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TITLE: A Pilot Intervention to Increase Women's Coping Skills in Family Integration after Deployment in Combat Areas

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14. ABSTRACT The goal of this research is to create an effective intervention that can contribute to the positive reintegration of women in the National Guard and Reserves into their civilian and family lives, which in turn will promote beneficial mental health outcomes for military families and our society. This mixed methods study will address two specific aims: 1) Document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment, and 2) Develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the Resiliency Model of Family Stress. Four research questions will be examined: 1. How do women in the National Guard and Reserves who have been deployed in combat zones cope with issues of family reintegration? 2. What are the specific stressors encountered and coping strategies employed by this population during reintegration? 3. How does the Resiliency Model of Family Stress serve as a framework for the development of an economical and viable coping intervention to facilitate family relationships during reintegration? 4. How does participation in a telephone-delivered coping support intervention impact on family coping skills?					
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SECTION I (purpose/scope of research effort)

The goal of this research is to create an effective intervention that can contribute to the positive reintegration of women in the National Guard and Reserves into their civilian and family lives, which in turn will promote beneficial mental health outcomes for military families and our society. This mixed methods study will address two specific aims:

- 1) Document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment, and
- 2) Develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the *Resiliency Model of Family Stress*.

Four research questions will be examined:

1. How do women in the National Guard and Reserves who have been deployed in combat zones cope with issues of family reintegration?
2. What are the specific stressors encountered and coping strategies employed by this population during reintegration?
3. How does the *Resiliency Model of Family Stress* serve as a framework for the development of an economical and viable coping intervention to facilitate family relationships during reintegration?
4. How does participation in a telephone-delivered coping support intervention impact on family coping skills?

SECTION II (progress to date)

Phase 1—Qualitative Study

In addition to the activities detailed in the 2012 Annual Progress Report, we have completed this Phase of the work. Our activities this past year focused on data analysis and dissemination. Four manuscripts have been generated; one, ‘A Gendered Perspective on Women’s Deployment’, has been accepted by the journal *Women and Health*. Three others are under review.

Title	Journal
Reintegration of Women in the National Guard after Deployment: There’s More to It Than Just Walking in the Door	Nursing Research
Women in the National Guard: Reintegration Experiences with Children after Deployment	Professional Psychology
For God and Country: The Role Of Religion and Spirituality in the Lives of Women National Guard Soldiers before, during and after Deployment	Journal for the Scientific Study of Religion

Phase 2-Quantitative Study

We developed a hypothesis, that is, that women’s post-deployment individual and family functioning is a function of:

- Prior experiences
- Deployment experiences
- Personal coping strategies
- Family functioning

Three research questions would be used to test the hypothesis. We developed a survey to answer these questions, using the findings from the Phase 1-Qualitative Survey and a literature review. The survey, its analytic strategy and the predictor and outcome variables are contained in Table 2.

Table 2: Phase 2 Survey Summary

Research Question	Analysis Plan	Predictor variables	Outcome variables
#1: What is the effect of deployment on women in the National Guard and Reserves?	Two group comparison: women who have and have not been deployed	Demographics Pre-deployment life events Religiosity Coping	PTSD assessment Stress Growth Scale Depression Post-Deployment Life Events
#2: What is the effect of deployment on the families of women in the National Guard and Reserves?	Two group comparison of women who have and have not been deployed	Demographics Pre-deployment life events Religiosity	Family Apgar Family Hardiness Parenting strain
#3: What factors influence individual and family reintegration experience?	Regression analysis of women who have been deployed	Demographics Pre-deployment life events (abbreviated) Relationships within unit Post-deployment support Religiosity Coping Self-assessment of deployment [will not use in model]	Family Apgar Family Hardiness Stress Growth Scale PTSD Assessment Depression

Table 3. Summary of Variables in Phase 2 Survey

Variable	Predictor	Outcome	# Items	Page	Citation
Demographics	X		11	3	
Family Apgar		X	5	4	
Family Hardiness		X	20	4	McCubbin, H. & McCubbin
Parenting strain		X	7	5	Adapted from: Pierce, P., Vinokur, A. & Buck, C. (1998). Effects of war-induced maternal separation on children's adjustment during the Gulf War and two

					years later. Journal of Applied Psychology, 28, 14: 1286-1311.
Religiosity	X		5	6	Koenig, H., Meador, K. & Parkerson, G. (1997). Religion index for psychiatric research: A 5-item measure for use in health outcome studies. American Journal of Psychiatry, 154: 885-886.
Coping	X		14	7	Adapted from DHHS Publication No. PHS79-50097
Depression		X	12	8	Major Depression Inventory; available at: www.ccmh.dk
Pre-deployment life events (abbreviated)	X		2	8	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Post-traumatic growth Inventory		X	10	9	Cann, A., et al., (2010). Anxiety, Stress & Coping, 23, 2: 127-137.
PTSD Assessment		X	17	10	Weathers, F., Litz, B., Huska, J., & Keant, T. (1994). The PTSD checklist-civilian version (PCL-C). Boston, MA: National Center for PTSD.
Service rewards/challenges			2	12	Developed for this survey
TOTAL FOR ALL			105		
Additional Items for Deployed Participants					
Deployment specifics	X		16	12	
Relationships within unit (Q 1-7 general; 8-14 sexual)	X		16	16	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Post-deployment support	X		15	17	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Post-deployment life events		X	7	16	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Additional items for deployed			54		

We pilot tested the survey with five participants who found the length to be acceptable.

After extensive negotiations with the Missouri National Guard, they agreed to have their female soldiers participate in the study. This permission enabled us to apply for and obtain Institutional Review Board approval from the University of Missouri-Kansas City and then from the Human Office of Research Protections, United States Army Medical Research and Materiel Command.

After securing permission from the Missouri National Guard, we continued to identify additional National Guard units in order to have a coherent sample for the quantitative survey. Because the Phase 1 survey was conducted with National Guard units and because considerably less work has been done with this population compared to that of women in the Army or Navy Reserves, our focus was on state National Guard units. Email and phone contacts with National Guard units that have a large female enrollment were initiated and followed-up. These included Texas and Pennsylvania. Suggestions from colleagues and from the Office of Congressionally-Directed Medical Research were also followed-up. The Pennsylvania National Guard and a Kansas City Naval Reserve Unit agreed to participate in early December. Commanders agreed that email solicitation for study participation might be more successful if delayed until after Christmas holidays. Therefore, emails were planned to be sent out the first week of January 2014 to female soldiers in the Missouri and Pennsylvania National Guard units and the Kansas City Reserve units

SECTION III—Current/Anticipated Problems

The survey link is planned to remain active until February 7th. A reminder email will be sent out in mid-January. We will continue to seek additional units for participation.

A current and ongoing problem has been securing access to an appropriate research population for the quantitative Phase 2 study. The original plan from the funding proposal was to send an electronic link to a population of women in the National Guard or Reserves, in order to access a sample of 500 participants for an electronic survey administration. In contacting units, we also offered to modify this strategy to include on-site data collection during National Guard meetings or trainings. However, because state National Guard units operate independently, we have had limited success in securing access to a population that would provide us with an adequate sample size. We will continue to follow-up all leads to secure access to a population of women from Army or Navy Reserve units.

SECTION IV (work during next reporting period)

We will analyze all data obtained from the Phase 2 survey. We will begin work on the intervention content and procedures, including recruitment. We propose to implement the intervention during Summer 2014.