

## Battlemind Training: Transitioning Home from Combat

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All Soldiers returning from combat encounter a paradox. The behaviors and emotions that kept them alive on the battlefield are not appropriate for their homes and families. They've come from physically harsh, mentally demanding, chaotic and dangerous circumstances where no alcohol is permitted and where there are no civilian friends or close family members with whom to relate. Destruction, injury, and death have been ever present in the combat zone. Furthermore, Soldiers sometimes feel that they have left behind unfinished work in the war zone. Although transitioning from combat to home can be difficult, most Soldiers make this transition successfully. This is not to say that Soldiers do not experience readjustment problems and that they do not need help. Many Soldiers encounter readjustment problems ranging from elevated post-traumatic stress disorder symptoms to sleep problems to marital and family issues. However, most Soldiers will not seek help due to the psychological stigma associated with admitting to having a mental health problem. Incredibly, there is not a validated training approach to assist Soldiers in the transition home process. The present study provides the first empirical support that mental health training, called "Battlemind Training," can help Soldiers navigate the challenges from transitioning from combat to home.

Methods: "Battlemind" is the Soldier's inner strength to face fear and adversity in combat with courage. The two components of Battlemind are self-confidence and mental toughness; strengths that all Soldiers must have to successfully perform in combat. The key precept in Battlemind Training is that *all* Soldiers have the necessary skills to successfully transition home. By building on the Soldiers' existing skills and inner mental strengths, the

transitioning home process can be enhanced. Through Battlemind Training, Soldiers are shown how their combat skills, if not adapted for home, may interfere with their transitioning process. Battlemind training focuses on ten specific skills, using the word B-A-T-T-L-E-M-I-N-D, and emphasizing how it is possible to avoid the problems that can occur when Soldiers go, in a matter of hours, from the battlefield to the home front.

Buddies (cohesion) vs. **Withdrawal**  
Accountability vs. **Controlling**  
Targeted Aggression vs. **Inappropriate Aggression**  
Tactical Awareness vs. **Hypervigilance**  
Lethally Armed vs. **"Locked and Loaded" at home**  
Emotional Control vs. **Anger/Detachment**  
Mission Operational Security (OPSEC) vs. **Secretiveness**  
Individual Responsibility vs. **Guilt**  
Non-defensive (combat) Driving vs. **Aggressive Driving**  
Discipline and Ordering vs. **Conflict**

Each of these relationships reveals how behaviors and reactions in combat need to be adapted back home. Soldiers are taught to change how they might react or think now that they are back home. Emphasis is placed on Soldier safety and Soldier relationships. In addition to the leadership training and handouts/brochures provided for individual Soldiers, Battlemind Training assists Soldiers to identify specific symptoms that require help. The training includes detailed direction for seeking care, based on contact information, for local and remote guidance.

In the present study, Soldiers returning home from a year of combat duty in Iraq were randomly assigned by platoon to one of two conditions: Standard Stress Education or Battlemind Training. All Soldiers (N = 860) completed a survey prior to training and again 3

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months later. The survey consisted numerous scales and items, including a 31-item Combat Experience Scale, the 17-item Post Traumatic Disorder Check List (PCL), the Patient Health Questionnaire (PHQ) for depression, a 4-item anger scale and a 7-item psychological stigma scale.

Analysis: Multi-level analyses were conducted where Combat Experience and the Intervention (Battlemind Training versus Standard Stress Education) were the main the effects, with the interaction being Combat Exposure X Intervention. All analyses controlled for any differences in rank, gender, unit type, pre-intervention scores, and company-level effects.

Results: Soldiers who experienced a high number of Combat Experiences (greater than 20 combat experiences) and received Battlemind Training reported fewer mental health problems and less stigma compared to Soldiers who received the Standard Stress Education Training. Specifically, at 3 months post-deployment, Soldiers who received Battlemind Training reported fewer Post-traumatic disorder (PTSD) symptoms ( $p < .01$ ), fewer depression symptoms ( $p < .05$ ), lower anger scores ( $p < .10$ ) and lower psychological stigma scores ( $p < .01$ ) compared to Soldiers who received the Standard Stress Education training.

Discussion and Conclusions: The objective of Battlemind Training is to show Soldiers how to transition their skills from combat to home. The present findings provide the first empirical evidence that post-deployment mental health training works. For Soldiers who were exposed to large number of combat events, Battlemind Training resulted in fewer PTSD and depression symptoms, as well as lower anger and stigma scores. Thus, effective mental health training must be built on solid practical learning theory. The next step must be the development of mental health training modules that help Soldiers and their families navigate the life transitions during all phases of the deployment cycle, including pre-deployment, post-deployment and sustainment phases. For instance, pre-deployment Battlemind Training needs to focus on what Leaders and Soldiers can expect to occur in the combat environment and the specific actions that they can take to minimize the impact that combat can have on their mental health and well-being. Perhaps most importantly, future mental health training must reinforce the importance of developing one's Battlemind for combat.

The views expressed in this abstract are those of the authors and do not reflect official policy of DoD, Department of Army of the U.S. Army Medical Command.



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# Background

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- War is hell, and the multiple psychological consequences are well known (e.g. PTSD, physical symptoms, alcohol abuse, aggression).
- This war is unique in the proactive stance toward mental health issues by DoD leaders.
- Key behavioral health strategies:
  - Research that informs policy as war is ongoing
  - Recognition of importance of stigma / barriers to care
  - Population based screening at <1 week and 3 months post-deployment
  - Improved mental health services in primary care
  - Efforts to develop and test early intervention strategies



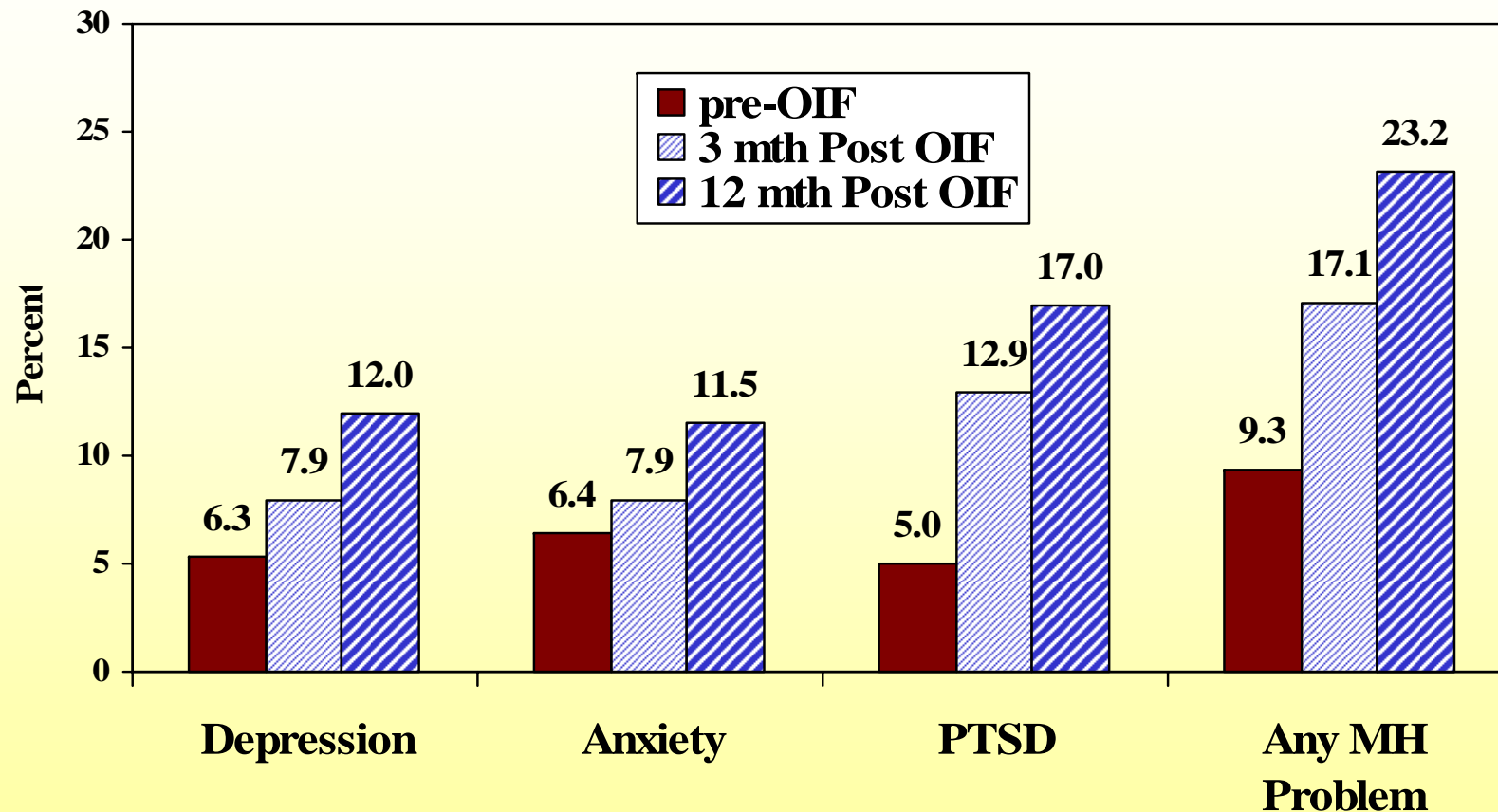
## Measuring the MH Impact of OIF / OEF

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- Robust data are now available:
  - Population-Based Post-Deployment Health Assessments at <1 week and 3-6 months
    - Brief validated screening survey plus primary care interview
    - Not anonymous, linked to clinical care
  - Land Combat Study (Infantry focused-surveys)
    - Cross-sectional surveys of infantry Brigade Combat Teams throughout deployment cycle (n>30,000).
    - Anonymous with informed consent
  - Health Care Utilization Data (also population-based)
    - All military clinical facilities
    - VA Facilities
  - Validation studies of deployment screening tools



# Percent of Soldiers Screening Positive for MH Problem Pre- and Post-Deployment



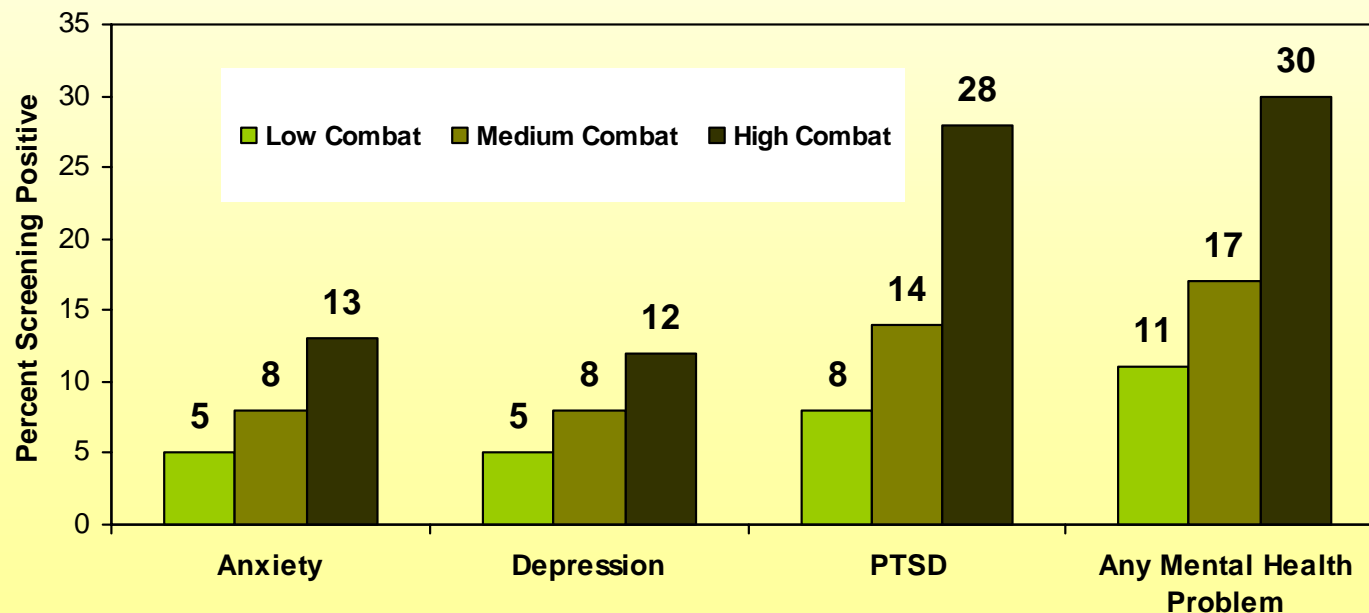
- The prevalence of PTSD increased during the first year post-deployment of a Brigade Combat Team.

(Castro & Hoge, 2005)



# Mental Health and Combat

- Soldiers were divided into low, medium and high combat based on frequency of combat events during the deployment.
- Soldiers with higher levels of combat were more likely to screen positive for anxiety, depression, or PTSD, indicating that all Soldiers are NOT at the same level of risk for a mental health problem.







## Summary of Data

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- Approximately 10-15% of Soldiers develop PTSD after deployment to Iraq.
- An additional 10% have significant symptoms of depression, anxiety, or PTSD and may benefit from care.
- The normal trend is for symptoms to be low at immediate reintegration and to increase over the course of the year.
- The more combat experiences reported, the more mental health issues, including PTSD.
- However, many Soldiers in need of mental health care still don't seek help, due to stigma and other barriers.



# Post-Deployment Early Interventions

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- No standardized combat and deployment stress training packages prepare Soldiers for the stressors of war and for their return home from war.
- No data exist on efficacy of early interventions at post-deployment
- Need early intervention that can be applied at the unit level
  - Be consistent with military culture
  - Integrate with post-deployment processes
  - Address stigma issues by not singling out just those Soldiers at high risk
  - Educate: Normalize that combat affects everyone
  - Train: Reinforce actions that individuals, buddies and leaders can take



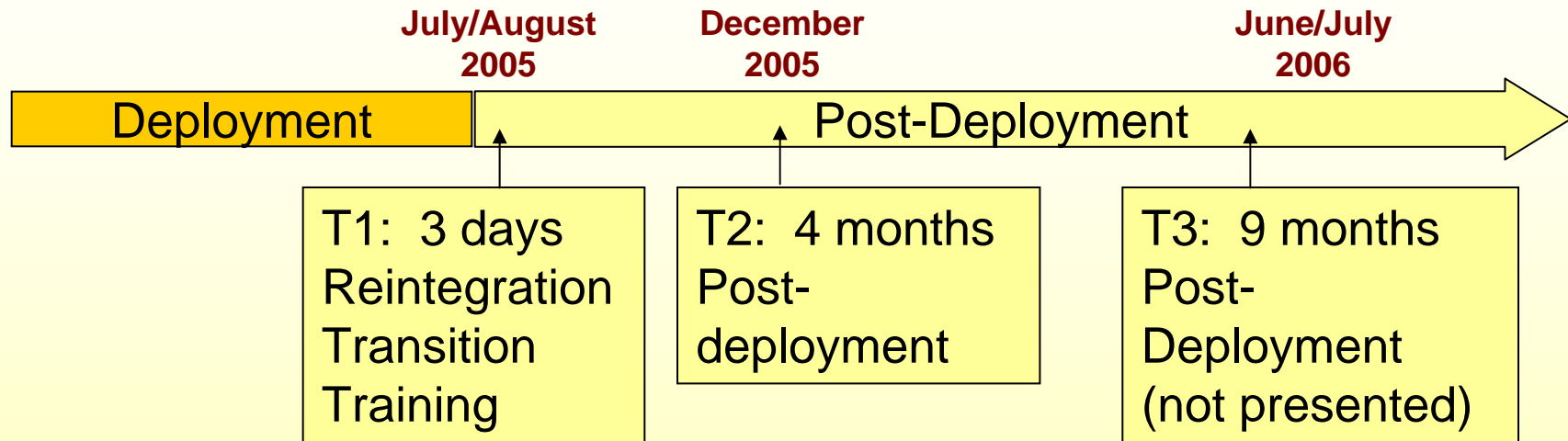
# Transition Intervention Study

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- Compared transition interventions for Soldiers returning from a year in Iraq on their first day of unit Post-Deployment Processing
- All intervention types:
  - Identified and normalized post-deployment reactions
  - Described when a Soldier might want to seek help
  - Listed resources in the community
- Early interventions compared:
  - Post-deployment stress education (large group)
  - Battlemind Training (small group)
  - Battlemind Training (large group)



# Combat-to-Home Transition Study



## •Research Questions

- What is the user acceptability of these interventions?
- Do the interventions prevent the typical pattern of symptoms increasing at the 4-month follow-up?



# Post-Deployment Stress Education (1 of 2)

- PowerPoint Presentation
- Developed by US Army Medical Command and adapted by local military mental health experts
- Not designed for interaction
- Conducted in large groups (+700)

**DEPLOYMENT STRESS**

**Purpose**

- To provide an understanding of the thoughts, feelings, and behaviors that are common to most service members after redeployment.

**When Normal Reactions become Problematic**

- Functional impairment: anything that significantly interferes with a soldier's ability to do the things that he or she needs to do in any important area of life (work, home, family, social, spiritual)

**Common Reactions (Interpersonal)**

- Feeling overwhelmed
- Frustration
- Irritability
- Depression
- Guilt
- Feeling emotionally numb (often described as "I just don't feel much of anything anymore")
- Concentration problems
- Memory problems
- Crying spells
- Loss of trust
- Loss of interest/motivation
- Fatigue
- Sleep disturbance
  - Oversleeping
  - trouble falling asleep
  - waking up in the middle of the night)
- Feeling jumpy
- Flashbacks

**What leaders can do**

- Identify warning signs
- Intervene early, refer when necessary
- Maintain proper confidentiality: make getting help safe
- Support access to treatment
- Recognize and eliminate barriers to seeking help:
  - Fear of appearing weak
  - Worry about being treated differently
  - Worry about being blamed
  - Worry about lack of support by Command
  - Fear that mental health treatment will hurt career



## Post-Deployment Stress Education (2 of 2)

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- Deployment Stress:
  - Military duty
  - Homecoming
  - Exposure to reminders
- Common reactions
  - Recommended courses of action
  - When to seek help
- More serious problems (PTSD, anxiety, depression, substance abuse, physical problems)
- What leaders can do
- Normalization of experiences following deployment
- Coping mechanisms
- Referral sources



## Battlemind: Definition

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**Battlemind** – the Soldier’s inner strength to face fear and adversity in combat with courage. This is resiliency...

Key components include:

- Self-confidence
  - Take calculated risks
  - Handle future challenges
- Mental toughness
  - Overcome obstacles or setbacks
  - Maintain positive thoughts during times of adversity and challenge.



# Battlemind Training Goals

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- Battlemind Training is designed to be:
  - **Evidence-based:** Built on findings from the Land Combat Study.
  - **Experience-Based:** Uses examples that Soldiers can relate to.
  - **Strengths-based:** Builds on existing Soldier strengths and skills – rejects a deficit or illness model.
  - **Training:** Focuses on skill development – not education.
  - **Explanatory:** Highlights conflicted/misunderstood reactions.
  - **Team-based:** Self awareness through helping buddy.
  - **Action-Focused:** Discusses specific actions to guide Soldier behavior.





## Battlemind Training (Post-Deployment I)

- The objective of the **post-deployment** Battlemind Training I is the resetting the Soldiers' Battlemind.
- The major content areas of BMT-I include:
  - Soldier safety and personal relationships
  - Normalizing combat-related mental health reactions and symptoms
  - Teaching Soldiers when they should seek mental health support for themselves or for their buddies



## Battlemind Skills

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Developed skills based on the term “Battlemind.”

- **Buddies (cohesion) vs.** Withdrawal
- **Accountability vs.** Controlling
- **Targeted Aggression vs.** Inappropriate Aggression
- **Tactical Awareness vs.** Hypervigilance
- **Lethally Armed vs.** “Locked and Loaded” at Home
- **Emotional Control vs.** Anger/Detachment
- **Mission Operational Security (OPSEC) vs.** Secretiveness
- **Individual Responsibility vs.** Guilt
- **Non-Defensive (combat) Driving vs.** Aggressive Driving
- **Discipline and Ordering vs.** Conflict



# Participants

- 1,146 Soldiers completed T1 and T2 surveys and provided informed consent under IRB-approved protocol

	Post-Deployment Stress Education	Large Battlemind Training	Small Battlemind Training
Number of Soldiers participating at T1 and T2	248	322	283
Number of Sessions	5	6	23
Range of session participants	51-257	126-225	18-45



# Participants

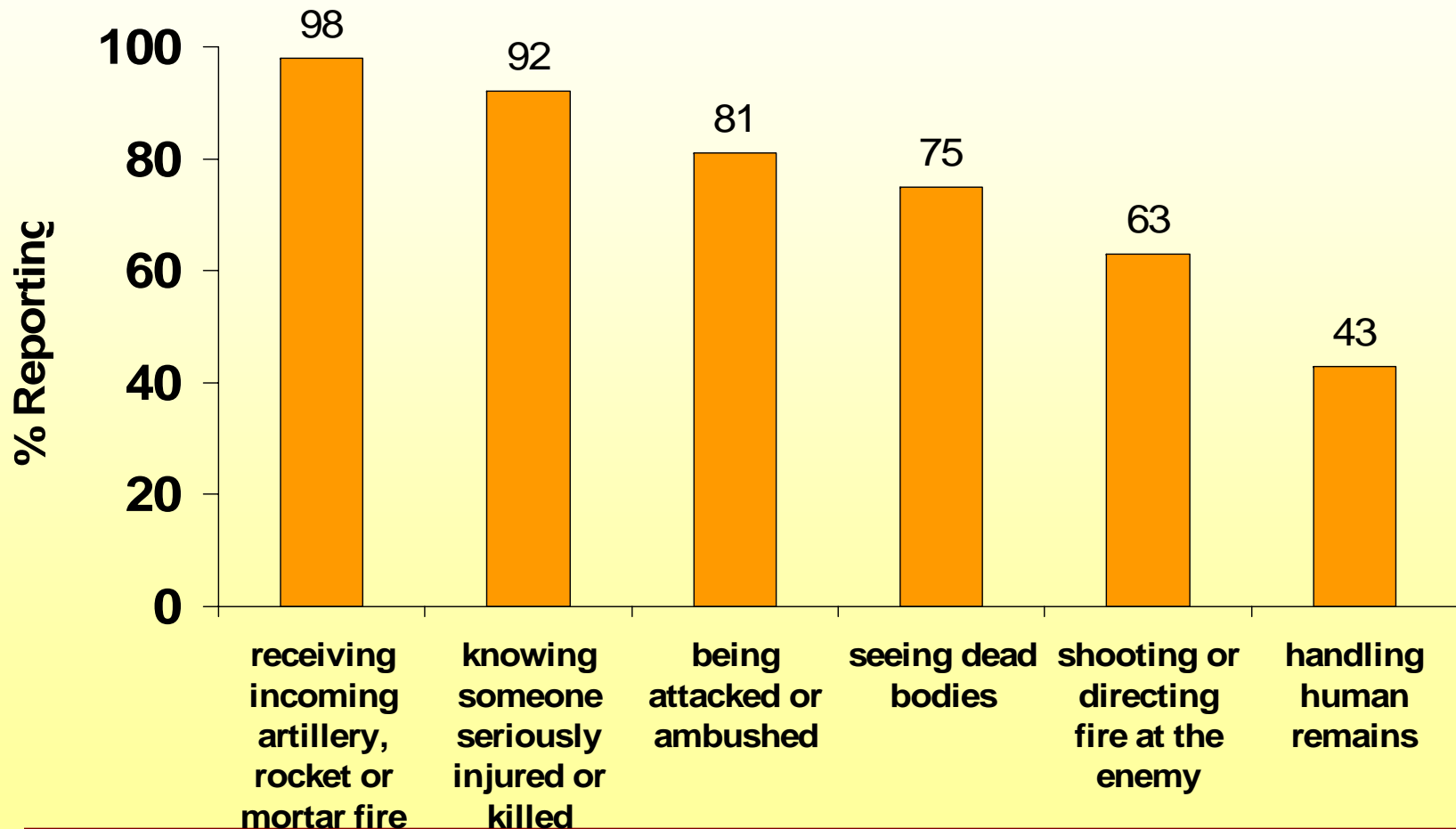
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- Demographics
  - 95.8% Men; 4.2% Women
  - 77.6% Combat Arms; 22.4% Non-Combat Arms\*
  - 66.2% Jr Enlisted, 27.8% NCOs, 6.0% Officers\*
  - 32.9% Married
- Company Effects
  - 34 Companies
- High levels of combat exposure



# Combat Experiences

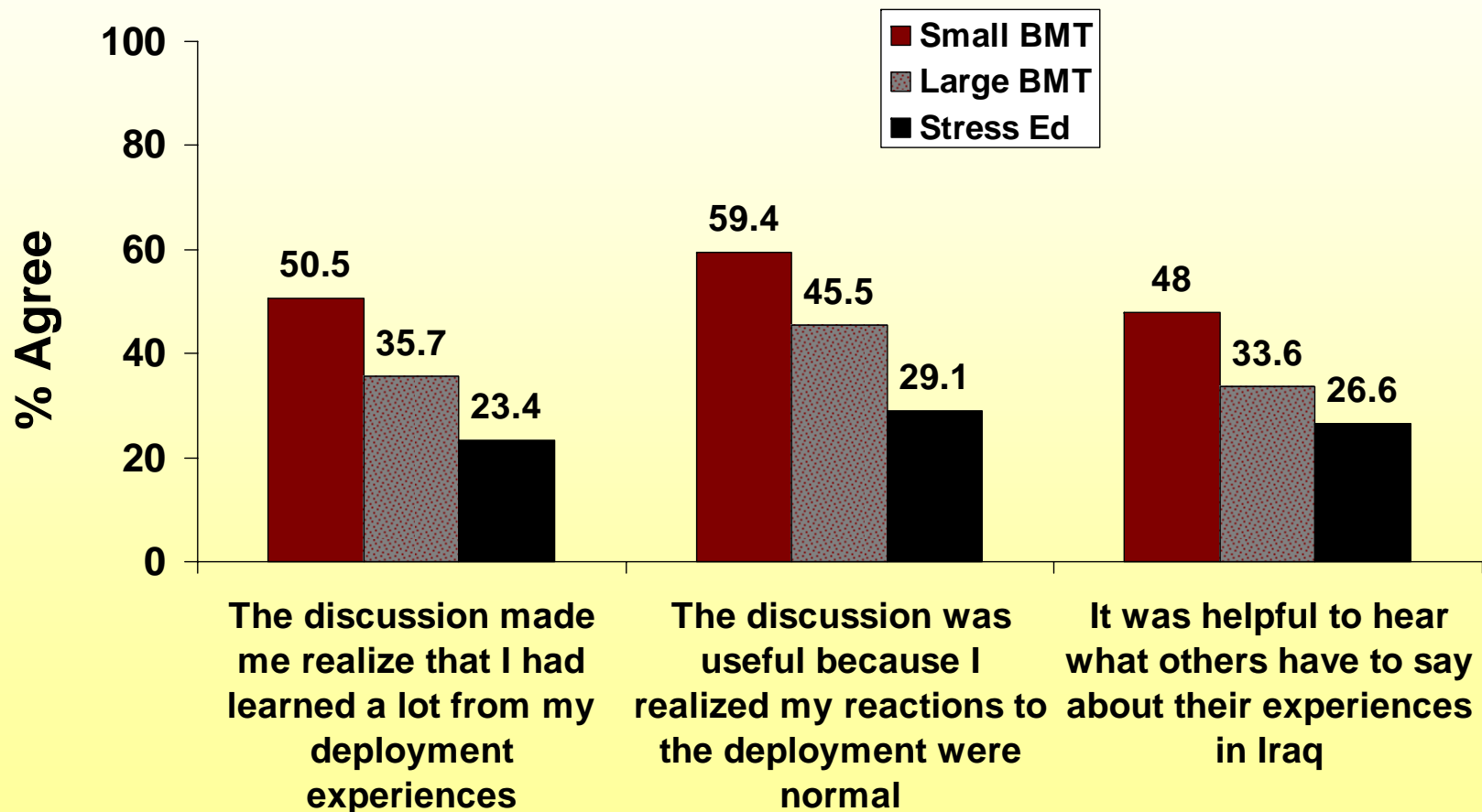
- On a scale of 0-34 negative combat-related events; median split occurred at 17 events.





## Soldier Attitudes: Training Utility

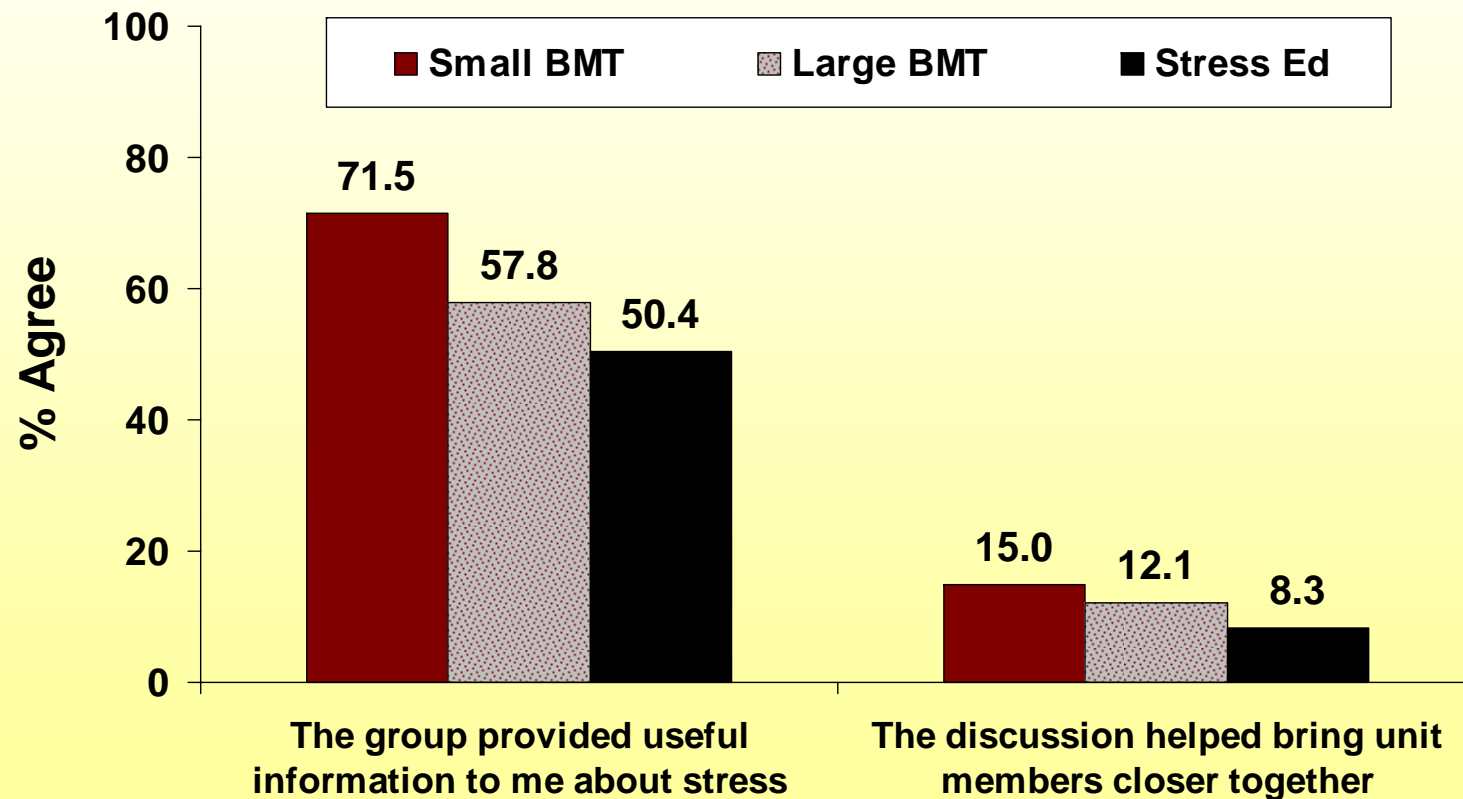
- Battlemind Training had high ratings.





## Soldier Attitudes: Training Goals

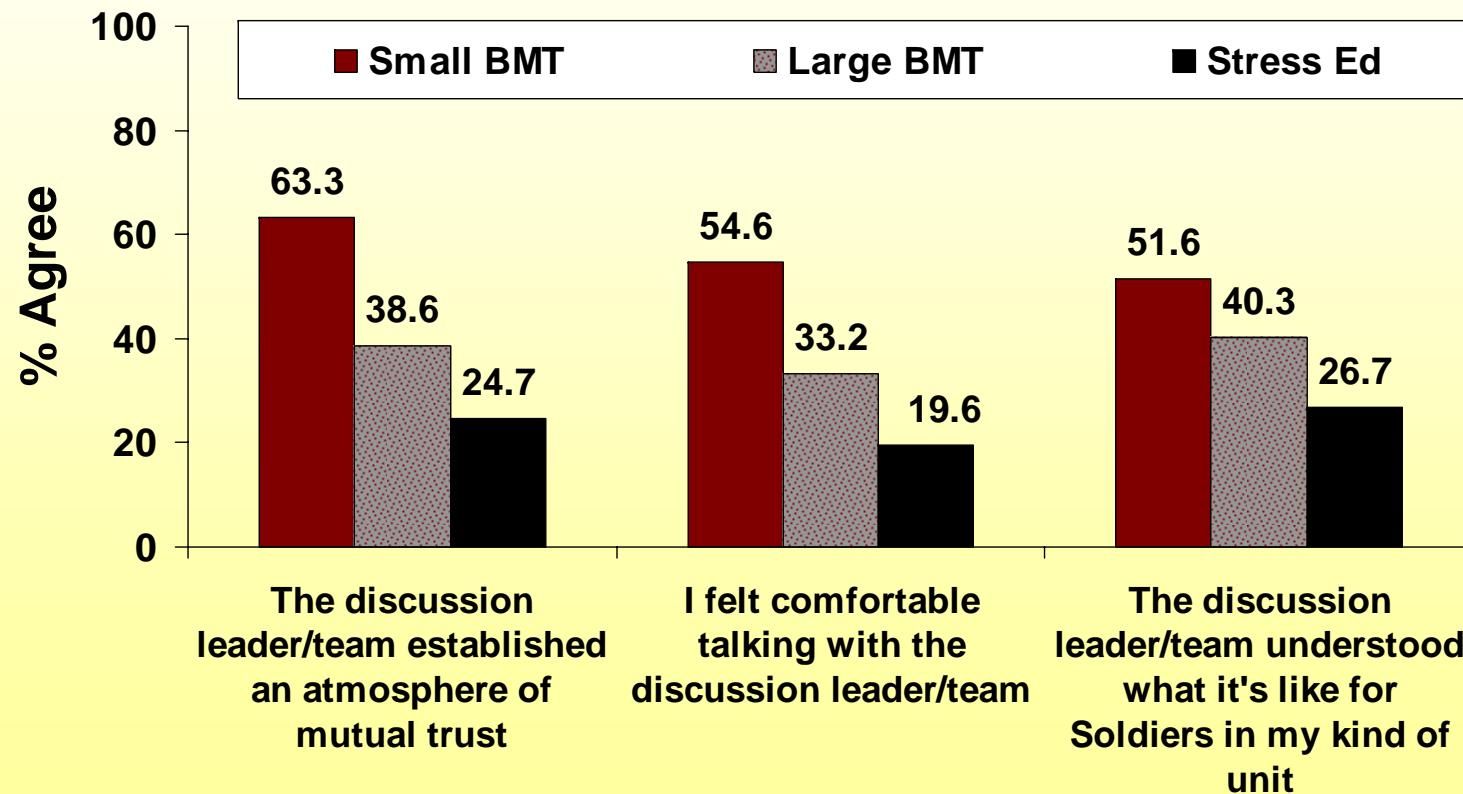
- Battlemind Training and Stress education provided useful information.





## Soldier Attitudes: Atmosphere

- Battlemind Training created supportive environments.







## Analysis Strategy: Nested RCT

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- RCTs normally assign individuals to conditions
  - Assumes individuals are independent
- RCTs using groups are rare
- Military groups are nested
  - Platoons are nested within Companies
  - Platoon members have interactions with Company members
  - Health outcomes are partially influenced by shared experiences and interactions
- Analysis needs to take group-level nesting into account



## Analysis Strategy: Covariates

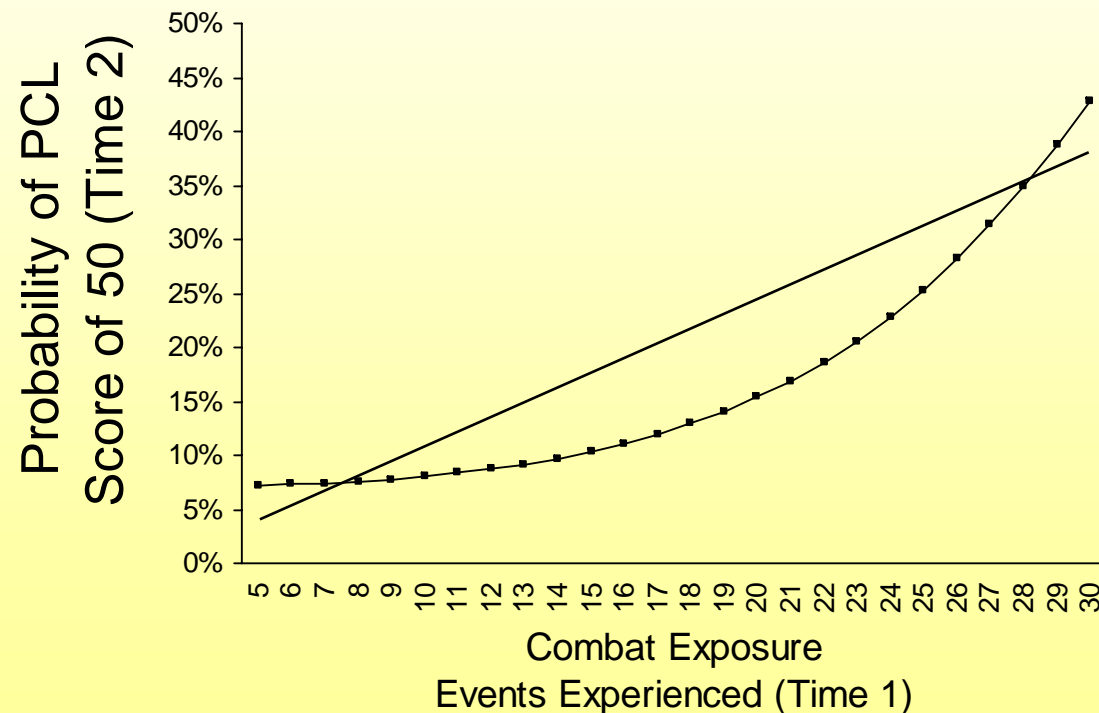
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- Randomization may not generate entirely equal conditions at T1
  - Unit type
  - Rank
  - Pre-intervention symptoms
- Other covariates examined, but no differences across intervention conditions
  - Gender
  - Previous debriefing
  - Trainer effects



## Analysis Strategy: Combat Experiences

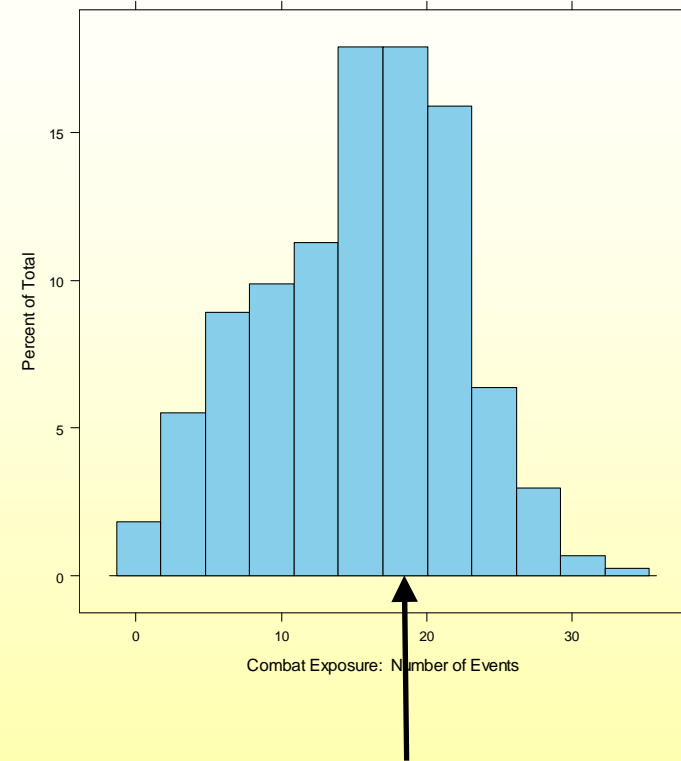
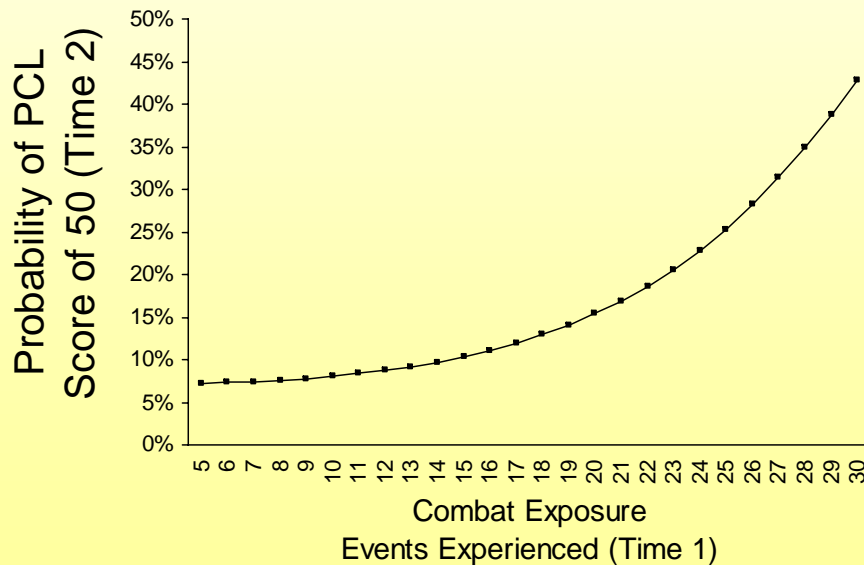
- Theoretical assumption incorporated into analyses
  - Individual combat experiences are related to health outcomes (linear and quadratic)
  - Intervention condition may interact with combat experiences





# Combat Events and Symptoms

- The sum of combat events is normally distributed
- A large percentage of Soldiers report more than 17 combat events





# Analysis Strategy: Mixed Effects Model

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- Mixed-effects analyses used to control for:
  - Group-level nesting
  - Covariates
- Basic mixed-effects model applied to data
  - Random effects for company to control for nesting
  - Fixed effects for covariates
  - Main predictors
    - Intervention Conditions
    - Combat Exposure (linear and quadratic trend)
    - Exposure X Intervention Interaction



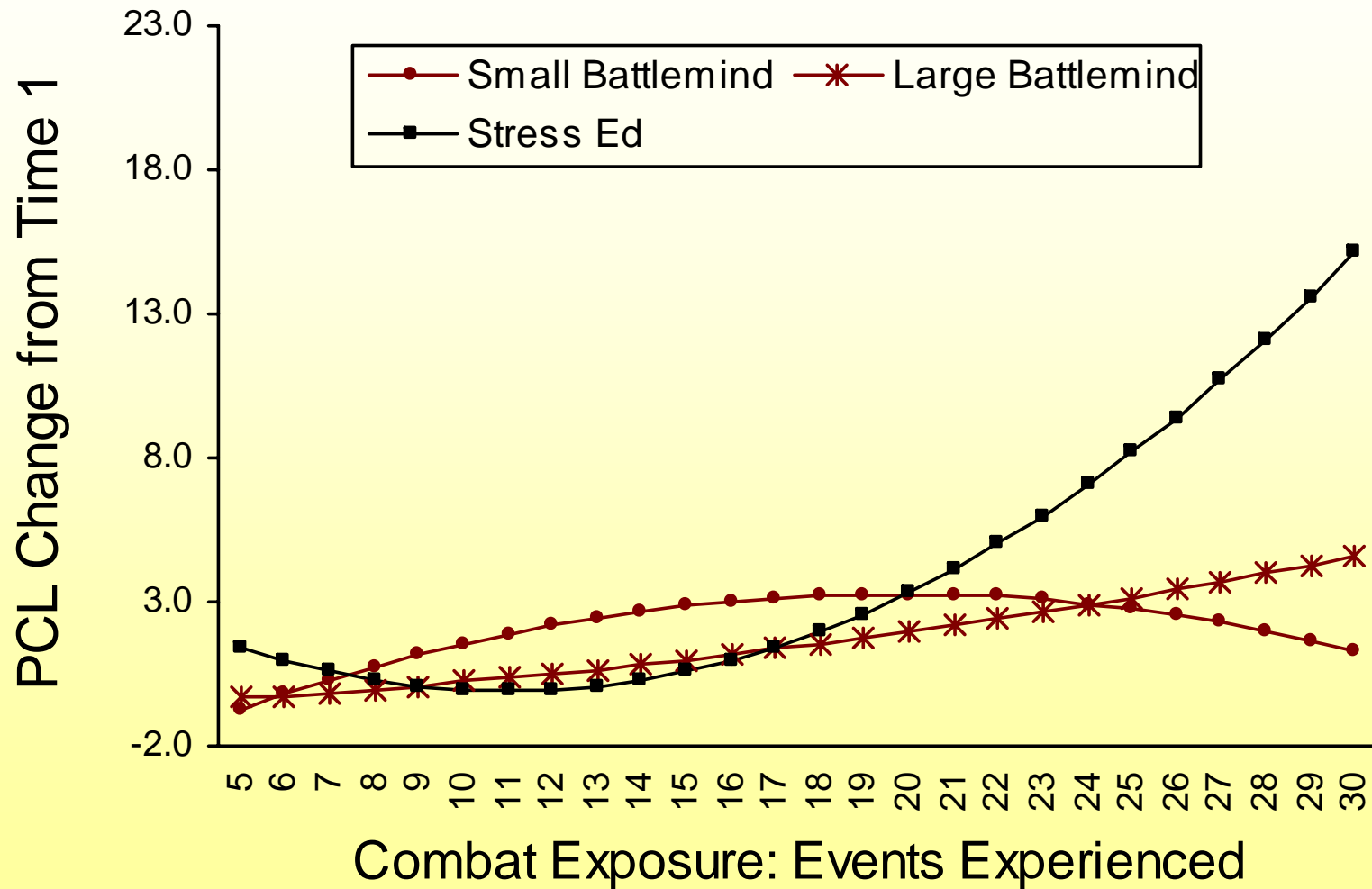
# Key Outcomes

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- Clinical Symptoms
  - Post-Traumatic Stress Disorder Symptoms (PCL; Weathers et al., 1993)
  - Depression Symptoms (PHQ-D; Spitzer et al., 1999)
  - Aggressive Behaviors (adapted from Land Combat Study)
  - Sleep Problems (Bliese et al., 2005; Morin et al., 1993)
  - Alcohol Problems (Brown et al., 2001)
- Work Attitudes
  - Perceived Organizational Support (Lynch et al., 1999)



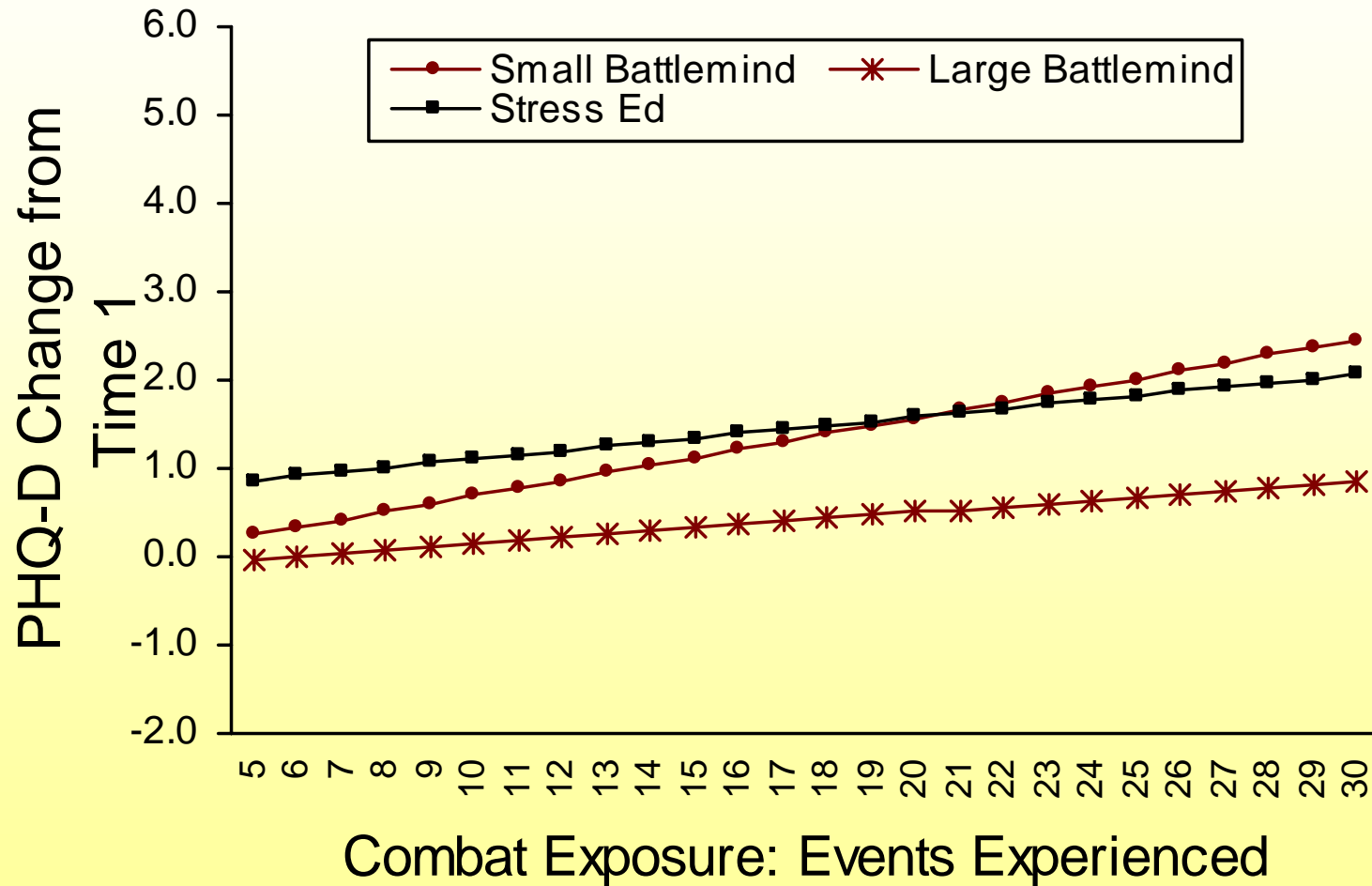
# Post-Traumatic Stress



NOTE: Quadratic effect for Large and Small Battlemind



# Depression Symptoms

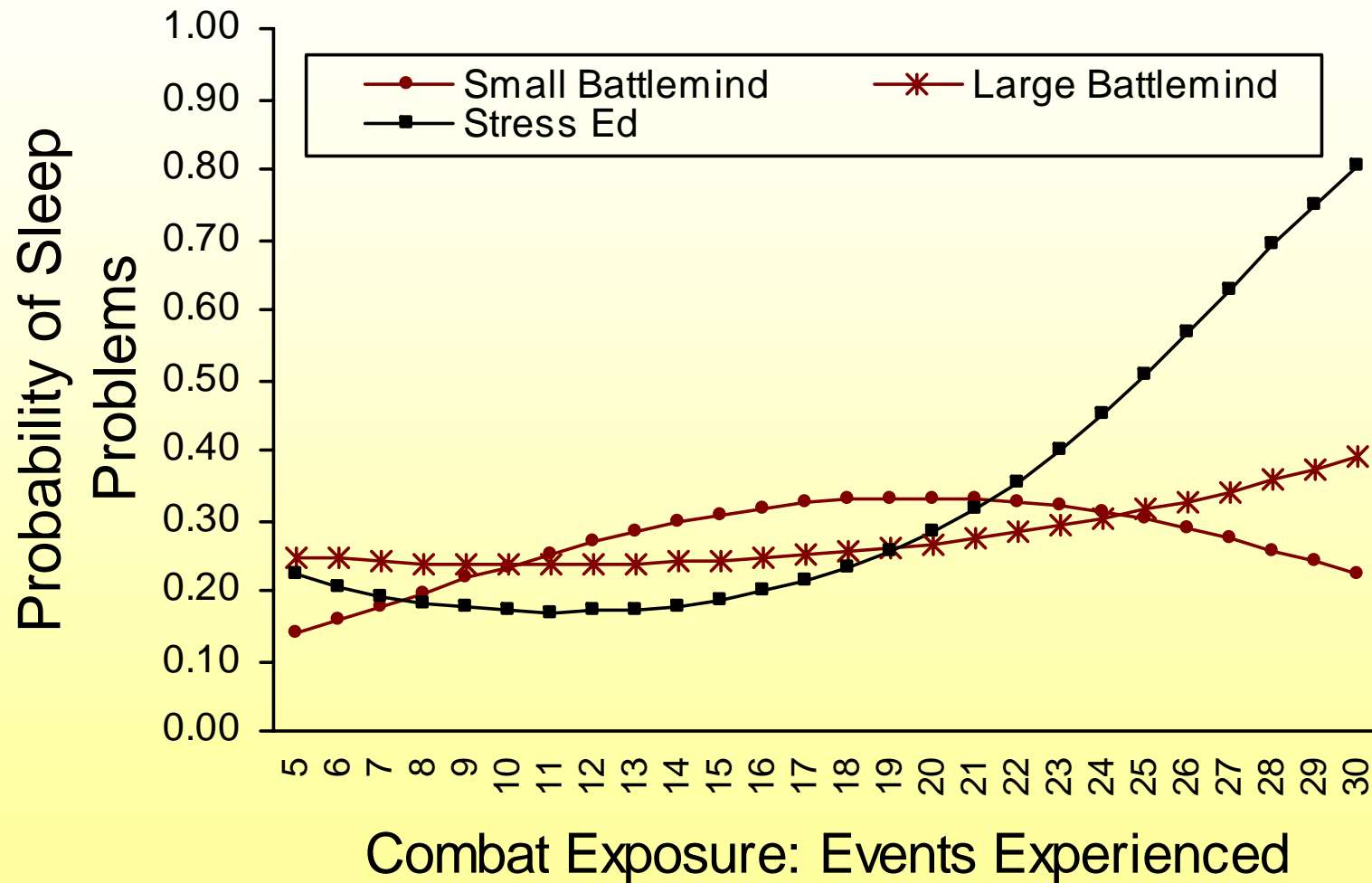


NOTE: Linear effect for Large Battlemind





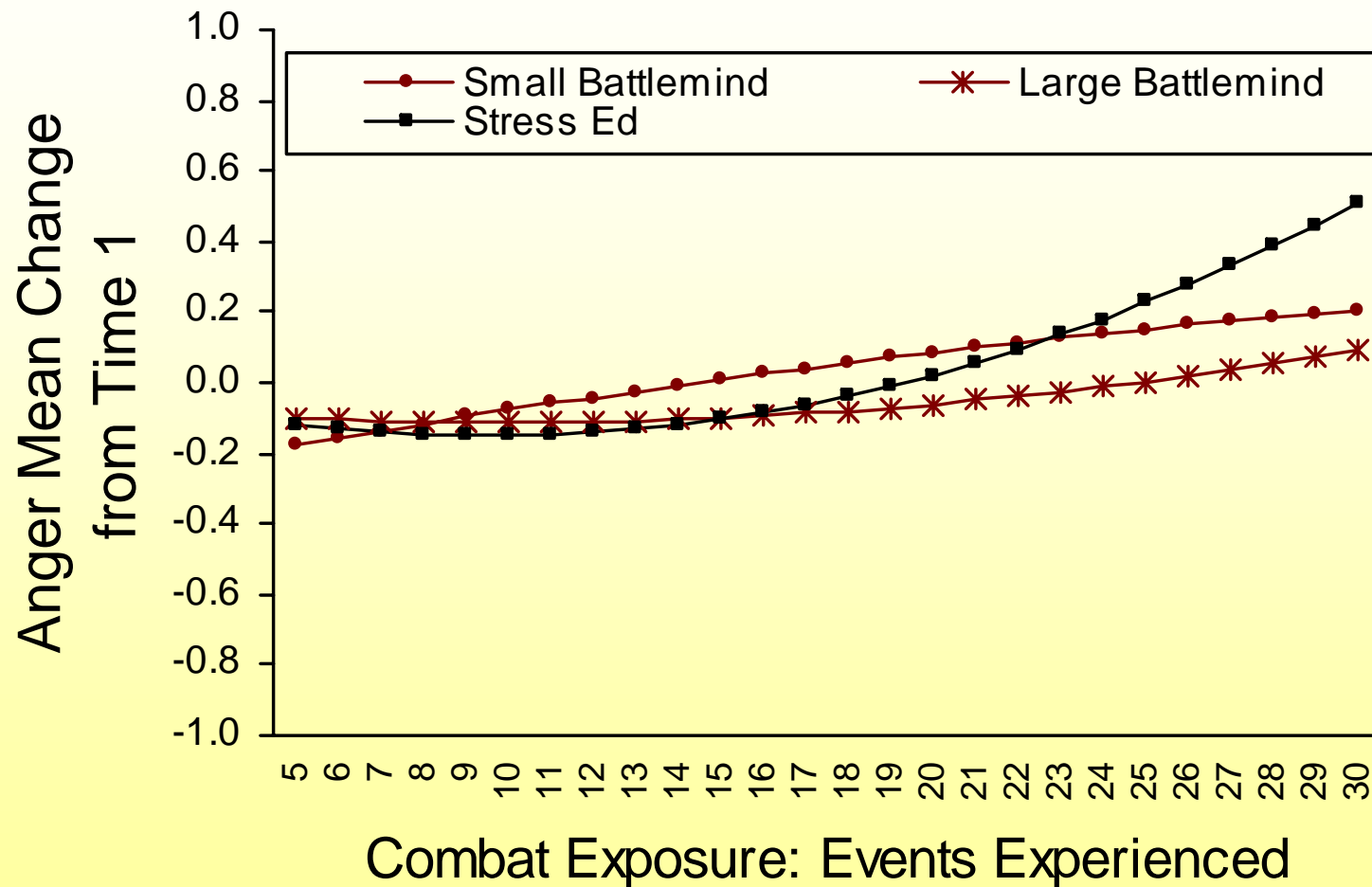
# Sleep Problems



NOTE: Quadratic effect for Small Battlemind, trend for Large Battlemind



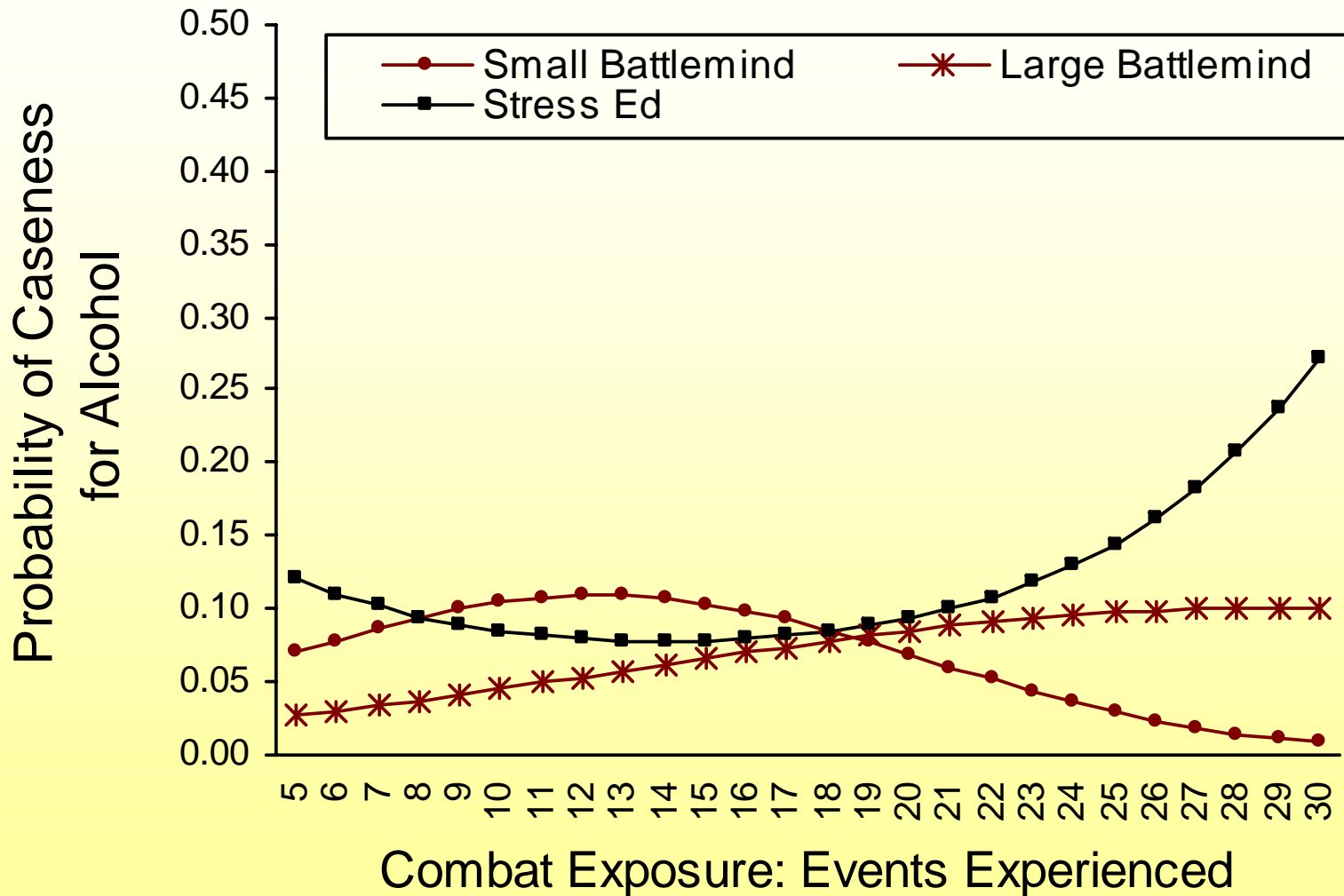
# Anger Problems



NOTE: No effect of Battlemind.



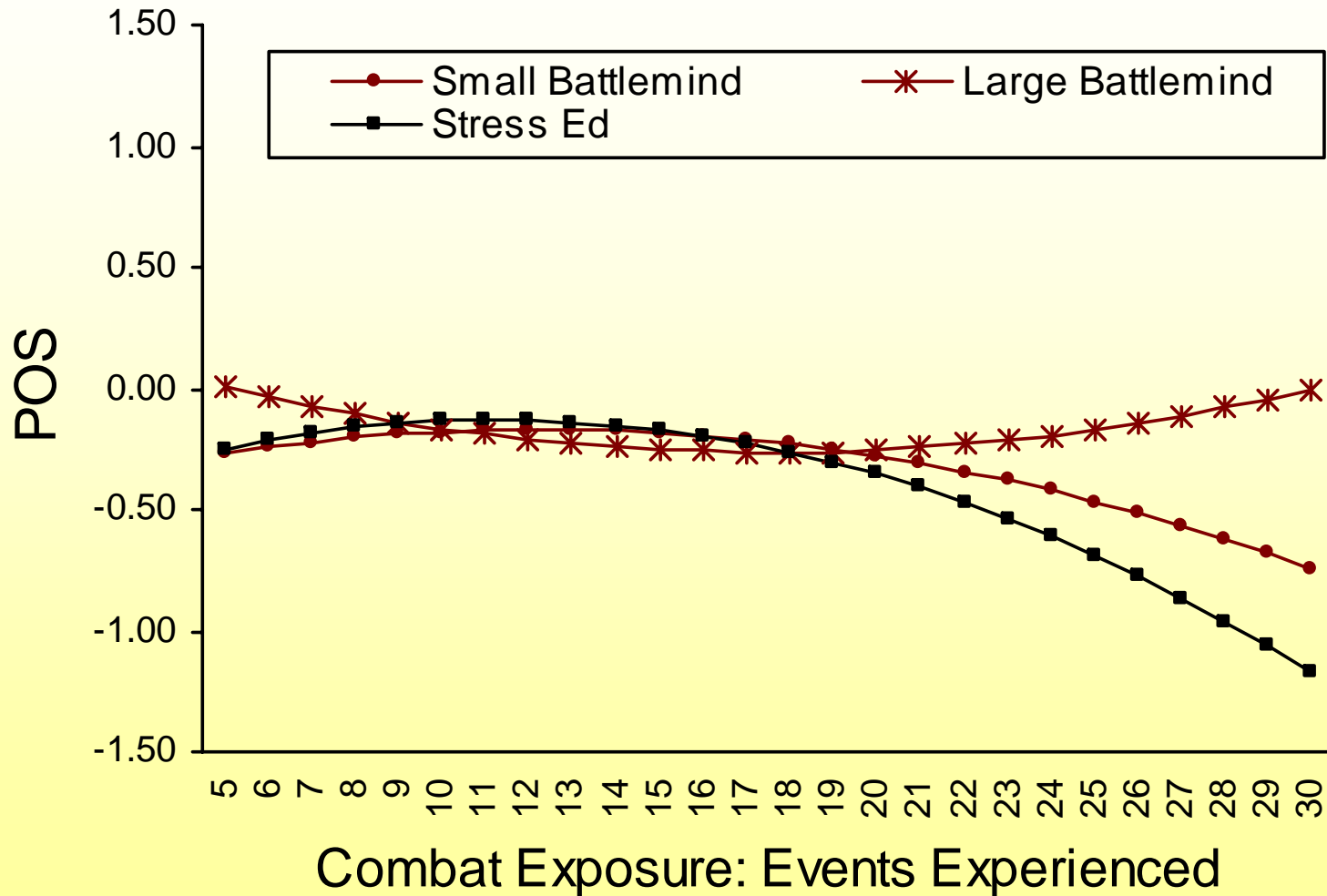
# Alcohol Problems



NOTE: Quadratic effect for Small Battlemind



# Perceived Organizational Support



NOTE: Quadratic effect for Large Battlemind



## Summary of Findings

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- Soldiers rated Battlemind more positively than Stress Education.
- Soldiers who received Post-Deployment Battlemind and who were exposed to many combat events reported better adjustment on a range of outcomes compared to those in Stress Education.



# Discussion

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- **Limitations:**
  - Self-report outcomes only
  - No survey-only control condition
  - Interventions conducted in different group sizes
- **Future Studies:**
  - Examine impact of Battlemind at other points in deployment cycle
  - Study ways to enhance impact of post-deployment interventions
  - Develop modules that target specific outcomes such as:
    - Alcohol problems
    - Stigma
    - Perceived organizational support



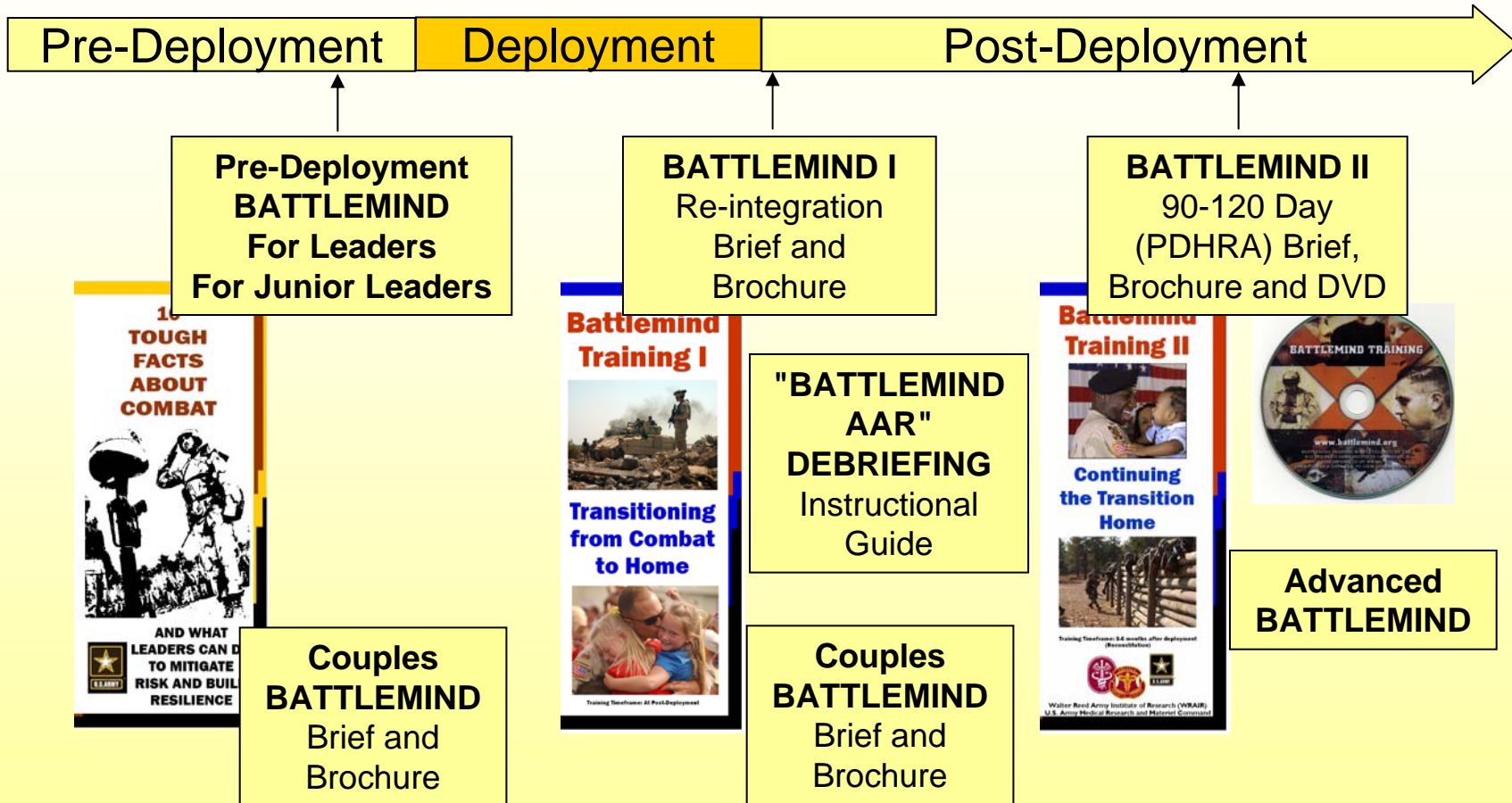
## Implications: Battlemind Training System

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- Provides standardized training platform to talk about mental health issues to Soldiers.
- Assists the Soldier in the transition home process.
- Other components to the Battlemind Program are in development.
  - Provides integrated, developmental program of mental health training across the soldier's career-cycle.



# BATTLEMIND Training System



<http://www.battlemind.org>





# The WRAIR Research Team

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