Immediate effects of therapeutic group drumming on affective states in inpatient substance abusers

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Background

The growing rate of substance abuse in America has cost the nation over $36 billion dollars (NIDA, 2014). 40-60% of individuals that complete substance abuse treatment programs return to active use within a year (McLeIlain, Lewis, O’Brien, & Kleber, 2000). Additionally, it is common for substance abusers to prematurely leave treatment programs against medical advice (Palmer, Murphy, Piselli, & Ball, 2009). Traditionally, substance abuse treatment centers operate from a multi-dimensional treatment approach and include group therapy, individual therapy, and medications (NIDA, 2014). Incorporating a variety of treatment modalities into a program helps reduce the rate of client drop out. Alternative treatments such as expressive arts (i.e. music and art therapy) are becoming a popular addition to substance abuse treatment programs. Winkelman (2003) identifies multiple therapeutic qualities of group drumming for substance abusers including; psychological dynamics, inducing relaxation response, self-awareness and insight, emotional healing, spiritual needs for contact with a higher power, as well as increasing social interest for contentedness, community building and interpersonal support.

Hypotheses

The purpose of this pilot study was to examine the general affect of inpatient substance abusers after drum therapy session. Specifically, we are interested in whether a group drum therapy session changes the mood of individuals above that of just a traditional group therapy session. We predicted that individuals who partake in the drum therapy session should show positive increases in mood (as indicated by the quick mood scale) immediately following the session. Ultimately, this technique could be used to help encourage inpatient substance abusers to continue and complete treatment.

Methods

Inpatient substance abusers (N=15, M age = 21.29 (3.27) were randomly assigned into two groups. The experimental group (N=8) consisted of individuals who participated in a 45-minute drum session followed by a 45 minute traditional group therapy session. A control group (N=7) only participated in the traditional group therapy session. To assess change in mood, Individuals were administered the Quick Mood Scale before and after the sessions. This scale examines several attributes of positive (e.g., relaxed, friendy, cheerful) and negative (e.g., depressed, anxious, confused) mood.

Table 1

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Experimental</th>
<th>Control</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide awake</td>
<td>4.14 ± 0.90</td>
<td>3.38 ± 1.06</td>
<td>-1.50</td>
<td>13</td>
</tr>
<tr>
<td>Relaxed</td>
<td>3.60 ± 0.90</td>
<td>2.75 ± 1.39</td>
<td>-1.80*</td>
<td>13</td>
</tr>
<tr>
<td>Depressed</td>
<td>2.29 ± 1.60</td>
<td>1.63 ± 0.52</td>
<td>-1.11</td>
<td>13</td>
</tr>
<tr>
<td>Friendly</td>
<td>3.57 ± 0.79</td>
<td>3.00 ± 1.41</td>
<td>-0.95</td>
<td>13</td>
</tr>
<tr>
<td>Anxious</td>
<td>2.86 ± 1.35</td>
<td>2.00 ± 1.31</td>
<td>-1.25</td>
<td>13</td>
</tr>
<tr>
<td>Clumsy</td>
<td>2.00 ± 1.53</td>
<td>1.38 ± 0.52</td>
<td>-1.09</td>
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<tr>
<td>Cheerful</td>
<td>3.86 ± 0.70</td>
<td>2.63 ± 1.41</td>
<td>-2.10*</td>
<td>13</td>
</tr>
<tr>
<td>Drowsy</td>
<td>2.43 ± 1.61</td>
<td>1.75 ± 0.86</td>
<td>-1.03</td>
<td>13</td>
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<tr>
<td>Aggressive</td>
<td>2.43 ± 1.81</td>
<td>1.50 ± 1.41</td>
<td>-1.14</td>
<td>13</td>
</tr>
<tr>
<td>Clear headed</td>
<td>3.57 ± 0.68</td>
<td>3.13 ± 1.25</td>
<td>-0.97</td>
<td>13</td>
</tr>
<tr>
<td>Well-coordinated</td>
<td>3.29 ± 1.25</td>
<td>3.25 ± 1.16</td>
<td>-0.06</td>
<td>13</td>
</tr>
<tr>
<td>Confused</td>
<td>2.98 ± 1.24</td>
<td>1.25 ± 0.46</td>
<td>0.12</td>
<td>13</td>
</tr>
</tbody>
</table>

* p < .05

Conclusions

An independent samples t-test was used to examine the mood of individuals after the traditional therapy session in both groups. Results suggest that the drum therapy session does not enhance the mood of individuals, however, we do see trends that suggest that drum therapy can increase positive mood attributes (e.g., feeling cheerful and relaxed). Overall, results are mixed, as some individuals show increases in negative affect, although these effects are not trending towards significance.