WEIGHT LOSS FOR WOMEN: STUDIES OF SMOKERS AND NONSMOKERS USING HYPNOSIS AND MULTICOMPONENT TREATMENTS WITH AND WITHOUT OVERT AVERSION

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Summary.—Study 1 compared overweight adult women smokers (n = 50) and nonsmokers (n = 50) in an hypnosis-based, weight-loss program. Smokers and nonsmokers achieved significant weight losses and decreases in Body Mass Index. Study 2 treated 100 women either in an hypnosis only (n = 50) or an overt aversion and hypnosis (n = 50) program. This multicomponent follow-up study replicated significant weight losses and declines in Body Mass Index. The overt aversion and hypnosis program yielded significantly lower posttreatment weights and a greater average number of pounds lost.

Study 1 focused on overweight adult women who smoked one or more packs of cigarettes a day. Would smokers participate, lose weight, and reduce Body Mass Index in an hypnosis-based, multicomponent program compared to an equivalent sample of nonsmokers? Study 2 was a follow-up, comparative study of multicomponent weight-loss programs emphasizing hypnosis or overt aversion with hypnosis-treatment protocols.

Method

Subjects

Over 200 adult female subjects were solicited by newspaper advertisements for weight control services. After an initial interview, 50 smokers and 50 nonsmokers in Study 1 were assigned by the clinician to an Only Hypnosis treatment protocol. Means were for age 37.7 yr., height 64.2 in. (1.63 m), starting weight 168.4 lb. (76.4 kg), and Body Mass Index 27.5. The Body Mass Index indicated the average subject was approximately 28% overweight (Rowland, 1989). There were no statistically significant differences except smoking status. For Study 2, after the initial interview, nonsmoking subjects who were not participating in any other weight control program were assigned to either an Only Hypnosis (n = 50) or an Overt Aversion and Hypnosis (n = 50) treatment protocol. Means were for age 41.2 yr., height 64.5 in. (1.64 m), starting weight 169.5 lb. (76.9 kg), and Body Mass Index 28.7. The average subject was 29% overweight. There were no significant baseline group differences.

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Measure

Subjects completed questionnaires detailing weight history, problem foods and drinks, diet, smoking, and health information. Only subjects in Overt Aversion and Hypnosis treatment provided examples of tastes, smells, textures, colors, and animals that disgusted them. Subjects were weighed without shoes on the same scale on the first day and weekly before each treatment. The procedures, diet, and treatments used were identical to those reported by Johnson and Karkut (1996).

Results

In Study 1 the total sample's pre- to postweight losses were significant ($t = 15.6, p < .0001$). All but two of the 100 subjects lost between 1 lb. (0.5 kg) and 28 lb. (12.7 kg) during treatment ($M = 27.2$ days). The total sample displayed a significant ($t = 16.0, p < .0001$) decline and average drop of 1.6 Body Mass Index. Analysis of variance of the samples' postweight scores yielded a mean nonsignificant difference of 3.1 lb. (1.4 kg). Analysis of variance of the postBody Mass Index yielded a significant mean difference of .6. Analysis of covariance of the postweight scores with the preweight score as covariate yielded adjusted treatment means for Nonsmokers of 159.0 lb. (72.1 kg) and for Smokers of 159.1 lb. (72.2 kg). The adjusted mean difference of .1 lb. (.05 kg) was not significant. Analysis of covariance of the postBody Mass Index with the pretreatment index as the covariate yielded an insignificant adjusted mean difference of .1.

In Study 2 the total sample's pre- to postweight losses were significant ($t = 20.3, p < .0001$). All but one of the 100 subjects lost between 1 (0.5 kg) and 20 lb. (9.1 kg) during treatment ($M = 31.8$ days). The total sample yielded a significant ($t = 20.4, p < .0001$) decline and average drop of 1.7 in Body Mass Index. The mean difference of 2.1 lb. (1 kg) lost between treatment programs was significant ($t = 2.1, p < .02$), but there was no difference in ending Body Mass Index. Analysis of variance of treatments by number of pounds lost exhibited a mean difference of 2.1 lb. (1 kg) which was significant ($F_{1,97} = 4.5, p < .04$). Analysis of covariance of the postweight scores with the preweight score as covariate yielded adjusted mean weights, Only Hypnosis = 160.3 lb. (72.7 kg), Overt Aversion and Hypnosis = 158.4 lb. (71.9 kg). The adjusted mean difference of 1.9 lb. (0.9 kg) was significant ($F_{1,97} = 4.2, p < .04$). When analysis of covariance of treatments by number of pounds lost used the preBody Mass Index as a covariate, the adjusted mean losses were for Only Hypnosis 9.2 lb. (4.2 kg) and for Overt Aversion and Hypnosis 11.2 lb. (5.1 kg). The adjusted mean difference of 2.0 lb. (0.9 kg) was significant ($F_{1,97} = 4.5, p < .04$) and consistent with the other weight-loss findings.
TREATMENT PROGRAMS FOR WOMEN'S WEIGHT LOSS

DISCUSSION

In Study 1 overweight adult women lost an average of 2.4 lb. (1.1 kg) per week in a multicomponent weight-loss program centered around the use of hypnosis. Smokers were as successful as nonsmokers in losing weight, reducing Body Mass Index, and sustaining participation in the program irrespective of starting weight, Body Mass Index, or initial classification (Body Mass Index 19.1-27.2 = Acceptable; > 27.2 = Overweight).

In Study 2 overweight adult women in multicomponent weight-loss programs showed significant total and mean (2.2 lb., 1 kg, per week) losses and significant drops in Body Mass Index. The program emphasizing overt aversion and hypnosis generated statistically significant lower posttreatment weights and a greater average number of pounds lost than the alternative treatment focused only on hypnosis. The difference in Body Mass Index was not significant. The significant treatment differences remained after adjusting for small initial sample differences in starting weight, Body Mass Index, and classification by Body Mass Index.

These findings supported and replicated studies proposing multicomponent treatments with hypnosis and overt aversion for weight control (Johnson & Karkut, 1996) and smoking cessation (Johnson & Karkut, 1994). They suggested a need for more controlled, systematic, comparative study and use of overt and covert aversion with hypnosis in multicomponent programming.

REFERENCES


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