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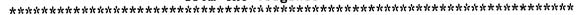
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### **ABSTRACT**

The majority of alcoholics and drug addicts relapse after treatment, with many substance abusers developing a chronic relapse pattern. For this study, 43 patients, who went through a 3-week inpatient relapse prevention program, answered the Situational Confidence Questionnaire (a measure of self-efficacy for alcohol-related, high-risk situations) prior to and then after their treatment. Results showed that subjects exhibited significant increases in self-efficacy--a person's belief that he or she can respond effectively to a situation by using available skills--over the course of treatment. One year follow-up data revealed that while the majority of the patients did relapse, they reported shorter periods of substance abuse. Increased involvement with outpatient activities correlated with positive outcomes, such as increased sobriety and fewer relapses. Two high-risk situations, unpleasant emotions or frustrations, and urges and temptations, played a major role in relapses. This study's findings support the benefits of relapse prevention treatment and aftercare activities, beyond treatment, for relapse-prone alcoholics, thus underlining the need for relapse-prone alcoholics to devote time, energy, and resources to their recovery program. Four tables present statistical summaries. (RJM)

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## The Relationship Between Relapse Prevention Treatment Outcome and Self-Efficacy

Presented at the Annual Convention of the American Psychological Association Toronto, Ontario August 22, 1993

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#### ABSTRACT

The Relationship Between Relapse Prevention Treatment Outcome and Self-Efficacy

This study examines the relationship between relapse prevention treatment outcome and self-efficacy. Forty-three patients who went through a three week inpatient relapse prevention program completed the Situational Confidence Questionnaire, a measure of self-efficacy for alcohol-related high risk situations, pre- and post-treatment.

Significant increases in self-efficacy occurred over the course of treatment. One year follow-up data showed that while the majority of the patients did relapse, they reported shorter periods of relapse.

More intense involvement with outpatient activities was associated with more positive outcomes, i.e., more months of sobriety, longer periods of sobriety, and fewer periods of relapse. Two high risk situations, Unpleasant Emotions or Frustrations, and Urges and Temptations were identified as playing a major role in relapse. Our findings support the benefits of relapse prevention treatment and aftercare activities post-treatment for relapse-prone alcoholics.



### INTRODUCTION

Addiction is a chronic condition that frequently involves relapse. In fact, the majority of alcoholics and drug addicts relapse after treatment, with many chemically dependent people developing a chronic relapse pattern (Costello, 1982; Emrick, 1982; Miller & Hester, 1980; Simpson & Sells, 1982). In response to the growing awareness of this problem, new approaches to relapse prevention have been developed over the past decade (see Daley, 1989). One such approach, developed by Gorski (1988), involves teaching "relapse-prone" patients to recognize personal warning signs that lead to relapse and the high risk situations that activate those warning signs. Patients are then taught how to manage or cope with the warning signs as they occur.

Self-efficacy is a concept that is at the root of a well known approach to relapse prevention (Marlatt & Gordon, 1985). Self-efficacy is a person's belief that he or she can respond effectively to a situation by using available skills. A growing body of evidence in the addictions field confirms that the development of self-efficacy is associated with a positive treatment outcome (e.g., Annis & Davis, 1988; Coelho, 1984; Colletti et al., 1985; Condiotte & Lichtenstein, 1981; DiClemente, 1981; Marlatt & Gordon, 1985; Miller, Ross, Emmerson & Todt, 1989). The Situational Confidence Questionnaire (SCQ), designed by Annis (1987), is a self-report measure which assesses self-efficacy for coping with alcohol-related high risk situations. Patients are asked to imagine themselves in a variety of situations, derived from the work of Marlatt and Gordon(1985). For each situation patients indicate, using a six-point Likert scale (ranging from 0 = not at all confident to 100 = very confident), how confident they are that they will be able to resist the urge to drink heavily. A patient's response on the SCQ allows the therapist to monitor the development of the patient's self-efficacy in relation to coping with specific drinking situation over the course of treatment.

The purpose of this study was to determine whether or not the Gorski model of relapse prevention results in an increase in self-efficacy. In addition, this study examined the relationship of self-efficacy during treatment to maintenance of abstinence, duration of relapse, and attendance in outpatient aftercare activities.



### **METHOD**

An inpatient relapse prevention program, based on the Gorski model, was implemented at the Department of Veterans Affairs Medical Center, Kansas City. Patients meeting four criteria were considered to be relapse-prone and were invited to join the program. These criteria included: 1) accepts the diagnosis of chemical dependency, 2) has at least one prior inpatient or intensive outpatient treatment, 3) has experienced at least one period of 90 days abstinence following treatment, and 4) is motivated and cognitively able to complete the program assignments. Patients completed the Self-Confidence Questionnaire prior to entry into the relapse prevention program and then again at discharge from the inpatient program. A total of 43 patients completed pre- and posttreatment SCQ's. These patients were contacted by telephone and mail one year post-treatment for follow-up. Questions were asked about relapse, high risk situations leading to relapse, length of sobriety, and attendance in outpatient recovery activities. Twenty eight of the 43 patients were located for followup (65%) and every patient who was located yielded a usable followup questionnaire.



### **RESULTS**

Pre- and Post- treatment means for the eight scales and the total score of the SCQ are presented in Table 1. A Multivariate Analysis of Variance examined pre- and post- treatment SCQ scores comparing those followed up to those lost to followup. Those results are found in Table 2 and indicate a significant main effect for treatment, but no difference between those available for followup and those lost to followup, and no interaction between treatment and followup availability, suggesting no difference between the patients available for followup and those lost to followup. The remainder of the analyses were performed on the 28 available for followup.

## Results from the Relapse Prevention Follow-up Questionnaire

Results from the Relapse Prevention Follow-up Questionnaire (RPFQ) are summarized in Table 3. While a large majority (86%) of the patients relapsed in the 12 months following treatment, 68% reported periods of relapse shorter in duration than periods of relapse prior to treatment, with 39% entering treatment again during the year. Of the eight possible high risk situations derived from the SCQ, only two received more than one response as being principally responsible for relapse(s). These high risk situations were "Unpleasant emotions or frustrations" (67%) and "Urges and temptations" (29%). As can be seen from Table 3, the majority of patients (96%) initially participated in outpatient recovery activities, although by the time of followup the level of involvement had dropped to 57%.

# Relationship of SCQ scores to Relapse Outcomes

SCQ scores were correlated with relapse status, months of sobriety, longest period of sobriety, and level of recovery activity. Those results are reported in Table 4. Overall, the SCQ was a relatively poor predictor for relapse outcome. However, Total Self Confidence at the end of treatment was significant in predicting relapse itself. This finding is inconclusive, because only four patients did not relapse. Nonetheless, means on Total Self Confidence at the end of treatment were 84.1 (sd=9.3) for those who relapsed, and 95.6 (sd=3.3) for those who did not. Interestingly, means on Total Self Confidence before treatment were lower for those who did not relapse, 15.9 (sd=18.0) than for those who did relapse, 24.4 (sd=16.8).

# Relationship of Level of Recovery Activity to Relapse Outcomes

One item on the RPFQ asked for level of involvement in outpatient recovery activities. The specific choices for that item can be found in Table 3. Responses to that item correlated .33 with relapse status, .42 with months of sobriety, .42 with longest period of sobriety, and .39 with number of relapses. The last three correlations were significant at the .05 level indicating that more intense involvement with outpatient activities was associated with more positive outcomes.



### DISCUSSION

The Gorski model of relapse prevention appears to contribute to increased self-efficacy for alcohol-related high risk situations. While the majority of the patients did relapse, they reported strong gains in efficacy from pre- to post treatment, as well as shorter periods of relapse after treatment. This result might seem less than astounding unless considered in light of the significant relapse histories of the patients. Indeed, shorter periods of relapse is one of the principle goals of the Gorski model.

The Situational Confidence Questionnaire was designed to identify eight potentially high risk situations for relapse. In this sample, two of those situations were identified as playing a major role in relapse, Unpleasant Emotions or Frustrations, and Urges and Temptations. This finding underscores the importance of teaching relapse prone patients coping strategies for these particular high risk situations.

In answer to the question regarding the relationship of self efficacy to relapse outcomes, the SCQ was unable to predict months of sobriety, longest period of sobriety, or level of recovery activity. Only post-treatment total efficacy was able to predict whether or not a patient relapsed, but that result is inconclusive in light of the small number of non-relapsers. It does, however, recommend the collection of further data concerning that question.

The majority of patients initially participated in outpatient recovery activities, although a substantial number of them reduced their level of activity over time. Nonetheless, many patients who experienced one or more relapses continued to remain involved in outpatient activities. Perhaps the most interesting finding from this study is the set of relationships between level of outpatient recovery activities and relapse outcomes. Consistent with findings from numerous prior studies, more intense involvement in recovery activities was associated with better outcome, i.e., more months of sobriety, longer periods of sobriety, and fewer periods of relapse. This accentuates the need for relapse-prone alcoholics to devote time, energy, and resources to their recovery programs.



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Table 1.

Means and Standard Deviations of SCO scores Before and After Treatment (n=43)

	n m. M (.3)	Death Man Man (ad)
<u>SCALE</u>	<u> Pre-Tx Mean (sd)</u>	<u>Post-Tx Mean (sd)</u>
TOTAL EFFICACY	22.21 (15.8)	84.96 ( 9.3)
UNPLEASANT EMOTIONS	19.07 (17.3)	81.40 (16.0)
PHYSICAL DISCOMFORT	38.84 (29.9)	91.16 ( 9.3)
SOCIAL PROBLEMS AT WORK	19.53 (18.2)	85.58 (12.8)
SOCIAL TENSION	20.93 (19.9)	86.74 (10.6)
PLEASANT EMOTIONS	35.58 (29.2)	90.93 (10.4)
POSITIVE SOCIAL SITUATIONS	11.40 (17.1)	81.86 (14.7)
URGES AND TEMPTATIONS	18.84 (18.2)	85.58 (10.8)
TESTING PERSONAL CONTROL	13.49 (18.4)	76.51 (21.4)



Table 2.

MANOVA of SCO Scores by Pre/Post Treatment and Followup Availability

Tests of Significance for Pre-treatment using UNIQUE sums of squares

Source	· ss _	DF	MS	F _	Sig of F
ERROR	4913.07	41	119.83		
FOLLOWUP	130.53	1	130.53	1.09	.30

Tests involving Pre/Post TX Within-Subject Effect.

Source	SS	DF	MS	F_	Sig of F
ERROR	9111.25	41	222.23		
PRE/POST TX	77142.24	1	77142.24	347.13	.00
FOLLOWUP BY	TX 1.71	1	1.71	.01	.93



### Table 3.

### Results from the Relapse Prevention Follow-up Questionnaire

Since	treatment:					
	Relapsed - 86%					
	Total months of sobriety - M = 8.6, SD = 3.0					
	Longest continuous period of sobriety - M = 6.6, SD = 3.2					
	Number of relapses - $M = 1.6$ , $SD = 1.1$ (13 had 1, 6 had 2,	3 had 3.				
	2 had 4)	,				
	Received more inpt or intensive outpt tx - 39%					
	Compared to relapses before treatment, periods of relapse w	ere:				
	No Relapses 14%					
	Shorter 68%					
	Longer 4%					
	About the same 14%					
	If you relapsed since treatment, your strongest trigger was	:				
	UEF Unpleasant emotions or frustrations	67%				
	PD Physical discomfort	48				
	SPW Social problems at work	0 %				
	ST Social tension	0%				
	PE Pleasant emotions	0 %				
	PSS Positive social situations	0%				
	UT Urges and temptations	29%				
	TPC Testing personal control	0%				
	Level of outpatient recovery activities:					
	I am not attending outpatient recovery activities	48				
	I did not initially attend outpatient recovery					
	activities after discharge, but I am now	0%				
	I am sporadically or episodically attending					
	outpatient recovery activities since discharge	7 %				
	I initially attended outpatient recovery activities					
	after discharge, but am not attending any now	39%				
	I initially attended outpatient recovery activities					
	on a regular basis, and have been sporadically					
	or episodically attending outpatient recovery					
	activities recently	25%				
	I have been consistently attending outpatient					
	recovery activities since discharge	25%				
	Type of recovery activities attended:					
	Relapse Prevention Group	71%				
	AA, NA, or other 12 step program	61%				
	Individual psychotherapy	14%				
	Group psychotherapy	7%				
	None	48				
	Other	48				



Table 4.

Correlations Between SCO Scores and Relapse Outcomes

	RELAPSE/ NO RELAPSE (PT. BISERIAL)	MONTHS OF SOBRIETY (PEARSON)	LONGEST PERIOD OF SOBRIETY (PEARSON)	LEVEL OF RECOVERY ACTIVITY (SPEARMAN)
PRE-T	REATMENT			
TOTAL	18	13	03	.00
UEF	22	10	02	12
PD	20	22	11	.04
SPW	10	03	06	.05
ST	07	02	.04	.03
PE	08	17	08	.09
PSS	17	.05	.15	01
UT	25	11	04	.03
TPC	04	12	.01	09
POST-	-TREATMENT			
TOTAL		.24	.10	.26
UEF	.39*	.10	.08	.21
PD	.15	.05	.00	.32
SPW	.32	.15	.01	06
ST	.39*	.32	.13	.27
PE	.36	.32	.21	06
PSS	.30	.17	.07	.15
UT	.28	.16	03	.30
TPC	.21	.13	.09	.24

<sup>\*</sup> p<.05

