

## **Research Note. Philosophical Worldview Determines Attitudes Toward Using Background Music Before, During, and After Counselling**

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The present study examined the degree to which counsellors' philosophical worldviews affect their attitudes toward using background music and natural sounds before, during, and after counselling. Seventy-two counsellors (35 male, 37 female) rated excerpts of five musical selections and recordings of birdsongs and a waterfall on perceived usefulness as background music/sound before, during, or after a counselling session and indicated their likelihood of using each selection. Factor-analytically derived scales from the ratings correlated positively with scores from the Organicism-Mechanism Paradigm Inventory (OMPI; Johnson *et al.*, 1988), indicating that organismically inclined counsellors are more likely to use background music/sounds in their practice than are mechanistically inclined counsellors.

### **Introduction**

In a recent exhaustive review of the psychological effects of music directly or indirectly related to the counselling process, Ortiz (1990) concludes that very few studies have addressed the effect of *background music* (in contrast to relaxation or guided imagery investigations where music is a major focus). Furthermore, the results of this small body of research are somewhat inconsistent. Ortiz describes in detail six studies indicating that background music may reduce apprehension, stimulate client self-exploration, and increase verbalisations in dyadic and group interactions, but he also cites five studies in which background music seemed to have no effect on the counselling process.

The present study represents a small-scale, exploratory examination of the influence of counsellors' philosophical worldviews on their attitudes toward using background music in their practice. Clearly we need more research investigating *directly* the effects of background music before, during, and after the counselling process. Yet the preliminary findings from this research note on the characteristics of counsellors who are more likely to use background music in their practice might serve the purpose of identifying individuals more likely to participate in such research.

The current study examined the degree to which openness toward using background music in counselling is related to adherence to Pepper's (1942)

*organismic* and *mechanistic* worldviews. Lyddon (1989) has suggested that Pepper's root metaphor theory is a useful heuristic for understanding the worldviews that underlie different approaches to counselling, and Johnson, Germer, Efran, and Overton (1988) present the Organicism–Mechanism Paradigm Inventory (OMPI) as a well-validated measure of these two worldviews. It was hypothesised that, given their progressive and aesthetic orientation, organismically oriented counsellors would be favourably disposed toward using background music in their practice, whereas the more conservative, mechanistically inclined counsellors would be less favourably disposed.

### Method

#### *Participants*

Participants in the study were 72 (35 male, 37 female) volunteer counselling psychologists. Thirty-five (16 male, 19 female) were graduate students enrolled in a counselling psychology programme and 37 (19 male, 18 female) were practising psychologists. Their mean age was 34 years (range = 24–60). All participants selected for the study had a minimum of two years of professional counselling experience. The mean for the number of years of professional experience for the entire group was nine (range = 2–26).

#### *Music Selections*

Five musical and two environmental sound recordings were selected by the second author and a clinical psychologist from pieces regarded in the literature as "soothing". Chosen selections included seven 45-second excerpts presented to participants on a Sony RO-2735 cassette tape deck at 55 dB in the following order: (1) Vivaldi's Largo Movement from *Concerto in D for Lute, Strings, and Continuo*; (2) Bach's *Air on the "G" string*; (3) Francisque's *Pavane* from *Three Lute Dances*; (4) Scott's *Is Not All One?* from *Music for Zen Meditation*; (5) Winston's *Colours/Dance* from *Autumn*; (6) *Birds at Dawn by a Water Stream* from *Solitudes*; and (7) *Waterfall* from *A Week in Hawaii*.

Each 45-second excerpt was extracted from the beginning of the selection. A three-minute lag was allowed between selections in order to diminish contamination effects and allow time for participants to rate the selection with the two rating forms described below.

#### *Measures*

*Psychoacoustic Rating Forms.* Two rating forms were created to measure participants' attitudes toward using the musical selections in counselling. Psychoacoustic Rating Form A (PRF-A) consisted of three 5-point Likert scales for each music/sound selection. Instructions for PRF-A asked participants to rate how each selection would affect a client if used as background music/sounds (a) before, (b) during, and (c) after a counselling session. Scale anchors were as follows: 1 = "harmful", 2 = "annoying", 3 = "neutral", 4 = "relaxing", and 5 = "curative". Psychoacoustic Rating Form B (PRF-B) also consisted of three 5-point Likert scales for each selection. Instructions for PRF-B asked participants to indicate whether, in their work as professionals,

they would be willing to use each music/sound selection as background music/sounds before, during, or after a therapy session. Scale anchors for PRF-B were as follows: 1 = "would definitely not use", 2 = "would probably not use", 3 = "not sure", 4 = "would probably use", and 5 = "would definitely use".

*Organicism-Mechanism Paradigm Inventory (OMPI)*. Before listening to the sound selections, subjects first completed the OMPI (Johnson *et al.*, 1988), a 26-item forced choice inventory covering both philosophical areas (ontology, epistemology, personhood, analysis and causality, change, dynamics, and methodology) and matters of practical concern for ordinary people (conjugal, parenting, occupational, legal, and other interpersonal relationships). High scorers on the OMPI are organistically oriented, and low scorers, mechanistically oriented.

Past research demonstrated a Guttman split-half reliability of .86 and a three-week test-retest reliability of .77 for the OMPI. The OMPI has shown significant correlations with other available measures of organicism and mechanism. Practising life-span developmental psychologists were found to score significantly higher than behaviourists. The OMPI correlates positively with the Empathy, Intellectual Efficiency, and Flexibility scales from the California Psychological Inventory, Intuition from the Myers-Briggs Type Indicator, and Artistic Occupations from the Strong-Campbell Interest Inventory and Vocational Preference Inventory. High and low scorers also make distinctively different impressions on observers. Organicists were described as more imaginative, creative, and unorthodox, whereas mechanists were described as more down-to-earth, ordinary, and conservative.

### Results

The average rating on the PRF-A across all background music/sound selections and before/during/after conditions was 3.2, which falls between "neutral" and "relaxing". Ratings varied across both the seven music/sound selections ( $F(6,426) = 23.96, p < .0001$ ) and whether the selection would be administered pre-, during or post-counselling ( $F(2,142) = 54.29, p < .0001$ ). Winston's New Age music received the highest overall rating (3.6), followed closely by Bach, Vivaldi, and Francisque; overall ratings of Scott's Zen music and the natural sounds were lower (less than 3.0). Averaged across types of music, ratings of the selections' helpfulness during a counselling session were lower (2.8) than ratings of helpfulness before or after a session (both 3.4).

The counsellors indicated on PRF-B that, as a group, they were prone not to use the background music/sound selections in counselling (mean rating across all conditions = 2.7, which lies between "probably not" and "not sure"). This rating varied, however, across the seven selection types ( $F(6,426) = 22.69, p < .0001$ ) and whether the selection would be administered pre-, during, or post-counselling ( $F(2,142) = 53.94, p < .0001$ ). Winston's music received the highest overall endorsement rating (3.3), followed closely by Bach, Francisque, and Vivaldi. Counsellors indicated that they would probably not use Scott's Zen music and natural sounds (ratings near 2.0). Counsellors were more positive about using selections before (3.0) or after (2.9) than during (2.0) a counselling session.

The most interpretable solution from a principal components factor analysis of subjects' responses to the two rating forms indicated seven clear factors defined by items dealing with each of the seven sound selections plus an eighth factor defined by items dealing with the use of background music during (as opposed to before or after) counselling. All subsequent analyses were based on eight scales constructed from the items defining each factor; alpha scale reliabilities ranged from .83 for Bach to .95 for *Waterfall*.

A series of 2x2 (male-female by student-professional) ANOVAs on the eight scales indicated no interaction effects, no differences between professionals and students, and slightly higher ratings from males only for Francisque ( $F(1,68) = 4.84, p < .05$ ) and Vivaldi ( $F(1,68) = 5.80, p < .05$ ). Pearson correlations between age and the eight scales showed a slight tendency for older subjects to give higher ratings to Francisque ( $r = .30, p < .01$ ) and Bach ( $r = .27, p < .05$ ).

Pearson correlations between the eight music/sound scales and the OMPI address the main purpose of this study: determining the relationship between attitudes toward using music in counselling and philosophical worldview. Consistent positive correlations between the scales and the OMPI indicated that organismic individuals are more likely to believe that background music facilitates counselling and are more inclined to use it in their own counselling practice. Correlation coefficients between the OMPI and eight music/sound scales are as follows: *Waterfall*, -.22; Zen, -.29; *Birds*, .31; Francisque, .35; Vivaldi, .38; Bach, .39; Winston, .50; and Music During Session, .41 ( $r > .20, p < .05; r > .30, p < .01; r > .38, p < .001$ ; all one-tailed). These correlations were similar to those computed for professionals and students considered separately, but were stronger for women than for men.

### Discussion

As predicted, organismists were more positively disposed than mechanists toward using background music in their counselling practice. This is apparently because organismic individuals possess a number of traits (openness, flexibility, creativity, non-conformity, imagination) that would predispose them toward the use of progressive, non-traditional therapeutic modalities, including playing background music during counselling sessions. More conservative individuals remain suspicious about non-traditional therapeutic modalities and may even poke fun at persons who use music in their counselling practice (*cf.* Sutton, 1988).

This confirmation of the expected finding was qualified by three considerations, however. First, a factor analysis and ANOVAs indicated that ratings of different music/sound selections were distinct from each other and that certain selections were viewed more positively than others. Ratings of Winston, Bach, Vivaldi, and Francisque were higher than ratings of Zen music and bird and waterfall sounds.

Second, correlations between attitudes toward music and organismic orientation tended to be higher for Winston, Bach, Vivaldi, and Francisque than the other selections, although the only statistically significant difference (using McNemar's (1969) test of differences between related correlations was between Winston (.50) and *Waterfall* (.22),  $t(69) = 2.47, p < .05$ ). (We

might note in passing that if the purpose of the study was to account for as much variance as possible in the criterion, we could have included in the regression a large number of other predictors that would surely be related to positive attitudes toward music—e.g. musical preference, training, and aptitude—however, this was not the point of the study.)

Third, use of music during—as opposed to before or after—therapy appeared as a unique factor in the principal components analysis, and the counsellors as a group indicated they were much less likely to use music during a counselling session. Some subjects indicated they felt the music would be obtrusive and distracting. Interestingly, however, informal interviews with two subjects who later tried using Winston's music during counselling revealed that they were surprisingly pleased with the non-intrusive, relaxing effect of the music. These two interviews suggest a final point: that attitudes toward playing music during counselling can be affected by experience as well as the preconceived notions within one's worldview. Further research can clarify the potency of experience—both direct and with research literature—on attitudes toward using music in counselling.

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#### References

- Johnson, J. A., Germer, C. K., Efran, J. S. and Overton, W. F. (1988). Personality as the basis for theoretical predilections. *Journal of Personality and Social Psychology*, 55, 824-835.
- Lyddon, W. J. (1989). Root metaphor theory: A philosophical framework for counseling and psychotherapy. *Journal of Counseling and Development*, 67, 422-448.
- McNemar, Q. (1969). *Psychological Statistics* (4th ed.). New York: Wiley.
- Ortiz, J. M. (1990). *The facilitating effects of soothing background music on an initial counselling session*. Unpublished doctoral dissertation, Pennsylvania State University.
- Pepper, S. C. (1942). *World Hypotheses*. Berkeley, CA: University of California Press.
- Sutton, J. (1988, 23rd June). "Electronic meditation" is the New Age stress relief. *DuBois Courier Express* [UPI feature story], p. 10.