

MUSIC AND MEDICINE

AN INTERDISCIPLINARY JOURNAL



Music & Medicine | 2025 | Volume 17 | Issue 4 | Pages 244–250

Ichinose, Akazawa, Matsumoto, Okuno & Masuko | Cymis, a new electronic music instrument

Full-length article

Cymis, a new electronic music instrument promotes voluntary finger movement in a 58 year old female with cerebral palsy

Tomoko Ichinose¹, Kenzo Akazawa², Kakuko Matsumoto¹, Ryuhei Okuno³, Tsutomu Masuko²

¹ School of Music, Mukogawa Women's University, Nishinomiya, Japan.

² Social-Welfare-Service Corporation Kibounoie, Takarazuka, Japan.

³ Faculty of Science and Technology, Setsunan University, Neyagawa, Japan.

Abstract

A woman with severe cerebral palsy had never shown visible voluntary finger movements until age 58 years. After several months of using the Cymis, a new electronic musical instrument developed by the authors, she was able to move the

Conclusion

With regard to the effectiveness of performing Cymis, the voluntary movement of previously immobile fingers in this study serves as a conclusive testament to the remarkable plasticity exhibited by the motor system in one adult with severe CP.

Acknowledgment

We are deeply grateful to Mr. M. Horai and Ms. M. Egashira, and all the music therapists for their support services in Kibounoie, Takarazuka, and Mr. H. Matono, D. Kato, and Y. Hoshino for their technical support of Cymis in Graduate School of Osaka University.

References

1. Schneider S, Schönle PW, Altenmüller E, Münte TF. Using musical instruments to improve motor 24 skill recovery following a stroke. 866-872. d
11. Dogruoz K. instrument functions i 121(5): 11;
12. Akazawa K. R. Novel el score for th 2017; 6: 1-
13. Rojo N, Ar Pallares J, S Altenmülle sensorimo/ multimoda 793. doi: 10
14. Akazawa K. stiffness in Neurophys
15. Kanosue K. motor unit human bra 10.2170/jjg
16. Kottke FJ, I