit from VR training, through an increase in confidence in coping with patient aggression.

REFERENCES

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