Criminology

Nadine Connell, Title of Criminology

Dr. Nadine Connell has just published two studies with colleagues Dr. Robert Morris and Dr. Alex Piquero that examine the various effects of school based bullying and victimization over the course of the victim’s life. In the first paper, “Predicting Bullying: Exploring the Contributions of Childhood Negative Life Experiences in Predicting Adolescent Bullying Behavior,” published in the International Journal of Offender Therapy and Comparative Criminology, she and her co-authors examined the impact that negative life experiences in early childhood had on predicting the likelihood that someone would become a bully in later adolescence. Using a community sample that followed students from kindergarten through 12th grade, they discovered that negative family and school experiences can have lasting long effects, even if the experiences were relatively minor. This speaks to the importance early life events can have on adolescent experiences and the need for early intervention when problems first arise. In the second paper, “Exploring the Link Between Bullying and Substance Use,” published in Victims & Offenders, Drs. Connell, Morris, and Piquero used the same longitudinal sample to look at whether early school based victimization predicted adolescent substance use. Their results suggested that students who were in the top 25% of bullying victims were more likely to use alcohol and cigarettes, but generally, adolescent substance use was more likely related to proximal causes during adolescence and not as strongly correlated with earlier in-school victimization. These findings speak to the necessity of continuing to encourage meaningful substance use prevention programs during adolescence and making sure students have the resilience skills necessary to stay away from substance abuse. Taken together, these studies point to the importance of context in understanding the impact of early childhood experiences on adolescent behaviors.

Geospatial Information Sciences

May Yuan, Professor of Geospatial Information Sciences

Dr. May Yuan is working on a spatial criminology project to develop a new space-time analytics approach that can identify specific locations susceptible to crimes. Instead of mapping hot spots of crime incidents, her approach detects categorical crime histories and pinpoints street intersections, street segments, local neighborhoods, and other microlocations where certain crime histories are prominent. The space-time analytics can differentiate that, for example, that this street corner experiences high robberies and drug offenses but low vehicle thefts, and that another street segment has frequent shoplifting but low burglaries. In contrast to broad areas of crime hot spots, such micro-information about criminogenic locations can be more effective to subsequent analyses of spatial risk factors to crime. The police department in Tulsa, Oklahoma
provided crime incident reports from 2009 to 2011. The data set included a total of 183,101 reports in 12 crime types. Preliminary analyses of all the crime incidents suggest that aggravated assaults, robberies, and motor vehicle thefts are most commonly co-located with other types of crime incident. Moreover, the new method identified 269 specific locations where crime incident reports were among the highest for all the 12 crime types. Occurrences of certain crime types appeared to attract other crimes to a location. For example, after experiencing aggravated assaults, places initially attracted drugs or “all other larcenies” but then became much more susceptible to robberies and burglaries over time. Locations where burglaries occurred, tended to suffer alternating burglaries, forcible rapes and robberies. The research has been accepted to present at “the Evolving GIScience International Workshop” in July 2015.

Economics
Vic Valcarcel, Assistant Professor of Economics
In a recently published article titled, "Solving the Price Puzzle with an Alternative Indicator of Monetary Policy," Assistant Professor Vic Valcarcel and coauthors showed that employment of the Federal Funds rate to characterize monetary policy gave rise to a counterintuitive response in US prices, which became specially problematic in the post Financial Crisis period. In late 2008, deteriorating economic conditions led the Federal Reserve to undertake a combination of conventional and unconventional measures that has resulted in a collapse of the Federal Funds rate. At the time of this writing, this key daily rate had not moved appreciably from zero for over half a decade. A variable that does not move from zero for such a protracted period necessarily loses any economic information content that it might carry. Valcarcel and his coauthors offered an alternative indicator based on a properly aggregated measure of the money supply that solved this puzzle.

Political Science
Patrick Brandt, Associate Professor of Political Science
Dr. Patrick Brandt, Associate Professor of Political Science, is pursuing two new projects. The first with Dr. Todd Sandler and his PhD student Justin George examines the causes of transnational kidnappings. Specifically, they are examining whether different countries’ concessions to terrorists via negotiation or ransoms affect the subsequent kidnappings of those countries’ nationals. His second project, in partnership with the Niko Spreybroeck (Catholic University of Louvain), examines how to forecast food borne diseases such as Salmonella, Campylobacter, and Listeria. The goal of this project is to then predict the societal burden of these diseases.

Public Policy and Political Economy
Jennifer Holmes, Professor and Department Head of Public Policy and Political Economy
Dr. Jennifer Holmes, Professor and Head of Public Policy, Political Economy, and Political Science, is about to embark on a new research project with Dr. Alvaro Cardenas in Computer Science at UTD. Next month, they will travel to Colombia to conduct interviews and gather statistical information on attacks on Colombian critical infrastructure, specifically pipelines and electrical transmission lines. This project will identify both technical and policy best practices.
for protecting critical infrastructure. The work will be highly interdisciplinary because it will involve the research of experts on terrorism in Colombia (Holmes) with experts on the security of critical infrastructures (Cardenas).

Public Affairs and Sociology
James Harrington, Assistant Professor of Public Affairs
James Harrington is currently working on two articles in higher education policy. In an article submitted to Research in Higher Education, Dr. Harrington uses statewide administrative datasets to estimate the effects of Missouri’s Bright Flight Scholarship program, a highly targeted, state administered merit aid program, on reducing instate brain drain. Using a regression discontinuity approach, he found that having the opportunity to participate in the Bright Flight Scholarship program increased the probability of being employed in the state eight years after graduating high school. In another article submitted to the Journal of Higher Education, Dr. Harrington examines Missouri’s A+ Scholarship Program, which provides eligible graduates from participating high schools with an opportunity to earn a scholarship to a public two-year community college. This research is important and relevant, because recent federal and state education policy has targeted community colleges as an affordable venue to increase postsecondary attainment. Overall, the A+ Scholarship Program provided a democratizing effect by increasing the overall college-going rate (1.5 percentage points), while simultaneously creating a diversionary effect through increased two-year enrollment (5.3 percentage points increase) as a substitute for four-year enrollment (3.8 percentage points decrease).

Additionally, Dr. Harrington is also working on several other manuscripts. One of his papers with Laura Jackson (PhD Student) examines the impact of accountability pressures on the passage of school bonds in Texas school districts. This paper was presented at the Midwest Political Science Conference in April. This research fits into Dr. Harrington’s larger research agenda of examining the impact of accountability programs on organizational outcomes. In regards to his accountability research, a co-authored article entitled, “Estimating the Effects of No Child Left Behind on Teachers’ Work Environments and Job Attitudes,” was recently published in Education Evaluation and Policy Analysis. Lastly, Dr. Harrington and Ji Han Lee (PhD Candidate) are working on several papers examining the impact of goal-setting and talent management in U.S. Federal agencies.

Institute for Urban Policy Research
Timothy Bray, Clinical Assistant Professor of Criminology
The Institute for Urban Policy Research is working with Children’s Health on the region’s first 6-county Beyond ABC report on the wellbeing of North Texas Children. The report involves facilitating an advisory board of members from Cooke, Fannin, Grayson, Collin, Denton, and Dallas counties to identify more than 50 indicators of children’s social and emotional wellbeing. Staff and students from the Institute then collect and analyze 10-years of data on each indicator to assist the advisory board in building practical, policy-oriented recommendations to improve wellbeing. While this is the sixth year of the partnership between Children’s Health and the Institute, this is the first year where the project has taken such a broad scope.