Short Communication

Relationship between Self-Esteem and Assertiveness Training among Japanese Hospital Nurses

Takashi SHIMIZU, Shinya KUBOTA, Norio MISHIMA and Shoji NAGATA

Department of Mental Health, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan

Key words: Hospital nurses, Self-esteem, Sense of coherence, Assertiveness, Mental health

Assertiveness (Assertion) is typically defined in terms of the legitimate and honest expression of one's personal rights, feelings, beliefs and interests without violating or denying the rights of others¹.

In Japan, only a few studies have investigated the relationship between assertiveness (assertion) training (AT) and psychological well-being^{2,3}, whereas, it has been widely studied in other countries.

AT based on the concept of assertiveness⁴, has shown a favorable effect on mental health status such as stress reaction and depressive state in previous studies^{5,6}. It also is thought to enhance one's self-esteem, self-confidence, interpersonal relationships, personal fulfillment, and internal locus of control^{1,7}.

Self-esteem (SE) refers to whether one accepts oneself, respects oneself, and considers oneself a person of worth⁸, and is an important factor in mediating the process between stressors and stress reaction in the model of job stress and health, suggested by the National Institute of Occupational Safety and Health (NIOSH)⁹. Enhancing one's self-esteem reduces one's stress levels.

A sense of coherence (SOC) has been proposed as a psychological factor that predicts good health and positive adjustment¹⁰. Japanese men with a low SOC have a tendency to be affected by stressful life events¹¹.

With references to above indications, we hypothesized that AT would have a positive effect on the psychological factors affecting stress reaction, such as SE and SOC. We studied the relationships between SE, SOC and AT to confirm our hypothesis with a view to improving the mental health of Japanese hospital nurses.

Materials and Methods

The subjects were 409 registered nurses working at Japanese hospitals. We explained the purpose of our study to them and then obtained their consent. They were divided into an intervention group of 94 nurses and a reference group of 315 nurses, taking into account their own desires and their superiors' opinions. All of the members of the intervention group who took part had done so either voluntarily or had been referred by their superiors. They received a two-day training session on AT between June and December, 2001. Before commencing the training we delivered self-administrated questionnaires to the intervention group, which included items on age, gender, the Japanese version of the Rosenberg's self-esteem scale (SES)^{12,13}, and the Japanese version of 13 items in the SOC scale (SOC-13)^{10,14,15} and collected them. Six months after they had received the AT, we again delivered the same questionnaires and collected them within a month. In the case of the reference group, with the same questionnaires we performed the initial survey in June, 2001 and the following survey in October, 2002.

Assertiveness training (AT)

The AT was performed in accordance with the concept of Anne Dickson¹⁶. The group was lead by an AT facilitator who had undergone a six-month training course on assertive skills, facilitation skills, presentation skills, role-play techniques, and group dynamics organized by Assertive Japan. The training was performed through lectures and role-playing in small groups of about twenty participants. The training contents were basic assertive skills such as the definition of "assertiveness", communication patterns, how to make requests, how to say "No", and how to give and receive compliments.

Statistical analysis

We compared age, SES and SOC-13 of the initial results in the intervention groups with those in the reference group. We calculated the degrees of changes between the initial survey and the follow-up survey, as indicated by $\Delta = (\text{the follow-up}) - (\text{the initial})$. We compared the Δ SES and Δ SOC-13 of the intervention group with those of the reference group by the t-test. We also compared the Δ SES and Δ SOC-13 of the intervention group with those of the reference group, adjusted by age, initial SES, and initial SOC-13 by means of analysis of covariance¹⁷, because there were significant differences between mean age, initial SES, and initial SOC-13 of the intervention and those of the reference group.

Results

Excluding the only four male nurses, 62 (66%) of the

Received Nov 7, 2003; Accepted May 27, 2004

Correspondence to: T. Shimizu, Department of Mental Health, Institute of Industrial and Ecological Sciences, University of Occupational and Environmental Health, 1-1, Iseigaoka, Yahatanishi-ku, Kitakyushu-shi, Fukuoka 807-8555, Japan (e-mail: t-shimiz@nifty.com)

Table 1. Age, SES, and SOC-13 of the intervention and the reference group

	Intervention	Reference
Response rate (n)	66% (62)	62 % (196)
Mean (SD)		
Age	44.0 (7.1)***	27.8 (5.9)
Initial SES	17.0 (4.7)**	14.4 (4.4)
Initial SOC-13	57.4 (10.5)**	52.7 (9.4)
Δ SES	2.1 (3.9)**	0.2 (3.4)
Δ SOC-13	2.2 (8.3)	1.5 (8.6)
Adjusted Δ SES	1.8 (0.6)*	0.3 (0.3)
Adjusted Δ SOC-13	0.7 (1.5)	2.0 (0.7)

1) Intervention: the intervention group, 2) Reference: the reference group, 3) SES: the Japanese version of the Rosenberg's self-esteem scale, 4) SOC-13: the Japanese version of 13 items in the sense of coherence scale, 5) Δ =(the follow-up)–(the initial), 6) adjusted: adjusted by age, initial SES, and initial SOC, with the analysis of covariance, 7) ***: $p<.001$ by the t-test, **: $p<.01$ by the t-test, *: $p<.05$ by the analysis of covariance

female intervention group and 196 (62%) of the female reference group returned sufficient answers for analyses in both the initial and the follow-up survey, respectively. The mean age of the reference group was significantly younger than that of the intervention group. Means of the initial SES and SOC of the reference group were lower than those of the intervention group. Mean Δ SES of the intervention group was significantly higher than that of the reference group, but there was not a significant difference between the Δ SOC-13 of the intervention group and that of the reference group (Table 1).

After adjusted by age, initial SES, and initial SOC-13, the mean Δ SES of the intervention group was also significantly higher than that of the reference group, although there was no significant statistical difference between the Δ SOC-13 of the intervention group and that of the reference group.

Discussion

We studied the relationships between assertiveness training, self-esteem, and a sense of coherence among Japanese hospital nurses who have considerable job stressors such as long working hours, a wide range of tasks, and complicated relationships with hospital staff, patients, and patients' families¹⁸.

We found that the nurses' SE had improved at six months after the AT. This corresponded with the previous studies which indicated that assertiveness contributed to self-esteem among American firefighters¹⁹ and that AT reduced stress reaction among Taiwanese hospital nurses⁶. This was also compatible with the finding that the communication skill training improved two communication skills, i.e. negotiation and accepting valid criticisms³. Suga suggested that a person with high self-

esteem was more likely to negotiate with an opponent successfully and to suitably accept valid criticisms¹².

In our results, the AT was not significantly related to SOC-13. This finding indicated the influence of regression to the mean²⁰, considering the difference between the initial SOC-13 of the intervention group and that of the reference group and between the adjusted Δ SOC-13 of the intervention group and that of the reference group. Further study should investigate the relationship between SOC and AT considering the initial SOC of the intervention and reference groups.

Our study had low response rates for the intervention and reference groups. This might reflect an insufficient explanation of the present study's purpose to the subjects and/or the imbalance between age and the number of the interventions and those of the reference group. Further study should investigate the effect of AT by matching the background of the intervention group with that of the reference group.

The present study had four other limitations of which the first was a quasi-experimental design. We could not match the characteristics of the intervention group with that of the reference group completely. Second was the mismatching time to perform surveys of the intervention group with those of the reference group. Third was that we did not measure levels of communication skills before and after the training. Last was that we could not deny the possibility of an event which might have influenced SE and SOC completely during the periods observed. Further study should investigate the relationship between SE, SOC and AT by a well-designed method.

In conclusion, our results implied that assertiveness training had the potential to improve self-esteem among Japanese hospital nurses.

Acknowledgments: We are grateful for the cooperation of Assertive Japan (<http://www.assertive.org>) and to those in related fields of study.

References

- 1) RJ Delamater and JR McNamara: The social impact of assertiveness—Research findings and clinical implications. *Behavior Modification* 10, 139–158 (1986)
- 2) M Murayama, H Yamada, O Minematsu, A Hiyakawa, K Tanaka and R Tamura: A study of mental health — Development of assertion inventory—. *J Health Sci* 11, 121–128 (1989) (in Japanese with English abstract)
- 3) T Shimizu, T Mizoue, S Kubota, N Mishima and S Nagata: Relationship between burnout and communication skill training among Japanese hospital nurses: A pilot study. *J Occup Health* 45, 185–190 (2003)
- 4) Lindenfield G. *Assert yourself: A self-help assertiveness programme for men and women*. London: HarperCollins Publishers, 1992: 3–60.
- 5) PM Hayman: Effects of assertion training on depression. *J Clin Psychol* 36, 534–543 (1980)
- 6) S Lee and MS Crockett: Effects of assertiveness training on levels of stress and assertiveness experienced by nurses in Taiwan, republic of China. *Issues in Mental Health Nursing* 15, 419–432 (1994)
- 7) JM Williams and JK Stout: The effect of high and low assertiveness on locus of control and health problems. *J Psychol* 119, 169–173 (1984)
- 8) Rothenberg M, Kaplan H B. *Social psychology of the self-concept*. Illinois: Harlan Davidson, Inc., 1982: 2–12.
- 9) JJ Hurrell and MA McLaney: Exposure to job stress —A new psychometric instrument. *Scand J Environ Health* 14, 27–28 (1988)
- 10) Antonovsky A, Yamazaki Y, Yoshii K. *Unraveling the mystery of health: How people manage stress and stay well*. Tokyo: Yushindo-koubunsha, 2001: 19–225 (in Japanese).
- 11) T Takayama, Y Asano, Y Yamazaki, K Yoshii, Y Nagasaka, J Fukuda, Y Furusawa, S Takahashi and Y Seki: Sense of coherence, stressful life events and psychological health. *Jpn Public Health* 46, 965–976 (1999) (in Japanese with English abstract)
- 12) S Suga: Self-esteem ni tsuite. *Kango Kenkyu* 17, 117–123 (1984) (in Japanese)
- 13) S Matsushita: The study about self-image— Development of the Japanese version of self-esteem scale. *Nihon Kyoiku Shinri-gakkai Dai 11 Kai Soukai Happyou-Ronbun-shu*, 280–281 (1969) (in Japanese)
- 14) Y Yamazaki and Y Togasaki: The Japanese sense of coherence and life stress—Standardization of SOC-13. *Jpn J Health Educ Promot* 11 suppl, 100–101 (2003) (in Japanese)
- 15) T Takayama, Y Asano, Y Yamazaki, K Yoshii, Y Nagasaka, J Fukada, Y Furusawa, S Takahashi and Y Seki: Sense of Coherence, stressful life events and psychological health. *Jpn J Pub Health* 46, 965–976 (1999) (in Japanese with English abstract)
- 16) Dickson A, Takezawa M and Ono A. *Dai Yon no Ikikata—A women in your own right*. Tokyo: Tsuge-shyoboshinsha, 2000: 33–179 (in Japanese).
- 17) Weinfurt KP. Repeated measures analyses: ANOVA, MANOVA, and HLM. In: Grimm L G, Yarnold P R, eds. *Reading and understanding more multivariate statistics*. Washington: American Psychological Association, 2002: 317–361.
- 18) A Miki: Stress management in hospitals: *San Ei Shi* 44: 219–223 (2002) (in Japanese with English abstract)
- 19) K Petrie and MJ Rotheram: Insulators against stress: Self-esteem and assertiveness. *Psychological Reports* 50, 963–966 (1982)
- 20) Barker DJP, Cooper C and Rose G. Evaluation of preventive measures. In: *Epidemiology in medical practice*. Fifth eds. New York: Churchill Livingstone, 1998: 97–113.