

Substance Use Depictions in Malayalam Cinema: A Systematic Movie Content Analysis

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Abstract

Malayalam movie occupies a distinctive position among India's regional film industries, long celebrated for its commitment to social realism. This study presents the first systematic content analysis of substance use depictions in Bollywood industry of Kerala State in India. We have drawn a sample of 30 commercially successful Malayalam movies released between 1991 and 2000. Three top-grossing films were selected for each year and every substance-related scene was crucially observed and coded using a structured observation tool. The scenes were categorized by type of substance, mode of depiction, their settings, and the character type and number of persons involved in each scene. We identified a total of 103 substance-related scenes, and an average of 4.37 scenes per movie. The results shows that among the substances portrayed, alcohol was depicted most frequently (37.8%), followed by tobacco (30.1%), illicit drug portrayals were rare (7.77%). The mode of depiction suggests that visual-only depiction accounted 44.66% of scenes, and domestic settings had a major proportion (41.75%). Hero and heroine characters were present in nearly half of all scenes (45.63%). The study underscores the need of health protective messages in the popular cinemas.

Keywords: Malayalam cinema, substance use depictions, media content analysis, social learning theory, cultivation theory, regional Indian cinema

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Introduction

Cinema does more than tell stories. At its most consequential, it teaches audiences how the world works, who belongs in it, and which behaviors carry social value. Films achieve this not through argument or instruction but through the accumulated weight of images, the emotional pull of character identification, and the quiet persuasion of narrative repetition. Among the social behaviors that popular cinema has consistently depicted with insufficient critical distance is substance use. Alcohol consumption, tobacco smoking, and illicit drug use recur across mainstream films in ways that embed them within positive social

contexts, associate them with characters viewers admire, and rarely follow them to any meaningful consequence. The question of whether and how these depictions affect real-world behavior is no longer a matter of speculation; several decades of empirical research now support a meaningful relationship between on-screen substance use and adolescent attitudes, intentions, and initiation.

Two theoretical frameworks have structured this body of research. The first, cultivation theory, holds that sustained exposure to television and film gradually reshapes viewers' sense of social reality, nudging their perceptions of what is normal, prevalent, and acceptable in the direction of what they repeatedly encounter on screen (Morgan et al., 2014; Dal Cin et al., 2008). Gerbner's original formulation of this theory was developed in the context of television viewing, but scholars have extended it productively to cinema, arguing that the more immersive and emotionally engaging conditions of film watching may, if anything, amplify cultivation effects.

The second framework, Bandura's social cognitive theory, specifies the mechanism through which screen behavior becomes real-world behavior: viewers observe what characters do, retain those behavioral templates mentally, and are subsequently motivated to reproduce them when analogous situations arise in their own lives (Bandura, 2009). The theory further specifies that observed behavior is most likely to be imitated when the model is perceived as attractive, powerful, or socially rewarded, conditions that precisely describe the protagonists of commercial cinema. For example, studies show the adolescents who are exposed to more to the substance and violence related content in movies are more likely to enjoy, initiate and model the same behavior. (Sargent et al., 2005; Dalton et al., 2009; Thomasius, R., Paschke, K., & Arnaud, N., 2022; Lee et al., 2026). Studies also suggest that these exposures predict the earlier initiation and higher consumption levels during adolescence (Hanewinkel et al., 2014; Wills et al., 2008).

Movie content analysis related to substance use depiction is seen in English cinemas (El-Khoury et al., 2019; Castaldelli-Maia et al., 2021). Comparable analyses have been conducted on Japanese manga (Lee et al., 2026), women's magazines (Kasujee et al., 2017), and, closer to the present study's context, Bollywood films. Gupta et al. (2025) examined 150 Hindi-language films across three decades and found that 24 percent contained substance use scenes specifically involving female characters. Their work demonstrated that content analysis methods developed for Hollywood cinema can be productively adapted to the Indian regional context and that the normative implications of substance depiction are equally relevant there. Yet the broad terrain of Indian regional cinema especially Malayalam cinema remains almost entirely unexamined.

Malayalam cinema is a particularly compelling starting point for this inquiry. Produced in Kerala, a state that by multiple indicators of human development ranks among the most progressive in India, this industry has been widely praised for its preference for realism over spectacle and for its willingness to engage with the social textures of everyday Keralite life (Rajadhyaksha and Willemsen, 1999). That realist aesthetic may, paradoxically, amplify the normative influence of whatever behaviors it depicts. No published study has yet addressed this question for any period of Malayalam film history. The present study fills that gap by analysing the 30 highest-grossing Malayalam films released between 1991 and 2000, three per year, examining the frequency, modality, setting, and thematic framing of substance use across a decade that many film historians regard as a commercially and artistically significant period for the industry.

Materials and Methods

Study Design

A systematic, descriptive Movie content analysis was the study design employed to examine how substance use was portrayed across the selected films.

Sample Selection

The sampling frame consisted of popular Malayalam films released during the calendar years 1991 through 2000. For each year, the three films with the highest recorded box-office earnings were selected, producing a total sample of 30 films. This selection strategy was adopted because commercially successful films, by virtue of their wide theatrical distribution and large cumulative audiences, carry the greatest potential for shaping the normative perceptions of the viewing public. Box-office figures were obtained from IMDb and Wikipedia, both of which hold accessible historical records for the Malayalam film industry. In the small number of cases where box-office data for a given year were incomplete or disputed, the film with the next-highest verifiable gross was substituted.

Data Collection Instrument

A structured film observation and coding sheet was used to record all substance-related scenes encountered during systematic viewing. The instrument was adapted from the protocol used by Gupta et al. (2025) which was itself developed to capture the breadth of substance use depictions in Indian popular cinema. For each identified scene, the following information was recorded: the full title and year of the film; the cumulative number of substance-related scenes in that film; the duration of the individual scene; the mode of depiction, coded as visual-only, audio-visual, or audio-only; the physical setting; the type and number of characters present; the apparent socioeconomic status of the characters involved; and the presence of concurrent high-risk behaviors such as driving or interpersonal aggression. Scenes in which substances were mentioned in dialogue but not visually depicted were retained in the sample as a distinct audio-only category, on the grounds that verbal normalization of substance use constitutes a meaningful form of media exposure in its own right. Every film in the sample was viewed in full, with selected scenes reviewed a second time when coding decisions were unclear or when scene boundaries were ambiguous. All data were entered into a structured Microsoft Excel spreadsheet. Coding consistency was monitored throughout the data collection period by periodic review of completed entries against the original coding criteria.

Data Analysis

Descriptive statistics were calculated to determine the frequency and percentage distribution of substance-related scenes across each coding category. Mean values were computed for the number of scenes per film and the duration of individual scenes.

Results

Sample Characteristics

Table 1:

Sample characteristics of the movies included in the analysis

Sample Characteristics	Results
Total films analyzed	30
Total substance-related scenes	103
Mean scenes per film	4.37
Study period	1991–2000
Mean film duration	153.63 minutes
Mean duration per substance scene	52.52 seconds

Table 1 represents the sample characteristics of the movies included. Across 30 films and roughly 77 hours of total screen time, the coders recorded 103 substance-related scenes at a mean rate of 4.37 per film. No film in the sample was entirely free of such content, and the recurrence of substance use across the decade suggests it functioned as a settled narrative convention rather than an intermittent authorial choice. Films ran for an average of 153.63 minutes, in line with the commercially driven long-format tradition of Malayalam cinema during this period. Individual substance-related scenes were brief, averaging 52.52 seconds,

but brevity is not the same as inconsequentiality. Research has shown that even short, repeated exposures to substance use imagery can cumulatively influence adolescent risk perceptions through the familiar mechanisms of habituation and incidental learning (Anderson et al., 2009; Wakefield et al., 2010). When four or five such scenes appear across a two-and-a-half-hour film, the cumulative screen time given to substance use is substantial.

Modes of Depiction

Table 2

Distribution of substance-related scenes by mode of depiction

Mode of Depiction	Frequency	Percentage (%)
Visual only	46	44.66
Audio-visual	31	30.10
Audio only	26	25.24
Total	103	100.00

Table 2 shows that visual-only depiction was the dominant mode, accounting for 46 scenes (44.66%). In these scenes, the act of consumption was placed on screen without any accompanying verbal commentary: a character lifts a glass, lights a cigarette, or handles a bottle, and the camera lingers long enough to register the behavior before the scene moves on. The communicative logic here is worth unpacking. Visual behavior presented without narrative framing is not neutral; it is, in a real sense, endorsed by its very inclusion. The viewer sees substance use enacted by a character they recognise, in a setting they find familiar, and in the absence of any cautionary context that might complicate that image. Bandura (2009) was explicit on this point: the absence of depicted consequences is not merely a neutral omission but functions as implicit approval, signalling that the behavior is consequentially safe. Audio-visual scenes, in which visual action was paired with dialogue that named or contextualized substance use, made up 31 scenes (30.10%). This combination is in some respects the most rhetorically complete mode of depiction, because it offers the viewer both the visual template and the verbal script for understanding what they have seen. Audio-only depictions, at 26 scenes (25.24%), were less visually direct but served a distinct normalizing function: by incorporating substance-related language into ordinary conversation, these scenes made alcohol and tobacco a taken-for-granted feature of the social world the film constructed.

Types of Substance Depicted

Table 3

Distribution of substance-related scenes by type of substance depicted

Type of Substance	Frequency	Percentage (%)
Alcohol	39	37.86
Tobacco	31	30.10
Multiple substances	14	13.59
Verbal reference only	11	10.68
Illicit drugs	8	7.77
Total	103	100.00

Table 3 represents the Distribution of substance-related scenes by type of substance depicted. Alcohol dominated the substance landscape of this sample, appearing in 39 scenes (37.86%). What is striking is not merely its frequency but its variety of form. Characters drank arrack and toddy in domestic settings, shared rounds in bar scenes, and raised glasses at informal social occasions. Local beverages, kallu and charayam among them, appeared with enough regularity to make clear that these films were not depicting a generic, deracinated version of social drinking but one anchored in recognizably Keralite culture. That specificity matters. A viewer who watches a familiar character drink a familiar beverage in a familiar domestic space encounters a representation that has been calibrated, whether intentionally or not, to resonate with their own social world. Tobacco featured in 31 scenes (30.10%), and its

visual grammar was fairly consistent: cigarette smoking appeared almost exclusively among male characters and functioned as a cinematographic signifier, used by directors to communicate that a character was assertive, troubled, or morally complicated. Fourteen scenes (13.59%) recorded multiple substances in simultaneous use, typically alcohol and tobacco consumed together in bar or party environments. These scenes are of interest because they represent not just the normalization of individual substances but the normalization of polydrug use as a feature of masculine social leisure. Verbal-only references to substances, at 11 scenes (10.68%), occupied a quieter but still meaningful position in the overall picture, their contribution being the incorporation of substance-related language into the unremarkable flow of everyday dialogue. Illicit drug depictions were rare, recorded in only 8 scenes (7.77%), and were almost without exception located within criminal narratives involving heroin trafficking and organised crime. The contrast between this marginalised, stigmatised framing of illicit drugs and the domesticated, socially embedded treatment of alcohol and tobacco is itself a finding of note. It suggests that these films maintained a clear moral hierarchy of substances, one in which the social harms of alcohol and tobacco were absorbed into the texture of normal life while illicit substances were expelled to the narrative margins.

Settings of Substance Use Depiction

Table 4

Distribution of substance-related scenes by setting

Setting	Frequency	Percentage
Home / Private residence	43	41.75
Public space	27	26.21
Workplace / Institutional setting	15	14.56
Bar / Restaurant / Party venue	9	8.74
Vehicle / Travel setting	9	8.74
Total	103	100.00

The setting distribution in Table 4 is among the majority of the results. The home and private residence emerged as the single most common backdrop for substance use, accounting for 43 scenes (41.75%). This is not the bar, the back alley, or the criminal hideout; it is the kitchen table, the veranda, the living room. Placing substance use within the domestic sphere does specific normative work. The home carries cultural associations of ordinariness, safety, and familial intimacy, and when substance use is repeatedly lodged within that space, the implicit communicative effect is to position it as an unexceptional domestic habit rather than a socially marked behavior. Media effects researchers have documented this process with some precision, demonstrating that risk behaviors depicted within familiar, normative social contexts are perceived by viewers as significantly more acceptable and less risky than the same behaviors shown in marginalised or stigmatised settings (Wakefield et al., 2010). In Kerala, where alcohol-related family harm is a documented social concern, the domestication of alcohol on screen takes on a dimension that extends beyond the representational. Public spaces stand second, hosting 27 scenes (26.21%), and workplace or institutional settings such as police stations, offices, and school environments accounted for 15 scenes (14.56%). The appearance of substance use in formal professional environments is noteworthy precisely because such settings are normally associated with codes of conduct that preclude it, and its inclusion in these spaces may reinforce the perception that substance use crosses all social boundaries. Bar, restaurant, and party settings, the venues most conventionally associated with social drinking in popular cinema, contributed only 9 scenes (8.74%), a lower figure than might be expected. It suggests, perhaps counter intuitively, that the films in this sample were not leaning on the usual commercial cinema shorthand of the bar scene but were instead threading substance use through more intimate and unremarkable parts of their characters'

lives. Vehicle-related scenes also recorded 9 occurrences (8.74%), raising a specific concern about the casual co-location of intoxication and travel that such scenes communicated to audiences.

Types of Characters Involved

Table 5

Distribution of Characters involved

Character Type	Frequency	Percentage
Hero / Heroine (Lead character)	47	45.63
Supporting characters	27	26.21
Mixed group (lead and others)	19	18.45
Negative / Villain characters	10	9.71
Total	103	100.00

The character distribution data in Table 5 Lead characters, the heroes and heroines around whom the film's sympathetic energy is organised, were present in 47 scenes (45.63%), the largest single category and nearly half the total. This figure cannot be treated as incidental. Bandura (2009) emphasised repeatedly that the effectiveness of observational learning depends less on the frequency of exposure than on the attributes of the observed model: attractive, high-status models who are seen to enjoy positive social outcomes are the most potent sources of behavioral influence. The heroes of commercial Malayalam cinema in the 1990s were precisely such models. Constructed through the combined apparatus of narrative, cinematography, and star persona as figures of admiration and identification, these characters brought a normative authority to every behavior in which they were shown engaging. When they drank, smoking appeared to be a reasonable thing to do. When they smoked, the gesture read as natural rather than deviant. Supporting characters contributed 26.21% of substance-related scenes, distributing the behavior across the broader social world of the film and preventing it from being read as the idiosyncratic trait of any single character. Group scenes involving the lead alongside others represented 18.45% of depictions, consistently presenting substance use as a shared social activity, something people do together rather than alone.

Discussion

This study is the first of its kind in the Malayalam cinema industry and research related to substance use depiction in the Malayalam cinema industry. This study is a part of the larger project the researcher team is conducting. In the current study, the description part of the study is brought in. The study design is the systematic movie content analysis. 30 popular movies released between 1991 to 2000 are selected in a systematic manner. 3 movies each year were chosen. 103 scenes were identified across 30 films with an average of 4.37 scenes per movie. Similar study was conducted by Everett et al. (1998) in which the researcher team explored the substance use pattern and depiction in the American films. They used five-minute block coding. The study showed that the depiction of tobacco in about one-third of segments and alcohol. Similar studies have been conducted by Stern, (2005); Wills et al (2009); Callister et al (2012).

The current study found out that among the substance use depictions, alcohol and tobacco depictions are more prevalent (37.8% and 30.1% respectively). It was found out that this percentage is less than what was depicted in the western movies during the same time. (Thompson, K. M., & Yokota, F.,2001; Stern, 2005; Callister et al, 2012). Studies also found out that the movies impact the overall wellbeing of the people. The repeated exposure to the substance and violent contents in the movies may lead to adolescent's early substance use initiation, suicidal ideation, indulging in deviant behaviors (Perkins, 2002; Berkowitz, D. E, 2013).

Our results also suggest that 44% of all substance-related scenes presented consumption without mentioning anything about the substance in the dialogue. Similar results have been found in the western movies as well. Research evidences shows that even a brief, repeated exposures to risk behaviors can shape the behaviors of the people especially the adolescents who have indulge in risk taking behavior (Stacy et al., 2004; Grenard, J. L., Dent, C. W., & Stacy, A. W., 2013). Neurocognitive research indicates that visual cues are associated with the activation of the reward related pathway in the adolescents. Kühn & Gallinat, 2011).

The finding that substance use was most frequently depicted in domestic settings adds an important dimension to the analysis. The home, as a culturally loaded space associated with safety and normalcy, serves as a powerful site for the normalization of behavior. Prior studies have shown that behaviors portrayed in familiar and socially sanctioned environments are perceived as less risky and more acceptable (Fischer et al., 2011; Bleakley et al., 2012; Austin et al., 2006). In contrast to Western cinema, where bars and nightlife dominate substance-related imagery (Roberts et al., 1999; Everett et al., 1998).

Malayalam films appear to embed substance use within everyday domestic life. This domestication likely enhances perceived realism, which in turn strengthens media influence by reducing psychological distance between the viewer and the depicted behavior (Busselle & Bilandzic, 2009; Green & Brock, 2000). The prominent involvement of lead characters in substance-related scenes further reinforces the potential for behavioral modeling. Nearly half of all depictions involved protagonists, who serve as high-status and aspirational figures. Empirical research has consistently shown that identification with media characters significantly increases the likelihood of behavioral imitation (Hoffner & Buchanan, 2005; Cohen, 2001; Tukachinsky, 2011). When protagonists engage in substance use without negative consequences, these behaviors are framed as compatible with success, social acceptance, and emotional coping.

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Ethical Consideration

All films included in the analysis are commercially released works that are freely accessible through digital platforms. The study involved no human participants, no collection of personal data, and no experimental procedures. Formal ethics committee approval was therefore not required.

Declaration of Use of Artificial Intelligence

The authors declare that Quilbot was used in the grammar corrections.

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Conflicts of Interest

The authors declare that there are no conflicts of interest.

Data Availability Statement

In the supplementary files (1) & (2).

Author Contribution statement

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Conclusion

Substance use depictions in Malayalam cinema during the 1990s were frequent, normalized, and closely associated with central characters and everyday settings. Drawing on a broad body of media and public health research, these findings suggest a meaningful potential for influencing audience perceptions and behaviors. Addressing such representations is therefore not only a matter of academic inquiry but also an important priority for public health policy and media regulation.

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