



Emotional responding to biological challenge as a function of panic disorder and smoking

Michael J. Zvolensky^{a,*}, Ellen W. Leen-Feldner^a,
Matthew T. Feldner^a, Marcel O. Bonn-Miller^a,
C.W. Lejuez^b, Christopher W. Kahler^c,
Gregory Stuart^c

^a*The University of Vermont, Department of Psychology, 2 Colchester Avenue,
John Dewey Hall, Burlington, VT 05405-0134, USA*

^b*University of Maryland, College Park, MD, USA*

^c*Brown University, Providence, RI, USA*

Received 24 July 2003; accepted 24 July 2003

Abstract

The present investigation evaluated anxious and fearful responding to bodily sensations as a function of panic disorder (PD) and smoking status. Participants completed a voluntary hyperventilation procedure that elicits panic-relevant bodily sensations. Psychophysiological data were collected throughout the study procedures. Assessments of anxiety and bodily distress were conducted pre-challenge baseline, post-hyperventilation, and during a recovery period following the challenge. Results indicated that smokers with PD reported greater levels of anxiety and bodily distress than smokers without PD and than nonsmokers with PD at the post-challenge assessment and recovery period. No differences in autonomic responding were evident during the challenge or in the recovery phase. In terms of rate of recovery, the linear decrease in anxiety, but not bodily distress, was significantly more steep for nonsmokers with PD than for smokers with PD. These findings are discussed in relation to better understanding the potential role that smoking may play in terms of anxious and fearful responding to bodily sensations.

© 2003 Elsevier Inc. All rights reserved.

Keywords: Panic disorder; Smoking; Anxiety; Bodily sensations; Biological challenge

* Corresponding author. Tel.: +1-802-656-8994; fax: +1-802-656-8783.
E-mail address: Michael.Zvolensky@uvm.edu (M.J. Zvolensky).

There has been a long-standing recognition that rates of cigarette smoking are greater among persons with psychopathology compared to rates of smoking in persons with no history of psychopathology. To date, most of the investigations in this domain have focused on individuals with schizophrenia, alcohol and drug dependencies, and depressive disorders (e.g., Black, Zimmerman, & Coryell, 1999; Burling & Zift, 1988; Hall et al., 1995; Merikangas et al., 1998). More recently, researchers have found a strong association between cigarette smoking and a history of panic attacks (Amering et al., 1999; Degenhardt, Hall, & Lynskey, 2001; McCabe et al., this issue; Pohl, Yeragani, Balon, Lycaki, & McBride, 1992). In a recent epidemiologic study (>4000 respondents), for example, Lasser and colleagues (2000) found that smokers were significantly more apt to have a history of panic attacks compared to nonsmokers. These findings are consistent with other epidemiologic data (Breslau, Kilbey, & Andreski, 1991; De Graaf, Bijl, Smit, Vollebergh, & Spijker, 2002) and studies using samples from treatment clinics (Hayward, Killen, & Taylor, 1989; Himle, Thyer, & Fischer, 1988; Norton, Cox, & Malan, 1992). The observed associations between smoking and panic attacks do not appear to be due to sociodemographic characteristics, comorbid psychiatric conditions (e.g., major depressive disorder, alcohol dependence), or symptom overlap in diagnostic criteria for panic attacks and nicotine dependence (see Zvolensky, Schmidt, & Stewart, 2003, for a review).

Recent studies suggest that cigarette smoking is associated with increased risk for developing panic psychopathology (Breslau & Klein, 1999; Goodwin & Hamilton, 2002; Kandel et al., 1997). For instance, Johnson et al. (2000) investigated the longitudinal association between cigarette smoking and anxiety disorders among adolescents and young adults using a community-based sample ($n = 688$). Heavy smoking (≥ 20 cigarettes per day) during adolescence was associated with higher risk of developing agoraphobia and panic disorder (PD) during early adulthood even after controlling for a variety of theoretically-relevant factors (e.g., alcohol and other drug use, parental history of psychopathology, childhood temperament). In this same investigation, there was no evidence that anxiety disorders during adolescence were associated with an increased risk of chronic cigarette use in young adulthood. These findings support earlier reports that the direction of the smoking-panic association is most likely to be from smoking to panic (Amering et al., 1999; Breslau & Klein, 1999; Pohl et al., 1992), although other alternative hypotheses (e.g., a third factor—negative affect—contributes to both; see Goodwin & Hamilton, 2002) still need to be ruled out.

Zvolensky, Kotov, Antipova, and Schmidt (2003) recently examined the extent to which smoking is associated with prototypical panic-related processes in an epidemiologically-defined sample of smokers from Russia. Results indicated that smoking status (cigarettes per day) significantly predicted indices of panic-specific distress (e.g., level of agoraphobic avoidance), but not general anxiety symptoms. These findings are consistent with past research that suggests smoking is most strongly related to panic-like symptoms (e.g., bodily vigilance; Zvolensky, Eifert, Feldner, & Leen-Feldner, 2003; Zvolensky, Forsyth, Fuse,

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات