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The influence of cognitive coping and mood on smokers' self-efficacy and temptation

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Abstract

Previous descriptive and treatment studies imply that the association between depressed affect and cigarette smoking may be strongest among those with limited cognitive coping skills. This study, therefore, experimentally examined whether the combination of poor mood management skills and negative affect results in reduced self-efficacy and increased temptation to smoke. Current smokers were randomly assigned to an elated-mood or a depressed-mood induction condition. State mood, temptation, and self-efficacy were measured before and after the induction. Contrary to prediction, mood induction condition did not interact with cognitive coping skill to predict change in self-efficacy or temptation. However, there was a significant interaction of (measured) state happiness and "positive" (functional according to expert cognitive therapists) responses on the Ways of Responding (WOR) test of coping skills in predicting temptation: those with low levels of positive coping responses *and* low positive affect after the induction were especially tempted to smoke. This latter finding suggests that smokers with a history of depression may respond well to interventions aimed at increasing positive affect and augmenting positive cognitive coping skills.

Keywords: Coping; Self-efficacy; Cigarette smoking; Craving; Depression

1. Introduction

People with a history of depression are more likely to smoke cigarettes than people who have never been depressed (Glassman et al., 1990), and, among smokers, those who are

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currently depressed or have a history of depression appear to have more difficulty in quitting smoking (Glassman et al., 1988). Depression is, of course, characterized by high negative affect, and, to address the needs of depression–vulnerable smokers, clinical researchers have evaluated the utility of interventions that should reduce negative affect. Research utilizing antidepressants has been examined as a means to enhance smoking cessation outcome by reducing negative affect. Trials utilizing bupropion (Hayford et al., 1999) and nortriptyline (Hall et al., 1998) have demonstrated some success at increasing abstinence rates for both smokers with and without a history of depression. However, if negative affect related to a past history of depression was solely responsible for the connections between this history and continued smoking, we would expect smokers with a history of depression to have specifically benefited from use of antidepressant medication designed to minimize negative affective states. Further research, therefore, on the process (e.g., reducing negative affect, increasing positive affect, etc.) by which antidepressants may facilitate smoking cessation success is needed in order to enhance our understanding of the relationship between a history of depression and smoking.

Other treatment research has suggested that the connection between smoking and a history of depression can be accounted for by the combination of negative affect *and* an inability to internally cope with this affect. Hall, Munoz, and Reus (1994) found that a cognitive–behavioral intervention program focusing on mood management skills, as compared to the health education control treatment condition, was specifically effective for smokers with a history of depression, but was not effective for those without a history of depression (see also Hall et al., 1998). When equating the control and experimental condition on contact time and nicotine gum use, however, the results did not replicate (Hall et al., 1996). Other research on the effectiveness of mood management skill training for alcoholics with a history of depression, however, was not limited by unequal contact conditions, and did replicate the benefits of this treatment modality (as compared to behavioral counseling) for this subpopulation of smokers (Patten, Martin, Myers, Calfas, & Williams, 1998).

These results imply that mood management skills are an important determinant of smoking abstinence. Research directly examining the effect of mood management skills on success or failure in smoking cessation is limited, however. The studies cited above did not include process measures to examine whether the interventions designed to augment mood management skills actually do so. Two studies have demonstrated deficiencies in mood management skills for smokers with a history of depression. First, Kinnunen, Doherty, Militello, and Garvey (1996) found that smokers with current depression reported having fewer coping resources, as operationalized by the Coping Resources Scale. Second, Rabois and Haaga (1997) compared the cognitive coping skills of smokers with a history of depression to smokers without a history of depression. The measured skills were those ostensibly taught in cognitive therapy of depression, measured by the Ways of Responding test (WOR; Barber & DeRubeis, 1992). Results indicated that a history of depression was associated with use of significantly more "negative" (deemed maladaptive by expert cognitive therapists) coping responses on the WOR.

Based on these findings and those suggesting that mood management skill training may be particularly effective for those with a depression history, it is important to examine