Original Investigation

Variations in Daily Cigarette Consumption on Work Days Compared With Nonwork Days and Associations With Quitting: Findings From the International Tobacco Control Four-Country Survey

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Received October 21, 2011; accepted March 15, 2012

Abstract

Introduction: We explore whether reported daily cigarette consumption differs between work days and nonwork days and whether variation in consumption between work days and nonwork days influences quitting and abstinence from smoking. We also explore whether effects are independent of measures of addiction and smoking restrictions at work and home.

Methods: Data were from 5,732 respondents from the first five waves of the International Tobacco Control Four-Country Survey, occurring between 2002 and 2006. Respondents were current smokers employed outside the home. Variation in daily cigarette consumption on work days compared with nonwork days at one wave was used to predict the likelihood of making an attempt and the likelihood of maintaining a quit attempt for at least a month at the next wave. Generalized estimating equations were used to combine data for multiple waves.

Results: Just under half reported smoking more on a nonwork day, a little over a third reported no difference, and around one fifth reported smoking more on a work day. Controlling for possible confounding factors, smoking more on a work day was associated with making quit attempts. Among people who made a quit attempt, variation in consumption did not consistently predict one month's abstinence, being positive in Australia, but negative in the United Kingdom.

Conclusion: Those who smoke more on work days try to quit more. Country differences for success may be related to the extent of bans on smoking, with those smoking more on work days more likely to succeed where bans in workplaces and public places were more prevalent, such as Australia at the time.

Introduction

Increasing evidence of the dangers of passive smoking has led governments to enforce environmental smoking restrictions in workplaces and enclosed public places. Householders, and sometimes smokers themselves, are increasingly implementing bans in their own homes (Borland, Yong, Cummings, Hyland, Anderson, & Fong, 2006). Smokers have had to adjust their smoking habits in response to environmental smoking restrictions either by reducing the amount they smoke or quitting, avoiding places where smoking is restricted, or by compensating and smoking more when they have the opportunity. Workplace bans on smoking typically lead to reduced cigarette consumption, but reductions in smoking prevalence are more controversial (e.g., Bauer, Hyland, Li, Steger, & Cummings, 2005; Borland, Chapman, Owen, & Hill, 1990; Borland & Davey, 2004; Fichtenberg & Glantz 2002). One large population-based study in the United States found smokers exposed to either a workplace or home smoking ban were more likely to attempt to quit and to succeed for at least 6 months (Farkas, Gilpin, Distefan, & Pierce, 1999), as has a study of ours on the impact of home bans (Borland et al., 2006).

In light of the increasing prevalence of smoking restrictions in homes and workplaces, we were interested in the pattern of variation in the number of cigarettes smoked daily on work days as compared with nonwork days and whether such variation is associated with the presence of home and workplace bans. Many smokers report smoking a different amount on work days compared with nonwork days (Borland & Owen, 1995; Chandra, Shiffman, Scharf, Dang, & Shadel, 2007), presumably in part due to restrictions on their smoking at work. In the only study we found on the implications of day-to-day variation, Borland and Owen (1995) reported that smokers less able to reduce work day consumption in the face of smoking bans reported a higher need to smoke at work. This suggests that those

doi:10.1093/ntr/nts110

Advance Access publication April 30, 2012

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who smoke more on work days may find it harder to quit. Alternatively, the capacity to change consumption to fit the circumstances could be more generally associated with reduced addiction and if this is so, greater variation in either direction should predict an increased likelihood of quitting. In this study, we explore whether smoking more on a work day or a nonwork day, or no difference, was related to making quit attempts and remaining abstinent for at least one month and whether any effect is independent of measures of addiction, smoking restrictions at work and home, smoking for pleasure, and aspects of social normativeness.

Methods

Participants and Data Collection

We used data from a total of 5,732 respondents taking part in a minimum of two consecutive waves of the first five waves of data collection from the International Tobacco Control four-country survey (ITC-4) occurring between 2002 and 2006 (four wave-to-wave transitions). The ITC-4 is a cohort survey conducted annually via computer-assisted telephone interview in Canada, the United Kingdom, the United States, and Australia. Respondents are selected via random-digit dialing to ensure a broadly representative sample. All respondents are smokers at the time of recruitment (smoked at least 100 cigarettes in their lifetime and smoked at least once in the past 30 days) but are retained at follow-up surveys if they quit smoking. At each wave, the sample is replenished from the original sampling frame. A detailed description of the ITC project's conceptual framework (Fong et al., 2006) and methodology (Thompson et al., 2006) can be found elsewhere.

Respondents were eligible for any wave-to-wave transition if they reported smoking daily and were employed outside the home at the first wave, and at the next wave, they reported whether they had attempted to quit or not and, for the analyses on more sustained cessation, whether they sustained a quit attempt for at least one month. If respondents remained in the cohort for three or more waves, they could provide data for multiple wave-to-wave transitions. At Wave 4, the consumption variation questions were only asked of newly recruited respondents; thus, no respondent provided data for more than three wave-to-wave transitions. The proportion of eligible respondents at Wave n who were recontacted at Wave $n+1$ were as follows; 75.3% at Wave 2, 70.6% at Wave 3, 71.5% at Wave 4 and 61.3% at Wave 5. For the analyses of sustained quitting, the sample is restricted to those who made a quit attempt between two consecutive waves. Table 1 shows the number of eligible respondents at each wave and the distribution by demographic characteristics and wave of recruitment.

Measures

Demographic variables included in this study were age in years (18+), sex, country, and socioeconomic status as indicated by reported household income and highest level of educational attainment. Income and education were classified into within country tertiles (low, moderate, and high) and then combined across countries.

Nicotine dependence was assessed using two items that form the Heaviness of Smoking Index (HSI; Heatherton, Kozlowski,

Frecker, Rickert, & Robinson, 1989), which is reliable and has predictive validity combined or by item (Borland, Yong, O'Connor, Hyland, & Thompson, 2010). The first question is "On average, how many cigarettes do you smoke each day?" with the number of cigarettes smoked per day (CPD). Second, time to first cigarette (TTFC) was ascertained by "How soon after waking do you usually have your first smoke?" answered in minutes or hours and categorized to 0: 61+ min, 1: 31–60 min, 2: 6–30 min, 3: 5 min or less.

Variability in daily consumption across work days and non-work days was assessed by "Is there any difference between the number of cigarettes you smoke during a workday and the number you smoke during a non-working day?" "Yes or No" with those who said "Yes" asked: "On average, how many cigarettes do you smoke on a workday?" and "On average, how many cigarettes do you smoke on a nonwork day?" Responses to all three consumption measures were square root transformed, as this improved normality. An index of variability was derived by subtracting the square root of reported consumption on a non-work day from reported consumption on a work day. Following inspection of the distribution of scores, they were divided into these five categories: (a) much more on a nonwork day (square roots of work-day consumption minus nonwork day ≤ -1), (b) moderately more on a nonwork day (> -1 to < 0), (c) smoked the same amount (all respondents who reported no difference), (d) moderately more on a work day (difference > 0 to < 1), and (e) smoked much more on a work day (difference ≥ 1). Use of the square root transformation helps take into account relative differences (e.g., a difference between four and nine cigarettes is scored as the same as between 9 and 16, 16 and 25 etc.) and thus is preferable to using absolute differences. Table 3 shows the mean number of cigarettes smoked on a work day and a non-work day, and the mean number for overall CPD, for each of these categories. Those who did not provide a valid response to each component measure ($n = 178$) or whose estimates of variation were implausible (reported CPD could not be reconciled with consumption estimated from various combinations of work day and nonwork days consumption; $n = 114$) were dropped from the analyses.

There were two outcomes measured. First, whether respondents made a quit attempt between two consecutive waves was assessed by asking "Have you made any attempts to stop smoking since we last talked with you?" and second, those who had made a quit attempt were asked whether they had achieved at least one month abstinence during the intersurvey interval, even if they had subsequently relapsed (for these analyses those who have only attempted once between waves and were currently quit for less than one month were dropped from the analyses).

We assessed some other possible mediating factors in addition to the HSI. Smoking restriction at work was assessed by "Which of the following best describes the smoking policy where you work?" (a) Smoking is not allowed in any indoor area, (b) Smoking is allowed only in some indoor areas, or (c) Smoking is allowed in any indoor areas. Smoking restriction at home was assessed by "Which of the following best describes smoking in your home" (a) Smoking is allowed anywhere in your home, (b) Smoking is never allowed anywhere in your home, or (c) Something in between. Smoking for pleasure assessed by: "You enjoy smoking too much to give it up," which was categorized as (a) Agree, (b) Neutral, or (c) Disagree. Aspects of the normativeness

of smoking in the persons life were assessed by: the number of five closest friends who smoke (1–5); and by agreement with the statement “People close to you believe that you shouldn’t smoke,” categorized as (a) Agree, (b) Neutral, and (c) Disagree.

Analyses Plan

Generalized estimating equation (GEE) models with binomial variations, logit link function, and an unstructured correlation structure multivariate model were used to predict the outcomes of interest, thus enabling us to maximize the number of observations across all wave-to-wave transitions while controlling for the correlations between responses from respondents who made a quit attempt at multiple waves. For each outcome, the model was built in a stepwise fashion beginning with exploration of the association between the categorical variability in consumption measure and outcome while controlling for sociodemographic variables. Following this, restrictions on smoking at work and at home were added. Finally, CPD and TTFC were included. All predictor variables and covariates were used to prospectively predict quitting behavior at the following wave. We also checked for interactions between country and the variability score. All analyses were performed using Stata v.11. Statistical significance was set to $p < .05$.

Results

Table 1 shows the characteristics of the sample at each wave. Approximately a third of respondents at each wave reported that there was no difference in the amount they smoked on a work day compared with a nonwork day, just under half reported smoking more on a nonwork day, and around one fifth reported smoking more on a work day. Among respondents who were smoking at two consecutive waves, scores on the variability measure were moderately correlated between waves (Pearson’s $r = .46, .48$), and there was a similar correlation over three waves (Pearson’s $r = .41$).

There was a significant association between TTFC and variation in consumption at each wave ($p < .001$ at Waves 1–3 and $p = .002$ at Wave 4). Those who reported smoking more on a work day were the least likely to report smoking their first cigarette within 5 min of waking (see Table 2). In addition, those who smoked moderately more on a work day or a nonwork day were likely to smoke fewer cigarettes per day overall (see Table 3). We also compared smoking policies at work and home across the levels of variation in consumption and found significant associations at each wave. Those who reported smoking more on a work day were most likely to report being allowed to smoke

Table 1. Characteristics of the Sample at Each Wave

	Wave 1–2 <i>n</i> = 3,154	Wave 2–3 <i>n</i> = 2,779	Wave 3–4 <i>n</i> = 2,608	Wave 4–5 <i>n</i> = 645
Variation in consumption (%)				
Much more on nonwork day	24.9	24.4	24.0	25.3
Moderately more on nonwork day	22.3	26.2	24.3	22.0
No difference	36.9	33.5	35.5	35.2
Moderately more on work day	8.0	8.6	9.0	7.9
Much more on work day	7.9	7.4	7.2	9.6
Sociodemographic measures				
Income (%)				
Low	19.9	19.1	17.9	21.1
Moderate	42.8	42.5	42.5	37.7
High	37.3	38.4	39.6	41.2
Education (%)				
Low	51.5	48.4	48.0	44.8
Moderate	33.7	37.1	34.7	32.7
High	14.9	14.6	17.3	22.5
Mean age (<i>SD</i>)	40.2 (11.5)	41.5 (11.4)	42.0 (11.1)	42.5 (11.6)
Country (%)				
Canada	25.2	27.9	26.3	28.1
USA	19.4	20.7	20.6	30.1
UK	28.1	24.9	26.2	24.2
Australia	27.2	26.6	26.9	17.7
Sex (%)				
Female	49.6	50.4	51.7	53.6
Attempted to quit between waves (%)				
Yes	35.4	38.9	39.9	41.2
Dependence measures				
Time to first cigarette (%)				
More than 60 min	13.6	14.9	13.3	13.6
31–60 min	19.0	20.0	21.2	18.0
6–30 min	48.1	46.0	46.7	47.9
≥5 min	19.3	19.1	18.9	20.5
Mean cigarettes per day (<i>SD</i>)	18.6 (9.7)	17.8 (8.9)	17.6 (9.6)	17.8 (9.0)

Table 2. Measure of Variation in Consumption Stratified by Reported Smoking First Cigarette Within 5 Min of Waking, Level of Restriction on Smoking at Home and Work, and Enjoy Smoking Too Much To Give it up (Range Across Wave 1 to Wave 4; Lowest to Highest)

	TTFC ≤ 5 min (%)	Total smoking ban at home (%)	Allowed to smoke indoors at work (%) ^a	Enjoy smoking too much to quit (%)
Much more on nonwork day	20.7–26.1	18.3–24.7	18.5–30.0	57.7–60.4
Moderately more on nonwork day	17.3–18.5	24.4–32.1	20.9–28.8	56.4–61.8
No difference	17.4–25.3	27.6–37.1	28.0–42.0	59.0–62.7
Moderately more on work day	10.2–17.6	42.1–51.0	35.3–44.5	49.3–52.0
Much more on work day	4.8–16.9	43.4–61.3	41.3–52.2	49.3–53.4

Note. ^aIncludes those who said “All indoor areas” and “Some indoor areas.” TTFC = time to first cigarette.

indoors at work ($p < .001$ at Waves 1–3 and $p = .002$ at Wave 4; see Table 2). They were also the most likely to report having a total ban on smoking at home ($p < .001$ at each wave; see Table 2).

Quit Attempts

We first explored the univariate associations between variability in daily consumption and the likelihood of making a quit attempt at each wave separately. Variation in daily consumption was a significant predictor of making quit attempts in the first three wave-to-wave transitions and was trending in the same direction in the fourth when the sample size was markedly smaller. Those who reported they smoked much more on a work day than a nonwork day were the most likely to make a quit attempt, followed by those who reported they smoked moderately more on a work day, with little difference between the other three categories. The multivariate GEE analyses predicting quit attempts, combined 9,187 observations from 5,732 individuals (see Table 4). Both before and after controlling for environmental restrictions, nicotine dependence, smoking for pleasure and social normativeness, variation in daily consumption was a significant predictor of making quit attempts, with the size of the odds ratio not altered appreciably (see Table 4). There was a significant interaction between country and smoking policy at work ($p = .013$). Reporting that smoking was allowed in some areas at work (compared with a total ban in indoor areas) was positively associated with making a quit attempt in Canada ($OR = 1.73$, 95% $CI = 1.19$ – 2.51) and negatively associated in Australia ($OR = 0.67$, 95% $CI = 0.45$ – 0.99).

Smoking for pleasure was associated with quit attempts with those most reluctant to quit because of enjoyment least likely to make attempts. Both of the social normative variables

were significant, such that disagreement with the statement that people important to you think you should not smoke and mean number of close friends who smoke were negatively associated with making quit attempts. However, these variables did not affect the effect of variability in daily consumption.

Short-Term Abstinence

In univariate analyses among those making quit attempts, variation in consumption was a significant predictor of achieving abstinence at the second wave only with respondents who smoked moderately and much more on a work day being more likely to achieve at least one month abstinence between surveys ($p = .021$). The multivariate GEE analyses predicting abstinence among those who tried to quit consisted of 3,371 observations from 2,719 individuals (see Table 4, column 2) and reduced the association between variation in consumption and short-term abstinence to a trend. Significant predictors of achieving at least one month's abstinence were a longer latency to first cigarette and smoking fewer cigarettes per day.

There was an interaction between country and the variability score ($p = .004$). Smoking much more on a work day was significantly associated with achieving one month abstinence in Australia ($OR = 1.88$, 95% $CI = 1.18$ – 3.00). The opposite effect was found in the United Kingdom ($OR = 0.34$, 95% $CI = 0.18$ – 0.65). The trend in the United States and Canada was consistent with Australia. There was also an interaction between the variability score and smoking policy at work ($p = .013$). Where there was a total ban on smoking at work, there was a linear trend for smoking moderately to much more on a work day to predict one month's abstinence. Where there was no ban or a partial ban, there was no clear trend. The country by variability interaction remained significant while controlling for the work policy by variability interaction.

Table 3. Mean Daily Cigarette Consumption Reported Across All Days, on Work Days, and on Nonwork Days (Range Across Wave 1 to Wave 4; Lowest to Highest)

	Mean CPD across all days (SD)	Mean CPD on work day (SD)	Mean CPD on nonwork day (SD)
Much more on nonwork day	19.0 (8.8)–19.5 (9.5)	10.8 (6.4)–11.4 (7.2)	22.3 (9.0)–23.3 (9.8)
Moderately more on nonwork day	15.0 (8.3)–17.3 (7.6)	12.2 (7.5)–13.9 (7.1)	16.9 (8.9)–19.2 (8.3)
No difference	18.4 (9.7)–19.5 (10.3)	18.4 (9.7)–19.5 (10.3)	18.4 (9.7)–19.5 (10.3)
Moderately more on work day	14.6 (7.4)–16.3 (7.5)	16.1 (13.6)–17.3 (8.2)	11.3 (9.4)–12.5 (7.0)
Much more on work day	16.9 (8.4)–20.2 (10.2)	19.3 (9.1)–24.1 (15.5)	9.3 (6.3)–11.8 (7.4)

Note. CPD = cigarettes per day.

Table 4. Multivariate Generalized Estimating Equation Analysis of Outcomes (Adjusted Odds Ratios and 95% CIs)

	Quit attempts <i>n</i> = 5,732 Observations = 9,187	Quit for >1 month, among quitters <i>n</i> = 2,719 Observations = 3,371	Quit for >1 month, entire sample <i>n</i> = 5,657 Observations = 9,053
Variability in CPD			
Much more on nonwork day	1.05 (0.93–1.18)	0.95 (0.78–1.15)	1.02 (0.87–1.20)
Moderately more on nonwork day	1.05 (0.93–1.18)	1.06 (0.88–1.29)	1.08 (0.93–1.26)
No difference	Reference	Reference	Reference
Moderately more on work day	1.20 (1.02–1.41)	1.10 (0.85–1.43)	1.21 (0.98–1.49)
Much more on work day	1.39 (1.17–1.65)	1.16 (0.90–1.51)	1.41 (1.13–1.75)
Smoking policy at work			
All indoor areas	Reference	Reference	Reference
Some indoor areas	0.97 (0.81–1.16)	0.94 (0.70–1.26)	0.92 (0.72–1.17)
Not allowed anywhere	0.92 (0.78–1.09)	1.01 (0.76–1.34)	0.93 (0.74–1.17)
Smoking policy at home			
Allowed anywhere	Reference	Reference	Reference
Something in between	1.08 (0.97–1.21)	0.97 (0.81–1.17)	1.06 (0.91–1.23)
Never allowed	1.11 (0.97–1.26)	1.08 (0.88–1.32)	1.12 (0.95–1.33)
Time to first cigarette			
More than 60 min	Reference	Reference	Reference
31–60 min	0.95 (0.82–1.12)	0.92 (0.73–1.16)	0.95 (0.79–1.14)
6–30 min	0.77 (0.66–0.89)	0.66 (0.53–0.83)	0.66 (0.54–0.79)
≤5 min	0.82 (0.68–0.98)	0.65 (0.49–0.86)	0.68 (0.54–0.86)
Cigarettes per day (square root)	0.91 (0.86–0.96)	0.84 (0.77–0.91)	0.82 (0.76–0.88)
Enjoy smoking too much to quit			
Agree	Reference	Reference	Reference
Neither agree nor disagree	1.29 (1.11–1.50)	1.08 (0.85–1.39)	1.34 (1.10–1.64)
Disagree	1.89 (1.71–2.08)	1.09 (0.94–1.27)	1.79 (1.57–2.02)
People important to you think you shouldn't smoke			
Agree	Reference	Reference	Reference
Neither agree nor disagree	0.86 (0.67–1.10)	0.74 (0.48–1.14)	0.71 (0.50–1.01)
Disagree	0.61 (0.51–0.73)	1.10 (0.79–1.54)	0.71 (0.56–0.92)
Number of five closest friends who smoke	0.96 (0.94–0.99)	0.99 (0.95–1.04)	0.97 (0.93–1.00)

Note. Age, gender, country, cohort, wave, education, and income are included as covariates. Bold text indicates significant odds ratios ($p < .05$).

Given that the effects of variation in consumption were in the same direction for attempting to quit and short-term abstinence, we conducted an additional GEE analysis of predictors of being quit at follow-up among all cases (regardless of making a quit attempt; 9,053 observations taken from $n = 5,657$) and found that respondents who smoked much more on work days ($OR = 1.41$, 95% $CI = 1.13$ – 1.75) were significantly more likely to achieve one months' abstinence than those whose daily consumption did not vary or those who smoked more on nonwork days. Both the country by variability and work policy by variability interactions remained significant.

Discussion

Most smokers report differences in daily cigarette consumption on work days and nonwork days, with over twice as many reporting smoking more on nonwork days than work days. That so many smokers report variation in daily cigarette consumption is

perhaps not surprising, given the range of environmental restrictions that people are likely to face in their day-to-day lives. Based on previous work (Borland & Owen, 1995), we had expected that people who reported smoking more on a work day, or reported less variability, might find it harder to quit. Our finding that people who smoke more on a work day are more likely to make a quit attempt was surprising. With the exception of smokers in the United Kingdom, those that smoked more on work days and made attempts were more likely to be abstinent for at least one month at follow-up compared with those who reported no difference or smoked much more on a nonwork day. The pattern of results suggest that it is not the variation in daily consumption per se that makes smokers more likely to try and quit, but rather it is something about smoking more on a work day, or less on a nonwork day, that is associated with an increased likelihood of making a quit attempt and, in some cases, short term abstinence.

One possible explanation is that as smokers increasingly perceive their habit as socially unacceptable (Hammond, Fong,

Zanna, Thrasher, & Borland, 2006), people who smoke more at work may feel more ostracized or more inconvenienced, and this may motivate them to make a quit attempt. However, our finding that people who report smoking more on a work day were also the most likely to report being allowed to smoke indoors at work suggests that inconvenience is not a sufficient explanation. Another explanation is that smoking more around work indicates smoking for instrumental reasons (e.g., to concentrate or socialize) and that this type of smoking may be easier to quit than smoking for intrinsic reasons such as enjoyment of the act or the effects of the drug.

In the years when the data for this study was collected, smoking was banned in most indoor workplaces. Australia had the highest rates of reported smoking bans at home and at work while the United Kingdom had the lowest rates. Smoking restrictions in restaurants, bars, and other recreational venues were incrementally introduced within each of the four countries, with the United Kingdom lagging behind Australia, Canada, and the United States. Hammond et al. (2006) reported that smokers in the United Kingdom reported lower social denormalization beliefs than in the other three countries at the first wave of the ITC-4. Thus, it appears that in the United Kingdom, public and private smoking was more normalized, and this may partly explain why smoking more on a work day was negatively associated with short-term success. In countries where smoking was more denormalized, those who smoke more for the instrumental value of smoking (rather than the pleasure of smoking) may have a greater chance at success if they are subject to less exposure to smoking in public places. Since the introduction of comprehensive smoking bans in the United Kingdom in recent years, we would expect the trend in the United Kingdom now to be the same as the other three countries.

Another possibility for why smoking more on a work day is associated with making a quit attempt is that more quitting activity takes place around typical work days. Calls to Quitlines and the use of internet cessation support services are more common between Mondays and Wednesdays (Balmford, Borland, Li, & Ferreter, 2009; Erbas, Bui, Huggins, Harper, & White, 2006), suggesting that quitting smoking is something of a work day activity. If the decision to quit is enacted on a work day, it may be easier to remain motivated on nonwork days for those who smoke less during these times.

There were several limitations to this study. We do not know how valid our measure of variability in consumption was, it is only moderately reliable as indicated by year to year consistency. That the effects had a dose response aspect, it seems likely that the measure has some validity. Furthermore, we did not ask respondents whether smoking more on a work day meant more smoked at and around work, before, or after work. Nor did we ask respondents whether they worked primarily indoors or outdoors. We also acknowledge that more detailed analysis of the different patterns of smoking restrictions between countries and across survey waves may have yielded more detailed findings for each country, but it was beyond the scope of this paper. Despite these limitations, our study showed a robust association over four waves of the ITC study. In addition to a consistent effect on quitting outcomes across waves, there were consistent patterns of association found between variation in consumption and other predictor variables.

In conclusion, variation in day-to-day consumption is the norm for smokers who are employed outside the home with the

majority smoking more on leisure (nonwork) days. The minority who report smoking more on work days are more likely to achieve a one-month abstinence, largely because they are considerably more likely to make quit attempts. These effects do not appear to be due to level of dependence. The effects on staying quit may be a function of the extent of restrictions on smoking both at work and other settings perhaps because of the reduced social normativeness of smoking in many public places. While we do not have a convincing explanation for our findings, it suggests that there may be utility in investigating how variation in cigarette consumption on work days compared with nonwork days affects quitting behavior. Exactly why this form of variation occurs also requires further exploration.

Funding

Current research acknowledgement: This research was funded by grants from the National Cancer Institute (NCI) of the United States (R01 CA 100362), the Roswell Park Transdisciplinary Tobacco Use Research Center (P50 CA111236), Robert Wood Johnson Foundation (045734), Canadian Institutes of Health Research (57897 and 79551), National Health and Medical Research Council of Australia (265903 and 450110), Cancer Research UK (C312/A3726), and Canadian Tobacco Control Research Initiative (014578), with additional support from the Centre for Behavioural Research and Program Evaluation, NCI of Canada/Canadian Cancer Society. Ethics clearance number from Cancer Council Victoria: HREC 0211.

Declaration of Interests

The authors declare that they have no competing interests.

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