

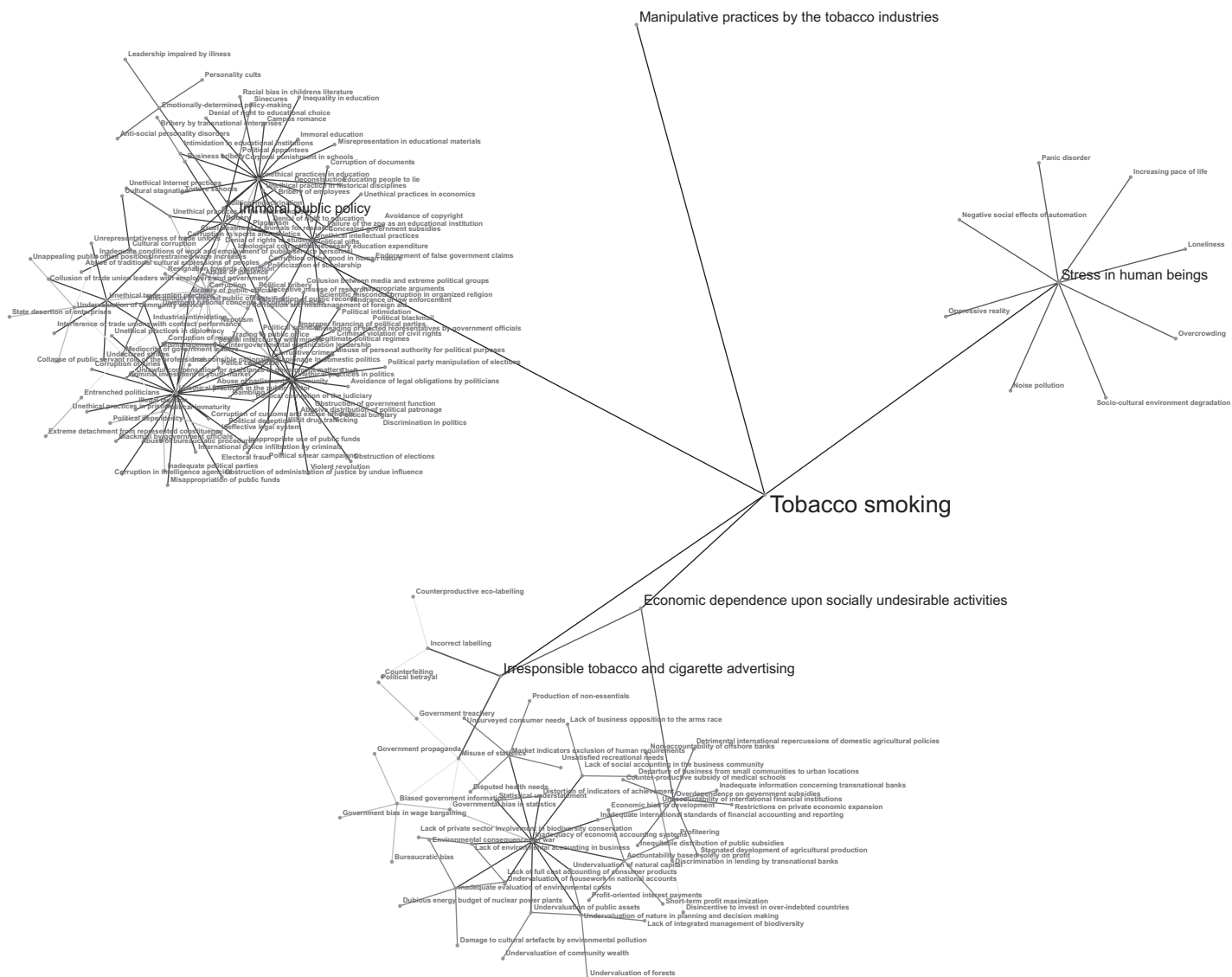
**Figure 10.1.2.24.**  
**Tobacco smoking**

Database: World Problems and Issues

**Link type:** aggravated by problems

**Network nodes:** 196

**UIA database:** <http://db.uia.org/scripts/sweb.dll/uiaf?DD=PR&DR=D0713>



The primary significance of nicotine in tobacco is to provide pharmacological effects, both acute (mood regulation, weight control) and long-term (reinforcing effects that create a continuing physiological need for nicotine). While nicotine in tobacco has both systemic pharmacological effects and acute sensory effects in the mouth, nose, and throat, the evidence in tobacco industry documents demonstrates that the acute sensory effects of nicotine are secondary in importance to the pharmacological effects of nicotine that underlie consumer satisfaction. Whilst smoking fulfils a psychological need in certain individuals it is only the inhaling cigarette smoker who is likely to gain psychopharmacological satisfaction from nicotine and become dependent on it. The tobacco industry distinguishes the role of nicotine from flavorants. A book on flavoring tobacco lists approximately a thousand flavorants, but fails to list nicotine as a flavoring agent. In fact, nicotine's flavor is unpleasant, and the tobacco industry has gone to significant lengths to mask the flavor of increased levels of nicotine in cigarettes. There is evidence that some of the sensory effects associated with nicotine, e.g., "irritation and impact," are sought by smokers at least in part because these effects are always followed by the pharmacological effects they seek. Thus, smokers learn to associate the sensory impact of nicotine (burning in the throat) with the resulting psychoactive effects of nicotine, and thus look for these sensory signals in tobacco products. This is known as secondary reinforcement. The tobacco industry's development of nicotine analogues also demonstrates the industry's interest in nicotine's pharmacological effects on the central nervous system, rather than in its sensory effects. The focus of industry research has been to develop compounds that will duplicate the pharmacological effects of nicotine on the central nervous system. Nowhere in the referenced tobacco industry documents concerning nicotine analogues is there mention of concern to duplicate any flavor, taste, or other acute sensory effects that may be associated with nicotine. Reduction in heavy or prolonged nicotine use can produce some of the following withdrawal effects; sweating or rapid pulse, increased hand tremor, insomnia, nausea or vomiting, physical agitation, anxiety, transient visual, tactile, or auditory hallucinations or illusions, and grand mal seizures.