InDependent: Creating a healthy, thriving community of military spouses PI: Dr. Emily Mailey, Department of Kinesiology, Kansas State University

Statement of need:

There are over 1 million military spouses nationwide; 93% of them are female. Increasingly, military spouses are being recognized as a cornerstone of the health and wellness of the military family. Research has shown that family leadership by the spouse is critical to family wellness, particularly during deployment. The health behaviors of spouses are likely to have a direct impact on the entire family, including military service members and their children. Unfortunately, evidence suggests a majority of military spouses are not engaging in health promoting behaviors, and many report high levels of stress, anxiety and depression that further compromise physical and mental health.

Due to the stressful nature of military family life, military spouses face unique barriers to maintaining a healthy lifestyle, which includes engaging in physical activity and maintaining a healthy diet. As spouses try to juggle the demands of multiple roles, including partner, parent, employee, and caregiver, their own health and well-being are often sacrificed. Furthermore, military spouses must endure frequent transitions, including family relocations and spouse deployments, which contribute to feelings of stress, isolation, and depression. These transitions also make it difficult to establish a reliable support network, which is one of the strongest buffers to stressful life events and, in turn, a robust predictor of health and health behavior.

Although a variety of health promotion programs targeting military families have been developed since the early 1980s, none have specifically targeted the unique needs and circumstances of military spouses. New, cost-effective programs that are designed to motivate and empower military spouses to make their own health and wellness a priority are needed. Specifically, evidence suggests that having a strong social support network and the "sisterhood" among military wives is of paramount importance to the well-being of today's military spouses. As over 30 years of research shows that social networks are powerful determinants of health and health behavior in the general population, targeting spouses' social networks is likely to be an effective strategy for promoting health in this population.

In response to the recognized need for a health promotion program tailored towards military spouses, Michele Bradfield launched InDependent in October 2013. The mission of InDependent, a website sponsored by Public Health Foundation Enterprises, Inc., is to create a thriving community of military spouses who inspire each other to make health and fitness a priority. Since its inception, InDependent has built a social media following of more than 2,000 military spouses and averages 5,800 blog views per month. At present, however, its capacity is limited in several ways. First, the program is primarily an informational resource. To truly impact the social environment and health behavior of military spouses, the website needs to be enhanced by evidence-based behavior change strategies. Second, the program is likely not reaching underserved populations who are most in need. A more systematic, collaborative approach to disseminating the program is needed.

Engaged activities:

From the outset, the InDependent team's vision has been to create a sustainable program in which spouses can enroll to access the support and resources they need to enhance their health. In north central Kansas, we are ideally situated to develop this program and implement it effectively. We are uniquely equipped to bring together behavioral scientists with expertise in developing health promotion programs with military and community partners who will ensure the program reaches spouses in need. Kansas State University and Fort Riley have a recent history of collaboration that has resulted in an enhanced sense of integration between the two entities. This partnership, however, has not yet focused on programming for military spouses, so this project represents an important step forward for our community.

Once funding is awarded, we will expand the InDependent website to incorporate evidence-based strategies that facilitate physical activity and dietary behavior change among military spouses. We will develop a 12-week curriculum that incorporates a host of interactive features including home-based workouts, weekly food challenges with printable recipes, meal and activity planners, in-person small group activities (yoga class, stroller walking, etc.), and discussion boards. We will also develop a detailed resource guide that outlines local health-promoting resources. Each participant will receive a welcome kit that includes the resource guide and other items to support an active, healthy lifestyle.

Once developed, we will partner with Fort Riley for marketing and outreach. We aim to enroll 200 spouses in the program. First, we will communicate with Fort Riley Garrison to identify units who are deployed or preparing to deploy. This is a particularly difficult time for spouses during which participation in a socially oriented health promotion program could have a significant impact on physical and mental health. In addition, the Army Wellness Center (AWC) and the Family Readiness Groups (FRG) will become agents for referral to InDependent. All spouses are assigned to an FRG when they come to Fort Riley, so by working directly with FRG leaders we will establish a consistent referral system and significantly increase the program's reach. In addition to spouses of deployed soldiers, the program will target, but not be limited to, spouses married to service members with the rank of E4 or below, earning basic pay of \$2,400 or less per month. This subpopulation was identified as a critical needs group for whom a free, easily accessible web-based program is likely to be a valuable resource.

A core feature of the program will be the use of group dynamics strategies to strengthen social ties between members. Upon enrollment in the program, participants will be prompted to either create or join a team. Each team will have 5-8 members and a team captain. Captains will be military spouses who agree to play a leadership role within their communities. We will conduct a team captains training session to equip captains with the necessary information to oversee weekly web-based team activities and maintain active, supportive relationships with their teammates. This will remove some of the administrative burden from the project team and also create an important link between the research team and the target population. Throughout the 12-week program, there will be multiple group-based challenges that prompt members to set individual and group goals, monitor their progress, provide instrumental and emotional support to each other, and ultimately work together to achieve collective health improvements.

Project timeline:

- July-December 2015: Develop resource guide and intervention materials; Update website content and structure
- January-February 2016: Marketing and outreach; Recruit participants for intervention and collect baseline data
- March-May 2016: Implement 12-week behavior change program
- June 2016: Conduct post-program evaluations; Gather quantitative and qualitative data
- July-December 2016: Analyze data and submit for publication; Prepare and submit NIH grant application; Make plans for ongoing integration with Fort Riley

Benchmarks:

Short-term impact: We expect this project to result in an innovative and feasible web-based health promotion program for military spouses. The program will affect military spouse health in two specific ways: by reducing isolation and by improving health behaviors (specifically physical activity and healthy eating). An equally significant impact of this engaged work will be capacity building. We will develop a cohesive multidisciplinary team with a common goal to improve health among military families and communities. This will lay the foundation for future collaborations that will be mutually beneficial to all affiliated university, military, and community partners.

Long-term impact: Because we plan to integrate the InDependent program into existing services at Fort Riley by establishing a reliable referral system, its impact will be sustainable and ongoing despite the transient nature of the Fort Riley population. Furthermore, because the program will be entirely web-based, it has the potential to reach and benefit military spouses throughout the country. We plan to apply for federal funding from the National Institutes of Health to support the dissemination of InDependent on a broader scale. The present project will provide critical pilot data to strengthen future NIH applications.

Collaborative partners:

We have assembled a team of university, community, and military partners who have a vested interest in military spouse health. We have met as a group to discuss challenges and opportunities related to working with this population, and believe this project represents a logical and feasible first step forward.

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Other K-State Collaborators: Dr. Brandon Irwin, Department of Kinesiology; Dr. Briana Nelson-Goff, Institute for the Health and Security of Military Families Director; Art DeGroat, Executive Director of Military and Veteran Affairs

Military Partners (Fort Riley): Colonel Paul Benne, Department of Public Health Chief; Kendra Seat, Army Wellness Center Director; Shawn Perry, Comprehensive Soldier and Family Fitness Training Center Manager; Julia Pleasants, Health Promotion Program Assistant Community Partners: Michele Bradfield, InDependent founder; Janet Nichols, Manhattan Chamber of Commerce Military Community Liaison

A unique feature of our community is the comprehensive higher education-to-military institutional partnership that was developed in 2008. A Partnership Resolution was signed by the University President and the Commanding General of the 1st Infantry Division at Fort Riley to legitimize the formal collaboration between both institutions. This partnership has laid the groundwork for effective collaboration between K-State and Fort Riley in order to better serve the mission and needs of both organizations. This project will benefit from this partnership and further reinforce the sense of integration between our two entities.