CURRICULUM VITAE

Major David S. Lyle
Department of Social Sciences
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Personal Information

Current Position: Academy Professor (Economics), Department of Social Sciences
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Membership in Professional Societies

Association of Graduates, West Point
Phi Kappa Phi, West Point Chapter

Academic Background

Doctor of Philosophy, Economics, Massachusetts Institute of Technology, 2003
Bachelor of Science, Mathematical Economics, United States Military Academy, 1994

Teaching Experience

2003-current: Department of Social Sciences, U.S. Military Academy; course director and primary instructor for Introductory Econometrics (SS368), Advanced Econometrics (SS469), and Advanced Economic Principles (SS251), Introductory Economic Principles (SS201)
Certified by the Center for Teaching Excellence Master Teacher Program

Area of Academic Interest

Econometrics
Labor and Manpower Economics
Human Capital Development
Applied Microeconomics
Microeconomic Theory

Scholarly Publications/Conferences

"Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Mid-Century."

ABSTRACT: This paper investigates the effects of female labor supply on the wage structure. To identify variation in female labor supply, we exploit the military mobilization for World War II, which drew many women into the workforce who remained in employment after the War. The extent of mobilization was not uniform across states, with the fraction of eligible males serving ranging from 41 to 54 percent. We find that in states with greater mobilization of men, women worked substantially more after the War and in 1950, though not in 1940. We interpret these differentials as labor supply shifts induced by the War. We find that increases in female labor supply lower female wages, lower male wages, and increase earnings inequality between high school and college educated males. Our findings indicate that at mid-century, women were closer substitutes to high school graduate and relatively low-skill males, but not to men with the lowest skills.

- Published in the Journal of Political Economy, June 2004, v112 no.3 pp497-551
- National Bureau of Economic Research Working Paper No. W9013
- Co-authored with Daron Acemoglu (MIT) and David Autor (MIT)
- Presented at the National Bureau of Economic Research Labor Studies Conference in July 2002 and at the MIT Labor Seminar in March 2002.

"Using Military Deployments and Job Assignments to Estimate the Effect of Parental Absences and Household Relocations on Children's Academic Achievement."

ABSTRACT: Military deployments and job assignments provide an opportunity to estimate the impact of parental absences and household relocations on children's academic achievement. Combining U.S. Army personnel data with children's standardized test scores from Texas, I find that parental absences adversely affect children's test scores by a tenth of a standard deviation. Likewise, household relocations have modest negative effects on children's test scores. Both parental absences and household relocations have the greatest detrimental affect on test scores of children with single parents, children with mothers in the Army, children with lower-ability parents, and younger children.

- Published in the Journal of Labor Economics, April 2006, v24 no.2 pp319-350
- Presented at the MIT Labor Seminar in August 2002, the Department of Social Sciences Faculty Seminar in September of 2003, and the Western Economic Association Conference in July 2004

"Estimating and Interpreting Peer and Role Model Effects from Randomly Assigned Social Groups at West Point"

ABSTRACT: The random assignment of cadets to social groups at West Point provides a rare opportunity to highlight potentially misleading estimates of social group effects found in many studies. Estimates of contemporaneous group effects in human capital production are typically positive and significant; however, evidence in this study suggests that occurrences common to a group may account for much of this correlation. Models that address these biases provide little evidence of group effects in academic performance, although there is evidence of group influences in choice outcomes such as the selection of academic major and the decision to remain in the Army.

- Published in the Review of Economics and Statistics, May 2007, v89 no.2 pp289-99
- Presented at the MIT Labor Seminar in October 2002 and the Department of Social Sciences Faculty seminar in September 2004

"Are Peers Complements or Substitutes in the Production of Human Capital at the United States Military Academy?"

ABSTRACT: Heterogeneity in peer group composition can provide evidence for the degree of substitutability between peers. This has important production efficiency implications for how schools organize classrooms. The random assignment of cadets to Companies at West Point provides an opportunity to investigate this issue empirically. Combining pretreatment measures of academic ability with freshman-year academic grades, I estimate the impact of peer group heterogeneity in Math SAT scores on freshmen-year Math grades and academic grade point average. Estimates reveal that more heterogeneous peer groups have positive effects on individual grades. A one standard deviation increase in the peer group 75-25 differential in peer Math SAT distributions increases the Company average Math grade by 13 percent of a standard deviation; the 75^{th} percentile, but not the 25^{th} percentile, of the peer Math SAT distribution accounts for most of this effect. The evidence suggests that peers serve as substitutes in this setting, and therefore, mixing cadets by ability is optimal for the efficient production of education at the United States Military Academy.

- Currently under review
- Presented at the United States Military Academy Faculty Seminar in September 2004

"Military Deployments and Children's Academic Achievement: Evidence from Department of Defense Education Activity Schools"

ABSTRACT: Lengthy and frequent overseas deployments since 2002 are apt to have placed considerable pressures on military personnel and their families. Combining the standardized test scores of children enrolled in Defense Department schools with their military parent's Army personnel data, we evaluate the effect of a soldier's deployment on the academic achievement of his or her children. We find that deployments have modest adverse effects across most academic subjects, with lengthy deployments and deployments during the month of testing leading to the largest detrimental effects. Evidence also suggests that the adverse effects in academic achievement persist for several years.

- Currently under review
- Presented at the Department of Defense Education Activity in September 2006 Presented at the Notre Dame Economics Seminar in September 2006
- Presented at the United States Military Academy Faculty Seminar in October 2006
- Presented at the American Economic Association Winter Conference in January 2007
- Presented at the Western Economic Association Conference in June 2007
- Co-authored with Rozlyn Engel (West Point) and Luke Gallagher (West Point)

"The Business of Maintaining the Force"

ABSTRACT: As the Global War on Terror has expanded the demand for military manpower, operational requirements, economic conditions, and shifting generational preferences have combined to moderate the supply of willing volunteers. Consequently, labor intensive branches like the Army and Marines confront significant manpower challenges now and in the foreseeable future. Varying degrees of mission difficulty and capital/labor complementarity suggest the need for differential manpower policies that are unique to each branch of service and focused on current and future challenges in recruiting, developing, and retaining the force.

- Currently under review
- Presented at the Western Economic Association Conference in July 2005
- Co-authored with Luke Gallagher, Casey Wardynski, and Mike Yankovich (USMA)

"Improving the Retention of Junior Officers"

ABSTRACT: The U.S. Army confronts a persistent shortage of senior captains and majors. Yet, high potential junior officers from scholarship sources exit the service at disproportionately high rates. Firther, due to the changing nature of mission requirements resulting from the Global War on Terrorism, the Army faces increasing uncertainty in its ability to man a robust officer corps. In response, the Army began offering a set of career satisfaction incentives to cadets starting with year group 2006. The incentives provide the prospective officers with enhanced expectations of service while simultaneously improving retention and the general human capital skills of the officer corps. Based on first year results, eight year continuation rates for officers commissioned through scholarship sources are predicted to increase from 45% to 57%. For every one dollar spent on these incentive programs, the Army saves four dollars while gaining greater flexibility to manage accession levels and promotion rates.

- Currently under review
- Presented at the Western Economic Association Conference in July 2006
- Co-authored with Casey Wardynski (USMA) and Mike Yankovich (USMA)

Military Experience

2003 - Present: Academy Professor of Economics, U.S. Military Academy

- Deputy Director of the Office of Economic Manpower Analysis
- Responsible for the intellectual and moral development of cadets
- Teach Econometrics and Economic Principles
- Individual Academic Workshop Coordinator for the Department of Social Sciences
- Officer Representative for the Fellowship of Christian Athletes
- Officer Representative for the Varsity Men's Basketball Team
- Member of the Cadet Chapel Parish Council
- Mentor for Rhodes, Marshall, and Hertz Scholarship Cadet Candidates
- Thesis advisor

2000 - 2003: Graduate Student in the Department of Economics, Massachusetts Institute of Technology

- Responsible for completing all course work and a dissertation

1998 - 1999: Company Commander, Fort Leonard Wood, Missouri

Company Commander, C Company, 5th Engineer Battalion, Combat Mechanized.

- Responsible for a mechanized corps combat engineer company whose mission was to deploy world-wide in order to provide combat engineer support to the 3rd Armored Cavalry Regiment
- Responsible for the readiness, training, morale, and welfare of 111 soldiers and the maintenance and accountability of vehicles and equipment valued at over $8 million
- Deployed to the National Training Center in support of OPFOR operations

1995 - 1997: Battalion Maintenance Officer, Executive Officer, and Platoon Leader, Fort Carson, Colorado

Battalion Maintenance Officer, 52nd Engineer Battalion, Combat Heavy.

- Responsible for supervising the battalion's maintenance program with over 600 pieces of engineer and ordnance equipment valued at more than $20 million
- Directed the movement of the battalion's equipment to Egypt for Operation Bright Star 1997
- Additional duties included safety officer, TAMMS, AOAP, TMDE, local purchase of repair parts, civilian contracted maintenance and warranty, scheduled services, driver training, and coordinating local purchases with external agencies

Executive Officer, A Company, 52nd Engineer Battalion, Combat Heavy

- Platoon leader for the headquarters platoon; responsible for the health, welfare, training, and combat readiness of 20 soldiers
- Managed an annual budget exceeding $350,000 and accountable for the maintenance of over 160 pieces of construction, wheeled, and power generation equipment

- Additional duties included safety, budget, communications, publications, NBC, movements, supply, and mess officer

Platoon Leader, A Company, 52nd Engineer Battalion, Combat Heavy
- Responsible for leading, training, and the welfare of a 40 soldier platoon
- Responsible for the safety, maintenance, and accountability of equipment worth in excess of $2.5 million
- Additional duties included environmental protection and fire safety officer

1994 - 1995: Graduate Assistant Varsity Men's Basketball Coach, West Point, New York
- Directed preseason conditioning and assisted with coaching daily practices
- Actively managed recruiting files and organized recruiting trips
- Research assistant for the Department of Social Sciences

1990 - 1994: Cadet at the United States Military Academy.
- Graduated top 2% of the class, distinguished cadet (Mathematical Economics)
- Deans list all eight semesters
- Robert E. Lee Saber Recipient for highest grade in Systems Engineering Sequence
- GTE Academic All-American Division I Men's Basketball, 1994
- Varsity Men's Basketball Letter winner 1993, 1994
- President of the Fellowship of Christian Athletes 1993, 1994
- Cadet Battalion Commander, 1994

Professional Schools

Combined Arms Services Staff School, 1998
Engineer Officer Advanced Course, 1998: Exceeded Course Standards
Engineer Officer Basic Course, 1995: Exceeded Course Standards

Awards and Certifications

Meritorious Service Medal
Army Commendation Medal
Army Achievement Medal (3 awards)
National Defense Service Ribbon (2 awards)
Global War on Terror Service Ribbon
Meritorious Outstanding Volunteer Service Medal
Army Service Ribbon
German Armed Forces Efficiency Test (Gold)
Master Fitness Trainer
Statistical Analysis System (SAS) Programming Course Certification