Psychosocial Mediators of a School-Based Tobacco Prevention Program in India: Results from the First Year of Project MYTRI

Sheri Lewis Bate • Melissa H. Stigler • Marilyn S. Thompson • Monika Arora • Cheryl L. Perry • K. Srinath Reddy • David P. MacKinnon

Published online: 21 November 2008 © Society for Prevention Research 2008

Abstract Each day in India, an estimated 5,500 youth initiate tobacco use, contributing to predictions that by 2020, tobacco will account for 13% of all deaths in India. Project MYTRI (Mobilizing Youth for Tobacco-Related Initiatives in India) is a multi-component school-based intervention designed to prevent and reduce tobacco use among adolescents in Delhi and Chennai, India. The intervention was implemented over the 2004–2006 school years and involved 6th and 8th grade students in 32 classrooms. Students participated in peer-led classroom activities involving games, competitions, and other activities intended to target a number of psychosocial risk factors

believed to prevent tobacco use among urban Indian youth. To more fully understand how Project MYTRI influenced students' intentions to smoke or chew tobacco, the current study used mediation analysis to investigate whether Project MYTRI altered the psychosocial risk factors as intended, and whether the changes in psychosocial risk factors were, in turn, responsible for altering students' tobacco-use intentions. Multi-level mediation models were estimated using student data from baseline and 1-year follow-up surveys. Results indicated that the psychosocial risk factors Knowledge of Health Effects, Normative Beliefs, Reasons to Use Tobacco, and Perceived Prevalence were significant mediators between the intervention activities and students' tobacco use intentions. Evidence of inconsistent mediation was observed for the Perceived Prevalence factor. These findings, combined with those from qualitative research and the second-year student data, will help to illuminate the impact of Project MYTRI on participating youth.

S. L. Bate · M. S. Thompson Division of Psychology in Education, Arizona State University, Tempe, AZ, USA

M. H. Stigler · C. L. Perry Michael & Susan Dell Center for Advancement of Healthy Living, University of Texas School of Public Health, Austin Regional Campus, Austin, TX, USA

M. Arora · K. S. Reddy Health-Related Information Dissemination Amongst Youth, Delhi, India

D. P. MacKinnon Department of Psychology, Arizona State University, Tempe, AZ, USA

S. L. Bate (⊠) 7719 Shadow Hills Drive, Arlington, TN 38002, USA e-mail: sheri.lewis@asu.edu **Keywords** Mediation analysis · Tobacco prevention · Adolescents · India · Psychosocial risk factors

Based on current trends, the World Health Organization predicts that by the year 2020, tobacco use will cause more than 10 million deaths per year (Warren et al. 2008). The majority of tobacco-related deaths are expected to occur in developing countries, where tobacco use is on the rise; in less developed countries, deaths due to tobacco are projected to increase from approximately 1 million in 1990 to 7 million in 2020 (The World Bank 1999; Warren et al. 2008). The climb in tobacco use is particularly evident

