

# Optimism, Abstinence Self-Efficacy, and Self-Mastery

## A Comparative Analysis of Cognitive Resources

John M. Majer  
Leonard A. Jason  
Bradley D. Olson

*DePaul University*

*The relationship between optimism, abstinence self-efficacy, and self-mastery was examined by investigating levels of these cognitive resources among two samples of recovering substance abusers: Oxford House residents who attended twelve-step groups and twelve-step members who had never lived in an Oxford House. Participants' levels of optimism were significantly and positively related to both abstinence self-efficacy and self-mastery scores, as abstinence self-efficacy was significantly and positively related to participants' number of days abstinent. Participants who reported having more than 180 days abstinent reported significantly higher levels of abstinence self-efficacy than participants who reported having less than 180 days abstinent. In addition, among participants who reported having less than 180 days abstinent, Oxford House residents reported significantly higher levels of abstinence self-efficacy than twelve-step members. Overall, findings suggest that cognitive resources facilitate substance abusers' recovery and that the Oxford House model might provide high levels of support in their ongoing abstinence.*

**Keywords:** optimism; abstinence self-efficacy; self-mastery; Oxford House; cognitive resources; addiction; relapse prevention

Bandura's (1977) pioneering self-efficacy theory has important implications for understanding the relationship between substance abusers' use of cognitive resources in pursuit of ongoing recovery from addiction. Self-efficacy is a crucial element toward relapse prevention (Marlatt & Gordon, 1985) that can help substance abusers cope with high-risk situations (Annis & Davis, 1991). Several studies have also demonstrated that optimism (Strack, Carver, & Blaney, 1987; White, Wampler, & Fischer, 2001) and abstinence self-efficacy (Greenfield et al., 2000; Majer, Jason, Ferrari, Venable, & Olson, 2002; Rychtarik, Prue,

Rapp, & King, 1992) are significantly related to substance abusers' abstinence.

Involvement with 12-step groups might strengthen substance abusers' optimism (White et al., 2001) and self-efficacy for abstinence (Morganstern, Labouvie, McCrady, Kahler, & Frey, 1997) because recovering substance abusers may acquire these cognitive resources through peer social support. Although optimism (Lightsey, 1997; Marshall & Lang, 1990; Scheier, Carver, & Bridges, 1994) and (generalized) self-efficacy (Lightsey, 1997) has been positively correlated with self-

---

This study is based on a dissertation in clinical psychology by the first author under the supervision of the second author. Gratitude is expressed to the men and women of Oxford House who took the time to complete the measures and to Leon B. Venable for his assistance in the data collection process. In addition, gratitude is expressed to Joseph R. Ferrari, Ph.D.; Eileen Martin, Ph.D.; Susan D. McMahon, Ph.D.; and Sr. Frances Ryan, Ph.D., for their comments on earlier drafts of this article. Comments should be addressed to John M. Majer, Department of Psychology, DePaul University, 2219 North Kenmore Avenue, Chicago, IL 60614; phone: (773)-325-7887; e-mail: Jmajer@depaul.edu.

mastery in other populations, self-mastery may not be used as a cognitive resource for abstinence. Substance abusers who use 12-step groups might endorse self-mastery as a cognitive resource for regulating emotional stress rather than as a resource directly related to abstinence (Majer, Jason, Ferrari, Olson, & North, 2003) because it may not be compatible with 12-step ideology.

It is possible that there are moderating factors that regulate substance abusers' use of cognitive resources, for instance, living in a recovery home. One type of recovery home is Oxford House, which are nonprofessional, self-run, communal living settings that offer their residents a drug-free and supportive community without limitations to length of stay (Jason et al., 1994). Prospective residents are voted into an Oxford House by an 80% house vote. There are no specific admission criteria or minimum requirement of days abstinent to enter an Oxford House because each house is autonomous in establishing its own rules throughout the 1,000 Oxford Houses located in the United States, Canada, and Australia (P. Molloy, personal communication, May 9, 2003). However, all houses require their residents to attend weekly business meetings, to pay rent, to participate in house chores, and to be abstinent.

Several studies suggest that the Oxford House model is beneficial to residents' recovery (Ferrari, Jason, Olson, Davis, & Alvarez, 2002). For instance, residents have reported that peer social support and a sense of community with similar others in a stable environment were the primary reasons for choosing to reside in Oxford Houses (Jason et al., 1997). Residents' perceived sense of community and optimistic expectations were demonstrated as being significant factors related to recovery in one follow-up study (Bishop, Jason, Ferrari, & Huang, 1998). Even though the majority of residents have psychiatric comorbidity, Majer, Jason, Ferrari, and North (2002) found outcome measures at 6 months revealed that 42% of participants chose to continue their residency, whereas 27% left on good terms (i.e., complied with house rules, did not relapse) and transitioned into their communities. Therefore, the Oxford House model might be a psychosocial intervention that is instrumental in strengthening recovering substance abusers' cognitive resources to prevent relapse through 12-step participation, social support, and a psychological sense of community (Jason, Davis, Ferrari, & Bishop, 2001).

In addition, levels of cognitive resources might be related to recovering substance abusers' amount of abstinence time. DiClemente, Fairhurst, and Piotrowski (1995) claimed that efficacy expectations are related to addictive behavior change and stabilize after 6 months of abstinence in accordance to process of change theory (Prochaska & DiClemente, 1992). Therefore, it is likely that levels of cognitive resources vary among substance abusers who

are at different milestones in their recovery, and Oxford House living might have an effect on these relationships because houses may foster intensive social support within stable environments (Jason et al., 1997; Majer, Jason, Ferrari, Venable, et al., 2002).

This study investigated levels of cognitive resources among two groups of substance abusers: Oxford House residents who attend 12-step groups, and 12-step members who never lived in an Oxford House. It was hypothesized that there would be significant positive relationships between levels of optimism, abstinence self-efficacy, and participants' number of days abstinent. Significantly higher levels of cognitive resources were expected in the Oxford House sample to determine whether the Oxford House model provides a significant psychosocial intervention for relapse prevention. In addition, high levels of cognitive resources were expected among all participants who reported having more than 180 days abstinent to test whether there are significant differences in efficacy expectations related to this 6-month milestone.

## METHOD

### Procedure

*Chicago-area 12-step sample.* Forty-two participants (30 men, 12 women) were recruited by the first author who attended two "open" meetings (i.e., open to members of the public) of Alcoholics Anonymous (AA) and two open meetings of Narcotics Anonymous (NA) that were in close proximity of DePaul University. Before the onset of these meetings, the investigator presented an overview of the study and engaged participants in a process of informed consent. Survey packets were disbursed during four AA/NA 12-step meetings in March and April 2002 among a total of 96 persons who attended these meetings. A total of 42 survey packets were mailed to the first author, resulting in a 44% (42/96) response rate.

*Chicago-area Oxford House sample.* Forty-two participants (25 men, 17 women) were recruited in a similar manner with the assistance of a Northern Illinois Oxford House coordinator between March and May 2002. After engaging residents in a process of informed consent, residents received survey packets and were instructed to immediately seal and mail their survey packets upon completion in a postage-paid envelope provided by the coordinator (to preserve their confidentiality). Most chose to complete their packets in a small group format, whereas only 4 participants chose to mail their survey packets. The overall response rate for participation was 54% (42/77).

*Participants.* Sociodemographic information among the 84 participants (55 men, 29 women) is presented in

**TABLE 1**  
**Averages and Percentages of Sociodemographic Characteristics by Sample**

	<i>Oxford House Residents</i> (n = 42)	<i>12-Step Members</i> (n = 42)	<i>Overall</i> (N = 84)
Age (in years)	38.3 ± 10.5	38.9 ± 9.11	38.6 ± 9.8
Annual income (in dollars)	19,700 ± 9,620*	31,400 ± 31,900*	25,400 ± 23,400
Education (in years)	12.3 ± 2.0*	15.1 ± 2.8*	13.7 ± 2.8
Number of children	1.3 ± 1.5*	.6 ± .9*	.9 ± 1.3
Employment status (in percentages)			
Full-time	64.3	68.7	66.7
Part-time	7.1%	10.8	9.0
Unemployed	19.0	13.3	16.0
Receiving disability	9.5	7.2	8.3
Marital status (in percentages)			
Single	61.9	50.0	56.0
Separated/divorced	28.5	26.2	27.3
Married/with partner	9.5	16.7	
Race (in percentages)			
African American	57.1*	4.8*	31.0
Anglo-American	35.7*	90.5*	63.0
Asian American	0.0	2.4	1.2
Latino/Latina	2.4	2.4	2.4
Multiracial	4.8	0.0	2.4
Sex (in percentages)			
Men	59.5*	71.5*	65.5
Women	40.5*	28.5*	34.5

NOTE: Variables significantly different at \* $p < .01$ .

Table 1. The majority of participants were single (54%), employed full-time (68%), had an average annual income of \$25,500, and had an average of 13.7 years of education. Participants reported a history of substance use with alcohol (71%), cocaine (61%), cannabis (50%), and opioids/heroin (33%) and a history of intravenous drug use (31%) and polysubstance use (80%). They reported attending an average of four ( $M = 4.3$ ,  $SD = 2.7$ ) AA/NA meetings per week. In addition, participants' number of continuous days abstinent ranged from 1 to 5,790 ( $M = 1829.4$ ,  $SD = 1835.7$ ) days, and residents' length of stay in an Oxford House ranged from 2 to 1,095 days ( $M = 200.29$ ,  $SD = 228.93$ ).

## Materials

*Optimism.* Scheier et al.'s (1994) revised Life Orientation Test (LOT-R) was administered to assess participants' tendency to expect favorable outcomes. Optimism is a favorable attitude or expectation toward future events, irrespective of one's perceived ability to efficaciously engage in goal-oriented situations or control outcomes (Scheier & Carver, 1985). The 12 items of the LOT-R are rated on a 5-point scale (0-4) ranging from *strongly disagree* to *strongly agree*, with scoring of only 6 LOT-R items (3 items are reverse scored) because the other items are used as filler items. The LOT-R has good internal consistency (Cronbach's  $\alpha = .78$ ), and items on the LOT-R

have been reported as correlating very high (in the .90s) with the original LOT items (Scheier et al., 1994). The internal reliability in the present study was appropriate for a research study (Cronbach's  $\alpha = .67$ ).

*Abstinence self-efficacy.* Annis and Graham's (1988) Situational Confidence Questionnaire-39 (SCQ-39) was administered to assess participants' confidence in resisting the urge to use drugs or alcohol across 39 hypothetical situations, with high scores indicating greater levels of confidence. The SCQ-39 is based on Bandura's (1977) cognitive-behavioral self-efficacy theory that involves one's sense of confidence or ability to engage in self-efficacious behaviors, and it is based on antecedents of substance abuse relapse. Responses range on a scale from 0% (*not at all confident*) to 100% (*very confident*). The SCQ-39 total score calculation has been effectively used in previous studies that measured self-efficacy for abstinence among substance abusers (Greenfield et al., 2000; Majer, Jason, Ferrari, et al. 2002). The internal consistency reliability of the SCQ-39 total score in the present study was excellent (Cronbach's  $\alpha = .98$ ).

*Self-mastery.* Pearlin and Schooler's (1978) Self-Mastery Scale (SMS) was used to measure participants' level of self-mastery. Self-mastery is a perception that reflects one's personal mastery or control over life outcomes, and it has been defined as the "extent to which one regards one's life-chances as being under one's own con-

trol in contrast to being fatalistically ruled" (Pearlin & Schooler, 1978, p. 5). The seven items of the SMS are scored on a 4-point (agree-disagree format) scale ranging from 0 to 28, with high scores indicating higher self-mastery. The internal reliability for the SMS in the present study was very good (Cronbach's alpha = .85).

*Sociodemographic and treatment history.* In addition, all participants completed a Basic Information Survey (27 items) and a Treatment Involvement Survey (21 items) developed for the study as a way of gathering relevant sociodemographic and substance abuse treatment information (e.g., self-reports on drug-dependent typologies, AA/NA affiliation, continuous days abstinent).

### Statistical Analyses

Initial analyses consisted of chi-square and independent sample *t* tests (two-tailed) to investigate potential differences in the overall sample ( $N = 84$ ). Relationships between levels of cognitive resources were evaluated by partial correlation analyses (Pearson, one-tailed), which controlled for the effects of sociodemographic characteristics that might differ between the samples. MANCOVA was conducted to test for differences in levels of optimism, abstinence self-efficacy, and self-mastery scores in relation to two factors: living in an Oxford House and days abstinent (less than or more than 180 days). This method was used to control for potential shared variance among covariate and dependent variables in addition to control for Type I error that might have resulted through repeated one-way analysis of variance testing.

## RESULTS

There were significant differences observed between the Oxford House and 12-step sample in terms of sex,  $\chi^2(1, N = 84) = 8.05, p < .01$ , and race,  $\chi^2(4, N = 84) = 31.6, p < .01$ , with a disproportionately fewer number of women in the 12-step sample. Further analysis revealed that there were significantly more African American men in the Oxford House sample,  $\chi^2(1, N = 84) = 28.59, p < .01$ , and significantly more Anglo-American men in the 12-step sample,  $\chi^2(1, N = 84) = 96.10, p < .01$ .

Twelve-step members reported having significantly fewer children,  $t(62) = 2.72, p < .01$ , but significantly more education,  $t(72) = -5.04, p < .01$ ; weekly income,  $t(43) = -2.19, p < .01$ ; and number of continuous days abstinent ( $M_s = 1829.4$  vs.  $588.8$ ),  $t(56) = -4.01, p < .01$ , than Oxford House residents. However, proportionately more residents reported a history of cocaine use than 12-step members,  $\chi^2(1, N = 84) = 7.16, p < .01$ . There were no significant differences observed between the Oxford

House and 12-step samples in terms of their age in years, marital status, or employment status.

### Relationships Between Cognitive Resources

Partial correlational analyses (all one-tailed), controlling for sex, race, income, number of children, educational level, cocaine use, and number of continuous days abstinent revealed that participants' optimism (LOT-R) scores were significantly and positively related to their abstinence self-efficacy (SCQ-39) scores,  $r(59) = .29, p < .01$ . Participants' optimism (LOT-R) scores also were significantly related to their self-mastery (SMS) scores,  $r(59) = .47, p < .01$ . However, self-mastery (SMS) scores were not significantly related to their abstinence self-efficacy (SCQ-39) scores,  $r(59) = .17, p < .10$ .

In addition, when controlling for sex, race, income, number of children, educational level, and cocaine use, participants' number of continuous days abstinent was significantly and positively related to their abstinence self-efficacy scores,  $r(59) = .22, p < .01$ . However, participants' number of continuous days abstinent was not significantly correlated to optimism scores,  $r(59) = .05, p < .36$ , or self-mastery scores,  $r(59) = .01, p < .47$ .

### Multivariate Analysis of Cognitive Resources

Differences in levels of cognitive resources were compared among participants in relation to their number of days abstinent and whether they had ever lived in an Oxford House. A MANCOVA was employed using a 2 (having more than 180 days abstinent, having less than 180 days abstinent)  $\times$  2 (having lived in an Oxford House, never lived in an Oxford House) design (covarying sex, race, number of children, education level, income, and cocaine use), with optimism, abstinence self-efficacy, and self-mastery as dependent variables. Participants who did not complete all measures ( $n = 16$ ) were not included in MANCOVA testing.

*Main effects.* Results from the MANCOVA test demonstrated a significant main effect for days abstinent, Wilks's  $\lambda(3, 56) = 2.81, p < .05$ . A follow-up between-subjects ANOVA test revealed that participants who reported having more than 180 days abstinent ( $n = 52$ ) also reported significantly higher levels of abstinence self-efficacy ( $M_s = 84.79$  vs.  $71.58$ ),  $F(1, 67) = 6.21, p < .01$ , than participants who reported having less than 180 days abstinent ( $n = 16$ ). In addition, a significant main effect was observed for Oxford House status, Wilks's  $\lambda(3, 56) = 2.91, p < .05$ . A follow-up between-subjects ANOVA revealed that Oxford House residents ( $n = 33$ ) reported significantly higher levels of abstinence self-efficacy, ( $M_s = 84.88$  vs.  $71.49$ ),  $F(1, 67) = 5.52, p < .01$ , than 12-step mem-

bers who reported never having lived in an Oxford House ( $n = 35$ ).

*Interaction effects and preplanned contrasts.* The interaction effect was marginally significant, Wilks's  $\lambda(3, 56) = 2.63, p < .06$ . A follow-up ANCOVA with two contrasts was conducted on each of the three dependent variables to examine potential sample differences in relation to days abstinent (having more than 180 days abstinent, having less than 180 days abstinent). Oxford House residents who reported having less than 180 days abstinent ( $n = 10$ ) also reported significantly higher levels of abstinence self-efficacy,  $F(3, 57) = 4.56, p < .01$ , than did 12-step members ( $n = 9, Ms = 79.74$  vs.  $62.20$ ),  $t(17) = 2.14, p < .05$ . The increase in the number of cases ( $n = 19$ ) was a result of ANCOVA testing on one dependent variable (as opposed to three in MANCOVA testing) as three additional participants completed all measures for ANCOVA testing for abstinence self-efficacy. However, there were no significant differences in levels of cognitive resources between samples among participants who reported having more than 180 days abstinent.

## DISCUSSION

The significant and positive relationship between optimism and abstinence self-efficacy suggests that optimistic expectations for favorable outcomes coincide with beliefs in continued efforts that sustain positive expectancies (Scheier & Carver, 1992). This is a reasonable interpretation of the data when optimism is viewed as being functional in promoting healthy behaviors (such as continued abstinence) because functional optimism has been claimed to encompass a sense of self-efficacy in addition to positive expectancies (Schwarzer, 1994). Optimism may serve more of a functional purpose that facilitates adaptation to change (Schwarzer, 2001) among recovering substance abusers even though levels of optimism and days abstinent in the present study were not consistent with previous research evidence (Majer et al., 2003). Future studies are needed to clarify this disparity, which may be related to methodological and/or sample differences.

The significant relationship between days abstinent and abstinence self-efficacy is a finding that is consistent with previous investigations in which high levels of abstinence self-efficacy were related to better treatment outcomes (Greenfield et al., 2000; Rychtarik et al., 1992) and living in an Oxford House (Majer, Jason, Ferrari, Veneable, et al., 2002). Self-efficacy for abstinence is a practical resource for substance abusers because it may consist of various cognitive and behavioral self-regulatory strategies in addition to relapse prevention skills (Bandura, 1997).

Self-mastery was significantly and positively correlated to levels of optimism, which is a finding that is consistent with previous research in other populations (Lightsey, 1997; Marshall & Lang, 1990; Scheier et al., 1994). The lack of any significant relationship between self-mastery and abstinence self-efficacy on one hand and the significant and positive relationship between optimism and abstinence self-efficacy on the other hand suggests that optimism may be a more powerful determinant of behavioral change than self-mastery (Marshall & Lang, 1990). In addition, self-mastery scores were not significantly related to levels of abstinence self-efficacy or number of days abstinent, and these findings are consistent with research evidence from one Oxford House study (Majer et al., 2003) that suggests recovering substance abusers use self-mastery as a cognitive resource for regulating emotional stress. Therefore, self-mastery might be a cognitive resource that indirectly supports recovering substance abusers' ongoing abstinence.

One limitation of this study is that both samples reported having some involvement with 12-step groups even though active 12-step participation was not controlled. For instance, participants' levels of cognitive resources might have varied in relation to use of a sponsor, participation in 12-step service commitments, and their understanding/application of the 12 steps because active 12-step participation has been related to significant increases in perceptions of meaning and life purpose (Majer, 1992). In addition, this study did not constrain the potential extraneous influences due to concurrent (and historic) engagement in psychotherapy, psychiatric comorbidity, the lack of standardized diagnostics instruments, and history of relapses. Future investigations should examine 12-step involvement and pertinent psychological variables among substance abuse populations to clarify how these variables are related to their levels of cognitive resources.

The investigation of cognitive resources among a substance abuse population is a unique contribution toward our understanding of how recovering substance abusers use these resources in relation to ongoing abstinence. For instance, significantly higher levels of abstinence self-efficacy were observed among participants who reported having more than 180 days abstinent compared to those who reported having less than 180 days abstinent. One treatment implication would be to target recovering substance abusers' abstinence self-efficacy within the first 6 months of abstinence, because their efficacy expectations are probably less than optimal (Prochaska & DiClemente, 1992). In addition, Oxford House residents reported significantly higher levels of abstinence self-efficacy than did 12-step members who never lived in an Oxford House. This finding suggests that the intensive social support provided by the Oxford House model (Jason et al., 1997;

Majer, Jason, Ferrari, Venable, et al., 2002) might bolster recovering substance abusers' abstinence self-efficacy early in their recovery process, and this would have serious implications for treating chronic relapse.

Strengthening substance abusers' belief in their ability to remain abstinent early in the course of therapy is recommended as a primary treatment goal that could be met through a variety of clinical techniques. Annis and Graham's (1988) SCQ-39 could be used to assess eight highly reliable dimensions of cognitive-behavioral antecedents of substance abuse relapse. We suggest that clinicians use reframing techniques to specifically address and restructure clients' confidence to maintain abstinence; moreover, their involvement with 12-step groups and living in an Oxford House could serve as supplementary treatment objectives. Although clinicians may consider drawing on recovering substance abusers' optimistic expectations to facilitate abstinence self-efficacy development, findings in the present study suggest that these cognitive resources are more empowering than self-mastery.

This study investigated two community samples of recovering substance abusers in which participant response came from natural settings, and this adds to the credibility of findings. Overall, findings suggest that cognitive resources facilitate substance abusers' recovery and that the Oxford House model provides recovering substance abusers with an environment that provides greater support in their development of cognitive resourcefulness for ongoing abstinence.

## REFERENCES

- Annis, H. M., & Davis, C. S. (1991). Relapse prevention. *Alcohol Health and Research World*, 15, 204-212.
- Annis, H. M., & Graham, J. M. (1988). *Situational confidence questionnaire*. Toronto: Addiction Research Foundation.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control* (pp. 357-368). New York: W. H. Freeman.
- Bishop, P. D., Jason, L. A., Ferrari, J. R., & Huang, C. F. (1998). A survival analysis of communal-living, self-help, addiction recovery participants. *American Journal of Community Psychology*, 26, 803-821.
- DiClemente, C. C., Fairhurst, S. K., & Piotrowski, N. A. (1995). Self-efficacy and addictive behaviors. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment: Theory, research, and application* (pp. 109-141). New York: Plenum.
- Ferrari, J. R., Jason, L. A., Olson, B. D., Davis, M. I., & Alvarez, J. (2002). Sense of community among Oxford House residents recovering from substance abuse: Making a house a home. In A. Fisher (Ed.), *Psychological sense of community: Research, applications, and implications* (pp. 109-122). New York: Kluwer-Plenum.
- Greenfield, S. F., Hufford, M. R., Vagge, L. M., Muenz, L. R., Costello, M. E., & Weiss, R. D. (2000). The relationship of self-efficacy expectancies to relapse among alcohol dependent men and women: A prospective study. *Journal of Studies on Alcohol*, 61, 345-351.
- Jason, L. A., Davis, M. I., Ferrari, J. R., & Bishop, P. D. (2001). Oxford House: A review of research and implications for substance abuse recovery and community research. *Journal of Drug Education*, 31, 1-27.
- Jason, L. A., Ferrari, J. R., Smith, B., Marsh, P., Dvorchak, P. A., Groessler, E. J., et al. (1997). An exploratory study of male recovering substance abusers living in a self-help, self-governed setting. *Journal of Mental Health Administration*, 24, 332-339.
- Jason, L. A., Pechota, M. E., Bowden, B. S., Kohner, K., Pokorny, S. B., Bishop, P., et al. (1994). Oxford House: Community living is community healing. In J. A. Lewis (Ed.), *Addictions: Concepts and strategies for treatment* (pp. 333-338). Gaithersburg, MD: Aspen.
- Lightsey, O. R. (1997). Stress buffers and dysphoria: a prospective study. *Journal of Cognitive Psychotherapy*, 11, 263-277.
- Majer, J. M. (1992). Assessing the logotherapeutic value of twelve-step therapy. *International Forum for Logotherapy*, 15, 86-89.
- Majer, J. M., Jason, L. A., Ferrari, J. R., & North, C. S. (2002). Comorbidity among Oxford House residents: A preliminary outcome study. *Addictive Behaviors*, 27, 837-845.
- Majer, J. M., Jason, L. A., Ferrari, J. R., Olson, B. D., & North, C. S. (2003). Is self-mastery always a helpful resource? Coping with paradoxical findings in relation to optimism and abstinence self-efficacy. *American Journal of Drug and Alcohol Abuse*, 29, 385-399.
- Majer, J. M., Jason, L. A., Ferrari, J. R., Venable, L. B., & Olson, B. D. (2002). Social support and self-efficacy for abstinence: is peer identification an issue? *Journal of Substance Abuse Treatment*, 23, 209-215.
- Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in addictive behavior change*. New York: Guilford.
- Marshall, G. N., & Lang, E. L. (1990). Optimism, self-mastery, and symptoms of depression in women professionals. *Journal of Personality and Social Psychology*, 59, 132-139.
- Morganstern, J., Labouvie, E., McCrady, B. S., Kahler, C. W., & Frey, R. M. (1997). Affiliation with Alcoholics Anonymous after treatment: A study of its therapeutic effects and mechanisms of action. *Journal of Clinical and Consulting Psychology*, 65, 768-777.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.
- Prochaska, J. O., & DiClemente, C. C. (1992). Stages of change in the modification of problem behaviors. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), *Progress in behavior modification* (pp. 184-214). Sycamore, NY: Sycamore.
- Rychtarik, R. G., Prue, D. M., Rapp, S. R., & King, A. C. (1992). Self-efficacy, aftercare and relapse in a treatment program for alcoholics. *Journal of Studies on Alcohol*, 53, 435-440.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical wellbeing: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16, 201-228.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.
- Schwarzer, R. (2001). Social-cognitive factors in changing health-related behaviors. *Current Directions in Psychological Science*, 10, 47-51.
- Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and Health*, 9, 161-180.
- Strack, S., Carver, C. S., & Blaney, P. H. (1987). Predicting successful completion of an aftercare program following treatment for alcoholism: The role of dispositional optimism. *Journal of Personality and Social Psychology*, 53, 579-584.
- White, J. M., Wampler, R. S., & Fischer, J. L. (2001). Indicators of spiritual development in recovery from alcohol and other drug problems. *Alcoholism Treatment Quarterly*, 19, 19-35.

**John M. Majer** is a doctoral candidate in clinical psychology, a part-time psychology instructor at DePaul University, and a part-

time researcher for the Center for Community Research. His clinical research interests focus on diverse issues among substance abusers who use community-based treatments. He has investigated the logotherapeutic value of 12-step therapy, psychiatric comorbidity prevalence and treatment outcome, the relationship between peer identification issues and levels of social support and self-efficacy for abstinence, and coping strategies among recovering substance abusers. Prior to his doctoral studies, Majer worked as both a substance abuse community liaison and clinical therapist in a variety of capacities for 9 years in addition to teaching as an adjunct psychology instructor for 4 years. He is currently a reviewer for *Medical Science Monitor*.

**Leonard A. Jason** is a professor of psychology at DePaul University and the director of the Center for Community Research. He received his Ph.D. in clinical and community psychology from the University of Rochester. He is a former president of the Division of Community Psychology of the American Psychological Association (APA) and a past editor of *The Community Psychologist*. He received the 1997 Distinguished Contributions to Theory and Research Award from the Society for Community

Research and Action (Division 27 of the APA). He has published more than 310 articles and 45 chapters on chronic fatigue syndrome; preventive school-based interventions; the prevention of alcohol, tobacco, and other drug abuse; media interventions; and program evaluation. He has served on the editorial boards of 10 psychological journals and has edited or written 14 books. He has served on review committees of the National Institute of Drug Abuse and the National Institute of Mental Health and has received more than \$16 million in federal research grants. He has received three media awards from the APA and is frequently asked to comment on policy issues for numerous media outlets.

**Bradley D. Olson** received his Ph.D. in the personality and social psychology concentration at the University of Iowa, where his research focused on social comparison theory, self-categorization theory, group polarization, and personality. He is now working at the Center for Community Research at DePaul University and is currently investigating factors involved in innovative community-based residences for people with substance abuse problems and other psychological and medical disorders.