

Smoking and *The Simpsons*

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The *Simpsons* has been an iconic animated television show since it first aired on 17 December 1989, after an initial run of sketches on the Tracey Ullman Show in 1987. After two decades and over 400 episodes, *The Simpsons* is the longest running situational comedy and has been rated as the most popular television show in history.¹ It has reshaped American culture: with millions of individuals around the world who can identify characters, songs, and lines from the show, its influence cannot be overstated. The Simpson family consists of Homer (father), Marge (mother), Lisa (daughter), Bart (son) and Maggie (second daughter). They live in Springfield, a town somewhere in the United States. Homer works in the local nuclear power plant, Marge is a homemaker, Bart and Lisa attend Springfield Elementary School, and Maggie is a baby.

Because the show is a cartoon, its primary target would traditionally be children, and although the show has adult overtones, most of its merchandising is directed at children. Anyone who has ever watched the show would have noticed the large number of regular characters as well as guest stars on the show who smoke cigarettes. Laramie is the name of a popular brand of cigarettes on *The Simpsons*, even though Laramie cigarettes have been out of production in the US since the 1950s. In the show, this cigarette company sponsors children's beauty pageants and has a corporate mascot named Menthol Moose (a parody of Joe Camel, advertising mascot for Camel cigarettes) who can be seen at parades in Springfield. Is this just satire, or does the repetitive nature of characters smoking on *The Simpsons* have an influence on young children watching? The aim of this study was to determine the levels of smoking among characters from the show, assess variations in the levels of smoking in the show and determine the frequency of "negative" as well as "positive" instances of smoking on *The Simpsons* television show over an 18-year period.

METHODS

We included all 400 episodes in the first 18 seasons of *The Simpsons* (a season is 1 year of episodes, and there are about 22 episodes per season), which aired from 1989 until 2007. We recorded all instances of smoking

ABSTRACT

Objective: To determine the frequency of smoking on *The Simpsons* television show, and the relationship with the sex and age groups of characters shown smoking, and with positive, negative and neutral connotations associated with instances of smoking.

Design and setting: Content analysis (performed from January to October 2008) of instances of smoking that appeared in the first 18 seasons of *The Simpsons* television show, which aired from 1989 to 2007.

Main outcome measures: Frequency, impact (positive, negative, neutral) of instances of smoking; and frequency associated with age (child or adolescent versus adult characters), sex and types of characters on the show.

Results: There were 795 instances of smoking in the 400 episodes observed. Most (498; 63%) involved male characters. Only 8% of instances of smoking (63) involved child or adolescent characters. Just over a third of instances of smoking (275; 35%) reflected smoking in a negative way, compared with the majority, which reflected smoking in a neutral way (504; 63%) and the minority, which reflected smoking in a positive way (16; 2%). Child and adolescent characters were much more likely to be involved in instances of smoking reflected in a negative way compared with adult characters (odds ratio, 44.93; 95% CI, 16.15–172.18).

Conclusions: There are a large number of instances of smoking in *The Simpsons* television show. Child and adolescent characters are much more likely to be portrayed in instances of smoking reflected in a negative way than adult characters. Viewing *The Simpsons* characters smoking may prompt children to consider smoking at an early age.

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(defined as any instance where smoking is mentioned or smoking was visible in any form) in these episodes. We used two methods for determining instances of smoking on the show: (i) we used the data on a public domain website² that records all instances of smoking on *The Simpsons* television show (this website has been reported in previous studies³); and (ii) we watched the episodes and recorded instances of smoking on a standardised proforma. The correlation between the website data and our records was 0.96.

The show is currently airing its 20th season, and by the end of this year, there will be a total of 443 episodes. We chose to limit our investigation to the first 18 seasons of *The Simpsons* because this corresponds to what was reported on the public domain website during our study period (January to October 2008).² We developed a database that incorporated all instances of smoking from the website and our own records.

Other data related to instances of smoking that were recorded in the database for analysis included: age of character (adult, child or adolescent, not applicable); sex of character (male, female, both sexes, not applicable);

smoking impact (positive [supporting or reflecting smoking in a favourable way], negative [unsupportive of smoking or reflecting it in an unfavourable way], neutral [having neither positive nor negative connotations]); category of character (Simpson family members, young Springfieldians, guest stars, famous people, main characters [those who regularly appear in the show such as Ned Flanders, Principal Skinner and Mr Burns], other characters, background people and animals/non-humans); and references to smoking (Laramie references and other references).

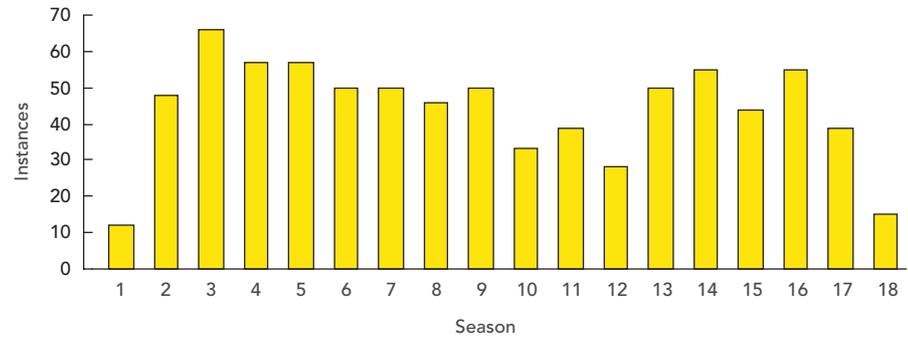
All data were coded by one of us (GDE). All characteristics are reported as mean and SD or odds ratio (OR) and confidence intervals for categorical data, and percentages for discrete characteristics. All *P* values calculated were two-tailed; the α level of significance was set at 0.05.

RESULTS

Frequency of smoking

We recorded 795 instances of smoking or references to smoking in 400 episodes over 18 seasons of *The Simpsons* (mean instances,

1 Instances of smoking or references to smoking in each of the first 18 seasons of *The Simpsons*, screening from 1989–1990 to 2006–2007



44 per season; range, 12–66 per season). More than half of these instances (498; 63%) involved male characters, while 156 (20%) involved female characters. Only 16 (2%) involved both sexes, and there were 125 instances of smoking (16%) that involved non-gender characters (eg, animals). In terms of age, we observed 607 instances of smoking by adult characters (76%), and 63 (8%) by child or adolescent characters; the remaining 125 (16%) did not fit either age group. Box 1 shows a bimodal distribution in the variation in instances of or references to smoking by season, with peaks in Season 3 (1991–1992) and again in Seasons 14 (2002–2003) and 16 (2004–2005). The main characters in the show had the highest frequency of smoking (Box 2), being involved in 34% of all instances of smoking. This was followed by background people (17%) and then the Simpson family members (15%). Young people of Springfield were shown smoking in only 3% of all smoking instances in the show.

Positive, negative or neutral impact of smoking

Smoking was reflected in a positive way in 16 instances (2%), and in a negative way in 275 instances (35%). Most instances (504; 63%) were considered neutral in nature. An analysis for trend showed that there was no statistically significant change in the number of positive, negative or neutral instances of smoking on *The Simpsons* over the 18 years ($P=0.851$). Instances of child or adolescent characters smoking were almost 45 times more likely to reflect smoking in a negative way than instances of adult characters smoking (OR, 44.93; 95% CI, 16.15–172.18). There were no differences between male and female characters in terms of the frequency of negatively depicted instances of smoking (OR, 1.09; 95% CI, 0.73–1.63).

DISCUSSION

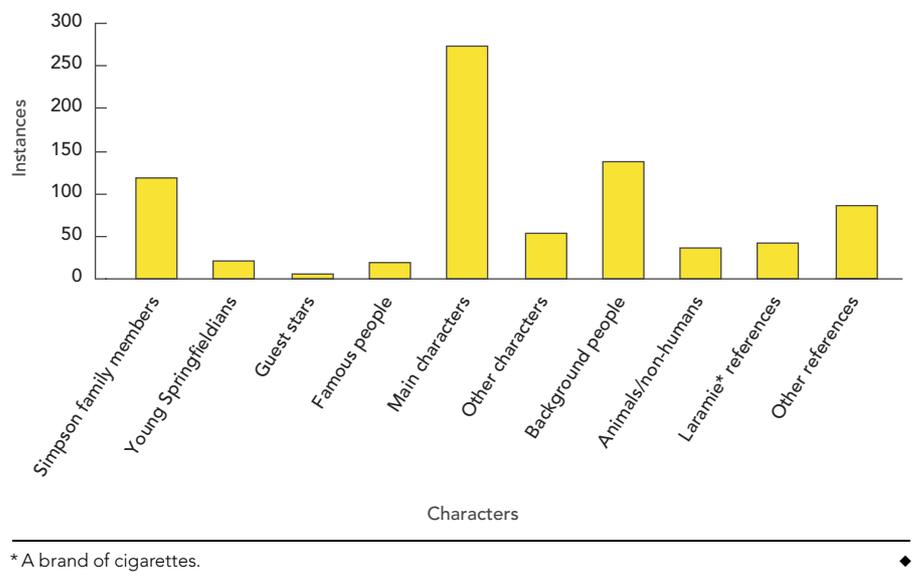
This is the first content-analysis study that focuses on instances of smoking in *The Simpsons* television show. This show depicts almost 800 instances of smoking over the 400 episodes in its first 18 years. Most instances of smoking involved male characters, which was not surprising, given that almost two-thirds of the characters on the show were male. Overall, the characters shown smoking were adults in most instances (76%), with children and adolescents only involved in 8% of instances.

There have been previous content-analysis studies assessing tobacco use and other health-related behaviours in television and the media that have included *The Simpsons*.^{3–5} A content analysis of New Zealand television

in 2002–2004 reported that *The Simpsons* cartoon show had the highest number of characters smoking (average five per episode), compared with another 119 programs viewed as part of the analysis.⁴ In another content-analysis study, 63 episodes of *The Simpsons* (seven randomly selected from each of the first nine seasons) were watched to determine the types of health-related messages (HRMs) present in the show.³ The HRMs involved nutrition, smoking, alcohol, drug use, physical health, mental health, and others. This study found 129 instances (12% of all HRMs) associated with smoking (ranked third after nutrition and alcohol); of these, 104 were negative, 20 were neutral and 5 were positive. This difference may be the result of episodes being randomly selected or because of differences in the classification of the impact of each instance of smoking.

Our study too reports the impact of instances of smoking in terms of their being positive, negative or neutral, and we found that most were neutral, fewer were negative and least were positive. An important finding in our study was that instances of smoking with a negative impact (reflecting smoking in an unfavourable way) occurred much more often among children or adolescents than among adult characters. We also observed several instances of drug use associated with smoking (eg, bong, crack cocaine, opium, marijuana) as well as alcohol consumption.

2 Instances of smoking by different categories of characters or of references to smoking on *The Simpsons* in its first 18 seasons, screening from 1989–1990 to 2006–2007



The most notable characters on *The Simpsons* who smoked cigarettes were Patty and Selma (Marge's sisters), Krusty the Clown, and Mrs Krabappel (Bart's school teacher), all of whom were main characters. It is also important to note that Patty and Selma, the show's most prolific smokers, started smoking as teenagers, which caused them to develop their raspy voices as shown in an episode during Season 2. Another prominent smoking character is Krusty the Clown, who had the second highest number of smoking instances; in the series, he has his own television show, which is aimed at children, and he has many followers and much influence. Krusty has health problems (most likely the result of his smoking) which include requiring a pacemaker.

Previous studies have highlighted the influence of onscreen use of tobacco by movie stars on adolescents, and the increased likelihood of these adolescents taking up smoking.⁶ Moreover, other research has found that very young children (aged 3–6 years) see, understand and remember cigarette advertising,⁷ and the use of cartoon characters like Joe Camel by RJR Nabisco has been reported to be more effective in marketing cigarettes to children than to adults.⁸ A more recent study has suggested that children who watch a lot of television are more likely to start smoking at a younger age.⁹ Indeed, the consensus appears to indicate that there is a causal relationship between exposure to movie and television depictions of smoking and the initiation of smoking among children and adolescents.¹⁰ If this is true, children and adolescents who watch *The Simpsons* and observe the characters who smoke cigarettes may be influenced to take up smoking, despite more instances of smoking being reflected in a negative way (35%) or neutral way (63%) than a positive way (2%). Just being exposed to *The Simpsons* characters smoking in so many episodes may prompt children to consider smoking at an early age.

In conclusion, it is clear that smoking is a frequent event on *The Simpsons* television show, and that even instances of smoking being reflected in a negative way, particularly among child and adolescent characters, could have an impact in prompting children to smoke cigarettes.

AUTHOR DETAILS

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COMPETING INTERESTS

None identified.