

# Smoking Cessation: Social Comparison Level Predicts Success for Adult Smokers

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The affiliation preferences of 151 adult heavy smokers who joined smoking cessation groups were assessed at the 1st group session and were then used to predict their smoking status 6 and 12 months later. Those who preferred to be in groups with other smokers who were having relatively little trouble quitting were more likely to be successful than were those who preferred others who were having more difficulty quitting. This prospective effect was mediated by psychological distancing from the image of the typical smoker: Preference for others who were doing well was associated with a decrease in perceived similarity to the typical smoker, which, in turn, was associated with successful cessation. Implications of these findings for cessation groups and social comparison theory are discussed.

*Keywords:* typical smoker, adult smokers, distancing, prototypes

An expanding body of literature has provided increasing evidence of the impact of social-comparison processes on health outcomes (Buunk & Gibbons, 1997; Gibbons & Gerrard, 1997; Gibbons, Gerrard, & Lane, 2003). Early work with breast cancer patients suggested that comparison with others who are thought to be doing worse (i.e., passive downward social comparison) may help individuals cope with the threat associated with health problems (Taylor, Wood, & Lichtman, 1983). This research prompted a series of experimental and correlational studies demonstrating that threatened people do feel better when given an opportunity to compare downward (Aspinwall & Taylor, 1993; Gibbons & Boney McCoy, 1991). Similarly, studies have shown that threat associated with poor academic performance leads some students to change their social comparison preferences, specifically, their preferred comparison level. For example, Gibbons, Benbow, and Gerrard (1994, Study 1) found that gifted students who did worse than they had expected in an advanced summer program reported a shift in comparison preferences. The students were asked about their preferences regarding the kind of person with whom they would like to compare test scores, with choices ranging from someone who “did poorly” to someone who “got the highest score.” Prior to learning that they had not performed as well as

anticipated, these students preferred to compare their scores with someone at the top of the class, but after receiving their (relatively) disappointing scores, they preferred to compare with someone below that level. This downward shift in comparison level was interpreted as a self-protection strategy. In fact, students who performed poorly and did not report this downward shift reported a decline in academic and general self-esteem.

Although effective at maintaining or improving self-esteem and mood, these comparison strategies—both downward comparison and downward shifts in comparison level—are not without cost. Blanton, Buunk, Gibbons, and Kuypers (1999) reported that students who had a relatively low preferred academic comparison level at the beginning of the semester (i.e., they preferred to compare with average as opposed to high-performing students) did significantly worse academically at the end of the semester. Similarly, Gibbons, Blanton, Gerrard, Buunk, and Eggleston (2000) found that a decline in preferred academic comparison level led to a decline in academic performance later in the semester. It would appear, then, that threatened individuals may be trading mood amelioration for performance when choosing to compare downward.

## Distancing

A different type of downward comparison has been linked with health outcomes. Gibbons and Gerrard (1995) suggested that people who are trying to stop a particular behavior—substance abuse, for example—will try to distance themselves psychologically from the prototype associated with the behavior, for example, the typical drinker or smoker. This process involves derogation of the prototype, what Wills (1981) called *active downward comparison*, as well as an effort to look for differences between the prototype and the self. Theoretically, the more effectively an individual distances from the prototype, the more likely he or she is to stop the

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behavior. The concept of distancing is similar to Buunk and Ybema's (1997) notion of contrast, which is part of their identification–contrast model of social comparison. These authors (Buunk & Ybema, 1997; Wills, 1981) suggested, however, that downward comparison can be problematic when the comparer cannot distance from the downward target.

### Social Comparison and Health Performance

Two studies have specifically addressed the relation between smokers' images of the prototypical smoker and success or failure in quitting smoking. In the first of these studies, members of smoking cessation clinics were asked about their perceptions of the typical smoker (Gibbons, Gerrard, Lando, & McGovern, 1991). At the start of the group, most of the smokers had relatively favorable perceptions. Over the course of the group, however, those who were successful (i.e., abstinent at 6 months) developed a significantly less favorable image of the typical smoker. There was no evidence of this type of distancing among those who did not quit. The same pattern was seen in the smokers' perceptions of similarity to the typical smoker, suggesting that those who were successful had engaged in an active process of distancing from the prototype.

#### *Distancing From the Typical Smoker*

The second study assessed smokers' perceptions of the typical smoker and then used these perceptions to predict smoking status 6 months later (Gibbons & Eggleston, 1996). Once again, most smokers started the clinic with relatively favorable perceptions. However, those who started with more negative perceptions were more likely to be abstinent at the follow-up, suggesting that distancing before the group meets also predicts success. This effect was moderated by the number of the smokers' friends and family members who smoked—those who had negative perceptions of the typical smoker and had friends or family members who smoked were more likely to relapse than those with negative images who were not embedded in a social network of smokers. Gibbons and Eggleston's (1996) interpretation of this finding was that having friends and family members who smoked inhibited the distancing process.

#### *Comparison Level*

A recent study explored changes in comparison level after smokers completed their cessation attempts (Gibbons et al., 2002, Study 5). In this study, people who joined a cessation clinic were asked about the kind of person they would like to have in their current (or future) cessation group, that is, someone who will have "very little trouble quitting" (high comparison level) to those who will have "a lot of trouble quitting" (low comparison level). As in the studies of academic comparison level, smokers who had not quit demonstrated increased preference to affiliate with others who were also having difficulty, suggesting that smokers use downward shifts in comparison level to protect their self-esteem when they relapsed. This study, however, did not investigate the question of whether beginning a cessation attempt with an ego-protective low comparison level predicted relapse.

### The Current Study

Several studies have shown that a preference for comparison with others who are doing poorly is associated with poorer academic performance (Gibbons et al., 2000; Huguet, Dumas, Monteil, & Genestoux, 2001). Consistent with this, it has also been suggested that perceived similarity to downward comparison targets can inhibit successful performance, although there is little direct evidence of this (Collins, 1996; Lockwood & Kunda, 1997). Research with smokers suggests that having a favorable image of the typical (i.e., heavy) smoker before beginning a cessation attempt also interferes with success (Gibbons & Eggleston, 1996).<sup>1</sup> Thus, it appears that having a low comparison level and a favorable image of typical smokers are both problematic in that these cognitions may interfere with attempts to quit. None of the previous studies, however, have directly addressed the impact of an initial low comparison level on quitting. Thus, the current study focused on this issue. Likewise, although several studies have suggested that the relation between comparison level and subsequent success or failure is mediated by psychological distancing, no study has examined this process directly. This study was designed to test the following hypotheses: (a) Smoking comparison level predicts smoking cessation—those who join a smoking cessation group with low comparison levels are less likely to quit than are those who join with high levels; (b) smokers who enter a cessation group with low comparison levels and favorable smoker images have more difficulty quitting than smokers with only one of these characteristics; (c) the relation between comparison level and success at quitting is mediated by changes in perceived similarity to other smokers. More specifically, low comparison levels inhibit psychological distancing (increased perceptions of dissimilarity) from other smokers and decrease the likelihood of successful cessation, whereas high comparison levels facilitate distancing and, thus, predict success.

### *Method*

#### *Participants*

The sample used in Gibbons et al.'s (2002) Study 5 was also used in this study. It included 62 male and 89 female smokers (mean age = 42 years) who answered questions related to their preferred comparison level at the first meeting of a smoking cessation group and at a 6-month follow-up. On average, participants had been smoking for 23 years and reported smoking 27 cigarettes per day at the initial meeting. Their mean number of previous quit attempts was five. Of this group, 111 (74%) also responded at a 12-month follow-up. There were no Time 1 (T1) differences between participants who responded at 12 months and those who did not on any of the measures (all  $ps > .10$ ) except age; responders were older than nonresponders (43 vs. 38;  $p = .005$ ).

#### *Procedure*

The Lando clinic procedure for smoking cessation involves a series of 12 to 15 sessions over 9 weeks, with all smokers agreeing to quit together at

<sup>1</sup> A number of previous studies of social comparison and smoking have demonstrated that the typical smoker is seen as a downward comparison target; for example, relative to the self, smokers rate the typical smoker as less capable of quitting and more likely to contract an illness related to smoking (Gibbons & Eggleston, 1996; Gibbons et al., 1991; Boney McCoy et al., 1992).

Table 1  
Correlations, Means, and Standard Deviations for Comparison Level, Prototype, Similarity, Commitment, and Confidence

Predictor	1	2	3	4	5	6	7	8	9
1. Comparison level	—								
2. Initial prototype	-.06	—							
3. Initial similarity	-.02	.26***	—						
4. 6-month prototype	-.14†	.54***	.05	—					
5. 6-month similarity	-.21**	.16†	.28***	.31***	—				
6. 12-month prototype	-.22*	.61***	.10	.78***	.33***	—			
7. 12-month similarity	-.36**	.14	.22*	.33***	.68***	.47***	—		
8. Commitment	-.28**	-.03	.07	-.07	.02	-.13	-.10	—	
9. Confidence	.14†	-.13	-.07	-.27***	-.16†	-.26**	-.08	.42***	—
<i>M</i>	51.39	68.64	79.59	67.02	72.25	64.84	73.53	101.34	79.25
<i>SD</i>	20.45	11.88	28.30	13.29	29.25	16.36	32.53	25.87	31.94

Note. All scales ranged from 0 to 125.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

the 6th session (almost all do quit for at least 1 week; Lando, 1993). The group sessions, facilitated by former clinic members who have successfully quit, last about 1 hr and involve discussion of the problems associated with smoking and quitting. The setting is conducive to social comparison with others who are trying to quit and, thus, provides an opportunity to observe and assess changes in comparison habits and preferences and their consequences over time. Data collection for the two follow-ups was conducted by mail.

### Measures

T1 included questions about demographic factors shown previously to be associated with smoking cessation: gender, education, number of cigarettes smoked per day, years of smoking, and number of previous attempts to quit (Hellman, Cummings, Haughey, Zielezny, & O'Shea, 1991; Rose, Chassin, Presson, & Sherman, 1996; Williams, Gagne, Ryan, & Deci, 2002). Education was measured on a 5-point scale (1 = *less than high school diploma*, 5 = *postgraduate*). Questions about smoking history included the following: "How many years have you smoked?" "What is the average number of cigarettes you smoke per day?" and "How many times have you made a serious effort to quit smoking?" Participants also answered questions about self-efficacy and commitment to quitting: "How confident are you that you can quit smoking permanently?" and "How committed (i.e., determined) to quit smoking are you right now?" These two questions were followed by 125-mm lines, with endpoints labeled *not at all* and *very*. Participants were instructed to place slashes that reflected their degree of confidence and commitment on the lines. The distance of the slashes from the endpoints was measured to the nearest millimeter producing a 125-point scale.

Comparison level was assessed at the initial session by asking smokers to complete the following sentences about their preferences for who would be in the group with them: "I would prefer someone who will have \_\_\_\_ trouble quitting smoking," and "someone who relative to [me] will have \_\_\_\_ trouble quitting smoking," with anchors of *a lot* and *very little*. Ratings on the preference-level items were averaged to form a single 125-point scale ( $\alpha = .58$ ). Prototype favorability was assessed at T1 and at both follow-ups. First, participants were given the following instructions:

We would like to get your opinion of other smokers, in other words, the "typical" smoker. We are not looking for anyone in particular; we just want to know what you think the average person (or most people) who smokes is like.

They then rated the typical smoker on the following dimensions taken from lists of descriptors generated by smokers in Gibbons et al.'s (1991) study:

considerate, smart, self-centered, friendly, moody, attractive, honest, dependent, irrational, reliable, and weak. Each adjective was followed by a 125-mm line with endpoints *not at all* to *very*. Ratings of negative adjectives were reversed and added to those for the positive adjectives to form a scale with high numbers representing a more favorable smoker image ( $\alpha$ s: T1 = .73, T2 = .83, T3 = .89).

Perceived similarity to the typical smoker (i.e., distancing) was assessed by asking "How similar to yourself would you say the 'typical' smoker is?" with anchors *not at all similar* and *very similar*.<sup>2</sup> Smoking status was assessed at T2 and T3 by asking, "Were you smoking on [date]?" (see Velicer & Prochaska, 2004). Significant-other verification (Ossip-Klein et al., 1991) was completed for 71% of the participants who reported abstinence at 6 months; only one of these verifiers disputed a participant's claim of abstinence. This verification rate is comparable with that suggested by biochemical verification (Velicer, Prochaska, Rossi, & Snow, 1992).

### Results

The smokers were relatively committed to quitting when they joined the group but were only moderately confident that they would succeed ( $M$ s = 101.3 and 79.3, respectively, on the 125-mm scales). There was a significant decline in perceived similarity to the typical smoker between the first group meeting and the 6-month follow-up; however, as in Gibbons et al.'s (1991) study, this decline was significant only among abstainers,  $t(56) = 3.89$ ,  $p < .001$ , vs.  $t(90) = 0.31$ , *ns*. Zero order correlations indicated that there was no relation between initial comparison level and prototype favorability or commitment at T1  $|r| < .10$ ,  $ps > .27$  (see Table 1). As expected, however, T1 comparison level was negatively correlated with prototype favorability and similarity by the 6- and the 12-month follow-ups,  $r = -.14$ ,  $p < .10$ , and  $r = -.21$ ,  $p < .01$ , respectively, at 6 months; and  $r = -.22$ ,  $p < .05$ , and  $r = -.36$ ,  $p < .001$ , respectively, at 12 months. Thus, compared with smokers who had high comparison levels, smokers with low comparison levels were less likely to derogate or distance themselves from the typical smoker. In addition, the correlation

<sup>2</sup> Participants were also asked, "How would you describe your own situation (i.e., your smoking problem) relative to other smokers?" Because reliability for the combination of this and the other similarity question was low at T1 ( $\alpha = .33$ ), this question was not used in the analyses. Results are comparable when the two-item index is used.

between similarity and prototype favorability at T1 was .26,  $p < .001$ .

*Predicting Smoking Status at 6 Months*

**Cessation.** Thirty-nine percent reported abstinence at 6 months ( $n = 59$ ), and 42% reported abstinence at 12 months ( $n = 47$ ). These figures are comparable with those typically achieved in Lando clinics in the 1990s (see Lando, 1993; H. A. Lando, personal communication, January 26, 2004). Logistic regression was used to predict smoking status at T2 (1 = smoking, 2 = not smoking). The first step of the analysis entered the block of demographic and psychological variables previously shown to be reliable predictors of smoking cessation: gender, education, years of smoking, number of cigarettes per day, number of previous attempts to quit, confidence in quitting, and commitment to quitting. Comparison level and prototype (both standardized) were entered in the second step, and the Prototype  $\times$  Comparison Level interaction term was entered in the third step.

Two of the standard demographic and psychological variables were significant predictors; that is, smoking fewer cigarettes and having greater confidence at the beginning of the group predicted abstinence 6 months later:  $b = -.55, p = .02, Wald = 5.95$ , odds ratio (OR) = 0.57, and  $b = .60, p < .02, Wald = 5.66, OR = 1.83$ , respectively (see Table 2). As expected, comparison level predicted smoking, such that smokers who were 1 SD above the mean in comparison level were 1.81 times more likely to be abstinent at 6 months than were those at the mean,  $b = .59, p < .02, Wald = 6.40, OR = 1.81$ . Smoker prototype was also significant, indicating that smokers with a favorable prototype of the typical smoker were less likely to quit,  $b = -.45, p < .05, Wald = 4.04, OR = 0.64$ . In addition, the Comparison Level  $\times$  Prototype interaction was significant,  $b = .67, p < .03, Wald = 4.87, OR = 1.94$ . As indicated in Figure 1, participants who reported favorable smoker prototypes (above the median) and low comparison level (below the median) were more likely to be smoking at 6 months than were those in the other three quadrants (75.6% vs. 55.5% for the other three groups combined).

**Mediation.** To determine whether the relation between comparison level and smoking status was mediated by changes in

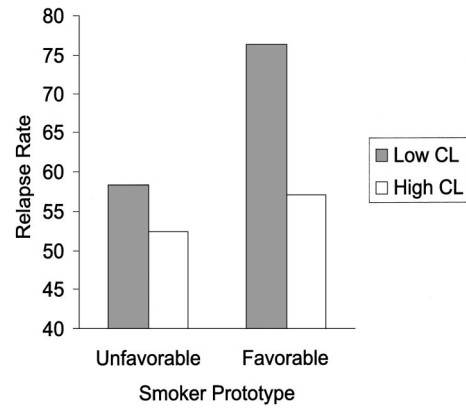


Figure 1. Relapse rates (in percentages) at 6 months as a function of prototype favorability and comparison level (CL).

perceived similarity to the typical smoker, a series of hierarchical regression analyses was performed (Baron & Kenny, 1986). First, in Step 1, perceived similarity at the 6-month follow-up was regressed onto the standard predictors (gender, confidence, etc.) and initial (T1) similarity and comparison level. As expected, this analysis indicated that comparison level was associated with a change in similarity between T1 and 6 months, such that a high T1 comparison level predicted distancing (decreases in perceived similarity to the typical smoker),  $\beta = -.20, p = .01$  (see Figure 2). Next, logistic regression was used to regress smoking status on the Step 1 predictors (along with first session, T1, and 6-month similarity to the typical smoker) and comparison level. This analysis indicated that distancing over 6 months was a significant predictor of smoking status,  $b = -.03, p < .001$ ; however, comparison level was no longer a significant predictor,  $b = .33, p = .16, Wald = 1.98$ . Sobel's test (Goodman version) revealed that the indirect effect of comparison level on smoking status through similarity was significant,  $z = 2.01, p < .05$ . Thus, distancing from the typical smoker between T1 and 6 months mediated the effect of comparison level on smoking status.

*Predicting Smoking Status at 12 Months*

**Comparison level and prototype.** Of the 111 smokers who responded at T2 and T3, 8 had changed status at T3—4 abstainers

Table 2  
Predictors of Cessation at 6 and 12 Months

Predictor	6 months			12 months		
	<i>b</i>	<i>SE b</i>	OR	<i>b</i>	<i>SE b</i>	OR
Gender	.52	.40	1.68	.49	.47	1.64
Education	.12	.19	1.13	.12	.22	1.13
Years of smoking	-.03	.22	0.97	-.20	.27	0.82
Cigarettes per day	-.55	.23	0.57*	-.79	.30	0.46**
Confidence in quitting	.60	.25	1.83*	.41	.27	1.51
Number of quit attempts	-.01	.01	0.99	-.01	.02	0.99
Commitment	-.01	.01	0.99	.00	.01	1.00
Initial CL	.59	.23	1.81*	.88	.31	2.40**
Prototype	-.45	.22	0.64*	-.23	.25	0.79
CL $\times$ Prototype	.67	.30	1.94*	.76	.38	2.13*

Note. Values are for the final step of the equations. OR = odds ratio; CL = comparison level.  
\*  $p < .05$ . \*\*  $p < .01$ .

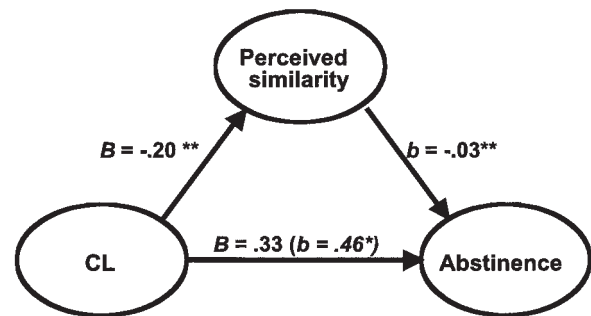


Figure 2. Mediation of the relation between initial comparison level (CL) and 6-month cessation by change in similarity. \*  $p < .05$ . \*\*  $p < .01$ .

became relapsers, and four relapsers became abstainers. We expected the T3 analyses to look similar to those at T2, and that was the case. T1 comparison level predicted smoking cessation independent of the background variables,  $b = .88$ ,  $p < .01$ , Wald = 8.27, OR = 2.40, but T1 prototype favorability did not,  $p = .35$ . The Prototype  $\times$  Comparison Level interaction term was still significant at this 12-month follow-up,  $b = .76$ , Wald = 3.89,  $p < .05$ . Thus, participants who reported both a low comparison level and favorable smoker prototypes at T1 were most likely to be smoking at 12 months: 71.4% versus 53.0%, for the other three groups.

*Mediation.* Mediation was tested with the same procedure used for the 6-month follow-up. The first regression controlled for T1 similarity and the standard predictors, and revealed that comparison level predicted 12-month similarity to the typical smoker,  $\beta = -.40$ ,  $p < .001$ . Next, logistic regression was used to regress T3 smoking status on comparison level and T3 similarity, controlling for T1 similarity and the standard predictors of cessation. This analysis indicated that T3 similarity was a significant predictor of T3 smoking status,  $b = -.03$ ,  $p < .001$ , Wald = 12.08, but that after T3 similarity was added to the equation, comparison level was no longer significant,  $b = .53$ ,  $p = .07$ , Wald = 3.20. Sobel's test revealed that the indirect effect of comparison level on smoking status through T3 similarity was significant,  $z = 2.83$ ,  $p < .005$ . Thus, distancing (change in perceived similarity to the typical smoker) from T1 to T3 mediated the effect of T1 comparison level on T3 smoking status (see Figure 2).<sup>3</sup>

### Discussion

Research has shown that smoker images or prototypes are related to the outcome of cessation attempts among adults: Having an unfavorable image of typical smokers facilitates cessation, and having a favorable image hinders the process (Gibbons & Eggleston, 1996; Gibbons et al., 1991). A basic assumption of this research is that psychological distancing (in the form of decreased perceptions of similarity to, and derogation of, the smoker image) plays a critical role in determining success. The current study provides the first clear support for this assumption. More specifically, the current results indicate that distancing from the image predicts outcome—those who do it are more likely to quit.

The current results expand on previous research by demonstrating that preference for affiliating with other smokers who are having trouble quitting—that is, having a low comparison level—inhibits distancing, with the same result: higher likelihood of relapse. Moreover, the current study provides direct evidence that psychological distancing mediates the relation between comparison level and smoking cessation—a link that had been hypothesized but not demonstrated empirically by previous research. As Buunk and Ybema's (1997) identification–contrast model suggested, failure to contrast with a poor-performing comparison target apparently interferes with health performance. In contrast, focusing on and comparing with others who are doing well can provide a number of performance-facilitating benefits, including inspiration, effective modeling, and optimism (Aspinwall, 1997; Collins, 1996)—benefits that are presumably forgone when comparison with poor performers predominates (Gibbons et al., 2000).

The analyses also demonstrate that smokers who begin cessation groups with either a favorable social image of the typical smoker

or a desire to affiliate with others who are doing poorly are more likely to relapse. Furthermore, these cognitions predict success independent of other reliable predictors of success including commitment, self-efficacy, and number of cigarettes smoked. In addition, these two tendencies interact such that smokers who have low comparison levels and favorable images of smokers are most likely to continue smoking. In spite of their common roots in social comparison, however, the two tendencies suggest different avenues for intervention.

### *Altering Prototype Favorability and Comparison Level*

Demonstrations of psychological factors that predict variance in smoking cessation beyond that explained by smoking history are relatively rare, and identification of such factors that are malleable is even more unusual. For example, confidence, or self-efficacy, is a reliable predictor of smoking cessation (cf. Shiffman et al., 2000; Williams et al., 2002). However, the, at best, mixed evidence that self-efficacy can be changed or that changing it can increase the likelihood of quitting diminishes the utility of this predictor for cessation programs (cf. Dijkstra & De Vries, 2001; Froehlicher & Kozuki, 2002). The current finding of a relation between comparison level and prototype favorability on the one hand and cessation on the other is encouraging, in part, because there is reason to believe that these factors are malleable.

A number of studies have demonstrated that images associated with health risk behaviors are malleable and that altering these images can be instrumental in shaping behavior. For example, Blanton et al. (2001) demonstrated that manipulating (i.e., lowering) the favorability of images of people who do not use condoms is associated with a reduction in subsequent willingness to have unprotected sex (cf. Thornton, Gibbons, & Gerrard, 2002). These studies suggest that future research should explore the efficacy of encouraging smokers to consider aspects of the prototypical smoker that are negative and, most important, different from the self, in order to facilitate distancing from this image.

Three recent studies have also suggested that contemplation of images is related to changes in health behavior. The first is a prospective study that revealed that the extent to which adolescents reported contemplating the prototypical nondrinker (i.e., "How often have you thought about this type of person?") was associated with smaller increases in alcohol consumption a year later (Gerrard et al., 2002). The second is an intervention that successfully delayed initiation of drinking in African American preadolescents by increasing their awareness of peers' negative attitudes toward the typical drinker their age (Gerrard et al., in press). The third is an experimental study that asked college students to consider and then describe, in detail, prototypical exercisers (Ouellette, Helsing, Gibbons, Reis-Bergan, & Gerrard, 2005). This study demonstrated that systematic consideration of this prototype increased exercise over a 4-week interval. Ouellette et al. (2005) also found that, for some, focusing on the typical nonexerciser tended to increase exercise as well, suggesting the possibility that a combi-

<sup>3</sup> The two-item similarity index (see footnote 2) also mediated the impact of comparison level on smoking status, and the drop in  $b$  was significant at both T2 and T3 ( $z_s = 2.17$  and  $2.40$ , respectively;  $p = .03$  and  $p < .02$ , respectively).

nation of systematic contemplation of people who are successfully quitting and of the negative characteristics of typical smokers would facilitate identification with nonsmokers and distancing from smokers.

The current study also suggests two strategies for reducing the dysfunctional consequences associated with low comparison level, whether it is low initial level or a downward shift in level. The first of these has to do with the fact that lowering one's comparison level appears to be a palliative rather than a problem-based approach (Lazarus & Folkman, 1984) that may reduce or preclude the use of more effective strategies (Gibbons et al., 2000; Gibbons & Gerrard, 1991). Thus, interventions that promote more constructive ways of coping should inhibit this natural tendency to increase affiliation with others or images of others who are having difficulty. The second (and related) strategy involves counteracting a preexisting low comparison level by promoting focus on, and identification with, upward comparison targets, that is, those who are succeeding or are coping well with the often-frustrating process.

### Limitations

This study provides information about how social-comparison processes operate in cessation groups and how those processes are related to outcome; it does not, however, address the issue of how these processes occur among smokers who try to quit on their own. To the extent that the image of the typical smoker is a cognitive fabrication (Taylor et al., 1983), there is no reason to expect that self-quitters could not distance themselves from the images they create. However, it is also the case that most cessation groups include useful upward comparisons or individuals with high comparison levels, and those who are struggling to quit smoking on their own will miss the benefits that being with successful quitters can provide.

This study also does not address one of the more challenging situations in smoking cessation, that is, attempting to quit while family and/or friends continue to smoke (Grove, 1993; Morgan, Ashenberg, & Fisher, 1988). As Gibbons and Eggleston (1996) suggested, the distancing process is much more difficult when friends and family members smoke, because smokers are not likely to use members of their own social networks as distancing targets. One reason for this may be that attempts to psychologically distance from friends and relatives may create interpersonal conflict at a time when social support from these people is potentially very beneficial (Cohen & Lichtenstein, 1990; Gibbons & Eggleston, 1996; Mermelstein, Karnatz, & Reichman, 1992). Future research should explore strategies for finding the most effective balance between distancing from, and receiving social support from, friends and family members when these people also happen to be smokers.

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