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### **The Development of Civic Scientific Literacy in the United States**

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Civic scientific literacy (CSL) refers to the ability to read and make sense of scientific constructs presented at the level found in the Tuesday *New York Times* or to view and make sense of scientific explanations at the level presented in a Nova television show. The CSL index is content neutral (individuals who accept climate change and individuals who have doubts about it could demonstrate an acceptable of scientific literacy by demonstrating a command of the basic scientific constructs that underlie these arguments) and source neutral (print, broadcast, Internet, museums, or other sources). This paper utilizes data from the 2008 cycle of the Longitudinal Study of American Youth (LSAY) to identify the factors associated with the development of CSL in young adults in their mid 30's. Building on more than two decades of national cross-sectional studies of CSL in the United States (Miller, 1983, 1987, 1995, 1998, 2000, 2001, 2004, 2010), this analysis uses a set of structural equation models to examine the relative influence of home and parental factors, pre-college science and mathematics courses, college-level science and mathematics courses, work experiences, religious beliefs, and involvement in scientific and technological issues in the political arena on the development of CSL. The results confirm the importance of college science courses - especially for non-STEMM majors - in the development of CSL. The results indicate that college science courses are valuable for college non-STEMM majors because of (1) the substantive content understanding produced by the course experience and (2) the utility of a command of these basic constructs in making sense of current and policy-relevant science information in more sophisticated public media.

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