



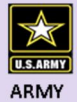
Supporting  
Military Families  
Through Research  
and Outreach

# PUTTING RESEARCH TO WORK FOR MILITARY FAMILIES

## Using Military deployments and Job Assignments to Estimate the Effect of Parental Absences and Household Relocations On Children's Academic Achievement

Lyle, D. S. (2006). Journal of Labor Economics, 24, 319-350.

[http://socialwork.usc.edu/~rastorj/Military%20Children%20-%20Articles%20by%20Category/Deployment/LYLE\\_U-1.PDF](http://socialwork.usc.edu/~rastorj/Military%20Children%20-%20Articles%20by%20Category/Deployment/LYLE_U-1.PDF)



*This study examined the effect of parental absences (due to deployment) and household relocations on children's academic achievement, specifically scores on a Texas state-wide standardized math test. Additional analyses examined the role of the child's age, single parenthood, gender of the military parent, and the parent's scores on the Armed Forces Qualification Test (AFQT).*

### Key Findings:

- Parental deployment during the school year had only a small adverse effect on math test scores (approximately 1-point decrease). However, cumulative absences over a 4 year period had a larger effect, particularly on children of officers. Children who had experienced parental deployment for 7 months or more scored 1.5 to 2 points lower than those who had not experienced parental deployment.
- Children of enlisted service members who had moved more frequently had lower math scores compared to those who had moved less frequently.
- The negative impact of both parental deployment and relocations were particularly marked among children who were younger, who were in a single-parent family, who had mothers who were Service members, and whose parent had scored lower on the AFQT.

### Implications for Programs:

- Children with mothers who serve in the military may be specifically targeted for academic support during parental deployment or after a Permanent Change in Station (PCS) move.
- Younger children could be provided with additional educational curriculum or tutoring to help support their academic achievement during deployment.
- Programs may emphasize curriculum that focuses on improving math skills among children with a deployed parent and/or who have experienced multiple parental deployments.

### Implications for Policies:

- Single parents, mothers in the military, and parents with younger children could be specifically encouraged to have their children participate in youth programs that target academic success.
- Children and families should be encouraged to participate in common national programs (e.g., 4-H) this may provide stability and consistency for children.
- Clear and consistent communication between the military, programs, and schools could help identify and meet the needs of students at risk for academic problems.

### Avenues for Future Research:

- Additional research could determine if the adverse effects seen as a result of deployment and moving extend to other areas of academic achievement (e.g., language skills, critical thinking).
- Longitudinal research to examine if the negative effects of deployment and moving on math scores translate into subsequent problems as adults (e.g. job attainment, job advancement, college entry, etc.).
- Future studies could examine the mechanisms by which parental deployment and moving impact children's math scores. For example, do students spend less time on homework, or have more difficulty paying attention as a result of parental deployment.

Prepared by Military REACH Team.

For additional information, please visit <http://reachmilitaryfamilies.arizona.edu>



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## Background Information

### Methodology:

- This study utilized standardized math test scores (i.e., Texas Assessment of Academic Skills exam) as well as information about deployment and other military demographics from the Army's Human Resources Command. Ordinary least squares (OLS) and two-stage least squares (2SLS) regressions were used to estimate the association between deployment and moving and math scores.
- This article focused on children with parents in the Active Component of the Army.

### Participants:

- The 11,548 children included in this study were stationed in Texas during the 1997-1998 school year, and ranged in age between 6 and 19 years old.
- The majority of children were White (44% of children with enlisted parents, 79% of children with officer parents).

### Limitations:

- Given that only children of Army soldiers in the Active Component, living in Texas, participated, the findings may not be generalizable to children in other states, civilian children or in other military branches/components.
- This study used only one indicator of academic achievement: scores on a standardized math assessment; a different pattern of findings may be evident when using an alternative indicator of academic (or math) achievement.

## Assessing Research that Works

Research Design and Sample				Quality Rating:	★★★★
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The design of the study (e.g., research plan, sample, recruitment) used to address the research question was....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Research Methods				Quality Rating:	★★★☆☆
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The research methods (e.g., measurement, analysis) used to answer the research question were...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Limitations				Quality Rating:	★★★☆☆
	Excellent Minor Limitations (★★★★)	Appropriate Few Limitations (★★★)	Limited Several Limitations (★★)	Questionable Many/Severe Limitations (★)	
The limitations of this study are...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Implications				Quality Rating:	N/A
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The implications of this research to programs, policies and the field, stated by the authors, are...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Not applicable because authors do not discuss implications					
				Overall Quality Rating	★★★★☆

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