

Developmental Trajectories of Tobacco Use and Their Relation to Tobacco Dependence

Given the variation of smoking behavior patterns within the population, as well as their potential for being classified as heritable traits, patterns of smoking behavior over time hold promise as a future basis for genetic studies of nicotine dependence. This part examines issues in the study of trajectories of tobacco use, ranging from the results of existing studies to their relationship with other trajectories, such as alcohol use or substance abuse.

The first chapter in this part examines the literature exploring developmental trajectories of cigarette smoking between adolescence and adulthood, together with results from a population study examining these trajectories. A subsequent chapter explores genetic modeling issues in the study of smoking trajectories and behavior, including methodological and conceptual issues, statistical modeling considerations, prior genetic studies, and research applying an item-response theory (IRT) approach to an analysis of smoking trajectories. The closing chapter of this part uses an empirical example from a cohort study to explore whether these trajectories should be considered unique to tobacco or are best conceptualized as general pathways underlying substance use.

