

# Smoking as a Job Killer: Reactions to Smokers in Personnel Selection

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**Abstract** Decades of tobacco control initiatives have turned public opinion against cigarette smoking. Smokers, once considered glamorous, are now stigmatized in domains including the workplace. Extant literature lacks scrutiny of smoker stigmatization and devaluation within the job selection process, and mechanisms that lead to such outcomes. Using an experimental design, we empirically examine initial reactions to job applicants' smoking behaviors within two samples ( $N = 122$  Canadian business students, and  $N = 143$  online U.S. respondents with hiring experience). We show that initial impressions are significantly worse when job applicants smoke versus do not in a store-based context. Moreover, this effect occurs indirectly through perceived likelihood of engaging in counterproductive work behaviors (and to some extent negative emotions experienced), and is conditional upon respondents' own attitudes towards smoking (particularly within the U.S. sample). These relationships—similar for customer service and inventory management jobs—are indicative of potential biases within the hiring process. Implications of these findings, and the moral dilemmas they raise around the treatment of smokers, are discussed from the ethical perspective of human resource management.

**Keywords** Counterproductive work behaviors · First impressions · Human resource management · Selection · Smoking · Stigmatization

Cigarette smoking that was once seen as glamorous is now widely stigmatized (Bayer and Stuber 2006). The stigma runs so deep that even an awareness that someone smokes can trigger negative impressions about him or her across a slew of unrelated characteristics (e.g., Seiter et al. 2010). In fact, the relationship between non-smokers and smokers today is best characterized as adversarial in nature, and has resulted in a discriminatory dynamic that also plays out in the workplace (Gilbert et al. 1998; Morrow and Leedle 2002). The social devaluation of smoking can be attributed to factors such as knowledge of the harmful health effects for smokers and (very importantly) innocent bystanders, the healthcare burden borne by society, stringent public policy measures that create physical separation by restricting smokers to designated areas that are visible yet at a distance from the majority population, and stigmatization tactics adopted by tobacco de-marketers as counterpoints to powerful positive imagery sold by tobacco companies (Bayer and Stuber 2006; Gilbert et al. 1998). The health risks of smoking are undeniable and the social denigration of smokers is credited with lowered smoking rates (Kim and Shanahan 2003). At the same time, literature on stigmatization reports on the physical and psychological stresses from being stigmatized (Weiner et al. 1988), and even the potential for intensified engagement in stigmatized behaviors (Steele and Aronson 1995). And, others (Bayer and Stuber 2006; McCool et al. 2013; Stuber et al. 2008) have begun questioning the ethics of looking down upon smokers given the magnitude of adverse consequences (e.g., the lack of adequate healthcare and research associated with smoking related illnesses, and reduced access to resources and opportunities in interpersonal and professional domains) that must be borne, for better or worse, by people who smoke.

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In the workplace, more and more organizations have shied away from hiring smokers based on perceptions of higher healthcare costs, greater absenteeism, and lost productivity (Houle and Siegel 2009), and those who at first glance unjustly characterize smokers as less qualified on job-related attributes can further exacerbate the situation. According to the *normative* stakeholder approach to human resource management, to “pass the ethics test” organizations have a moral responsibility towards all their stakeholders, despite these stakeholders having potentially conflicting interests (Greenwood 2002, 2013). For instance, organizations and managers have the moral obligation to treat all their employees with respect, equality, and fairness (Greenwood 2002), to ensure their well-being (Guest and Woodrow 2012), to ensure non-discriminatory practices (Demuijnck 2009), and to consider the consequences of their actions (Legge 1998). However, ethical obligations (where at its most fundamental level, employees are treated as human beings and not mere commodities or resources to be managed; Greenwood 2013) can sometimes conflict with strategic objectives (Van Buren et al. 2011). In the specific context of personnel selection, organizations and applicants too can have conflicting interests (Bangerter et al. 2012), yet organizations still bear the responsibility for providing a fair and just process to all job applicants (Arvey and Renz 1992; Gilliland 1993). Unfortunately, organizations often fail at adopting this ethical perspective of human resource management. For instance, taking a *descriptive* ethics perspective (Jack et al. 2012), there is evidence from numerous empirical studies that stigmatizing features of job applicants such as race (Brief et al. 2000), age (Finkelstein et al. 1995), or obesity (Roehling 2002) often trigger unethical treatment and biases in how they are judged.

The present study follows this research tradition, and examines the treatment of an applicant feature previously unexamined within the personnel selection domain, i.e., that of smoking status. How smokers are treated has been at the center of numerous debates within the social sciences (Stuber et al. 2008), psychology (Gilbert 1995), law and labor relations (e.g., Chadwick 2006; Pugsley 1993; Warner 1994), as well as business ethics (Lecker 2009) literatures. For instance, Lecker (2009) builds on Locke, Kant, and Nozick’s philosophies of individual rights and freedom, and asserts that from an ethical standpoint, companies have no right over the behaviors of their employees, especially if these behaviors have no reputational or productivity consequences for the firm. Indeed, while in no way condoning tobacco use, it is also true that there is a lack of empirical evidence to support the assertion that smokers make for less qualified employees (Morrow and Leedle 2002).

This mischaracterization of smokers has the potential to unfairly impact a large number of applicants. Notwithstanding declining smoking rates within the general adult population, most recent statistics indicate that in 2014 fully 16.8 % of the adult U.S. population smoked (Centers for Disease Control and Prevention, CDC 2016), and in 2013 14.6 % of Canadians over the age of 15 were self-identified as smokers (Canadian Tobacco, Alcohol and Drugs Survey, CTADS 2013). This implies the presence of a non-negligible proportion of smokers within job applicant pools that reside at the very entrance into organizations, and warrants examinations by human resource management researchers that are interested in the ethical implications of practices that can significantly impact people’s lives. Some organizational smoker-related policies (Houle and Siegel 2009), and laws in the U.S. designed to protect smokers from discrimination (Schmidt et al. 2013) have also been instituted. This issue, however, remains largely overlooked in the human resource management and industrial/organizational psychology literatures. In fact, we are not aware of a single study within the area of personnel selection that investigates whether or not smokers are stigmatized and discriminated against. This paper, thus, examines the consequences of being considered a smoker at the very point of admittance into the workforce (i.e., the selection process) by building on stigmatization theory, and drawing from literatures on tobacco control and personnel selection.

Overall, we are the first to empirically examine anti-smoker biases within the personnel selection literature. Using an experimental design with (non-representative) samples of business students and online respondents with hiring experience, we highlight the impact of applicants’ smoking status on respondents’ initial impressions of them. Initial impressions have practical significance in employment interviews as they often trigger biased confirmatory processes (Dougherty et al. 1994) and impact final hiring decisions (Stewart et al. 2008). Also importantly, we build upon the dual-process model of reactions to stigmas (Pryor et al. 2004) to identify mediating mechanisms (i.e., emotional responses and inferences about applicants’ likely behaviors) and moderating variables (i.e., attitudes towards smoking and job type) that may influence such decisions. Findings of ‘smokerism’ biases (Gilbert et al. 1998; Lecker 2009) in employment decisions have practical significance for organizations (in terms of fulfilling their moral obligation of non-discrimination, and the loss of potentially qualified candidates), applicants (in terms of heightened awareness of the need for smoking cessation, or barring this, impression management), and legislators (in terms of adding to the push to designate smoking as a prohibited ground for hiring discrimination, on par for instance with alcohol addiction).

## Hiring Smokers: Legislation, Practices, and (the Lack of) Research

Numerous studies in personnel selection have highlighted stigmatization, biases, and employment discrimination based on a multitude of factors including: race, ethnicity, and immigrant or minority status (Brief et al. 2000; Derous and Ryan 2012; Petersen and Krings 2009), gender (Cohen and Bunker 1975; Glick et al. 1988; Ng and Wiesner 2007), age (Finkelstein et al. 1995; Krings et al. 2011), sexual preference (Hebl et al. 2002), attractiveness (Tews et al. 2009), or obesity (King et al. 2014; Roehling 2002). Non-discrimination has been described as a moral obligation for organizations (Demuijnck 2009). Moreover, most of the factors described above are now prohibited grounds for hiring discrimination in many countries, including the U.S. (the Civil Rights Act), Canada (the Human Rights Act), and the European Union (Charter of Fundamental Rights).

Disabilities for which applicants are legally protected also include present or previous addiction to alcohol (as long as an employee's job performance is not directly impacted). Theoretically speaking, smoking is an addiction to nicotine and should also be thought of as a disability (Pugsley 1993). Yet, nicotine addiction remains excluded from the Americans with Disabilities Act and the Canadian Human Rights Act, and cigarette smoking is not a prohibited reason for discrimination within national-level legislations (Chadwick 2006; Pugsley 1993). In the U.S., 29 states have recently passed legislation prohibiting employers from refusing to hire applicants because of their smoking habits. The remaining 21 states, however, have no such restrictions placed upon them (Schmidt et al. 2013). In Canada, judges and arbitrators have consistently ruled that smoking is not a disability and have not punished discriminatory practices.

In sharp contrast to legislations evolving to protect smokers, historical and anecdotal evidence suggests that some employers deliberately choose not to hire smokers. In earlier times, Henry Ford and Thomas A. Edison refused to hire anyone that smoked on or off the job (Tate 1999). More recently, a number of organizations have switched from enforcing *smoke-free* workplaces to developing *smoker-free* policies that restrict hiring smokers (Houle and Siegel 2009; Lecker 2009). For instance, not-for-profit organizations (such as the World Health Organization, and a number of hospitals), as well as for-profit companies (such as Momentous Corp. in Canada, and Weyco Inc. and Union Pacific Railroads in the U.S.) have stopped hiring smokers. There are even reports of organizations with smoker-free policies that have terminated employees who lied about their smoking status during the hiring process (Gray 2005).

Even organizations that lack such policies show evidence of the devaluation of smokers. For instance, smokers

tend to receive lower *subjective* performance evaluations as compared to non-smokers, especially in the areas of professionalism, interpersonal working relations, and dependability (Gilbert et al. 1998), although exceptions exist (see for instance Morrow and Leedle 2002). Yet, the actual relationship between smoking habits and *objective* measures of job performance remains under-researched. While smokers tend to select riskier jobs than do non-smokers, they receive lower hazard pay (Viscusi and Hersch 2001). In general, smokers receive wages reduced by an average of 4–8 % as compared to comparable non-smokers, even after controlling for education level and other socio-economic variables (Levine et al. 1997).

The main argument for bans on hiring smokers (at least in the U.S.) pertains to higher costs borne by employers (*estimated* at \$4000 per smoker per annum), with smokers *perceived* as being more expensive in terms of health insurance claims (Schmidt et al. 2013; Stuber et al. 2008). Smokers are also *expected* to be more absent and less productive (e.g., Greenberg 1994; Leigh 1986) despite a scarcity of supporting empirical evidence (Morrow and Leedle 2002). Other arguments include corporate aspirations such as physically fit employees or extremely sanitized workspaces free of tobacco odors (Malouff et al. 1993). These organizational practices have been embraced by tobacco control proponents (e.g., the National Cancer Institute) as another way to dissuade cigarette use (Houle and Siegel 2009). At the same time, critics of these policies consider them as unethical (Lecker 2009; Schmidt et al. 2013) given the non-job-related leisure time nature of smoking (Chadwick 2006), and the potential for stigmatization to cause unemployment, stress, and other personal problems (Houle and Siegel 2009). Very importantly, such stigmatization may also translate into indirect forms of discrimination against minorities where higher rates of tobacco use are generally observed (i.e., within less privileged, less educated, and unemployed populations; Garrett et al. 2011; Schmidt et al. 2013).

## Stigmatization of Smokers in the Selection Process

We propose to examine reactions to smokers in the hiring process in alignment with stigmatization theory. Goffman (1963) conceptualized a stigma as being a link between an attribute (such as, smoking cigarettes in the present research context) and stereotypes about an individual (such as, undesirable characteristics associated with smokers). Stigmas have been further de-constructed by Link and Phelan (2001) into labeling (e.g., as 'smokers'), stereotyping (e.g., association of smokers with a variety of negative attributes), separation (e.g., between the 'non-

smoker' majority and 'smoker' minority), status loss (e.g., the social devaluation of smokers by non-smokers), and discrimination (e.g., the erosion of opportunities for smokers). Stigmatized individuals are thus likely to face negative stereotypes and discrimination, such as in the form of lower access to valued resources (Link and Phelan 2001).

Stigmatization of risky behaviors is often used in public health campaigns as a means to lessen the behaviors' attractiveness. Anti-smoking marketing campaigns have reframed smokers as socially unappealing misfits that harm not just themselves but also blameless bystanders (Bayer and Stuber 2006). As a result, the societal stigmatization of smokers is credited with significant drops in smoking rates (Bayer and Stuber 2006). At the same time, the harmful effects of stigmatization on the physical and psychological outcomes of those that are targeted (Weiner et al. 1988) and the risk of worsening the very behaviors being denigrated (Steele and Aronson 1995) have long been cautioned against. Evidence for the stigmatization faced by smokers and its outcomes has begun to accumulate. For instance, people that smoke are viewed as social outcasts (Alesci et al. 2003; Kim and Shanahan 2003) that are less attractive, likeable, clean, and healthy in comparison to those that do not smoke (Seiter et al. 2010). Smoking is perceived as a signal of self-destructiveness, poor logical reasoning, and being low on the socio-economic spectrum (Bayer and Stuber 2006; McCool et al. 2013).

Stigmas also allow for a better understanding of the situation faced by smokers in the selection process. It is likely that perceptions that drive the treatment of smokers in organizations will reflect broader social perceptions surrounding this demographic. In other words, the negative sentiments against smokers are likely to carry over into the workplace and hiring process. And, research on the impact of stigmas on hiring decisions has highlighted that stigmatized applicants are evaluated more negatively than non-stigmatized ones (e.g., Hebl et al. 2002; Madera and Hebl 2012). The effect of smoking status is likely to be especially strong when one has to form an initial impression about the applicant. Job applicants identified as smokers, thus, are expected to be initially evaluated more negatively as compared to non-smokers.

**Hypothesis 1** Initial impressions of an applicant described as a smoker will be more negative than for a non-smoker.

The impact of applicant smoking status on initial impressions about applicants can, potentially, be indirect. According to the dual-process model of reactions to stigmas (Derous et al. in press; Pryor et al. 1999, 2004), individuals respond to stigmas in two ways: First, they engage in reflexive processes which are mostly based on

instinctive (or automatic) emotional reactions. A stigma may thus trigger fear, disgust, and avoidance as impulsive or automatic responses developed through learning. Second, individuals engage in rule-based processes which involve more controlled and thoughtful reactions. Individuals may thus reflect on the appropriateness of their initial emotional reactions and engage in more deliberated attributions about the stigmatized person. Such processes are likely to be particularly negative when the stigma is perceived to be controllable (e.g., smoking status) as compared to uncontrollable (e.g., a facial stigma; Pryor et al. 1999).

In line with the reflexive process, one immediate reaction to applicants who smoke may be negative emotional reactions (e.g., becoming angry, upset, disgusted, annoyed, and distressed) that are triggered on being confronted with them. Indeed, smoking has been associated with negative reactions such as disgust (Rozin and Singh 1999), and tobacco control strategies have included graphic health warnings on cigarette packages to create negative emotions (e.g., fear, disgust) in order to encourage smoking cessation (Leshner et al. 2009). In the same way, we expect applicants who smoke to trigger more negative emotional reactions, which would then indirectly result in more negative initial impressions of applicants.

**Hypothesis 2** Negative emotions will act as a mediator in the relationship between applicant smoking status and initial impressions of the applicant.

In line with the rule-based process, one may engage in attributions about the kind of employee the stigmatized applicant is likely to be. We suggest that people may infer that smokers are more likely to engage in deviant or counterproductive work behaviors (CWB) than non-smokers. CWB are defined as voluntary behaviors that violate important organizational norms (or rules and policies) that thereby threaten the well-being of an organization, its members, or both (Robinson and Bennett 1995). They involve "mild" behaviors that affect organizational productivity such as withholding effort, working slowly, and absenteeism, and more damaging behaviors like theft, fraud, harassment, and sabotage. CWB have a strong negative relationship with positive (or citizenship) workplace behaviors and task performance (Sackett 2002).

Public health advocates and non-smoker advocacy groups have encouraged the framing of tobacco consumption as an anti-social and objectionable act (Americans for Non-smokers' Rights 2006). As a consequence, the act of smoking is frequently associated with deviance or non-conformity (Markle and Troyer 1979). Gilbert (1995) investigated smokers' personalities and noted that individuals "that do not adhere to traditional social values are more likely to smoke than others" (Gilbert et al. 1998,



p. 286). The failure to stop smoking has been linked with a lack of self-control (Muraven and Baumeister 2000), and employees' lack of self-control has been identified as a strong predictor of counterproductive work behaviors (Marcus and Schuler 2004; Spector 2011). Altogether, one may be concerned that smokers tend to engage in more CWB than non-smokers. We therefore predict that individuals presented with information suggesting that applicants smoke will perceive them as more likely to engage in CWB and, indirectly, evaluate them less favorably.

**Hypothesis 3** Perceived likelihood of CWB will act as a mediator in the relationship between applicant smoking status and initial impressions of the applicant.

### Stable Attitudes and Situational Factors as Moderators of Reactions to Smokers

The dual-process model of reactions to stigma (Pryor et al. 2004) also suggests that stable attitudes towards the stigmatized group can influence reactions, and especially reflexive processes. For instance, reactions towards individuals with HIV/AIDS were stronger for respondents with negative attitudes towards homosexuals (Pryor et al. 2004). Similarly, research on racial discrimination during the selection process highlights the important role of evaluators' level of racial prejudice in their evaluations of minority versus majority applicants (Brief et al. 2000; Mullins 1982). As such, stable attitudes towards the act of smoking in general could influence the assessments that one makes of smokers as potential employees. Stigmatization of applicants that smoke, and the negative reactions and perceptions associated with it, are thus likely to be stronger when one has negative (vs. positive) attitudes towards smoking. These attitudes can be driven by factors such as ones' own smoking behaviors, those of their loved ones, or others they feel a sense of affinity for. Such a prediction is also consistent with other theoretical approaches related to stigmas and stereotyping. For instance, social identity theory (Tajfel 1979; Turner 1991) suggests that preference is generally given to the in-group (i.e., groups we already belong to or wish we belonged to) over an out-group (i.e., groups we do not belong to nor wish we were members of) in the form of greater liking or better appraisals (Struch and Schwartz 1989). We thus predict that the negative effects of applicant smoking status on reactions and perceptions will occur mainly when one holds less favorable attitudes towards smoking.

**Hypothesis 4** The direct and indirect effects of applicant smoking status on initial impressions of the applicant will be moderated by personal attitudes towards smoking.

Finally, it is possible that situational factors also moderate assessments that one makes of smokers as potential employees. One important negative perception associated with smokers is that of lower cleanliness (Dermer and Jacobsen 1986). Non-smokers especially tend to perceive smokers as being less clean than non-smokers (Seiter et al. 2010). In the organizational context, tobacco odors on the breath of an employee can be perceived as problematic (Malouff et al. 1993). Cigarette smells could, for instance, be perceived as offensive to customers and may fuel ones' reluctance to hire smokers. However, such an issue would be more valid for jobs involving customer contact (e.g., a customer service job) as opposed to back office jobs (e.g., an inventory management job). We thus predict that the negative effects of applicant smoking status on reactions and perceptions will be stronger when the job involves customer contact.

**Hypothesis 5** The direct and indirect effects of applicant smoking status on initial impressions of the applicant will be stronger for customer service jobs than inventory management jobs.

## Method

### Samples

We tested our hypotheses within two different (non-representative) samples. Our first sample comprised undergraduate business students at a major Canadian university. A total of 161 students that were recruited from a research subject pool agreed to participate in the 15-min online study in exchange for course credit. After eliminating participants failing our manipulation check questions (see below), the final sample included 122 respondents. The average age was 20.3 ( $SD = 3.0$ ) years. The majority of participants were male (54 %), of Canadian nationality (70 %), and native English speakers (78 %). They were mostly non-smokers (86 %), although a few were regular smokers (2 %), occasional smokers (7 %), or ex-smokers (5 %). We obtained a post hoc estimation of students' hiring experience based on an independent sample of students drawn from the same subject pool ( $N = 206$  and with a similar demographic makeup), which indicated that 30.9 % had previous experience hiring people (with  $M = 1.83$ ,  $SD = 7.73$  hires; this rose to 5.08 amongst those that indicated prior hiring experience).

For our second sample, we recruited 269 participants via Amazon's Mechanical Turk (MTurk). MTurk has been described as a reliable approach for recruiting more diverse and experienced samples that resemble organizational samples more so than do student samples (Landers and

Behrend 2015; Paolacci et al. 2010). Participants were invited to partake in a short study about recruitment, and engaged in the same 15-min online study in exchange for US\$1. We eliminated 19 individuals that failed our manipulation check questions or who were not based in the U.S. (based on the geo-IP location feature in our online survey system). In order to work with a sample of respondents who had experience in selecting employees, we also eliminated those who had never participated in hiring employees (i.e., 107 respondents). This led to a final sample of 143 U.S. respondents with previous hiring experience. The average experience involved 11.6 ( $SD = 24.0$ ) hires, but only a few respondents in our sample can be considered as professional recruiters (e.g., about 20 % of our final sample participated in hiring more than 10 employees). The average age of the sample was 34.6 ( $SD = 12.5$ ) years. The majority of participants were male (57 %), White (76 %), and college or university educated (60 %). Although they were mostly non-smokers (63 %), some were regular smokers (13 %), occasional smokers (9 %), or ex-smokers (15 %).

## Procedure

Participants were asked to imagine that they were working part-time as an assistant manager at a local electronics store. They were then told that as part of their duties, they were to help the store manager in selecting and hiring a new employee. Participants were then randomly assigned to read one of the four hypothetical scenarios with different vignettes (see the *experimental design* section). After reading the scenario, participants were asked to complete measures of negative emotions, likelihood of CWB, initial impressions about the applicant, attitude towards smoking, and demographic variables (in this order). Upon completion, participants were thanked and debriefed as to the purpose of the research.

## Experimental Design

A 2 (applicant status: smoker versus control) by 2 (job type: customer service versus inventory management) between-subjects experimental design was used. The fictitious scenario described a situation where the assistant manager (i.e., the participant) was said to arrive at the store where he/she was to interview applicants for a customer service versus an inventory management position. On the way into work, this assistant manager noticed a person standing outside the store portrayed as talking on a cellphone while smoking a cigarette versus only talking on the phone. The assistant manager then got ready for the interview in the office area, and as the applicant entered the office, realized that this was the person encountered on the

way into the store. We depicted cellphone use in the control condition in order to avoid showing the applicant simply standing there and doing nothing, and to make the smoking manipulation more subtle.

## Manipulation Check

Participants were asked to indicate the status of the applicant (*talking on a cellphone, asking someone for directions, waiting for the bus, talking on a cellphone and smoking*) as a manipulation check for smoking status, and the main type of activities (*interacting with customers, attending to phone calls, managing product inventory, making deliveries*) as a manipulation check for job type. The percentages of correct responses were 84 and 96 % for smoking status and 83 % and 95 % for job type, in the Canadian student sample and U.S. MTurk sample, respectively. This suggests that our manipulations were effective. Moreover, because inattentive or careless respondents may threaten the validity of online studies (Huang et al. 2012), participants failing to respond correctly to these questions were deemed inattentive and thus eliminated from the analyses in both samples.

## Measures

### *Negative Emotions*

Participants' emotional reactions to the scenario were captured via a 5-item scale ( $\alpha = .94$  in the Canadian sample/ $\alpha = .92$  in the US sample) taken from the PANAS instrument (Watson et al. 1988). Participants rated how they felt at that moment (using the following adjectives: *angry, upset, disgusted, annoyed, and distressed*) on 5-point Likert scales, with 1 = *not at all* and 5 = *very much so*.

### *Likelihood of CWB*

We measured participants' perceptions of the applicant's likelihood of engaging in CWB at work with a 13-item scale ( $\alpha = .91/.94$ ) adapted from Bennett and Robinson's (2000) organizational deviance measure. Items were introduced with *to what extent do you think that the applicant would be likely to...* and included nine items from the original scale (e.g., *put little effort into their work, come in late to work without permission*) as well as four items more specific to smokers' counterproductive behaviors that were developed based on open-ended comments collected in a pilot study (e.g., *take a lot of breaks, not present a well-groomed and professional appearance*). Responses were captured on 5-point Likert scales, where 1 = *very unlikely* and 5 = *very likely*.

### Attitude Towards Smoking

Four 7-point semantic differential scale items anchored by *favorable/unfavorable*, *negative/positive*, *dislike/like*, and *bad/good* were used to capture participants' attitude towards smoking ( $\alpha = .94/.96$ ). This set of bipolar adjectives is similar to those used for assessing attitudes towards various attitude objects (such as, attitude towards the act of engaging in an activity; Oliver and Bearden 1985). We note that we chose to use participants' attitudes towards smoking and not their smoking status as our moderator. Yet, attitudes towards smoking were strongly related to the current smoking status of respondents. For instance, regular smokers ( $n = 3$ ,  $M = 3.97$ ,  $SD = .38$  in the Canadian sample/ $n = 18$ ,  $M = 3.81$ ,  $SD = 1.40$  in the U.S. sample) had much more positive attitudes than non-smokers ( $n = 105$ ,  $M = 1.49$ ,  $SD = .87/n = 90$ ,  $M = 1.66$ ,  $SD = 1.10$ ).

### Initial Impressions of the Applicant

Participants indicated their initial impressions of the applicant's potential qualifications for the position using a 4-item scale ( $\alpha = .78/.84$ ) adapted from previous research in personnel selection (e.g., Krings et al. 2011): *excellent communication skills*, *teamwork skills*, *interpersonal skills*, and *leadership skills*. Responses were captured on 5-point Likert scales, where 1 = *strongly disagree* and 5 = *strongly agree*.

## Results

Descriptive statistics and correlations between the main variables (including our experimental manipulations) are presented in Table 1.

We tested our hypotheses first by using multiple regressions (Baron and Kenny 1986). Results are presented in Table 2. In Step 1, we assessed the effects of the experimentally manipulated applicant smoking status (i.e., smoker vs. non-smoker), attitude towards smoking, and job type on negative emotions, likelihood of CWB, and initial impressions of the applicant. In Step 2, we entered the two-way interaction terms (applicant smoking status  $\times$  attitudes towards smoking, smoking status  $\times$  job type, and job type  $\times$  attitudes). In Step 3, we entered the three-way interaction (status  $\times$  job type  $\times$  attitudes). Finally, in Step 4, we entered negative emotions and perceived deviance as mediators that predict initial impressions.

In the Canadian student sample, we found full support for Hypothesis 1 (that the initial impression of job candidates that smoke was more negative than those that are not), Hypothesis 2 (that negative emotions mediate the

impact of applicant smoking status on initial impressions), and Hypothesis 3 (that perceived likelihood of CWB acts as a mediator). We also found partial support for Hypothesis 4 (that attitudes towards smoking acted as a moderator). However, Hypothesis 5 (job type as a moderator) was not supported. In Step 1, applicant smoking status significantly predicted negative emotions ( $b = .73$ ,  $SE = .18$ ,  $p < .01$ ), likelihood of CWB ( $b = .46$ ,  $SE = .11$ ,  $p < .01$ ), and perceived initial impressions ( $b = -.32$ ,  $SE = .10$ ,  $p < .01$ ). In Step 3, the applicant smoking status  $\times$  smoking attitudes interaction significantly predicted negative emotions ( $b = -.54$ ,  $SE = .24$ ,  $p < .05$ ) but not likelihood of CWB nor initial impressions. Moreover, job type did not significantly interact with smoking status. Finally, likelihood of negative emotions ( $b = -.12$ ,  $SE = .05$ ,  $p < .05$ ) and CWB ( $b = -.30$ ,  $SE = .08$ ,  $p < .01$ ) both significantly predicted perceived initial impressions in Step 4. The mediation was full, since the effect of applicant smoking status disappeared in Step 4.

The story was slightly different with the U.S. sample (i.e., respondents with hiring experience). We found partial support for Hypotheses 1 and 2, full support for Hypotheses 3 and 4, but no support for Hypothesis 5. In Step 1, applicant smoking status significantly predicted negative emotions ( $b = .38$ ,  $SE = .13$ ,  $p < .01$ ), but not likelihood of CWB or initial impressions. However, in Step 3, the applicant smoking status  $\times$  smoking attitudes interaction significantly predicted negative emotions ( $b = -.39$ ,  $SE = .14$ ,  $p < .05$ ), likelihood of CWB ( $b = -.44$ ,  $SE = .12$ ,  $p < .01$ ), and (to a lesser extent) initial impressions ( $b = .21$ ,  $SE = .11$ ,  $p < .10$ ). Moreover, likelihood of CWB significantly predicted perceived initial impressions in Step 4 ( $b = -.48$ ,  $SE = .07$ ,  $p < .01$ ), but not negative emotions. Once again, job type did not serve as a moderator.

To further explore our conditional process, we used Hayes' (2013) PROCESS macro for SPSS. Because job type did not act as a moderator in the regression results, we only included attitudes towards smoking in the model (and hence used PROCESS Model 8). To test our indirect effects, we built 95 % bias-corrected bootstrap confidence intervals (Hayes and Scharkow 2013), estimated from 10,000 bootstrap samples. Furthermore, we used a floodlight analysis (Spiller et al. 2013) to examine the direct and indirect effects at all values of the moderator (i.e., attitudes towards smoking), highlighting the Johnson-Neyman point(s) where effects reach the level of significance. Such an approach eliminates the arbitrariness of choosing test values such as Mean  $\pm 1$  Standard Deviation to highlight a moderation (Preacher, Curran, & Bauer 2006).

Results suggest that, independent of attitudes towards smoking, there was no direct effect of applicant smoking

**Table 1** Means, standard deviations, and correlations between main variables

	<i>m</i>	<i>sd</i>	1	2	3	4	5
Canadian students							
1. Smoking status	–	–					
2. Job type	–	–	–.02				
3. Smoking attitude	1.68	1.01	.14	.01			
4. Negative emotions	2.17	1.02	.34**	–.02	–.12		
5. Likelihood of CWB	2.87	.62	.35**	–.05	–.08	.32**	
6. Initial impressions	3.04	.54	–.27**	–.07	.11	–.36**	–.46**
U.S. sample							
1. Smoking status	–	–					
2. Job type	–	–	.11				
3. Smoking attitude	2.22	1.43	.08	.04			
4. Negative emotions	1.53	.80	.22**	.00	–.19*		
5. Likelihood of CWB	2.69	.72	.03	.02	–.39**	.36**	
6. Initial impressions	3.15	.63	.01	–.09	.28**	–.30**	–.61**

*N* = 122 and 143; Smoking status: 0 = non-smoker, 1 = smoker; Job type: 0 = Inventory management, 1 = customer relations; CWB = counterproductive work behaviors

\*  $p < .05$ ; \*\*  $p < .01$

status on initial impressions. Yet, significant indirect effects were observed through likelihood of CWB (and negative emotion in the student sample) depending on attitudes towards smoking. In the Canadian student sample, we found negative indirect effects of applicant smoking status on initial impressions through both negative emotions and likelihood of CWB. Yet, these effects were significant only when attitudes towards smoking were smaller than 3 (on a 1–7 scale). In the U.S. sample, the negative indirect effect through likelihood of CWB was significant when attitudes towards smoking were smaller than 2. Interestingly, when respondents' attitudes towards smoking were equal to or above 3.5, this indirect effect turned positive and significant. It is important to note that most of the respondents had fairly negative attitudes towards smoking, and more so in the Canadian student (i.e.,  $M = 1.67$ , 85 % scoring below 3) than the experienced U.S. sample (i.e.,  $M = 2.22$ , 60 % scoring 2 or below).

## Discussion

### Findings and Theoretical Implications

Results of this research provide initial evidence of the potential adverse impact of smoker stigmatization on people (i.e., job applicants) that are at the “receiving end” of HR practices (Mabey, et al. 1998) using an experimental design. More specifically, respondents are found to (directly or indirectly) form more negative initial impressions about applicants who smoke versus do not smoke. Although initial impressions can change when more job-

related information becomes available, they often impact final decisions in interviews (Stewart et al. 2008). For instance, interviewers are likely to engage in confirmatory processes by asking questions and evaluating responses in ways that confirm their initial impressions (Derous et al. in press; Dougherty et al. 1994; Macan and Dipboye 1990). As such, applicant smoking status triggers biases similar to those triggered by the other stigmatizing features such as age, ethnicity, or obesity. Our research, thus, provides initial evidence suggesting that the social devaluation of smokers found in society (e.g., Bayer and Stuber 2006; Kim and Shanahan 2003) can potentially carry over into the hiring process. Moreover, these findings complement law and labor relations research (e.g., Pugsley 1993; Warner 1994) to paint a more comprehensive picture of how smokers can be treated within organizations, and encourage the adoption of human resource management that is morally obligated to avoid discrimination (Demuijnck 2009). They also respond to calls by tobacco control researchers for greater investigations into the impact of strident societal anti-smoking sentiments on the lives of smokers (e.g., by Seiter et al. 2010).

Our study also points to mechanisms and pathways that trigger the devaluation of smokers. Building on the dual-process model of stigmas (Pryor et al. 2004), we examined examples of both reflexive (i.e., emotional reactions) and rule-based (i.e., perceived likelihood of CWB) processes. We found only partial support for an indirect effect through negative emotions (i.e., smoking status impacted such emotions in both samples, but the mediation was only present with student respondents). Moreover, our results suggest that the impact of applicant smoking status on



**Table 2** Regressions for Mediation Tests

	Canadian students			U.S. sample		
	Negative emotions	Likelihood of CWB	Initial impressions	Negative emotions	Likelihood of CWB	Initial impressions
<b>Step 1</b>						
(Constant)	2.12** (.20)	2.82** (.12)	3.10** (.11)	1.61** (.14)	3.07** (.13)	2.94** (.11)
Job type	-.03 (.17)	-.06 (.11)	-.08 (.10)	-.02 (.13)	.05 (.11)	-.13 (.10)
Applicant smoking status	.73** (.18)	.46** (.11)	-.32** (.10)	.38** (.13)	.09 (.11)	-.01 (.10)
Attitude towards smoking	-.17 (.09)	-.08 (.05)	.08 <sup>†</sup> (.05)	-.12** (.05)	-.20** (.04)	.12** (.04)
Total $R^2$	.14	.14	.10	.09	.16	.09
<b>Step 2</b>						
(Constant)	2.04** (.29)	2.79** (.17)	3.20** (.16)	1.24** (.18)	2.51** (.17)	3.22** (.19)
Job type	-.29 (.36)	-.27 (.21)	-.12 (.19)	.09 (.26)	.40 <sup>†</sup> (.21)	-.20 (.21)
Applicant smoking status	1.07** (.38)	.51* (.22)	-.29 (.20)	.81** (.26)	.75** (.22)	-.45* (.21)
Attitude towards smoking	-.09 (.15)	.01 (.09)	-.04 (.08)	.09 (.08)	.07 (.07)	-.01 (.07)
Status × Attitudes	-.26 (.17)	-.16 (.10)	.10 (.09)	-.26** (.09)	-.31** (.07)	.21** (.07)
Status × Job type	.21 (.35)	.49* (.21)	-.41* (.19)	.28 (.25)	.04 (.21)	-.03 (.20)
Job type × Attitudes	.10 (.17)	-.01 (.10)	.14 (.09)	-.12 (.09)	-.18* (.08)	.05 (.07)
Total $R^2$	.17	.20	.16	.16	.28	.15
<b>Step 3</b>						
(Constant)	1.80** (.33)	2.78** (.20)	3.21** (.18)	1.10** (.24)	2.38** (.20)	3.22** (.19)
Job type	.17 (.45)	-.25 (.27)	-.15 (.25)	-.16 (.18)	.63* (.27)	-.19 (.26)
Applicant smoking status	1.54** (.47)	.52 <sup>†</sup> (.28)	-.32 (.25)	1.09** (.35)	1.02** (.30)	-.44 (.28)
Attitude towards smoking	.07 (.18)	.01 (.11)	-.05 (.10)	.16 (.10)	.14 (.08)	-.01 (.09)
Status × Attitudes	-.54* (.24)	-.17 (.15)	.11 (.13)	-.39* (.14)	-.44** (.12)	.21 <sup>†</sup> (.11)
Status × Job type	-.76 (.68)	.46 (.41)	-.35 (.37)	-.19 (.47)	-.41 (.40)	-.05 (.38)
Job type × Attitudes	-.20 (.25)	-.02 (.15)	.16 (.14)	-.23 <sup>†</sup> (.13)	-.28* (.11)	.04 (.10)
Status × Job type × Attitudes	.58 (.35)	.01 (.21)	-.03 (.19)	.22 (.18)	.20 (.15)	.01 (.14)
Total $R^2$	.19	.20	.16	.17	.29	.15
<b>Step 4</b>						
(Constant)			4.24** (.27)			4.45** (.23)
Job type			-.20 (.22)			.13 (.22)
Applicant smoking status			.01 (.24)			.13 (.22)
Attitude towards smoking			-.04 (.09)			.07 (.07)
Status × Attitudes			-.00 (.12)			-.04 (.10)
Status × Job type			-.31 (.34)			-.25 (.32)
Job type × Attitudes			.13 (.12)			-.11 (.09)
Status × Job type × Attitudes			.04 (.17)			.12 (.12)
Negative emotions			-.12* (.05)			-.07 (.06)
Likelihood of CWB			-.30** (.08)			-.48** (.07)
Total $R^2$			.31			.39

$N = 122$  (Canadian sample) and  $143$  (U.S. sample); Values are unstandardized b-values with standard errors in parentheses, *Job type*: 0 = Inventory management, 1 = Customer service

CWB counterproductive work behaviors

<sup>†</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$

initial impressions was fully mediated via perceived likelihood of CWB in both samples. This suggests that the less favorable evaluations were mostly the result of rule-based rather than reflexive processes (Pryor et al. 2004). In other words, initial assessments of applicants were based more

upon adverse inferences made about smokers' potential behaviors than simply on emotional reactions (e.g., disgust). These findings imply that inferences about smokers' potential future behaviors were aligned with more general societal perceptions of smokers as objectionable and

deviant, artifacts themselves of decades of tobacco demarketing tactics (Bayer and Stuber 2006; Kim and Shanahan 2003). Although such inferences correspond to the wide ranging generalizations made about people that smoke (Stuber et al. 2008), there is no evidence that smokers are indeed more likely to engage in CWB. Such inferences may thus further limit smokers' access to fair and equal job opportunities, a key condition of non-discrimination (Demuijnck 2009).

Moreover, in line with both the dual-process model (Pryor et al. 2004) and social identity theory (Struch and Schwartz 1989), our results highlight the important role of stable attitudes. More precisely, our mediations were moderated by respondents' own attitudes towards smoking. Respondents with more negative attitudes towards smoking perceived applicants who were smokers (vs. non-smokers) more negatively, as such applicants were believed as more likely to engage in CWB. Those with more positive attitudes towards smoking did not do so (and initial impressions were more positive when respondents possessed very positive attitudes towards smoking). Although such similarity effects are often used when assessing applicants (Kristof-Brown et al. 2002), they clearly bias the decision-making process (Latham et al. 1975). Interestingly, the effects of positive attitudes were mostly visible in the more experienced U.S. sample. Indeed, participants in this sample were older and had slightly less negative attitudes towards smoking. This is reflective of wider societal trends where smoking rates skew higher within the 25–44 years range (similar to the age profile in the U.S. sample) than the 18–24 range (more indicative of the age range in the Canadian sample; U.S. Centers for Disease Control and Prevention 2016).

Finally, our results suggest that the impact of applicants' smoking status was similar for both job types (i.e., customer service and inventory management jobs). These findings strengthen the potentially unethical nature of smoker stigmatization, as such reactions cannot simply be justified on the basis of legitimate job qualification concerns, such as those of smokers' having bad breath and the smell of tobacco being problematic for front-end positions involving customer reactions to cigarette odors. However, it is also possible that respondents were concerned about unclean employees interacting with coworkers as much as interacting with customers.

### Practical Implications

Because smoking remains a non-job-related leisure activity (Chadwick 2006; Lecker 2009) that is not empirically associated with lower job performance or counterproductive behaviors (Morrow and Leedle 2002), it would be unethical for organizations to rely on such features to evaluate applicants. That smokers are at risk for being

stigmatized is recognized as important at organizational as well as societal levels, and this mindset is reflected within recent legislations that have been put in place (e.g., in the U.S.) to protect smokers against discrimination (Schmidt et al. 2013). Such biases may further marginalize those sections of society that already endure social marginalization, such as ethnic and racial minorities and the underprivileged among whom smoking rates tend to be higher. Organizations are morally obligated to protect the integrity of the hiring process and foster fairness towards all individuals (Arvey and Renz 1992).

The need for protection against a smokerism bias is further intensified given the adverse societal effects of stigmatization. Stereotypes can be self-fulfilling whereby targeted individuals behave in stereotype confirming ways (Snyder et al. 1977; Steele 1997). For instance, stigmatized people (smokers) may intensify their engagement in the very behaviors (smoking) that they are stigmatized for. Smokers in this adversarial milieu are also at risk for withdrawal from mainstream society, with a preference for the company of other smokers (Stuber et al. 2008), a formula likely designed for continued or exacerbated tobacco use.

A straightforward implication for potential job applicants, in the absence of abstinence, may be to move this behavior deeper into the shadows, especially against a cultural backdrop where smokers are herded and made visible in restricted smoking areas. In fact, Goffman (1963) argues that stigmatization is intensified when targeted individuals are seen to congregate together in the same location. Smoking policies, including those implemented within organizations, that group smokers together in publicly visible designated areas located away from work and living spaces further deepen a smokerism bias and invite re-examination (Gilbert et al. 1998). Applicants' quest to keep smoking behaviors hidden from public view is made more difficult in the era of social media where public scrutiny occurs in virtual as well as physical spaces. This suggests the sanitization of smoking portrayals on social media sites such as Facebook and Twitter that are extensively reviewed by employers (Roulin and Bangerter 2013) in addition to within physical locations. Such recommendations must also acknowledge that hiding true smoking habits forces applicants to carry undue psychological burdens arising from the fear of being found out. The further possibility that smokers lack awareness of the aversion generated within others (Kim and Shanahan 2003) speaks to the need for better information and training for people seeking employment. This information can additionally benefit smokers by deterring the behavior itself as smokers are found to display greater willingness to quit upon exposure to negative public reactions (Kim and Shanahan 2003).

## Limitations and Future Research Directions

This research has some limitations and associated avenues for additional research. We relied on a controlled experimental design with hypothetical scenarios and students or online panel respondents. Such a methodology is typical in empirical research on stigmatization in the selection context (e.g., Finkelstein et al. 1995; Madera and Hebl 2012; McElroy et al. 2014). Moreover, it allows for an initial assessment of anti-smoker biases free of extraneous confounding factors and possible endogeneity issues associated with surveys relying on self-report measures (although our mediators/moderators and dependent variable were measured at the same time, possibly leading to common-method variance issues). However, it clearly limits the external validity and generalizability of our findings. Our results should thus be replicated with a sample of professional recruiters or hiring managers. Future research could also use study designs resembling more realistic hiring situations (e.g., with more information about applicants' qualifications). Ultimately, field studies (e.g., using an audit approach; Derous and Ryan 2012) should be conducted.

Future research should attempt to replicate our results in other countries or contexts. For instance, we collected data in Canada and in the U.S. Variations in our findings between these two samples could be attributed to differences in age and thus, indirectly, smoking status and attitudes towards smoking. As such, additional studies should be conducted in countries or contexts where tobacco use is still higher than in North America, where smoke-free legislations are more recent, or where prevention initiatives are only in their early stages and have not yet turned public sentiment forcefully against cigarette smoking. For instance, many European countries have implemented smoke-free legislations only recently (Mons et al. 2013). Attitudes towards smoking may also be more positive in some Asian countries.

## Conclusion

Over the past few decades, anti-smoking campaigns have transformed general public sentiments towards smokers into full-blown stigmatization. Smokers are now stigmatized in a variety of domains including the workplace. While some organizations have engaged in smoker-free policies, a number of states in the U.S. have also passed recent legislations that prohibit employers from refusing to hire smokers. Moreover, using smoking status as a selection criterion is controversial since its relationship with job performance has not been formally demonstrated. Critics have begun to argue that employers have no ethical right to discriminate against smokers for non-job-related behaviors.

Our research provides initial evidence that job applicants who are viewed as smokers could be stigmatized. This suggests that smokers would increase their chances of being offered a job by hiding their smoking status (an unfortunate maladaptive response in the absence of smoking cessation), and organizations that engage in such smokerism biases may end up overlooking potentially qualified applicants. Overall, our research answers calls placed by researchers within the anti-smoking arena as well as the ethical human resource management domain that organizations should consider the human costs associated with how stakeholders are treated.

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