
Notes and Comments

Characteristics of Stress Clinic Attendees

Evelyn I. Bird¹

University of Guelph

Vietta E. Wilson

York University

Edward B. Blanchard

State University of New York-Albany

Increasing numbers of self-referral stress management programs are using relaxation and biofeedback techniques, but few data are available on the characteristics of the clients upon which one might base the design or improvement of a self-regulation program. The type, duration, and severity of stress problem, medication, and demographic information were obtained from 423 adults who attended a university-based stress clinic. The clients were classified into four symptom groups (anxiety, muscle tension headache, muscle tension, and "other") and one asymptomatic (personal growth) group. Ten sessions of cognitive and somatic relaxation techniques were provided, followed by a posttreatment improvement questionnaire. The asymptomatic group was significantly different from the stress groups, whereas the latter exhibited more similarities than differences. The groups reported an average improvement in well-being of 67%, and the majority of clients equally preferred the autogenic and progressive muscle relaxation therapies.

Descriptor Key Words: stress; clinic.

¹Address all correspondence to Evelyn I. Bird, School of Human Biology, University of Guelph, Guelph, Ontario, N1G 2W1, Canada.

Nakagawa, Beaton, and Betrus (1981) reported that, among a large group of clients referred for treatment of a variety of anxiety-related problems, the clinical gains were of the same magnitude regardless of the presenting problems or treatment. This is an interesting finding since some investigators (Lazarus, 1973; Schwartz, Davidson, & Goleman, 1978) have suggested that different techniques may modify different components of anxiety. Whether or not the Nakagawa et al. (1981) finding is representative of other clinics and populations is not known.

The purposes of this paper are to describe the clients who attended a university-based stress management clinic and to determine, for each of five different types of clients, the degrees of improvement for each type, and their preference for the different relaxation techniques taught in groups. This documentation and evaluation of group relaxation programs is important because of the many clinics devoted to stress management. In some settings group relaxation programs may be both effective and cost-efficient, reserving individual relaxation and biofeedback for selected clients.

METHOD

Subjects

The data from 257 females (61%) and 166 males who attended group relaxation classes were used. The mean age of the subjects was 30 years, ranging from 11 to 67 years.

The clients were categorized by the first author on the basis of the referring diagnosis and/or symptoms reported on the intake questionnaire. The five groups were as follows:

1. Anxiety (ANX)—Clients who expressed their symptoms only in terms of cognitive anxiety with no somatic symptoms (e.g., 'worry about...', 'feel uptight'). ($N = 93$.)
2. Muscle tension headache (MTH)—Clients who described a dull, bandlike pressure or pain occurring in the forehead, the back of the head, and/or the neck. ($N = 78$.)
3. Muscle tension (MT)—Clients who were aware of muscle tension other than muscle tension headaches (e.g., bruxing, MPDS, lower back). ($N = 137$.)
4. Personal growth (PG)—Clients who reported no cognitive or somatic stress symptoms but wished to learn relaxation skills. These clients served as a control group. ($N = 57$.)
5. "Other" (0)—Clients who had a variety of other stress-related problems (e.g., insomnia, essential hypertension). ($N = 53$.)

On the intake form the clients reported their age, sex, type and duration of their stress problem, severity (0 = none to 5 = extreme, often debilitating), and the total number of medication doses during the preceding week.

A posttreatment questionnaire included the client's perception of self-improvement based upon a scale of (+) 300% to (–) 300%. The 0 point was identified as representative of how the client felt, emotionally and physically, when starting the program. Any deviation represented a change of stress. The clients also indicated which relaxation technique they most preferred.

Procedure

At the initial meeting, all clients completed a consent form and a demographic intake form. The 1-hour relaxation sessions were held twice a week for 5 weeks in the fall and winter. In order of presentation, the techniques were progressive muscle relaxation (PMR), including differential relaxation (Bernstein & Borkovec, 1973); autogenic therapy (AT; Luthe, 1977); alphagenics (Zaffuto & Zaffuto, 1974); visualization of quiet scenes and the quieting response (QR; Strobel, 1983). All presentations were led by one of four therapists who were not the investigators.

The data from the males and females were combined because there were no significant ANOVA sex differences for any of the variables. A one-way ANOVA then compared the variables among the five groups, with Scheffé post hoc comparisons where appropriate. In the relaxation preference data the first choices for the two largest categories, PMR and AT, were compared using χ^2 and a Yates correction.

RESULTS

The means for age, symptoms, medication, and improvement are shown in Table I.

The PG group was significantly younger than the MTH, MT, and O groups ($F(4, 413) = 5.23, p < .01$). The MTH group reported more years with their problem than did the MT group ($F(4, 339) = 7.45, p < .001$). The severity of the problem was not different among the symptom groups but these groups reported more severe symptoms than the PG group ($F(4, 337) = 61.32, p < .001$). For the four symptom groups the number of pretreatment medication dosages per week were not significantly different from each other but the MTH group was higher than the PG group ($F(4, 250) = 3.62, p < .01$).

Table I. Mean Value for Symptom and Improvement by Gender and Diagnostic Category^a

Diagnostic group	Sex	Age		Symptom				Pretreatment medication doses/wk		Improvement	
		\bar{X}	N	Years		Severity		\bar{X}	N	$\bar{X}\%$	N
				\bar{X}	N	\bar{X}	N				
Anxiety	M	30.3	(45)	8.6	(37)	3.0	(38)	.7	(27)	73.0	(28)
	F	27.8	(48)	7.0	(46)	3.3	(47)	3.5	(33)	75.0	(26)
Muscle tension headache	M	35.7	(20)	10.0	(18)	3.5	(18)	10.4	(12)	52.5	(8)
	F	30.5	(58)	9.9	(49)	3.3	(53)	2.9	(37)	65.1	(31)
Muscle tension	M	32.0	(47)	6.2	(44)	2.9	(44)	2.2	(36)	71.4	(28)
	F	31.7	(90)	5.6	(82)	3.0	(87)	2.0	(66)	71.1	(66)
Personal growth	M	27.9	(24)	.1	(8)	.7	(15)	.2	(16)	53.8	(19)
	F	23.7	(33)	.1	(12)	1.0	(29)	.1	(27)	62.5	(29)
Other conditions	M	35.2	(26)	6.6	(22)	2.9	(25)	1.9	(20)	79.5	(21)
	F	31.6	(27)	6.5	(26)	3.0	(26)	4.1	(21)	60.7	(17)

^aNo significant sex differences were found at the .05 level.

There were no significant differences between groups on the self-reported improvement following the treatment sessions ($F(4, 427) = 1.12, p > .05$). The average improvement was 66.5%. There were no significant differences between the therapists in the percentage of improvement ($F(3, 295) = .446, p > .05$).

The first and second choices for preference of type of relaxation were provided by 261 clients. The first choice was autogenic (36%) followed by PMR (27%), visualization (11%), alphagenics (11%), QR (10%), and differential relaxation (5%). There were no significant differences between the first two choices ($\chi^2(1, N = 165) = 3.49, p > .05$). The first choice of all the symptomatic groups was AT, while the personal growth group preferred PMR.

DISCUSSION

It is recognized that the clients' self-perception of change in symptoms and stress levels is only a beginning step in assessing the effectiveness of treatment. However, within the limitations of the reliability of the self-report of improvement scale and the five-group categories, some generally consistent findings are apparent.

The duration and severity of the problem and the medication usage were generally similar for the different symptom complaint groups. The PG group may come to the clinic because of an awareness of the potential for stress in their lives and the desire to prevent becoming symptomatic. This was supported by the anecdotal reports of generally feeling fine when they began the relaxation and feeling even better when they completed the sessions.

Interestingly, the clients similarly preferred to use the AT and PMR techniques. It is not known whether this was due to an order effect of the presentations or the therapists' ability to provide these techniques, or whether the selected technique reduced the symptoms most effectively. Questions remain about the relationship between preference and effectiveness.

There were also no differences in percentage of improvement as a function of which therapist conducted the program. This is somewhat understandable since the therapists were trained by the same person and followed the same protocol.

The overall improvement of 67% is similar to that reported by Nakagawa et al. (1981) and contrary to what Lazarus (1973) and Schwartz et al. (1978) hypothesized. Perhaps this is due to the teaching of techniques that have both cognitive and somatic components and/or to clients' selecting the technique for home practice that they perceived as best suiting their needs. Clients kept records of type and amount of home practice. Perhaps

the actual stress reduction technique makes little difference as long as the client is sufficiently aware of having a problem and is then motivated to learn and practice a technique. In such cases the most cost-effective therapy could be used.

This study appears to reiterate the finding of the survey conducted by Hillenberg and Collins (1982) that a variety of relaxation techniques are apparently effective as therapeutic interventions for a wide variety of problems.

REFERENCES

- Bernstein, D., & Borkovec, T. (1973). *Progressive relaxation training*. Champaign: Research Press.
- Hillenberg, J. B., & Collins, F. L. (1982). A procedural analysis and review of relaxation training research. *Behaviour Research and Therapy*, 20, 251-260.
- Lazarus, A. A. (1973). Multimodal behavior therapy: Treating the basic id. *Journal of Nervous and Mental Disease*, 156, 404-411.
- Luthe, W. (1977). *Introduction to the methods of autogenic therapy: Manual for a workshop*. Denver: Biofeedback Society of America.
- Nakagawa, H., Beaton, R., & Betrus, P. (1981). Clinical evaluation of stress response management training by nurses. In *Proceedings of the Biofeedback Society of America Twelfth Annual Meeting* (pp. 194-197). Denver: Biofeedback Society of America.
- Schwartz, G. E., Davidson, R. J., & Goleman, D. J. (1978). Patterning of cognitive and somatic processes in the self-regulation of anxiety: Effects of meditation versus exercise. *Psychosomatic Medicine*, 40, 321-328.
- Strobel, C. (1983). *QR: The quieting response*. New York: Berkley Books.
- Zaffuto, A., & Zaffuto, M. (1974). *Alphagenics. How to use your brain waves to improve your life*. New York: Warner Paperback.