Original Investigation

To what extent do smokers make spontaneous quit attempts and what are the implications for smoking cessation maintenance? Findings from the International Tobacco Control Four country survey

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Abstract

Aim: To assess the extent to which quit attempts are spontaneous and to evaluate if this is a determinant of smoking cessation maintenance, with better control for memory effects.

Methods: We use data from 3,022 smokers who made quit attempts between Waves 4 and 5 and/or Waves 5 and 6 of the International Tobacco Control Four country survey. Outcomes (quitting for 6 months) were confirmed at the next wave for cases where the attempt began within the previous 6 months. We assessed the length of delay between the decision to quit and implementation and whether the attempt followed a “spur-of-the-moment” decision or some serious prior consideration. Outcomes were modeled using generalized estimating equations.

Results: Prior consideration of quitting was unrelated to the outcome, but there were complex relationships for the delay between choosing a quit day and implementation. Those who reported quitting on the day they decided and those who delayed for 1 week or more had comparable rates of 6-month abstinence. Delaying for 1–6 days was associated with a greater relapse rate than those who quit on the day, although this effect became nonsignificant in multivariate analyses.

Conclusions: Quitting is on most smokers’ minds regularly and most attempts are not preceded by a long lead in period following the decision to try. Neither prior consideration nor delay between the decision to quit and implementation was clearly related to outcomes. Previous findings of greater success for spontaneous quit attempts may be because they conflate set-

ting a date in advance with planning and also perhaps some differential memory effects.

Introduction

In a household survey amongst smokers and ex-smokers, West and Sohal (2006) found that almost half reported having made a quit attempt without any preplanning. Surprisingly, they were between two and three times more likely to achieve abstinence for at least 6 months than smokers whose quit attempt was planned. These findings replicated a previous small study by Larabie (2005). West and Sohal suggested that these findings provide evidence contrary to the prevailing stage model of smoking cessation (Prochaska & Velicer, 1997). Rather than progression through a series of stages, they proposed that the decision to stop smoking could better be modeled as a “catastrophic” event. According to this model, smokers experience varying levels of “motivational tension” to stop, which when followed by “environmental triggers” can lead to a sudden attempt to stop smoking. In contrast, quit attempts that are preplanned may indicate a lower level of commitment, explaining the finding that planned attempts are less likely to be successful than unplanned ones. Ferguson, Shiffman, Gitchell, Sembower, and West (2009) replicated the findings with a sample from the United States, and they support West and Sohal’s interpretation.

All three studies were limited in as much as they were retrospective and, being cross-sectional and using a 6-month period of being quit as the criterion for success, included only cases where the quit attempt occurred more than 6 months previously.

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This allows the possibility of differential forgetting of short failed attempts, something each study acknowledges. A recent cross-sectional study by Murray, Lewis, Coleman, Britton, and McNeill (2009) attempted to overcome this limitation by including only quit attempts that began in the last 6 months with success measured as point prevalence abstinence. Among attempts that began 3–6 months prior to the interview, they replicated the finding that unplanned quit attempts are more successful than planned ones. However, the difference was not significant for quit attempts beginning 1–3 months prior.

It is plausible that the ease of recall of a quit attempt is a function of the duration of the attempt plus any focused preplanning. If so, it is likely that recall of shorter quit attempts that involve preplanning will be recalled more readily than those of similar duration that did not involve planning. As recall of quit attempts declines with time from the attempt (Gilpin and Pierce, 1994; West, 2006), and does so more rapidly for shorter attempts, any differences in recall of planned versus unplanned attempts may increase as the recall interval increases. Consistent with this, West and Sohal (2006) found that both planned attempts and failed attempts were reported more often between 6 and 12 months prior to the interview compared with those beginning up to 5 years before.

Before advising smokers who are motivated to quit to do so without engaging in precessation planning, research is needed that controls for the potential confounding due to differential recall of quit attempts. One way to overcome the memory effect is to make use of more recent quit attempts. This was the approach taken by Murray et al. (2009), although her study was limited by the cross-sectional design. Unlike the previous published studies, we were able to exploit the longitudinal nature of the International Tobacco Control (ITC) study to prospectively follow-up on unresolved quit attempts at the next wave of the survey (i.e., ongoing quit attempts at the reporting wave), thus having contemporaneous accounts of attempts, while retaining a 6-month cessation criterion.

Another problem with the published studies is that they all used a definition of planned attempts that conflates any delay in implementing a decision to quit after making it with any associated planning. Logically, a person can engage in planning before committing to an attempt, and leaving a gap between decision and implementation does not necessarily mean that this period is used for planning. Having decided to quit, a person could simply wait until the time came before doing anything. Further, the research in this area to date has used the terms “unplanned” and “spontaneous” synonymously. But a truly spontaneous quit attempt is one in which the person had not been considering quitting, then makes the sudden decision to do so, and does not delay its implementation.

In this study, we explore two aspects of preparing for a quit attempt; first, if the decision to quit followed prior consideration of quitting (as compared with a “spur-of-the-moment” decision) and second, the delay between the decision to quit and the day that the quit attempt started. We aim to find out how common each mode of decision is and how long smokers typically delay quitting once the decision is made. We are also interested in how these two aspects of quitting are combined. Further, we will test whether these two facets of the quitting process are

associated with the likelihood of maintaining abstinence for at least 6 months.

Additionally, we also test for confounding effects, including the timing of the attempt in relation to when we collected the information on the nature of the attempt, level of dependence at the previous wave, use of pharmacotherapy, sociodemographic effects, whether with the attempt involved cutting down gradually or stopping abruptly, and quitting experience in the 12 months preceding the interview. These latter two factors had not been controlled for in the previous studies. Thus, this study should be more robust test of the proposition that many quit attempts are spontaneous and of the proposition that such attempts are more successful.

Method

Participants

The ITC Four country survey encompasses longitudinal representative cohorts of adult smokers across the United States, Canada, United Kingdom, and Australia. For a full description of the methodology and the conceptual framework of the ITC project, see Thompson et al. (2006) and Fong et al. (2006), respectively. For the current study, respondents were eligible if they reported making a quit attempt in the interval between Waves 4 and 5 and/or Waves 5 and 6 of the ITC Four country survey and were either daily smokers or quit at the prior wave (4 or 5). As replenishment of the sample is only from smokers, respondents were not eligible at their first survey. This gave 1,880 and 1,866 respondents at Waves 5 and 6, respectively. There were 724 respondents who reported a quit attempt at both waves. Respondents were excluded from the analyses of 6-month abstinence if they had missing data on any of the covariates or could not recall whether there was any delay between the decision to quit and implementation of their most recent quit attempt.

Respondents were included in the 6-month outcome analyses if they had either started their most recent quit attempt 6 months or more before the survey or began 6 months or less before the survey and were followed up at the next wave to determine outcomes for those quit at the reporting wave. To avoid a bias toward including more recent failed attempts, we excluded those who had begun their most recent quit attempt less than 6 months ago and had returned to smoking at the reporting wave but were not followed up. As such, there were 1,462 cases available for the analyses of the outcome at Wave 5 and 1,376 for the outcome at Wave 6. This means that there are 25%–30% fewer cases in the 0- to 6-month time since quit for the analyses by outcome compared with the analyses of prevalence of spontaneous attempts.

Measures

Sociodemographic variables

Demographic variables included: age (18–24, 25–39, 40–54, and 55+ years), sex, country, and socioeconomic status (SES). SES was derived from separate measures of income and education that were classified into within-country tertiles (low, moderate, and high). The mean of income and education was used to estimate a three-level composite SES variable. Therefore, low SES corresponds to low–low and low–moderate combinations, and

high SES corresponds to moderate-high and high-high combinations. Moderate SES corresponds to all other combinations of income and education. Where respondents refused to give their income ($n = 123$ at Wave 5 and $n = 117$ at Wave 6), only education was used to estimate SES.

Main predictors

Delay between choosing a quit day and implementation of the quit attempt on the most recent attempt was assessed by: "When you made your last quit attempt, when did you choose your quit day?" (1) "Chose it on the actual day you stopped," (2) "Chose it on the day before you stopped," (3) "Chose it more than one day before" (and "How long before?" with answers given in days or weeks), or (4) "Actually decided to quit after having not smoked for some other reason." Categories 2 and 3 were reallocated into those choosing a quit day "1 to 6 days before" or "1 week or more before."

To assess whether the decision to quit followed any prior consideration, participants who chose responses (1)–(3) of the above question were also asked: "Had you been seriously thinking about quitting in the days before you finally decided to stop or was it a spur-of-the-moment decision?" Those reporting having stopped for some other reason were not asked this question, as it was assumed that the experience of not smoking was the primary stimulus for turning the period of abstinence into a quit attempt.

Control variables

Dependence was assessed using the Heaviness of Smoking Index, (HSI; Heatherton, Kozlowski, Frecker, Rickert, & Robinson, 1989). The HSI (range 0–6) was created as the sum of two categorical measures: number of cigarettes smoked per day (coded: 0: 0–10 cigarettes/day (CPD), 1: 11–20 CPD, 2: 21–30 CPD, and 3: 31+ CPD) and time to first cigarette (coded: 0: 61 min or more, 1: 31–60 min, 2: 6–30 min, and 3: 5 min or less). The HSI was then recoded into three categories of dependence: low: 0–1, moderate: 2–3, and high: 4–6. As respondents could be on a current quit attempt at the reporting wave, we use their HSI score from the prior wave. If respondents were quit at the prior wave (i.e., they relapsed and quit again between surveys), we used their HSI score from the last wave at which they were smoking. Use of quit smoking medications to stop smoking completely in the intersurvey interval was assessed (yes vs. no). We also included a dichotomous measure of whether respondents had made multiple attempts in the intersurvey interval as an index of difficulty in quitting (made other attempt/s vs. made only one attempt). Other control variables were whether respondents quit by cutting down or by stopping abruptly and survey wave.

To explore potential differences in recall over time, quit attempts were divided into four groups according to when they began in relation to the reporting survey to assess their recency (less than 1 month, 1–3 months, 4–6 months, and 7–12 months). Among ex-smokers, this measure was derived from responses to the same question outlined in the measure of successful quit attempts described below. For those who had relapsed by the time of the interview, this measure was derived by adding the number of days spent smoke free (see below) with the number of days given in response to the question "How many days, weeks, or months ago did your most recent quit attempt end?"

Outcomes

For the 6-month outcome analyses, the measure of successful quit attempts was derived from two survey questions. Current

quitters were asked: "How many days, weeks, or months ago did your quit attempt start?", whereas current smokers who had made a quit attempt since Wave 4/5 were asked "How many hours, days, weeks, or months were you smoke-free on your most recent quit attempt?" A failed quit attempt was defined as relapsing at 6 months or less, whereas a successful quit attempt was one that lasted more than 6 months and included respondents who had subsequently relapsed. Respondents who made their last quit attempt within the 6-month criterion period were only included if they provided follow-up data in the next wave (6/7). The status of those who were currently quit for 6 months or less at the interview was determined at the following wave.

Analyses

Chi-square tests were conducted to examine the bivariate associations between the variables of interest. A multivariate model was tested to predict the outcome of 6-month sustained abstinence. In order to maximize the number of observations across both waves while controlling for the correlations between responses from respondents who made a quit attempt at both waves, we analyzed the multivariate models using a generalized estimating equation (GEE) with binomial variations, logit link function, and an unstructured correlation structure. This method yielded 2,837 observations from 2,297 unique individuals who met the inclusion criteria. The model was built in a stepwise fashion beginning with exploration of the association between the delay variable and success while controlling for sociodemographic variables and survey wave. Following this, a set of potential confounding variables such as the HSI, use of medication, other quit attempts, and method used to quit were entered. Finally, the recency of the quit attempt was added on the third step to test for possible memory effects. We tested for possible moderating effects between the delay variable and all covariates by adding interaction terms on a fourth step.

The interaction with country was trending toward significance at $p = .163$, but a closer examination at the within-country effects did not reveal any results of interest. Since no other interactions reached significance, we will not detail them further. To examine whether there was an effect for prior consideration, we also ran a model that excluded the group who had decided to quit after having not smoked for some other reason and included both measures of delay and prior consideration.

All analyses were performed using SPSS v.14, except for GEE modeling that was performed using Stata v.10. Statistical significance was set to $p < .05$.

Results

The characteristics of the sample are shown in Table 1 for Waves 5 and 6 separately. The only notable difference between waves was more reports of use of medication at Wave 6.

Table 2 shows the proportion of respondents at each level of the delay variable. This is further split by whether the decision was spur-of-the-moment or followed prior consideration. The corresponding 6-month success rates are shown for those who were eligible for inclusion of analyses of outcome. The only sociodemographic characteristic of smokers consistently associated with the delay variable was age, with those more than 55 years more likely to stop smoking on the day they

Table 1. Sample characteristics

	Wave 5, <i>n</i> = 1,880	Wave 6, <i>n</i> = 1,866
Female (%)	58.9	58.5
Age in years (%)		
18–24	4.3	3.5
25–39	27.3	22.0
40–54	36.3	38.5
55+	32.2	36.0
Socioeconomic status (%)		
Low	46.1	48.0
Moderate	27.3	26.4
High	26.6	25.6
Country		
Canada	25.3	23.8
USA	22.1	24.2
UK	22.1	23.2
Australia	29.7	28.8
Heaviness of Smoking Index (%) ^a		
Low	28.0	23.1
Moderate	46.3	49.4
High	23.9	25.3
Multiple quit attempts in survey interval (%)	49.6	46.9
Reported attempt/s at both waves (%)	38.5	38.8
Used medication to quit (%)	39.5	48.0
Cut down to quit (%)	30.5	31.0
Timing of attempt (%)		
<1 month	17.0	17.0
1–3 months	32.6	33.5
4–6 months	23.5	23.7
7–12 months	27.0	25.8

Note. ^aTaken from last wave reported smoking.

decided to quit. There were no consistent effects by country, gender, or SES, except that at both waves, Canadians were the most likely to report delaying for 1 week or more. For the 37% who chose their quit day on the actual day they stopped, around a third (12%) reported that they did this on the spur-of-the-moment, with the remainder only doing this following prior consideration.

Excluding those lost to follow-up, the 6-month success rates for the “on the day” quit attempts were 25.5% (see Table 2). It can be seen that raw quit rates were lowest for those setting a date less than 1 week in advance, with the other three groups having roughly equal success rates. When analyzed wave-by-wave, the delay variable was significantly associated with 6-month abstinence (see Table 2).

There was no evidence of systematically changing choice of delay option among those who reported quit attempts at both waves (McNemar’s χ^2 test, $p = .121$, $n = 724$).

We also explored both the prevalence and the outcomes for delay as a function of time between quit attempt and the survey and found significant differences (analyses available on request). The main differences were the proportion of reports of attempts set for 1–6 days ahead decreased as time since quit attempt increased, while reports of a choosing a delay of 1 week or more increased with time. Reported success rates increased markedly with

Table 2. Period of delay preceding implementation and mode of decision to quit: prevalence and corresponding outcome

When decided and mode of decision	% Prevalence	% Quit 6 months or more
	Observations = 3,746	Observations = 2,838
On day	36.9	25.5
Prior consideration	24.5	25.2
Spur-of-the-moment	12.3	26.0
1–6 days	26.0	18.5
Prior consideration	21.1	17.8
Spur-of-the-moment	4.8	21.7
One week or more	22.5	27.9
Prior consideration	21.0	27.8
Spur-of-the-moment	1.5	28.9
Already stopped	12.3	24.0
Cannot recall	2.3	—
Total	100	24.1
Prior consideration	66.8	23.8
Spur-of-the-moment	18.6	25.2

Note. χ^2 Test for difference in 6-month outcome by the four categories of delay; Wave 5: $p = .015$ and Wave 6: $p = .007$.

time since quit attempt started, with less than 10% lasting more than 6 months for those quit for less than 1 month when surveyed to more than 40% for those who began more than 6 months ago. There was no clear evidence of an interaction between choosing a quit day in advance, time since attempt, and outcomes.

Table 3 presents the results of the GEE analysis predicting 6 months of sustained abstinence. After controlling for sociodemographics, the length of delay between deciding to quit and implementing the quit attempt was significantly associated with 6-month abstinence ($p = .001$). The results show that those who delayed for 1–6 days were significantly less likely to succeed than those who did not delay. There was no significant difference between those who did not delay and either those who delayed for 1 week or more or those who decided to quit after they had already stopped for some other reason. This relationship remained the same after adding in the set of potential confounding variables, albeit the effect was somewhat attenuated ($p = .016$). Notably, abrupt cessation (vs. cutting down) was a significant predictor of success. With the recency of the quit attempt added, the delay variable failed to reach significance ($p = .173$); however, delaying for 1–6 days had borderline significance (see Table 3). In a separate analysis, there was no effect for prior consideration on the association between the delay variable and success, something not included in Table 3 as respondents who had stopped for some other reason before quitting were not asked about prior consideration.

Discussion

Our results do not support previous findings (Ferguson et al., 2009; Larabie, 2005; Murray et al., 2009; West & Sohal, 2006) that spontaneous quit attempts are associated with superior outcomes, as we found no clear effects on outcomes. If those who

Table 3. Generalized estimating equation model for predicting 6-month abstinence (2,837 observations and 2,297 individuals)

	Step 1. Adjusted odds ratio (95% CI)	Step 2. Adjusted odds ratio (95% CI)	Step 3. Adjusted odds ratio (95% CI)
Delay			
On the day	Ref	Ref	Ref
1–6 days	0.65 (0.52–0.82)	0.72 (0.56–0.91)	0.78 (0.61–1.00)
1 week or more	1.13 (0.91–1.41)	1.07 (0.85–1.35)	1.03 (0.81–1.32)
Already stopped	0.93 (0.70–1.23)	0.91 (0.68–1.23)	0.92 (0.68–1.25)
Gender			
Female	Ref	Ref	Ref
Male	1.09 (0.91–1.31)	1.11 (0.92–1.34)	1.20 (0.99–1.48)
Age (years)			
18–24	Ref	Ref	Ref
25–39	1.39 (0.83–2.34)	1.53 (0.88–2.68)	1.61 (0.93–2.79)
40–54	1.04 (0.62–1.74)	1.24 (0.71–2.15)	1.42 (0.83–2.44)
55+	1.17 (0.70–1.96)	1.50 (0.86–2.60)	1.71 (0.99–2.94)
Socioeconomic status			
Low	Ref	Ref	Ref
Moderate	1.12 (0.90–1.40)	1.07 (0.85–1.34)	1.07 (0.84–1.37)
High	1.33 (1.06–1.66)	1.14 (0.91–1.44)	1.19 (0.93–1.51)
Country			
Canada	Ref	Ref	Ref
US	1.24 (0.94–1.64)	1.24 (0.94–1.64)	1.38 (1.03–1.85)
UK	1.74 (1.34–2.26)	1.55 (1.19–2.03)	1.66 (1.25–2.20)
Australia	1.40 (1.09–1.80)	1.35 (1.04–1.75)	1.55 (1.18–2.04)
Wave			
5	Ref	Ref	Ref
6	0.89 (0.76–1.05)	0.85 (0.71–1.01)	0.82 (0.68–0.99)
Nicotine dependence			
Low	Ref	Ref	Ref
Moderate	—	0.75 (0.60–0.93)	0.79 (0.63–0.99)
High	—	0.54 (0.41–0.70)	0.57 (0.43–0.75)
Used medication to stop smoking			
No	Ref	Ref	Ref
Yes	—	1.02 (0.84–1.23)	1.00 (0.82–1.23)
Made other attempt/s since last survey			
No	Ref	Ref	Ref
Yes	—	0.32 (0.26–0.39)	0.49 (0.39–0.61)
Method to quit			
Stopped abruptly		Ref	Ref
Cut down to quit		0.68 (0.55–0.84)	0.77 (0.62–0.96)
Quit attempt recency			
< 1 month	Ref	Ref	Ref
1–3 months	—	—	1.43 (0.97–2.11)
4–6 months	—	—	2.22 (1.50–3.29)
>6 months	—	—	6.15 (4.25–8.91)

decided to quit after a period of not smoking for some other reason are added to those who implemented their quit attempt on the day they decided to quit, then we have replicated the finding that quit attempts that can be called spontaneous by some criterion are common, accounting for around half of all attempts. However, most quit attempts followed some period of serious consideration, with only around 20% being spur-of-the-moment (those reporting quitting after being stopped for some other reason were not asked but cannot be truly spur-of-the-moment).

Prior serious consideration of quitting was unrelated to the outcome, although there was some evidence of a small effect of

delay. Those reporting choosing a quit day less than 1 week in advance (but not on the day) were less likely to subsequently achieve more than 6 months of sustained abstinence compared with those reporting other intervals, although most of this effect was lost in multivariate analyses. It seems likely that at least some of the effect is due to memory biases. The magnitude of the odds ratios for the recency variable provides clear and strong evidence that with time, longer spans of abstinence are more memorable than shorter ones. We also found some evidence that there is a shift in recall of the duration of delay prior to implementation. That is, reports of 1- to 6-days decline as length of recall period increases, while the relative frequency of longer

delays increases. The shift is similar for successful and failed attempts. We are not sure if attempts that are delayed for more than the same day but less than a week are the most forgettable or are being misremembered as a shorter or longer delay.

Our finding that abrupt cessation is associated with better outcomes than cutting down replicates similar findings from earlier waves of the ITC study (Cheong, Yong, & Borland, 2007), and this appears to occur largely independent of the delay between the decision to quit and implementation, something that is surprising. We thought it possible that the period of cutting down might have explained some differential success rate by delay in actually quitting.

A major strength of this study is that quit attempts that began less than 6 months ago were followed up at the next wave, making this study the first to enjoy both accounts of recently occurring quit attempts and a criterion of 6-month sustained abstinence. However, while we have minimized the possibility of recall bias, relying on retrospective reports means that we have not entirely eliminated it. We have also been able to control for smoker's quitting experience in the previous 12 months and whether they stopped abruptly or cut down to quit, factors not controlled for previously. We were able to take advantage of the longitudinal nature of the ITC study and perform GEE analysis across two waves of data collection, increasing the analytic power to detect even small effects. Further, our study allowed for a non-linear relationship between the delay between the decision and implementation and successfully quitting, something that might have been masked by the other studies use of a dichotomous measure. One drawback of our study is that we did not differentiate between implementation immediately after the decision and implementation later the same day. If the success of a spontaneous quit attempt truly relies on an immediate transition to actively not smoking, then we may have failed to detect this.

In attempting to understand the results, it has become clear that there has been insufficient conceptualization of both what constitutes a spontaneous quit attempt and what planning necessarily entails. Larabie (2005) conducted her study in a general practice and did not appear to have a fixed set of questions. She reported that planned attempts included any activity that predated the quit attempt and was designed to help the attempt succeed and unplanned meant a sudden decision not to smoke any more cigarettes, including any remaining in the pack. In contrast, West and Sohal (2006), Ferguson et al. (2009), and Murray et al. (2009) all relied on the same measure included in their surveys of smokers: "Which of these statements best describes how your most recent quit attempt started?" (a) I did not plan the quit attempt in advance: I just did it, (b) I planned the attempt for later the same day, (c) I planned the quit attempt the day beforehand, (d) I planned the quit attempt a few days beforehand, (e) I planned the quit attempt a few weeks beforehand, or (f) I planned the quit attempt a few months beforehand. Only the first choice indicated an unplanned attempt. These measures ignore the possibility of delay in implementation without any planning. There appear to be at least three elements of preparing for a quit attempt: prior consideration, if any, that precedes a decision; the timing of the decision in relation to its implementation; and the extent and nature of any planning that occurs before implementation. Indeed, the possibility of postimplementation planning exists. Clearly a spur-of-the-moment decision to quit that is enacted immediately and follows no consideration of quitting

cannot have any preplanning, but any attempt for which the decision to quit followed a period of consideration could have preplanning either before or after the decision, as could any spur-of-the-moment decision to quit other than right away.

We cannot be sure as to why our results differ so markedly from the other studies. It is possible that a small part of the effect is due to memory effects, but it cannot in any simple way account for most of the differences. It could be something about the questions asked. Our questions identified a small group who reported having not smoked for sometime before deciding to quit. This possibility does not seem to have been allowed in the other studies. Both our study and those before us focused on the delay between deciding to make a quit attempt and its implementation. However, the measure that is used in the other studies conflates this delay with planning. But being committed with a delay does not mean that the delay will be used for planning. Choosing a quit day in advance is not necessary for there to be planning nor does it guarantee that there will be planning. There can be conditional planning either before or after any commitment to act. This all said, we have no clear explanation as to why conflating planning and any delay between the decision to quit and its implementation would lead to the higher rate of success associated with unplanned attempts. We have now included more detailed questions on the extent of planning activity in the ITC survey, so we will eventually be able to address these issues empirically.

This area of research has huge potential implications for smoking cessation practice, which encourages planning. Research on behavioral interventions that typically include elements of planning are demonstrably effective (e.g., Stead, Perera, & Lancaster, 2009), and while their benefits may be independent of any planning component, we know of no randomized control trials in which the control group is not also subject to a period of delay. However, both West and Sohal (2006) and Ferguson et al. (2009) warn against making the conclusion that planning per se leads to failure, arguing that it indicates some unresolved internal conflict, and it is this that makes abstinence less likely. We agree with Hughes and Carpenter (2006) that research is urgently needed to resolve these issues.

Conclusion

Those who implemented a quit attempt on the day they decided to quit and those who delayed for a week or more had comparable rates of success. This suggests that delaying per se does not predict failure. We found some evidence of an association between delaying for 1–6 days and failing at a quit attempt, but this was confounded by other factors determining failure. Importantly, our study adds to the growing body of evidence (Ferguson et al., 2009; Larabie, 2005; Murray et al., 2009; West & Sohal, 2006) suggesting that smokers who are motivated to quit should not be discouraged from implementing a quit attempt as soon as the decision is made. Research is needed on optimizing postimplementation evidence-based cessation support.

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Declaration of Interests

None declared.

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