

styles. Totally 4 types of music were used in this study with silence for the background as a negative control.

Scoring the incidences of inappropriate behavior

According to occupational therapists, a patient committing "inappropriate behavior" means that the patient's behavior does not conform to the role expected of that patient. Inappropriate behavior among patients during therapeutic activities was definitively divided into the following 4 types:

1. Deserting a group during the therapeutic activity, including unauthorized desertion or roaming.
2. An unauthorized uproar during the therapeutic activity; for instance, laughing or singing loudly and suddenly, speaking to another person loudly, taking to oneself loudly, etc. "loudly" means that the person's voice was so loud that all participants could hear it.
3. Violence, such as beating or pushing another person, or groping another person's body.
4. Dullness of mind, simpering, sleeping; for instance, a steady gaze that lasts longer than 20 s, or a simper that occurs in a self-absorbed, self-centered manner and lasts longer than 10 s.

Inappropriate behavior of patients was observed by therapists through a 1-way mirror, and the therapist recorded the frequency of the inappropriate behavior on a form. The total and average the number of times for each inappropriate behavior exhibited by patients in each session were calculated.

Assessing patient's cognitive level

We used L.O.T.C.A. (Loewenstein Occupational Therapy Cognitive Assessment) to evaluate patients' cognitive levels before the study.¹⁰

Assessment procedures

A 30-min static occupational therapy session (with drawing, paper-craft, paper clippings, etc.) for the 15 schizophrenic patients was held twice a week. This study used close observations of inappropriate behavior during therapy sessions. No music played in the first 5 sessions as a negative control; then 4 different types of music were played as 3 background music during subsequent therapy sessions. There were 5 ses-

sions of Mozart's music, followed by 5 sessions of Chinese classical music, then 5 sessions of Mandarin pop music, and finally 5 sessions of jazz. Totally, 25 sessions of occupational therapy were conducted to observe patients' inappropriate behavior. The times of inappropriate behavior among the patients are recorded in these 5 types of session.

Statistical analysis

We use SPSS software to analyze the results.

RESULT

In preliminary results, different effects of the 4 types of background music on inappropriate behavior by the 15 patients during occupational therapy were observed. (Table 1, Fig. 1). In comparison to the negative control (with no background music), it was very prominent that when Mozart's music was played, the frequencies of all 4 types of inappropriate behavior decreased. These are included (1) 2.84 times fewer instances of deserting, (2) 4.72 times fewer instances of unauthorized uproar, (3) 0.32 times fewer instances of violence, and (4) 1.68 times fewer instances of dullness of mind, simpering and sleeping (Fig. 1).

Regarding sessions with Chinese classical music as the background music, 3 of the 4 types of index inappropriate behavior occurred less often, namely (1) 2.18 times fewer instances of deserting, (2) 4.34 times fewer instances of unauthorized uproar, (3) 0.30 times fewer instances of violence, and (4) 1.76 times additional instances of dullness of mind, simpering and sleeping. Three of the 4 types of index inappropriate behavior occurred less often in comparison to those of sessions with no background music. However, whenever Chinese classical music was played, the frequency of the occurrence of dullness of mind, simpering and sleeping increased from average 6.82 times to 8.58 times in a 30-min session. Regarding Mandarin pop music, the frequencies of the occurrence of the 4 types of index inappropriate behavior were (1) 2.46 times fewer instances of deserting a therapy group, (2) 2.32 times additional instances of unauthorized uproar, (3) 0.30 times fewer instances of violence, and