

## **Music For All Seasons Research Study**

Quality of life was measured for children at women's shelters via questionnaires. The questionnaires will be filled out by the mothers of the children. We provided musical performances at most of the shelters. Shelters without performances were used as control facilities in some cases. In a few cases we had "before and after" measures of quality of life.

### **The TACQOL is used for children aged 6 to 15 years.**

Subscales were created based on similar themes of the questions:

#### **Behavioral Difficulty:**

- Difficulty with going to school on his/her own
- Difficulty washing himself/herself
- Difficulty getting dressed on his/her own
- Difficulty going to the lavatory on his/her own
- Difficulty with eating or drinking on his/her own
- Difficulty with sports or going out to play on his/her own
- Difficulty with doing hobbies on his/her own
- Difficulty with riding a bicycle

#### **Physical Difficulty**

- Difficulty with running
- Difficulty with walking
- Difficulty with standing
- Difficulty with walking down stairs
- Difficulty with playing
- Difficulty with running or walking for long periods
- Difficulty with balance
- Difficulty with doing things handily or quickly

#### **Dealing with difficult situations**

- My child was incommunicative or quite with us
- My child was restless or impatient with us
- My child was defiant with us

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### **Performance group vs Non-performance (control) group**

Sixty-seven children filled out surveys without any performances (if they filled out more than one form they were averaged together) and 17 children filled out surveys within two weeks of a performance (one of these 17 actually had two performance surveys, so they were averaged together; some also had non-performance surveys as well, but those were ignored for this analysis). When the 67 were compared to the 17, all of the subscales of the questionnaire showed only tiny differences between the two groups, such that all of the two-group t values were less than .5 (all p's greater than .6). However, 7 children had filled out a survey without a performance, and then subsequently another survey soon after a performance, so before-after differences within this group could be tested. The results of these matched t tests were much better.

### **Pre vs. Post**

The t value for the **Behavioral Difficulty** subscale (the average of Q's 20 to 27) was actually significant,  $t(6) = 2.75$ ,  $p = .033$ ; the mean on this scale went down from .36 without a performance to .09 after a performance. The t values approached significance for both physical difficulties (Q11 to Q18),  $t(6) = 2.29$ ,  $p = .062$  (the mean went down from .20 to .04), and dealing with difficult situations (Q38 to Q45),  $t(4) = 2.72$ ,  $p = .053$  (the mean went down from 1.68 to 1.33; two of the 7 children were missing values on this scale).

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**The TAPQOL is used for children aged 1 to 5.**

The subscales are:

### **Pain**

- Abdominal
- Colic
- Eczema
- Itchiness
- Dry skin
- Bronchitis
- Breathing
- Short of breath
- Nauseated

### **Sleep**

- Restless
- Awake
- Crying at night
- Difficulty sleeping through the night

### **Behavior**

- Short-tempered
- Aggressive
- Irritable
- Angry
- Restless/impatient
- Defiant/awkward
- Unmanageable

### **Pre vs. Post**

These results show an opposite pattern to the TACQOL, in that the before-after differences did not even approach significance (all  $p$ 's  $> .22$ ), but some of the two-group differences (7 young children filling out surveys within two weeks of a concert as compared to 64 children never exposed to a concert near the time of writing the survey) did attain significance. Three subscales yielded significant results: pain (Q1 to Q9), sleep (Q10 to Q13), and behave (Q17 to Q23), In all three cases, the large non-perf group had significantly more variance than the much smaller perf group, due to having a larger range of scores. So, in each case, it was appropriate to use the separate-variances t test (that is why the degrees of freedom involve fractions), which is fortunate, because none of the corresponding pooled-variances t tests were significant.

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### Performance group vs Non-performance (control) group

The results were as follow: For **pain**, the mean was .332 for the non-perf group, and .140 for the perf group,  $t(15.64) = 2.59$ ,  $p = .02$ ; for **sleep**, the mean was .652 for the non-perf group, and .11 for the perf group,  $t(42.11) = 4.10$ ,  $p < .0005$ ; and for **behavior**, the mean was 1.58 for the non-perf group, and 1.23 for the perf group,  $t(11.11) = 2.81$ ,  $p = .017$ .