Leaders and elites: portrayals of smoking in popular films

D M Dozier, M M Lauzen, C A Day, S M Payne, M R Tafoya

Methods

Sample selection

The study examined smoking and character portrayals in the top 100 US domestic grossing films released in 2002. These films were taken from Variety’s annual list of the top 250 US domestic grossing films. At the time of the study, 88 of the top 100 films were available in VHS or DVD format, constituting the final sample. The US domestic gross corresponds closely with top films distributed globally. Of the films analysed, all but one appeared on Variety’s listing of the top 125 grossing films around the world. Globally, the films analysed grossed US$12.4 billion in 2002. Other than subtitles, films distributed globally differ little from the versions distributed in the USA.

Data collection

The coding instrument incorporated variables developed in prior studies. However, this study analysed smoking as a behaviour of characters; only incidents linked to specific characters were coded. Background indicators of smoking (for example, ashtray) not linked to characters were not coded, a more conservative measurement strategy that accounts for fewer smoking incidents in this study, when compared to other studies. After intensive training on a sample of the films, the last three authors coded the films. Scott’s π intercoder reliability coefficient was calculated by double coding approximately 10% of the films. All intercoder reliability coefficients were deemed acceptable according to established standards in content analysis.

Coders classified characters as smokers if characters used a tobacco product, such use was implied, or characters mentioned their own smoking. Every speaking character was coded. Smoking incidents were summed for each character; 182 characters (6% of all characters) used tobacco at least once. Among these characters, the mean number of tobacco incidences was 2.49. The number ranged from just one incident per character (n = 102) to 17 incidents for one character. Intercoder reliability was 0.87.

Each character was coded as either female (n = 889) or male (n = 2253). Intercoder reliability was 0.99. Each character was coded as either major (n = 1733) or minor (n = 1409). Characters deemed essential to the development of the central or ancillary plots were coded as major characters; others were coded as minor characters. Intercoder reliability was 0.86. Age was categorised as children (1–12 years), teens (13–19 years), 20–29, 30–39, 40–49, 50–59, or 60 years and older. Intercoder reliability was 0.88. Race was coded into seven categories; intercoder reliability was 0.94. Race was then collapsed into white (n = 2236) and non-white (n = 906) categories. Characters were classified as playing leadership roles (n = 349) or not (n = 2793). Characters were coded as leaders if they were formally appointed within groups to provide guidance and direction or emerged informally to serve those functions. Intercoder reliability was 0.84.

Statistical methods

Key character traits were cross tabulated with tobacco incidents to determine what kinds of characters were portrayed using tobacco products. The $\chi^2$ test of significance was used; Yates correction for continuity was used for all 2 × 2 tables.

Results

Nearly two thirds of films portrayed at least one character related tobacco incident. Only 37% of films showed no
smoking. About 15% of films portrayed one instance of tobacco use, 18% portrayed 2–5 incidents, 14% portrayed 6–10 instances, and 16% portrayed 11 or more instances. One film portrayed 47 separate incidences of smoking. Characters in comedies smoked less frequently (4.5%) than characters in action-adventure films (7.1%) or dramas (7.7%). Characters in G (general audience) rated films (1.4%) and PG (parental guidance) rated films (1.3%) smoked less frequently than characters in PG-13 (5.2%) and R (restricted) rated films (10.0%).

In all, 453 incidents involving tobacco were portrayed in the 88 films analysed. Of the 453 incidences, 92% (n = 415) indicated no consequences from tobacco use. Of the remaining 8%, the most common consequence was a verbal reprimand from another character. Two incidences (0.4%) resulted in death. In one, lighting a cigarette set off a car bomb; in the other, a cigarette attracted a heat seeking missile. No deaths from tobacco use were caused by disease. In reality, the World Health Organization regards tobacco as the second most common cause of death globally, with five million tobacco related deaths annually.

Common reasons for smoking in films included 57 incidences to relieve stress and 31 incidents to relax. Arguably, real people smoke to satisfy nicotine addiction; only five incidents (1.1%) in the films analysed involved smoking to satisfy a craving for tobacco.

Major characters were almost four times more likely to smoke than minor characters. Male characters were almost twice as likely to smoke as female characters. Leaders were more than twice as likely to smoke, when compared to characters that were not leaders. White characters were over 50% more likely to smoke than characters from other ethnic groups. In the 88 films analysed, 3.2% of characters classified as children used tobacco, higher than the 2.5% of teenagers who smoked. Mature characters 60 years old and older used tobacco the most. Characters in their 60s and older were almost twice as likely as characters in their 20s to use tobacco products (table 1).

### DISCUSSION

In 2002, the Motion Picture Association of America (MMPA) reported 7.3 billion admissions to theatres. Thus, the 453 incidences of tobacco use in the 88 films analysed represent several hundred million consumer impressions for each smoking incident. What do these impressions communicate about tobacco? First, smoking has no serious consequences. If any, consequences are most likely verbal reprimands.

Prior research has examined the frequency and nature of portrayal of tobacco use in films, but the most recent published data were from 1994. This paper adds to the empirical research showing that films portray smoking frequently and in a positive manner. Further, smoking had no serious health consequences. In this content analysis of 2002 top grossing films, smokers tend to be major characters, white, male, and mature. They tend to play leadership roles.

### ACKNOWLEDGEMENTS

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### REFERENCES


Table 1: Differentiating characters who smoke from those who do not smoke

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>% involved in smoking incidents</th>
<th>$\chi^2$</th>
<th>df</th>
<th>Significance</th>
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<tr>
<td>Character type</td>
<td></td>
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<tr>
<td>Major</td>
<td>8.7</td>
<td>56.88*</td>
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<tr>
<td>Minor</td>
<td>2.3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
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</tr>
<tr>
<td>Males</td>
<td>6.6</td>
<td>8.30*</td>
<td>1</td>
<td>&lt;0.01</td>
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<tr>
<td>Females</td>
<td>3.8</td>
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<tr>
<td>Leadership (any kind)</td>
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<tr>
<td>Yes</td>
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<td>19.74*</td>
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<tr>
<td>No</td>
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<tr>
<td>Race</td>
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<tr>
<td>White</td>
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<td>6.38*</td>
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<tr>
<td>Not white</td>
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<td>Child (1–12)</td>
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<td>60 and older</td>
<td>9.6</td>
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</tbody>
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*Yates $\chi^2$ corrected for continuity.
The Lighter Side

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