

Title: Trends in Suicide Among Urban White and Urban African American Males: 1980 to 2002

Abstract: Historically, whites have committed suicide at a greater rate than blacks. However, recent reports show this gap is narrowing, primarily due to a significant rise in young African American male suicide. While many explanations for this increase have been proposed, we know of no empirical research that has examined the causes of increased rates nor made comparisons of long term trends in these patterns across cities. Using data from the Multiple Mortality Cause of Death Records, the Supplemental Homicide Reports, and the U.S. Census for 1980-2000, we employ latent growth model approaches, as well as pooled time series to examine the process by which variation and change in the demographic, economic, and cultural characteristics of cities have influenced suicide subpopulations. To our knowledge, this is the first study to examine the causes and correlates of rising suicide rates among young black males over the last twenty plus years.

Authors:

Tim Wadsworth (University of Colorado, Boulder)

Charis Kubrin (George Washington University)

Jerald R. Herting (University of Washington)

Patterns of suicide for US whites and US African Americans have distinctive patterns.

Historically, whites have committed suicide at a greater rate than blacks. In addition, white suicide risk tends to increase with age while the African American rates while distinctively lower than whites have a greater bulge of risk in the late adolescent and young adult age groups, especially for the late 20's and early 30's age groups (Gibbs 1997).

Recent decades have been characterized by differential growth in risk for these two groups and some evidence for the narrowing of long standing gaps between the two race groups especially for males. Work by South 1993 and by Almgren et al 1998 point to a narrowing of these racial differences over the past decades. The CDC has also pointed to this growth as well. Plus, in general, across both race groups there were increases among middle to late adolescent age group (15-19) during the period under study (Watt and Sharp 2002).

In general, this makes the period from the late 1970's through 2000 interesting due to these growth periods for the younger age groups and possible convergence or collapsing of certain gaps in mortality due to suicide for Black and whites. Much of this work is descriptive in orientation and has not looked at the full time series that encompasses both increases and decreases (or stabilization) of these patterns. Also much of the descriptive discussion is either in specific locations (i.e. Chicago) or at a state or national level.

In this paper we begin to approach both the descriptive patterns of urban suicide from 1980 to 2000 for both groups. We use latent growth mixture models to examine the nature of the trends and explore whether there are distinctive forms/classes of this growth across 196 urban places. We then relate these growth patterns to features of urban place concentrating on the role

variation and change in the demographic, economic, and cultural characteristics of cities are related to these patterns. Of key interest will be shifts in key features of socio-economic disadvantage and stability. We also examine some features of crime and gun availability across these urban places. Key is an attempt to understand potential differential effects of these factors on the patterns for African Americans versus whites.

Figure 1 and Figure 2 illustrate the crude temporal pattern of suicide rates for young Black males (14-19) and young white males (14-19) across urban locations. These crude plots show the variation across place (including the skew and potential outliers in the data). The graphs clearly show the difference in rates between the two groups. They also show the median trending slightly differently for African Americans versus whites; more of an up swing for Blacks in the early 90's and a bit of delay in this pattern for whites..

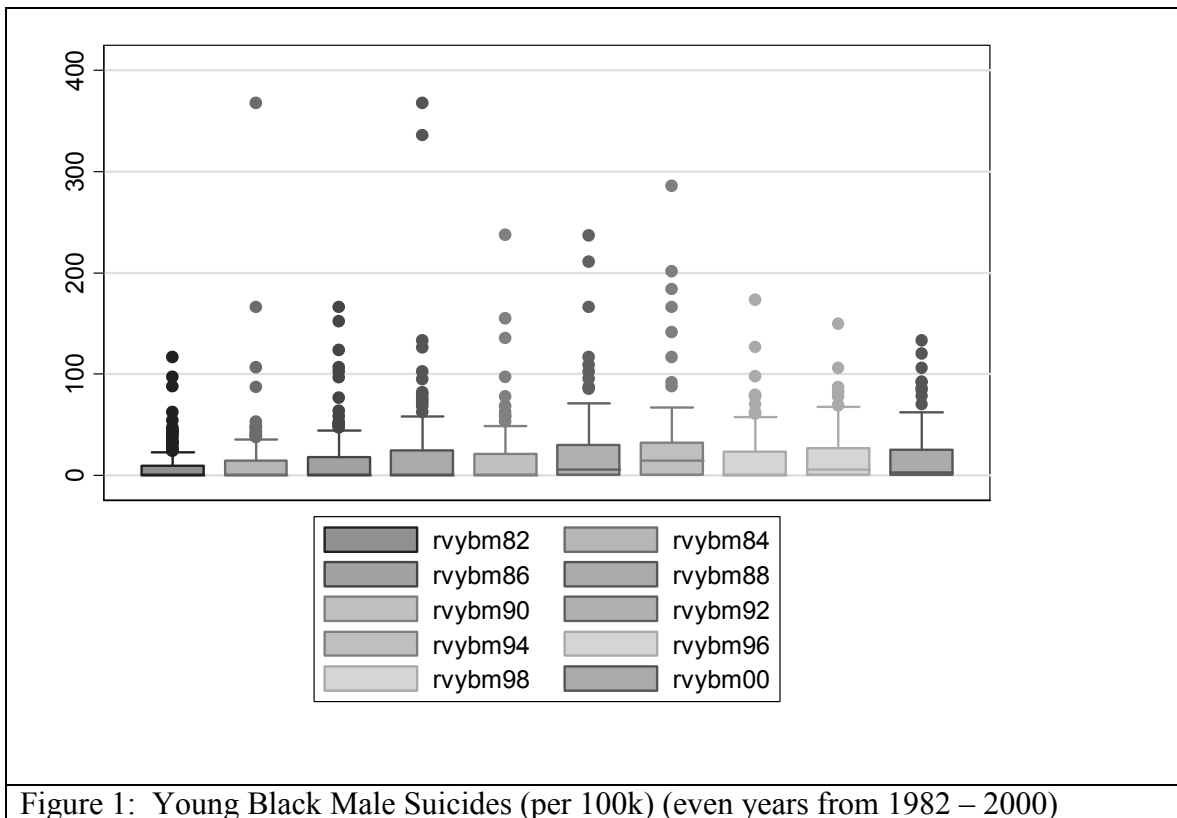


Figure 1: Young Black Male Suicides (per 100k) (even years from 1982 – 2000)

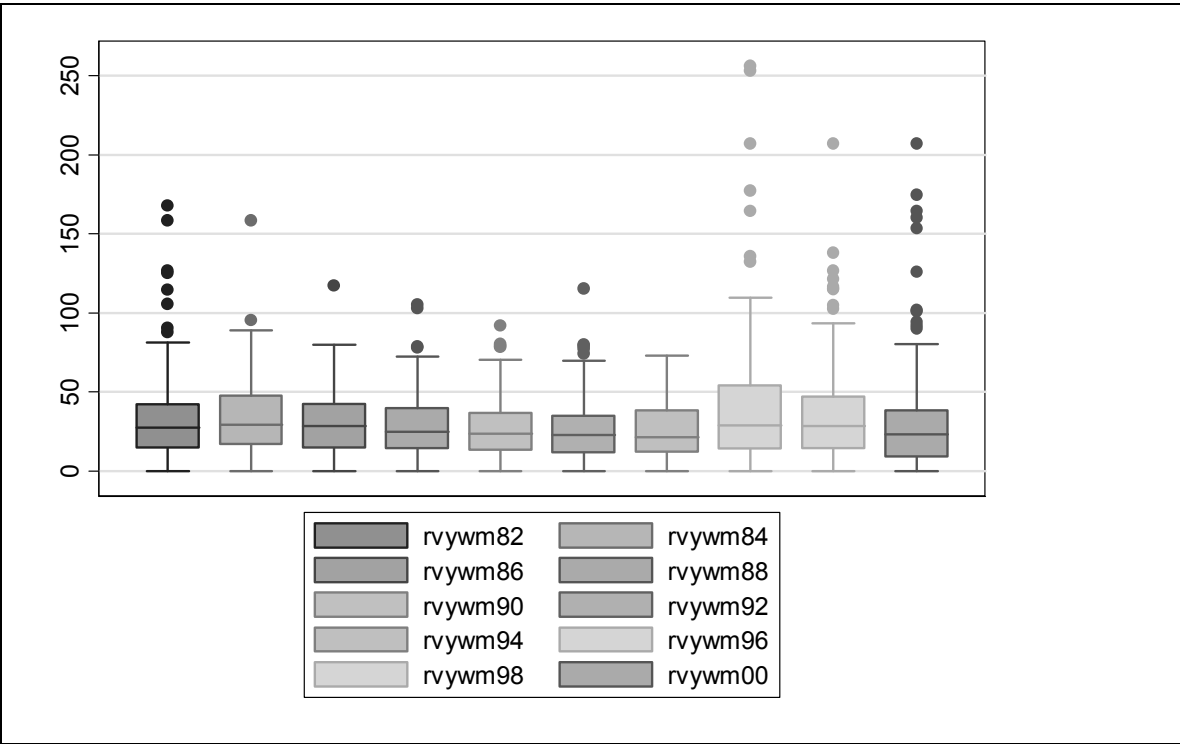


Figure 2 Young White Male Suicides (per 100k) (even years from 1982 – 2000)

We have also used latent growth models to try and capture these general patterns. A quadratic growth structure is shown in Figure 3 with a sampling of individual growth curves for different cities; this depicts the overall average curve and the variation in estimated patterns across place.

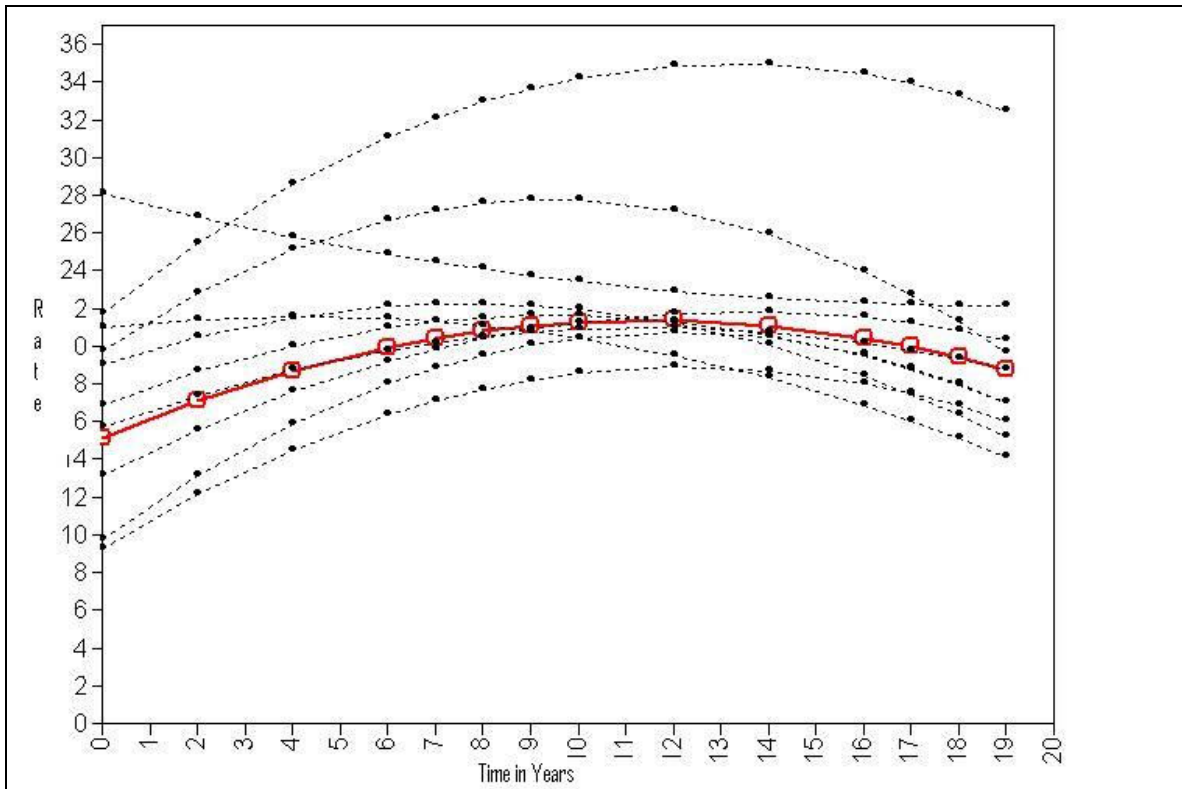


Figure 3: Estimated Growth Pattern of Young Black Male Suicides from 1980 to 2000

This model indicates our general strategy of trying to model the overall trend and capture variation in the observed trends across urban place. The variation in intercepts and nature of the curve will be related to the urban characteristics of the population and to specific nature of the urban place (i.e. the specific unemployment among African Americans, as well as the total population unemployment or specific quality of place (e.g. size and density). Relating these patterns for both whites and African Americans across late adolescent and early adulthood age groups will help better understand the roots of the changes observed across these late decades of the 20<sup>th</sup> century and early period of the new century.