

## ENHANCING WARRIOR ETHOS IN INITIAL ENTRY TRAINING

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The U.S. Army Infantry School Task Force Soldier, in 2003, adopted four Tenets of Warrior Ethos: Mission First, Never Quit, Never Accept Defeat, Never Leave a Fallen Comrade. The research described in this report was conducted for the U.S. Army Research Institute's Infantry Forces Research Unit at Fort Benning. The purpose of the research was to refine and operationalize the 2003 definition of Warrior Ethos and to examine means for its inculcation into the Army. Warrior Ethos was translated into seven values-based attributes exemplified by behavior which could be identified in combat and non-combat situations. The attributes thus make it easier to examine and develop the underpinnings of Warrior Ethos early in a Soldier's training. Hence, trainers can be provided with ways of looking at Soldier behavior within a framework for Warrior Ethos that can be applied consistently throughout training.

### INTRODUCTION

The *Warrior Ethos Staff Primer*, presented to Chief of Staff of the Army General Peter J. Schoomaker, is a seminal document from the Task Force Soldier within the Training and Doctrine Command (2003). The basis of the work is the motivational principle that transforms American Soldiers into Warriors – the Warrior Ethos. Newly re-defined and adopted by the Army in November, 2003, the four Tenets of Warrior Ethos are the heart and central focus of the new Soldier's Creed:

- I will always place the mission first.
- I will never accept defeat.
- I will never quit.
- I will never leave a fallen comrade.

It is clear that Soldiers recognize the Warrior Ethos tenets when historical deeds are described. However, the average Soldier is not continually exposed to conditions within which Warrior Ethos is clearly manifested and may not frequently experience the conditions that foster Warrior Ethos. An important implication of contemporary military operations is that all Soldiers can benefit from Warrior Ethos whether they are assigned to Combat Arms, Combat Support, or Combat Service Support operations. There is a need and an opportunity to develop training curricula that foster Warrior Ethos development and sustainment (Riccio, Sullivan, Klein, Salter, & Kinnison, 2004).

The basic combat training (BCT) environment provides a logical entry level training site, whether it is

the gender-integrated BCT found at Fort Jackson, SC, or the One Station Unit Training at Fort Benning, GA. The inculcation of Warrior Ethos into initial entry soldiers can be aided by a Training Support Package and associated training methods. The primary challenge to addressing Warrior Ethos in Basic Training is associating the concept with behavior that can be observed and modified by Drill Sergeants (DS) in training situations.

Our intent was to identify a set of concepts relating to Warrior Ethos that referred, as explicitly as possible, to individual dispositions (i.e., cognitive or social-psychological attributes) that could be addressed, as directly as possible, with training interventions. Following discussions with DS and experts in cognitive science and teamwork, as well as a review of relevant literature (e.g., Brannick, Salas, & Prince, 1997; Cannon-Bowers & Salas, 1997; Cannon-Bowers, Tannenbaum, Salas, & Volpe, 1995; Salas, Cannon-Bowers, Church Payne, & Smith-Jentsch, 1997; Salas & Fiore, 2004), we identified seven behavioral attributes as key elements of the four Warrior Ethos tenets:

- Perseverance
- Adaptation
- Prioritization
- Making Tradeoffs
- Motivation from a Sense of Calling
- Accepting Responsibility for Others
- Accepting Dependence on Others

## Penultimate Inquiry

The methodology used here was grounded in an integrated DOTMLPF approach: Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities. The first step in our iterative inquiry was to review formal traceable documentation from DOTMLPF domains to identify capabilities gaps and opportunities for inculcating Warrior Ethos (Riccio et al., 2004). Findings and tentative conclusions from the review of documents in various DOTMLPF domains were examined critically in an intensive two-day working group session that included scientists, former commissioned and noncommissioned officers with both training and combat experience, and DS from Ft. Benning and Ft. Jackson. Conclusions and action items from this working group session are highlighted below:

*Organization.* On-site investigation of potential training methods for Warrior Ethos should take place at the Ft. Benning and Ft. Jackson BCT units. Notable differences between these two units include the relative numbers of trainees in the Combat Arms, Combat Support, and Combat Service Support specialties and, more significantly, the gender integration at Ft. Jackson.

*Training.* Opportunities for observing Warrior Attributes of Ethos and for more systematic inculcation of Warrior Ethos are available at the earliest stages of BCT. The most feasible and least intrusive approach would be to adapt methods currently being used in various outdoor activities that involve team problem solving under physically difficult conditions. After-Action Reviews (AARs) can provide immediate positive and negative reinforcement about Warrior Ethos.

*Materiel.* DS utilize training support packages to prepare for various elements of the program of instruction for BCT. To varying degrees, they keep notes on lessons learned about individuals and about elements of the program of instruction, and share lessons within and beyond their DS cadre to identify and promulgate best practices.

*Personnel.* DS are the most potent influence on trainee development. Different DS have different specialties and varying degrees of pedagogical and combat experience. Their attitudes about Warrior Ethos, and BCT in general, are shaped by these individual differences. Any methodology for inculcation of Warrior Ethos must address DS, both male and female, across Combat Arms, Combat Support, and Combat Service Support specialties and experience levels. In addition, if Brigade, Battalion, and Company Commanders show a special interest in particular

objectives or methods, DS will respond with due diligence.

*Facilities.* Physical obstacles in various outdoor facilities are used for specific training events (e.g., the Teamwork Development Course (TDC) that involves team problem solving to traverse various obstacles). The TDC provides an opportunity to plan specific places and times for observing behavior that exemplifies or is inconsistent with the Attributes of Warrior Ethos.

## METHOD

### Qualitative Inquiry

*Participants.* The focus of the qualitative inquiry were DS in BCT on the TDC at Ft. Benning and Ft. Jackson. Meetings with both male and female DS, as well as Brigade, Battalion, and Company Commanders also took place to obtain their unique perspectives on inculcation of Warrior Ethos in BCT. Trainee behavior at the TDC was observed on numerous occasions over the period of two years. Both male and female DS and trainees were observed at Ft. Jackson, while only male DS and trainees were observed at Ft. Benning.

*Procedure.* The primary events involved two or more investigators, one with operational expertise and one with scientific expertise, observing use of the TDC. Periods of observation were approximately four hours in length. Relevant documentation from the BCT Brigade was reviewed. Special attention was given to training support packages for the TDC. Notes and audio-visual records were collected to identify behavior of DS and trainees that appeared to be relevant to the Attributes of Warrior Ethos.

One way in which the qualitative inquiry informed the quantitative methods was in developing a behavioral checklist. Each of the Attributes was indicated, with behavioral examples, within a checklist that DS or investigators could take into the field (i.e., to the TDC). Investigators could use the checklist to comprehensively code TDC behavior, while the DS would use them as a dynamic plan for what to address in AARs.

### Quantitative Methods

The ultimate objective of the formalized observations and video analyses described below was to identify trainee behaviors that exemplify each of the seven Warrior Attributes. Two visits were made to Ft. Benning and Ft. Jackson in the summer of 2005, during which soldiers were videotaped while executing the TDC stations. These tapes were then coded to identify behaviors indicative of the seven Attributes, which also provide the foundation for a multimedia "Train the

Trainer” program. This program is designed to help Drill Sergeants ground their AARs within the framework of Warrior Ethos.

*Participants.* A total of 26 basic training soldiers participated. The Benning unit ( $n = 12$ ) was all male, while the Jackson unit ( $n = 14$ ) was gender-integrated (10 males, 4 females).

*Instruments and Facilities.* In each data collection event, two video cameras and a parabolic microphone were used to record trainee behaviors: one to gather global, and the other for relatively close-up, footage. In both cases, substantial distances were maintained between the cameras and soldiers so as to minimize interference.

The TDC consists of 6 stations that resemble obstacle courses. In general, the goal of each station is to maneuver the entire team, as well as some additional resources (e.g., ammunition) across a set of disconnected platforms and walls within a 20 minute time period using limited resources and a strict rule set.

*Procedure.* Two individuals experienced with video analysis coded the video footage from both trials. Initially, we used an iterative process to develop a common coding scheme between the coders, including a complete list of attribute subcategories and their constituent behavior. For example, the Dependence attribute contained the following subcategories for which behavior could be identified: full participation, idea solicitation, and using physical assistance. Prioritization, on the other hand, contained the subcategories developing sound plans, considering multiple courses of action, and managing resources.

Once the coding scheme was established, we used a multi-pass method such that coding was directed at one attribute independently per pass, allowing for a narrowed focus and non-orthogonal attributes. For each observed behavior the coders recorded the phase, time, attribute and subcategory, and whether it was a positive or negative example (e.g., “you’re not allowed to jump!” and “just jump!” are positive and negative examples of Sense of Calling respectively, within the rule set of the TDC that prohibits jumping).

## RESULTS

### Qualitative Findings

*Non-materiel gaps and solutions.* The two most noteworthy observations at the TDC are (a) Warrior Ethos can be identified with training behavior in ways that can be utilized by DS to reinforce desirable behavior and attitudes, and (b) there is considerable variability among DS and over time in the use of Warrior Ethos as a

teaching construct. Thus, there is an opportunity to provide DS with a framework for more consistent use.

The clearest use of Warrior Ethos by DS was in the AARs that were scheduled after each station in the TDC. DS could benefit from a framework that would make it easier for them to make connections between Warrior Ethos and observed behavior in TDC.

*Materiel gaps and solutions.* Spiral development of a training support package for the TDC over more than a year, and with frequent feedback from DS, has led to a tool that should facilitate teaching of Warrior Ethos at TDC. Checklists for the Attributes of Warrior Ethos also underwent spiral development based on iterative use by investigators in the field and in post hoc analysis of audio-video recordings.

### Quantitative Findings

*Reliability Assessment.* To assess inter-rater reliability of coded video data, we conducted a simple comparative behavioral frequency analysis by totaling each coder’s number of observed behavior for each of the seven attributes and six TDC stations. A Pearson’s  $r$  ( $r = .89, p < .05$ ) was calculated to assess correspondence between the two coders’ frequency counts.

*Descriptive Analysis.* A total of 467 behavioral events were identified and categorized. Descriptive analysis was conducted in an effort to find patterns that indicate which behaviors were observable, and on which stations within the TDC course. The analysis collapsed the data across attribute subcategories from the Benning and Jackson trials, and then occurrence across each of the six TDC stations (Table 1).

*Interpretation of Behavioral Patterns.* We identified several important findings in these data. First, there were inconsistencies in the total frequency counts across attributes and stations. For example, there were few instances of Adaptability relative to Responsibility, suggesting that novice trainees may be less skilled in adapting to the station demands after establishing a course of action. However, trainees also demonstrated a relatively high degree of Responsibility toward both the tasks and fellow trainees.

Second, we recognized several important behavioral patterns by station. For example, the highest frequency of Dependence came from the Destroyed Bridge station, which elicited many behaviors indicative of individuals using their teammates’ unrequested physical assistance (see Figure 1). This result is not surprising given the nature of this station, which required the repetitive passing of boards while maintaining balance in close contact with teammates.

Further, the highest frequency of Prioritization came from the Quicksand station, which elicited a large number of behaviors indicative of developing a sound plan and effective resource management. This particular station required complex problem solving during mission planning and managing a limited number of resources.

These interpretations were made for each station, allowing us to assess not only which attributes have the highest frequencies, but why this was likely to occur, providing a solid foundation for training support package development.

## DISCUSSION

### *Application to Training Program Development.*

Having identified the relationships between attributes and stations, the video tapes were reviewed to find salient behaviors exemplifying each attribute. Several of these video clips have been included in a “Train the Trainer” program that is designed to assist DS in conducting AARs. Within this program, DS see samples of how to link behavioral examples to the higher level concepts of Warrior Ethos.

Ideally, having familiarized themselves with how attributes manifest themselves as trainee behaviors, the DS will be able to embellish typical questions and comments (e.g., “What did we do well?”) with specific comments directly related to Warrior Ethos (e.g., “You showed excellent responsibility for others when...”). Trainees are also likely to benefit from receiving feedback that is grounded in specific examples. As such, they can begin to learn that Warrior Ethos is not just a philosophical concept, but rather it is reflected in their own actions.

*Limitations of Current Methodology.* The current method and resulting training program examined the concept of Warrior Ethos within the TDC training environment, representing an exciting step in providing pedagogical solutions for this practical training need. Future work should expand the applicability of the present methodology to a variety of environments that may vary in content and complexity, and thus, in how Warrior Ethos can be best observed and addressed to foster training. The methodological findings from this research suggest that the Attributes of Warrior Ethos, and the behavior associated with them, have utility in hypothesis testing. The present findings also suggest a variety of hypotheses about training Warrior Ethos. Thus, future work could examine, for example, hypotheses about the effect of AARs based on Attributes of Warrior Ethos on the relative number of behaviors associated positively and negatively with Warrior Ethos.

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Table 1. Behavior frequencies by station and attribute, collapsed across attribute subcategories and trials.

Station Name	Attribute							Total
	Dependence	Responsibility	Sense of Calling	Prioritization	Trade-offs	Adaptability	Perseverance	
Short and Difficult Route	12	21	7	7	11	10	8	76
Cliffhanger	13	20	11	4	15	0	5	68
Quicksand	13	35	17	28	13	4	9	119
Destroyed Bridge	16	25	14	5	5	2	10	77
River Crossing	10	23	18	12	17	1	1	82
One-Rope Bridge	5	17	5	2	11	1	4	45
<b>Total</b>	<b>69</b>	<b>141</b>	<b>72</b>	<b>58</b>	<b>72</b>	<b>18</b>	<b>37</b>	<b>467</b>

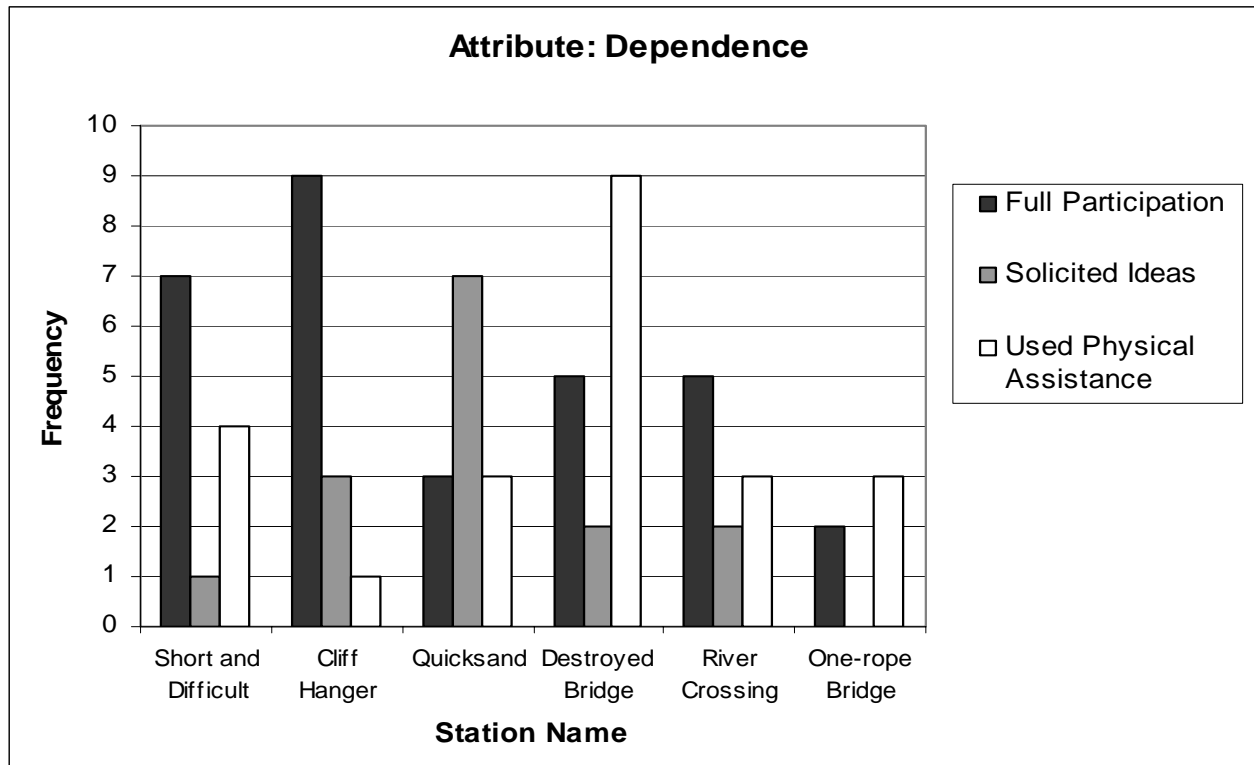


Figure 1. Behavior frequencies for the Dependence attribute and its constituent subcategories, by station name, collapsed across trials.