Group drumming and well-being: A promising self-care strategy for social workers

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RESEARCH ARTICLE

Group drumming and well-being: A promising self-care strategy for social workers

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Background: The purpose of this pilot study was to examine the influence of recreational drumming among social workers on measures of well-being, empowerment and connectedness. Methods: A pretest–posttest design was used to evaluate outcomes among a sample of 73 social workers who participated in the two-hour “I–We Rhythm” program for recreational drumming. Results: Results of paired t-tests analyses revealed significant differences in levels of stress, energy and feelings of empowerment and community between pre- and posttest measures. Medium effect sizes were seen for all results. As such, the results of this pilot study are promising but should be viewed with caution. Conclusions: Recreational drumming is a promising group-oriented self-care strategy among social workers, who often hold high-stress occupations.

Keywords: recreational drumming; creative arts; social work practice; stress reduction techniques; self-care strategies

Background

The National Association of Social Workers Code of Ethics (NASW, 1999) asserts that the primary mission of the social work profession is to enhance “human well-being” and increase “empowerment” among individuals, families, groups and communities. Group work has traditionally been a common vehicle used by social workers to help achieve this mission (Lee, 2001; Toseland, Rivas, & Furman, 2008). Effective social work advocacy also necessitates that social workers work collaboratively with professionals from other disciplines to help facilitate well-being and empowerment among individuals and groups (Lee, 2001; Toseland, Rivas, & Furman, 2008).

The use of music has been shown to have positive intrapersonal and interpersonal outcomes among its participants. In particular, studies on the use of music as an intervention have shown increased well-being, empowerment, group cohesiveness and feelings of calmness and connectedness among diverse client populations (Bungay, 2010; Clift, 2010; Clift et al., 2010; Von Lob, Camic, & Clift, 2010). Diverse populations helped by music therapy include community members in good health (Bittman et al., 2001; Bungay, 2010; Clift et al., 2010; Olson, 2005), victims of trauma (Allen, 2001), individuals with terminal illnesses (Burns, 2001; Waldon, 2001), children including those...
with developmental delays (Aldridge, Gustoff, & Neugebauer, 1995), at-risk adolescents (Keen, 2004; McFerran-Skewes, 2004), and individuals with mental health problems, including older adults (Hanser & Thompson, 1994; Lefevre, 2004).

Recreational music-making, especially group drumming, is a creative arts intervention strategy that is consistent with social work’s mission. Much like the social work mission, the purpose of recreational drumming is to empower individuals through the group experience and enhance well-being by reducing feelings of stress and tension in the individual; it allows the individual to use recreational drumming as a means to cope with issues that he or she may be experiencing. Recreational drumming utilizes a group work modality, as participants who take part in recreational drumming sit in a drum circle (Stone, 2005). Within the circle, the primary method of communication in group work is spoken language; in recreational drumming where spoken language is represented, this takes the form of singing or chanting (Clift et al., 2010). Other forms of nonverbal communication are utilized in recreational drumming as individuals play percussion instruments (e.g. hand drums, tambourines, woodblocks and shakers). What is probably most useful about the approach is that it places the intervention in the hands of the players, as opposed to the use of music as therapy in which a trained expert is often required to administer the intervention (American Music Therapy Association, 1999). During the recreational drumming session, the group is led by a facilitator; this individual co-creates an environment with each and all of the participants. In recreational drumming, making music through singing or percussion instruments is part of the therapeutic experience; it provides an opportunity for each participant to express him-/herself in a unique way while allowing for active involvement in the group by each participant (Bungay, 2010). The drum circle connects the individuals as they make music together; it represents a shared collective and individualized experience for all (Clift, 2010).

The positive impact of music also has been documented among individuals in high-stress positions, such as health-care professionals and medical students (e.g. Bittman et al., 2004). Research on group drumming has been shown to have positive outcomes, such as improving mood states and decreasing stress and job-related burnout among long-term health-care professionals and nursing students (Bittman et al., 2003, 2004, 2005; Bungay, 2010; Clift, 2010). However, little is known about the relationship recreational music-making and well-being among social workers and social work students, who also often work in high-stress positions. In light of studies that document job-related stress, job turnover (Barak, Nissly, & Levin, 2001), burnout (Jayaratne & Chess, 1984), secondary trauma (Bride, 2007; Dane, 2000; Nelson-Garedell & Harris, 2003) and mental health issues (Gold, 1998; Von Lob, Camic, & Clift, 2010) among social workers, pursuing evidenced-based, self-care strategies including group drumming warrants further investigation.

Hands-on experiential group exercises, such as recreational drumming, offers social workers group-oriented stress management techniques that may reduce stress or burnout. For social work students, who are in the nascent stages of their careers, drumming provides another therapeutic tool or technique that they can utilize in their practice.

Purpose of Study

The purpose of this pilot study was to examine the association between recreational drumming and well-being, including feeling tense/relaxed, stress/calm, energized, empowered and connected. The following hypotheses were tested: Participants who participate in the I–We Rhythm program for recreational drumming will report lower...
levels of stress and greater levels of feeling energized, empowered and connected at posttest as compared to pretest.

The “I–We Rhythm” Program Description

The protocol for the “I–We Rhythm” program for recreational drumming was developed by the first author. It infuses elements of stress process theory and the role of internal and external coping strategies and supports (Lazarus & Folkman, 1984), empowerment theory and the influence of self-efficacy beliefs on actions (Frans, 1993) and ecological systems theory (Bronfennbrenner, 1979; Cichetti & Lynch, 1993) in which the external social environment influences individual and psychological well-being. Recreational drumming empowers individuals to cope with issues in a hands-on manner; individuals learn to cope by expressing their feelings through recreational drumming. The individual is further empowered by being around individuals who are doing the same; the group dynamic can promote further coping as individuals can express their feelings to others and feel a sense that others feel the same way they do.

The “I–We Rhythm” program consists of a two-hour session designed to familiarize participants with recreational drumming and its usefulness in practice with clients and/or as a self-care strategy. The session is divided into four segments: (1) introduction to recreational music-making as a social work intervention strategy, (2) learning the basics of rhythm, (3) introduction to percussion instruments and hand-drumming techniques, and (4) participating in group drumming.

A licensed clinical social worker, a social work educator and a professional musician facilitated the workshop. The student participants explored the “rhythm of social work” by learning the basics of rhythm and hand-drumming techniques and then applying these skills in a series of group drumming exercises. The facilitator provided the percussion instruments to the participants. The instruments included hand drums (e.g., congas, djembes and doumbeks) and hand-held percussion instruments (e.g., cowbells, agogo bells, woodblocks, tambourines, maracas and other shakers). In addition to hands-on experience with drumming, visual supports (e.g., handouts and PowerPoint slides) assisted participants as they acquired the basics of rhythm, rhythmic patterns and hand-drumming techniques.

Method

Study Design

The study took place in a private, mid-sized, liberal arts university in the northeastern USA during March to July 2010. The study used a one-group pre- and posttest design that included a purposive sample of social workers enrolled in a Saturday section of an advanced social work research course who consented to take part in the drumming intervention.

Variables and Measures

The pre- and posttest design utilized a modified version of the Session Evaluation Questionnaire (SEQ; Stiles et al., 1994). Stiles et al. (1994) developed this scale for use in short-term treatment, including single-session groups. The original SEQ has 21 items and has traditionally been utilized before and after the receipt of treatment. Items on the original SEQ are grouped into two areas of evaluation. Evaluating the session refers to
how the participant felt about the treatment, while evaluating the mood refers to how the individual feels as a result of the treatment (Stiles et al., 1994). This instrument has been shown to have high internal consistency across a wide variety of populations and settings (Stiles, Gordon, & Lani, 2002). The SEQ was modified and only the six items related to mood were utilized for the study. Before and after the recreational drumming session, respondents completed six items about their current thoughts and feelings. Each of the six items consists of a 7-point rating scale in which the points on the continuum are ordered in equal intervals and are assigned numerical values from 1 to 7.

The variables of central interest related to mood, feeling tense, stressed, energized, empowered, connected and community were operationally defined using the following items from the modified SEQ. Participants were asked to respond to a series of statements, each of which was preceded by the statement, “right now I feel...”. Tension level was measured from “tense” (1) to “relaxed” (7). Stress level was measured from “stressed” (1) to “calm” (7). Energy level was measured from “tired” (1) to “energized” (7). Empowerment level was measured from “disempowered” (1) to “empowered” (7). Connectedness level was measured from “disconnected” (1) to “connected” (7). Community level was measured from “isolated” (1) to “community” (7). Because this measure is part of a standardized scale in which participants use a subjective definition, the research team did not provide respondents with a predetermined definition.

Demographic Variables

The Culturally Competent Socio-Demographic Questionnaire was used to gather sociodemographic characteristics of the study sample (Maschi, 2010). For the purpose of this analysis, the following demographic information was reported: age, gender and race/ethnicity. Age was measured as a continuous variable and determined by the question “What is your age in years?” Gender was measured as either male or female (male = 1; female = 2). Race/ethnicity was determined by the question “What is your race/ethnicity?” in which respondents could choose from seven categories: White (not of Latino[a] origin), African American, Latino(a), Asian/Pacific Islander, American Indian/Alaskan Native, interracial and other race/ethnicities not listed.

Data Collection

The study was reviewed and approved by the Institutional Review Board at Fordham University. Prior to survey administration, all participants were asked to read and sign an informed consent document. Pretest surveys were administered and collected by a trained research assistant prior to the intervention. A trained research assistant also distributed the posttest survey immediately following the intervention and collected it. Each of the respondents received a special code number that allowed the researchers to match the respondents’ pre- and posttest surveys. Data were entered into the statistical software package (SPSS 18.0) in preparation for data analysis.

Data Analysis

A descriptive analysis was conducted to determine the sociodemographic profile of the study sample. The study hypotheses were tested using paired (or dependent) t-tests to examine the differences in the respondents’ mean scores on the variables of central interest before and after the intervention.
Results

As shown in Table 1, the age range of participants was 22–51, with a mean age of 31. Most of the participants were aged 25 or above (76.7%; \( n = 56 \)), Caucasian (50.7%; \( n = 37 \)) and female (82.2%; \( n = 60 \)). The analysis plan to test the study hypotheses was conducted in seven steps, with each step utilizing a dependent paired \( t \)-test. The mean scores at pre- and posttest are presented in Table 2; the results of the paired \( t \)-tests are presented in Table 3. In step one, the mean scores of the pre- and posttest for students’ tense–relaxed level were compared. The mean score of the pretest levels of tense (t1: tense–relaxed) was 4.30 compared to 5.76 at posttest (t2: tense–relaxed), indicating a mean score increase of 1.46 (4.30–5.76). This difference from pre- to posttest was statistically significant (\( t(df = 69) = 2.95; p = .001 \)), indicating a significant increase in relaxed feelings following the drum intervention.

In step two, the mean scores of the pre- and posttest for students’ stressed–calm level were compared. The mean score of the pretest levels of stress (t1: stressed–calm) was 3.87 compared to 5.54 at posttest (t2: stressed–calm), representing a mean score increase of 1.67 (3.87–5.54). This difference was statistically significant (\( t(df = 69) = 2.89; p = .001 \)). These findings suggest that participants reported a higher level of feeling calm at posttest, as compared to pretest.

In step three, pre- and posttest energy–tired levels were compared. The pretest mean score (t1: tired–energized) was 3.49, whereas the posttest mean score (t2: tired–energized) showed an increase to 5.07. This difference between the t1 and t2 energy levels was statistically significant (\( t(df = 69) = 2.69; p = .001 \)). Compared to pretest, participants’ posttest scores showed a significant increase in feelings energized.

In step four, the mean scores of pre- and posttest levels of empowerment–disempowered were compared. The pretest mean score (t1: disempowered–empowered) was 4.87, whereas the posttest mean score was 5.67 (t2: disempowered–empowered). The increase was statistically significant (\( t(df = 69) = 2.64; p = .001 \)). These results suggest an increase in participants’ feelings of empowerment from pre- to post-intervention.

In step five, pre- and posttest mean scores for feelings of connectedness–disconnected were compared. Participants’ pretest score of 4.63 (t1: disconnected–connected) increased to 5.89 at posttest (t2: disconnected–connected) (see Table 2). This increase was

<table>
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<th>Sample characteristics</th>
<th>Total</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>60</td>
<td>82.2</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>13</td>
<td>17.8</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td>37</td>
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</tr>
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<td>13.7</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td></td>
<td>19</td>
<td>26.0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>7</td>
<td>9.6</td>
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</table>
statistically significant \((t(df = 69) = −8.35; \ p = .001)\). Feelings of connectedness significantly increased after the intervention.

In step six, the pre- and posttest mean scores for sense of community–isolation were compared. The pretest score of 4.80 \((t1: \text{isolation–community})\) increased to 5.93 at posttest \((t2: \text{isolation–community})\) for social workers. The difference was statistically significant \((t(df = 69) = −6.37; \ p = .001)\). After the drumming intervention was conducted, participants’ sense of community significantly increased.

In step seven, the total mean scores of tense, stress, tiredness, disempowerment, disconnectedness and isolation in the pre- and posttest were compared. Prior to the \(t\)-test, reliability of the scale items was examined; the Cronbach’s alpha on the overall scale was 0.85. Results of the dependent paired \(t\)-tests in Table 3 indicated the score of 25.96 increased from the pretest to 33.79 for the posttest, which was statistically significant \((t(df = 69) = −11.33; \ p = .001)\). Thus, the in-class intervention also resulted in significant increase in the total mean scores.

In summary, the results of the dependent paired \(t\)-test showed that social workers that participated in the recreational drumming intervention show a change in levels of tension, stress, empowerment and connectedness. A detailed discussion of these findings follows.

Discussion

The purpose of this exploratory study was to evaluate social workers’ level of well-being before and after a group drumming program. Support was found for the four study hypotheses, which predicted a significant difference between pre- and post- measures on tension stress levels, energy, empowerment and connectedness. A statistically significant change from before and after the recreational drumming experience was evidenced in all areas of well-being. These findings suggest that by participating in this event, participants felt a difference between feeling stressed–calm, tired–energized, disempowered–empowered and disconnected–connected.

These findings are supportive of prior research on the use of creative arts strategies with a wide variety of client populations to help influence stress or well-being (Bittman et al., 2004; Burns, 2001; Clift, 2010; Clift et al., 2010; Levine & Levine, 1999;
Table 3. Results of Paired Samples $t$-Tests Among Social Work Students for Levels of Tense, Stress, Energy, Empowerment, Connectedness, and Isolation Between Pretest and Posttest Measures ($N = 45$).

<table>
<thead>
<tr>
<th>Paired variables</th>
<th>M</th>
<th>SD</th>
<th>SEM</th>
<th>Lower</th>
<th>Upper</th>
<th>$t$</th>
<th>df</th>
<th>Sig (1 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 &amp; T2 Tense–Relaxed</td>
<td>-1.46</td>
<td>1.28</td>
<td>.15</td>
<td>-1.76</td>
<td>-1.15</td>
<td>-9.51</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Stress–Calm</td>
<td>-1.67</td>
<td>1.56</td>
<td>.19</td>
<td>-2.04</td>
<td>-1.30</td>
<td>-8.98</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Tired–Energized</td>
<td>-1.59</td>
<td>1.92</td>
<td>.23</td>
<td>-2.04</td>
<td>-1.13</td>
<td>-6.90</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Empowerment</td>
<td>-.80</td>
<td>1.04</td>
<td>.13</td>
<td>-1.05</td>
<td>-.55</td>
<td>-6.41</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Connectedness</td>
<td>-1.26</td>
<td>1.26</td>
<td>.15</td>
<td>-1.56</td>
<td>-.96</td>
<td>-8.35</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Isolate–Community</td>
<td>-1.13</td>
<td>1.48</td>
<td>.18</td>
<td>-1.48</td>
<td>-.78</td>
<td>-6.37</td>
<td>69</td>
<td>.001</td>
</tr>
<tr>
<td>T1 &amp; T2 Total score</td>
<td>-7.83</td>
<td>5.78</td>
<td>.69</td>
<td>-9.21</td>
<td>-6.45</td>
<td>-11.33</td>
<td>69</td>
<td>.001</td>
</tr>
</tbody>
</table>
Longhoefer & Floersch, 1993; Waldon, 2001). This study adds to the extant literature by examining multiple aspects of well-being. However, further examination of the relationship between recreational drumming and well-being should be examined in order to determine the effects of outside factors.

These findings also suggest some implications for social worker education and professional training, especially for reducing stress and burnout and enhancing well-being. Although the literature addresses the inevitability of stress and burnout in the social work profession, it is important that social workers learn effective self-care strategies as part of their toolkit (Bride, 2007). In order to manage job-related stressors, infusing self-care strategies, such as the use of group drumming, may have short- and long-term influence positive influence on well-being. As the results indicate, group drumming has the potential to reduce stress and promote a sense of community within individuals.

There are methodological limitations that warrant discussion. The largest limitation is that this study used a small nonprobability sample of social workers at a private university in a suburban geographic location in the northeastern USA. While this was a pilot study, the results may not be generalizable to the larger social worker population. However, as this was a pilot study, it does provide a foundation from which future studies can establish the validity of group drumming. The study also did not utilize a control group (i.e., a group that did not receive the intervention); therefore, causal inferences are beyond the scope of these data. However, previous studies on recreational music making have utilized a similar one-group study design. Drawing students from the same academic cohort served as a control for external factors that may affect their stress levels, such as holidays or academic program issues.

Additional limitations include that the variables of central interest were only measured at two time points (i.e., before and after the intervention), so it is unclear if positive effects will last over a period of time. Despite the use of a standardized measure, the use of an individual item and subjective definition of these constructs (i.e. student participants’ interpretation of items in the measure may vary by student) make reliability and validity questionable. Other studies that utilized the measure have reported that participants liked the freedom of using their own definition (Stiles et al., 1994). Finally, despite the use of an anonymous self-administered pre- and posttest survey, participants may have chosen to respond to the pre- and posttest surveys to please the facilitator. Despite these limitations, these findings offer directions for future research on recreational music-making as a self care strategy for social workers. In particular, future longitudinal studies using experimental and control groups can provide feedback on the influence in the longer term of a drumming intervention on feelings of well-being, empowerment and connectedness among social workers.

In addition, the integration of mixed methods (i.e., using both quantitative and qualitative data) will help provide multiple angles for measuring and understanding the impact of a creative arts intervention. Areas that might be explored in such an inquiry could be formulated through the use of theoretical perspectives that address such issues as how internal and external supports facilitate well-being. Applied research in this area can assist with the development and improvement of creative teaching strategies that help social work students manage the stress of social work practice.

**Conclusion and Future Directions**

The findings from this pilot study suggest that helping social work students find creative outlets for self and group expression may have a positive influence towards advancing the
mission of social work. As the National Association of Social Workers Code of Ethics (NASW, 1999) highlights, the mission of social work is to increase well-being and empowerment. Our findings indicate that group drumming is a vehicle with the potential to help individuals, groups and communities across a diversity of practice settings. Recreational drumming brings out unique elements of central importance to social workers and group work, such as balance of power, the importance of relationships and communication, as well as individual and group empowerment and well-being (NASW, 1999). Moreover, social workers’ reported increased feelings of being calm, energized, empowered and connected found in this short-term intervention suggest that creative arts, such as drumming, might be useful as a repeated self-care strategy for reinforcing health and well-being and reducing the likelihood of stress and burnout. Future directions for research include strategies to further establish the intervention’s effectiveness. Specifically, the use of longitudinal mixed-methods studies of social workers and randomized control group designs across a diversity of university and community practice settings would be beneficial. Future studies should also compare the influence of recreational drumming with other types of alternative modalities, such as meditation, yoga, visual arts, music and dance on well-being. Future studies that compare the effects of recreational drumming and other alternative creative arts modalities among social workers and other allied health care professionals also are warranted.

References


