

## The psychological effects of robot therapy

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### Abstract Body

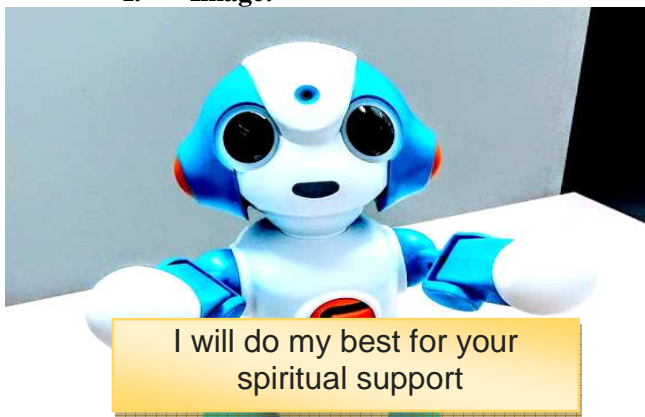
**Introduction:** Aging is associated with a decline in memory ability in many cognitive tasks. The pretest in this study verified the correlation between psychological stress and cognitive ability ( $p < 0.05$ )<sup>1</sup>. The reported psychological effects of robot therapy include stress relief, relaxation, and healing; hence, improvement in mental health can be expected from robot therapy<sup>2</sup>. This research investigated the current psychological state of local residents and the psychological effects that they experienced after robot therapy.

**Method:** A questionnaire was distributed to measure the participants' degree of psychological stress, the extent of their enjoyment in life, the degree of their fulfillment in life, and any emotions that they experienced after robot therapy.

**Results:** The responses of 42 participants (7 male, 35 female) were analyzed. The average responses were as follows: stress level was 4 out of 5 (slightly high), degree of enjoyment was 3 out of 5 (median), and fulfillment in life was 3 out of 5 (median). The descriptions offered regarding robot therapy included feeling healed, loved, affinity, and relaxed.

**Discussion and conclusion:** In the current study, the participants' average stress level was somewhat high. The psychological effects described after robot therapy were expressed on average as being healed, feeling love and affinity, and being able to relax. Because the pre-test showed a negative correlation between cognitive function and stress level, it can be expected that robot therapy reduces stress and promotes positive cognitive effects.

### I. Image:



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### II. Reference:

- 1 Sawami K, et al. Relationship between cognitive function, vascular age and stress. *International Journal of Case Studies in Clinical Research*. 2017;4(3):1-5.
- 2 Shibata T, et al. Robot therapy: a new approach for mental healthcare of the elderly - a mini-review. *Gerontology*. 2011;57(4):378-86.

### III. Biography:

Kazue Sawami is a professor at Nara Medical University. Her Ph.D. acquisition is a health science, and the recent study is the prevention of dementia in elderly people. Research currently being developed is the intervention by artificial intelligence, and support of the elderly by the information equipment remote control system. Results of their research group can be viewed at the following address. <http://www.g-nursing.com/katsudou.php>

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