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The hurricane Katrina effect on mathematics achievement in Mississippi.

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Summary: Hurricane Katrina caused severe physical damage to the Gulf Coast states of Louisiana, Mississippi, and Alabama. Homes and businesses were destroyed. Natural habitats were annihilated, and many Americans were displaced for days, weeks, and even years. This study investigated the within-subject effects and contrasts of poverty, rurality, and location within a Katrina distance impact zone on mathematics achievement in fifth-grade, eighth-grade, and Algebra I schools in Mississippi during the 2004–2007 school years. Through an analysis of publicly available school data, all school groups were found to have been impacted by Katrina, but the nonpoor/nonrural Algebra I schools within a 90-mile radius of Katrina’s point of landfall were affected the greatest. Interesting patterns in eighth-grade mathematics achievement results were additionally found. Rural schools were impacted to a greater extent than their nonrural counterparts. Several findings in this study were startling and counterintuitive, but this initial analysis into the impact of Katrina on mathematics achievement in Mississippi illustrated that catastrophic natural disasters like hurricane Katrina can cause more than just physical damage.

Classification: C63 C33

Keywords: achievement; hurricane Katrina effect; socio-cultural influences; poverty; rurality; location
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