

The Effects of Creative/Improvisational Movement on the Stress Levels of High School Students

Samantha Kahn

Briarcliff High School

What is DMT?

Dance/movement Therapy or (DMT) is defined as “the psychotherapeutic use of movement as a process which furthers the emotional, cognitive, physical, and social integration of the individual”(The American Dance Therapy Association).

Review of Literature

- Nancy Beardall has implemented the dance movement therapy program in Newton Public Schools in MA.
- Individual ‘body sense’ as well as a positive attitude toward individual differences was developed.
- Students felt respected and encouraged to participate (Beard all, personal communication, 2002).
- Overall positive attitude among students and a greater sense of respect between peers.

Review of Literature

- Many abused children misjudge their kinespeheres, or personal space. (Goodill, 1987).
- Children regained control over that space and their sense of control and possession of their bodies.

Review of Literature

- Tina Erfer used DMT with children in hospitals who suffered from severe stress due to their diseases.
- DMT helped to reduce this stress and to give them an overall more positive attitude and outlook on life (Erfer, Tina 2006).
- Improvement in anxiety was reported indicating increased relaxation due to the DMT.

Research Question

Adolescents who actively participate in creative dance sessions will report a significant reduction in stress levels when compared to adolescents who remain physically passive.

Ho (null hypothesis): $H1 \geq H2$ (The difference in H1 vs. H2 will be greater than or equal to .05 level).
The t test will prove 95% of the time that the .05 level (α is the significance level) is not due by chance.

Methods

- Research was conducted at a suburban Westchester high school, in the school's dance studio.
- The experimental group consisted of 30 participants who attended two creative dance sessions and danced to a selection of music.
- The control group consisted of 30 participants who attended two sessions in which they sat passively for two sessions and listened to the same musical selections as the experimental group.

Methods

- The Spielberger State Inventory was administered as a pre and post test.

Positive Question:

I feel calm:

1. Not at all
2. Somewhat
3. Moderately So
4. Very Much So

Negative Question:

I am tense:

1. Not at all
2. Somewhat
3. Moderately So
4. Very Much So

A question is defined as positive if it holds affirmative connotations compared to negative. Answering a 4 to a positive question has greater significance than answering a 1.

A question is defined as negative if it holds off-putting connotations compared to positive. Answering a 1 to a negative question has greater significance than answering a 4.

Methods

- The mean of the positive post-test questions was then subtracted by the mean of the positive pre-test questions.
- The mean of the negative post-test questions was then subtracted by the mean of the negative pre-test questions.
- In addition to statistical evidence, an optional verbal form was administered.

Results: Dance Group

- Figure one shows that the statistical significance of the mean difference of the positive post-test minus the positive pre-test was 0.000 on the .05 scale, proving extremely statistically significant.
- Figure two shows that the statistical significance of the mean difference of the negative post-test minus the negative pre-test was 0.003 on the .05 scale also proving extremely statistically significant.

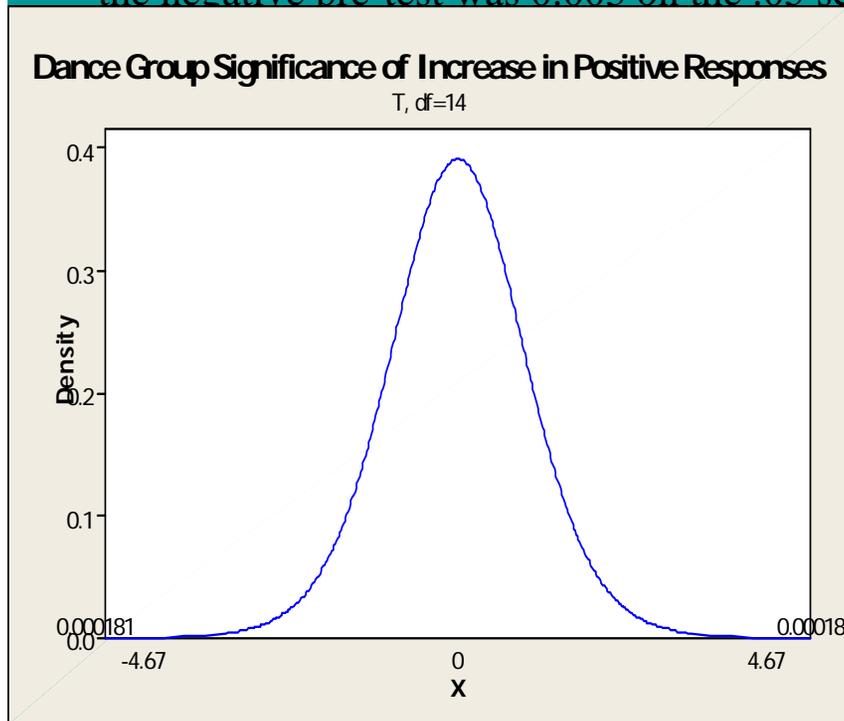


Figure One; Dance Group Significance of Increase in Positive responses

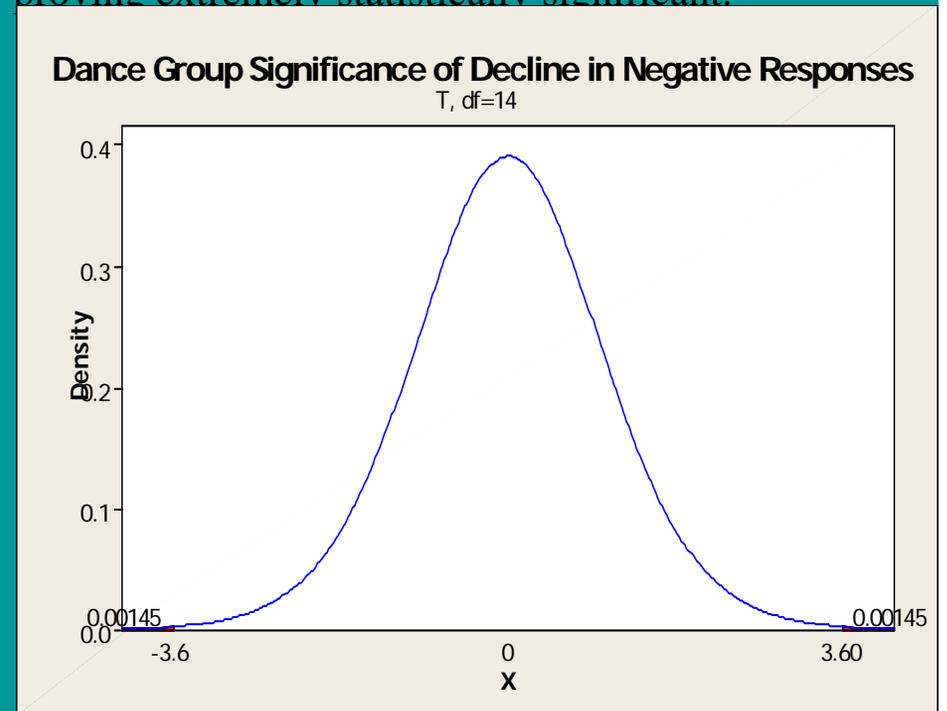


Figure Two; Dance Group Significance of Decline in negative responses

Results: Non Dance Group

- Figure three shows that the statistical significance of the mean difference of the positive post-test minus the positive pre-test was 0.000 on the .05 scale proving extremely statistically significant.
- Figure four shows that the statistical significance of the mean of the difference of the negative post-test minus the negative pre-test was 0.000 on the .05 scale proving extremely significant.

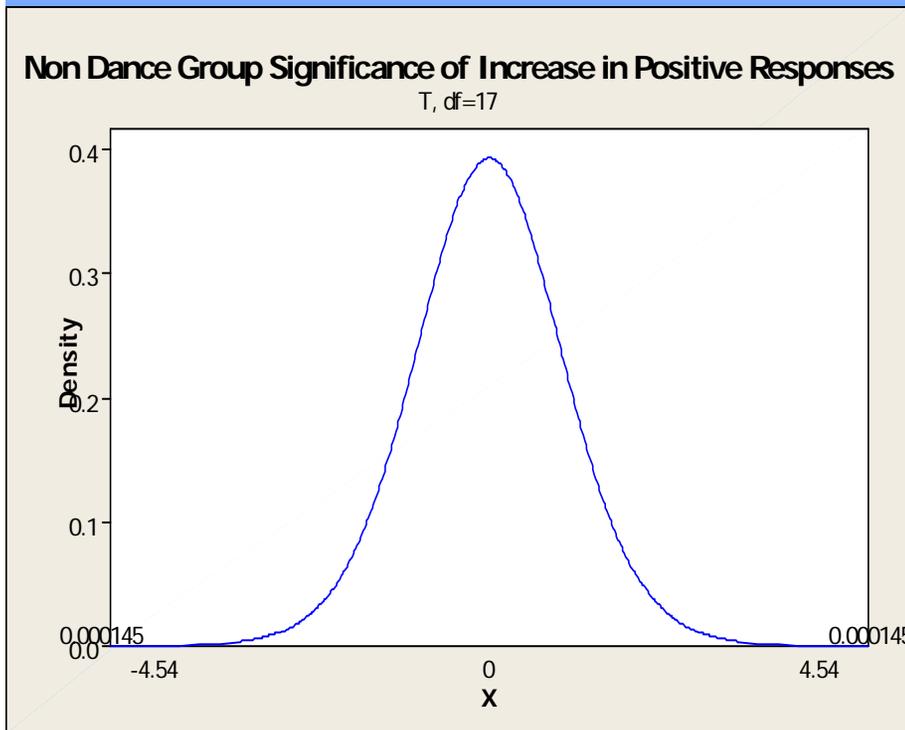


Figure Three; Non Dance Significance of Increase in positive responses

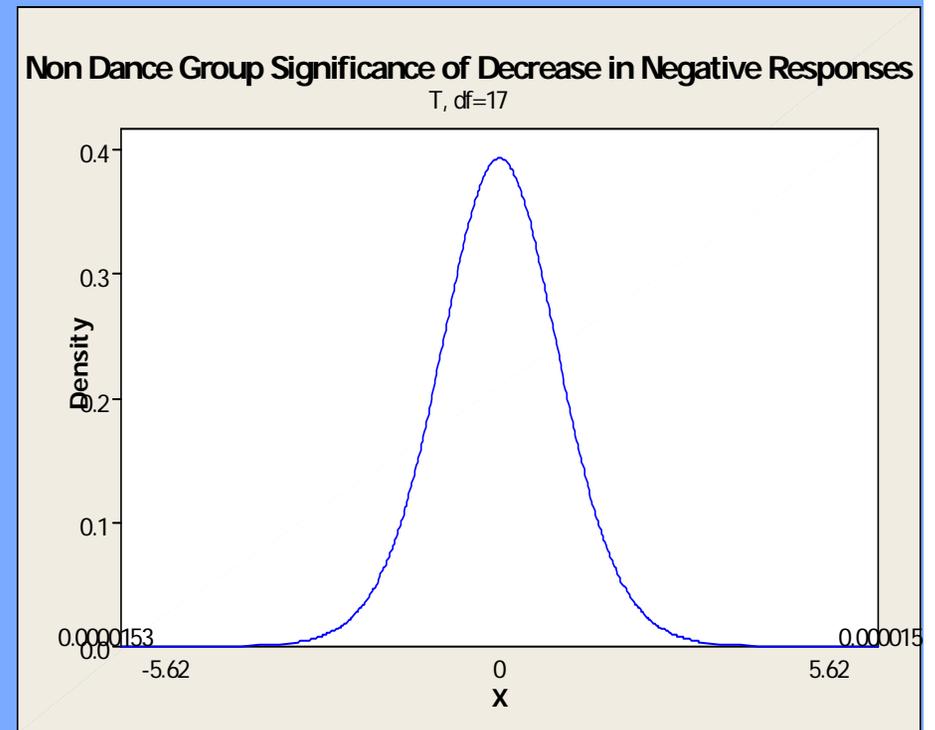


Figure Four; Non Dance Group Significance of Decrease in Negative Responses

Restrictions/Future Research

- Two day span of the experiment
- Use of Music
- The effect that “being sleepy” had on participants

Acknowledgements

- I would like to thank my mentor, Patricia Capello for her endless support and guidance throughout this process.
- I would also like to thank Nancy Koprak, Mr. Inglis, Dr. Brown, Ms. O'Brien and her parents who without them, this research would not have been possible.
- Special thanks to Ms. Diane Guida who served as the instructor in the experiment and who has supported her throughout the process.

Analysis and Conclusions

- Findings show that dance did cause a significant increase in positive feeling and decrease in negative feeling.
- The Non-Dance group also experienced a significant increase in positive feeling and decrease in negative feeling.