U.S. Army Research Institute
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Research Report 2021

Offensive Operations in a Decisive Action Training Environment

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June 2018

U.S. Army Research Institute
for the Behavioral and Social Sciences

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REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy)	2. REPORT TYPE	3. DATES COVERED (from. . . to)
	Final	January 2017 – November 2017

4. TITLE AND SUBTITLE	5a. CONTRACT OR GRANT NUMBER
Offensive Operations in a Decisive Action Training Environment	
	5b. PROGRAM ELEMENT NUMBER 622785
6. AUTHOR(S)	5c. PROJECT NUMBER A790
W. Anthony Scroggins, Christopher L. Vowels (U.S. Army Research Institute), Captain John M. Herger, and Sergeant First Class Curtis J. Perry (Joint Readiness Training Center)	5d. TASK NUMBER 215
	5e. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Readiness Operations Group 7260 Alabama Avenue Fort Polk, LA 71459	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 6000 6th Street, Bldg 1464/Mail Stop 5610 Fort Belvoir, VA 22060-5610	10. MONITOR ACRONYM ARI
	11. MONITOR REPORT NUMBER Research Report 2021

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

Subject Matter POC: Dr. W. Anthony Scroggins, in-house project lead

14. ABSTRACT *(Maximum 200 words)*:

Working with members of the Joint Readiness Training Center Warrior Leadership Council, we investigated whether the Leader's Guide for Offensive Operations could improve units' performance during their Combat Training Center (CTC) rotations. The guide was a brief reference that detailed multiple tasks necessary to successfully conduct offensive operations. The performance of units that received the Leader's Guide for Offensive Operations (the experimental group) was compared to the performance of units that did not receive the guide (the control group). Results largely indicated the units that received the guide performed no better on the measured tasks compared to units that did not receive the guide. Further analysis revealed that independent of whether or not units received the guide, units with a current Tactical Standing Operating Procedure (TACSOP) for Offensive Operations were more likely to carry out the necessary tasks and they performed better than units that did not have a TACSOP.

15. SUBJECT TERMS

Offensive Operations, Training, Joint Readiness Training Center,

SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT	20. NUMBER OF PAGES	21. RESPONSIBLE PERSON
16. REPORT	17. ABSTRACT	18. THIS PAGE			
Unclassified	Unclassified	Unclassified	Unlimited		Brian T. Crabb 254-288-3833

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ACKNOWLEDGEMENT

The authors would like to thank the members of the Joint Readiness Training Center Warrior Leadership Council and the Observer/Coach/Trainers who have continued to support and guide this research.

We also want to thank SMA(R) Julius W. Gates. SMA(R) Gates has provided support and insight throughout the project. His guidance ensured the research was successful.

OFFENSIVE OPERATIONS IN A DECISIVE ACTION TRAINING ENVIRONMENT

EXECUTIVE SUMMARY

Research Requirement:

This report describes research conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) in collaboration with the Joint Readiness Training Center (JRTC) Warrior Leadership Council (WLC). The primary goal of this research was to evaluate a brief guide developed to improve Offensive Operations during JRTC rotations. The guide was intended to improve unit performance while conducting Offensive Operations in accordance with Field Manual (FM) 3-21.10, *Infantry Rifle Company*, FM 3-90.1, *Armor and Mechanized Infantry Company Team*, FM 3-21.8, *Infantry Rifle Platoon and Squad*, and Army Doctrine Publication/Army Doctrine Reference Publication (ADP/ADRP) 3-90 *Offense and Defense*. Unit performance was assessed via an Offensive Operations Checklist developed by the WLC as a means for Observer/Coach/Trainers (OCT) to collect data on how well units conducted Offensive Operations in the Decisive Action Training Environment (DATE).

Procedure:

The OCTs filled out checklists to assess units in three areas: Planning, Execution, and Overall Performance. The checklists were collected at the end of each rotation. Data were collected from 489 checklists over eight unit training rotations. Four rotations were in the control group, and four of the rotations were in the experimental group. Based on the performance of four initial/baseline rotations, a Leader's Guide for Offensive Operations was developed and distributed to the remaining four rotations (the experimental group). The effectiveness of the guide was evaluated by examining differences between the performance of the units in the control group and the units in the experimental group.

Findings:

There were few significant differences found between the performance of units in the control group and units in the experimental group, indicating that the Leader's Guide for Offensive Operations had little effect on ratings of units' performance on most tasks. However, additional analyses indicated units that had a Tactical Standing Operating Procedure (TACSOP) were rated as better performing on many of the critical tasks than were units that did not have a TACSOP.

Utilization and Dissemination of Findings:

Summary findings were provided to the WLC. The Leader's Guide for Offensive Operations appears to have minimal to no effect on improving unit performance on the measured tasks. The results of this research suggest that encouraging units to establish SOPs for Offensive Operations and rehearse operations at home station will likely improve performance during Combat Training Center (CTC) rotations and beyond.

OFFENSIVE OPERATIONS IN A DECISIVE ACTION TRAINING ENVIRONMENT

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OFFENSIVE OPERATIONS IN A DECISIVE ACTION TRAINING ENVIRONMENT

The Joint Readiness Training Center (JRTC) is a Combat Training Center (CTC) that supports individual and unit-level training in preparation for deployment. The JRTC Warrior Leadership Council (WLC) [1] examines the nuances of operational unit performance and proposes methods to improve individual and unit operations (Evans & Baus, 2006; Evans, Reese, & Weldon, 2007; Vowels, Dasse, Ginty, & Emmons, 2014; Vowels, Scroggins, Daniels, & Volino, 2017).

The current research focused on evaluating a leader's guide developed to improve offensive operations. The guide was intended to increase unit performance during offensive operations in accordance with Field Manual (FM) 3-21.10, *Infantry Rifle Company*, FM 3-90.1, *Armor and Mechanized Infantry Company Team*, FM 3-21.8, *Infantry Rifle Platoon and Squad*, and Army Doctrine Publication/Army Doctrine Reference Publication (ADP/ADRP) 3-90 *Offense and Defense* (Department of Army, 2012a/b). The Offensive Operations Checklist was created by the WLC as a means for JRTC Observer/Coach/Trainers (OCT) to collect data on how well units were conducting offensive operations. The effectiveness of the guide was determined by analyzing the differences in performance between units in the control group and units in the experimental group.

Offensive Operations

The primary purpose of offensive operations is to defeat, destroy, and neutralize the enemy force (ADP 3-90). Additionally, offensive operations are conducted to hold an enemy in position, seize decisive terrain, develop intelligence, and deprive the enemy of resources. Successful completion of offensive operations depends heavily on the characteristics of the offense. Characteristics of offense include audacity and surprise, among others. Audacity refers to boldly executing the plan of action. One way to demonstrate audacity is to violently apply combat power. Leaders can also demonstrate audacity by seizing the initiative and pressing the battle (ADP 3-90). Surprise, on the other hand, involves attacking the enemy when and where they are not expecting it. Unpredictability and boldness are often used to gain surprise. Surprise induces psychological shock in the enemy that overloads and confuses their command and control systems. Surprise reduces enemy combat power and allows attackers to exploit the enemy's paralysis.

In an effort to better prepare units for contemporary operations and improve CTC training, JRTC's WLC decided to measure the performance of units as they conducted offensive operations during JRTC training rotations. Thus, a primary goal of measuring unit performance was to identify areas of weakness in order to develop a tool (specifically, a leader's guide) to mitigate those weaknesses and ultimately improve overall performance for future rotations, particularly in Decisive Action Training Environments (DATE). In cooperation with the JRTC WLC, we examined offensive operations as rotational units conducted training in a DATE at JRTC.

[1]Led by the Deputy Commander and Command Sergeant Major of the Operations Group, the council consists of representatives from each Operations Group division, as well as the 1st Battalion (Airborne) 509th Infantry, and the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). The primary purpose of the council is to leverage the expertise of JRTC Observer/Coach/Trainers (OCT) in order to identify and prioritize the most serious small unit leadership and training deficiencies found across rotations (ARI, 2005).

Data were collected on the effectiveness of offensive operations conducted by units for eight rotations. Units were observed during all phases of planning and execution. Performance for all rotations was assessed using the Offensive Operations Checklist (Appendix A). A pocket-sized leader's guide (Appendix B) was distributed to units prior to the final four rotations (experimental group). The purpose of the guide was to assist company and platoon leaders in the planning and execution of offensive operations.

Materials and Methods

Sample

The OCTs collected data on eight rotational Brigade Combat Teams (BCTs). Over the course of the eight rotations, OCTs completed 489 Offensive Operations Checklists at the echelon in which they were embedded. Of the 489 Offensive Operations Checklists, 171 checklists from non-Active Component units (as well as units whose component was not annotated on the checklist) were excluded from further analysis after preliminary results revealed that National Guard units were overrepresented in the experimental group (79 units in the experimental group versus 3 in the control group). This was especially problematic because preliminary analyses revealed that National Guard units underperformed compared to their Active Component counterparts. The final sample consisted of 318 checklists from Active Component units, 177 checklists from units in the control group (i.e., the initial four rotations) and 144 checklists from units in the experimental group (i.e., the final four rotations). The majority of units in the control group were completing DATE rotations (88%), were companies (40%) or platoons (32%), were Infantry (37%) or Field Artillery (15%), were observed during Force-on-Force (FOF) (63%), while conducting an attack (59%). The majority of units in the experimental group were completing DATE rotations (91%), were companies (27%) or platoons (48%), were Infantry (45%) or Cavalry (14%), were observed during FOF (64%), while conducting an Attack (65%). Across all eight rotations, the majority of data were collected on units conducting DATE rotations (89%) from companies (34%) and platoons (39%). The most common unit types observed were Infantry (41%), Field Artillery (12%), and Cavalry (12%). Force-on-Force was the most common phase type observed (63%). Attack was the most common type of offense (62%).

Offensive Operations Checklist

The WLC developed and approved the Offensive Operations Checklist in an effort to examine operations across and within rotational units. Major areas of interest included planning, execution, and overall performance. Specifically, the first section of the Offensive Operations Checklist was comprised of general information about the unit, the mission, and rotation observed. The second section of the checklist covered specific questions about the unit's planning (e.g., "Did the unit have a current Offensive Operations TACSOP?"). The third section of the checklist examined questions relating to how well the unit executed the necessary tasks (e.g., "Did the unit Find, Fix, and Finish the Enemy?"). The fourth section of the checklist required OCTs to rate the unit on how well they planned and executed the various offensive phases throughout the rotation. Additionally, OCTs also rated the unit on how well they employed the characteristics of offense (i.e., surprise, tempo, concentration, and audacity). The

checklist is available in its entirety in Appendix A. The JRTC Operations Group division leaders issued checklists to Observer/Coach/Trainers (OCT) prior to each rotation. The WLC division leaders were responsible for ensuring that the OCTs completed the checklists correctly. The WLC collected the checklists at the completion of each rotation.

The Offensive Operations Checklist was made up of both dichotomous (Yes/No) and continuous (scaled) questions. For dichotomous questions, OCTs reported whether or not a unit performed the offensive task in question. For the continuous/scaled questions, OCTs reported "how well" the unit performed offensive tasks on a scale from 0 (*Unsatisfactory/not at all)* to 4 (*Exceeds standard/performed all tasks and prepared for contingencies)*. The continuous/scaled questions are especially informative as they allow for both the use of more sophisticated statistical tests when analyzing the data and can provide a more nuanced understanding of unit performance (Hays, 1994; Vowels, Dasse, Ginty, & Emmons, 2014).

Leader's Guide for Offensive Operations

The Leader's Guide for Offensive Operations (Appendix B) was developed by members of the WLC as a training aid to enhance offensive operations performance. Specifically, the content of the leader's guide was based on observations from the first four rotations (control group). The pocket-sized guide was designed to be a quick reference to improve planning, execution, and follow-up operations. At 5.5 inches by 4.25 inches, the guide could fit in the pocket of leaders for easy access during exercises. This guide was issued to company/platoon/section leaders in the final four rotations during their initial JRTC rotation briefings (briefings occurred a few days prior to the start of the rotation). This guide served as the only independent variable.

The topics covered in the guide were based on the performance of initial rotations, observations of OCTs, and feedback from council members. Each topic contained several subtopics to assist units in conducting offensive operations. For example, the *Planning* section reminded leaders to issue warning orders as soon as possible; develop a primary, alternate, contingency, and emergency (PACE) plan; conduct a detailed reconnaissance of the objective area; and to identify ambush sites, security sites, fighting positions, and obstacles. The *Execution* section directed units to suppress the enemy prior to the assault; execute breaching operations; conduct timely evacuation of casualties; and to fix, attack, and finish the enemy. The *Follow-Up* section reminded leaders to reorganize and consolidate, conduct a debriefing with their Soldiers, and to prepare for future operations.

Procedure

The JRTC Operations Group divisions issued Offensive Operations Checklists to the OCTs prior to each rotation. The checklists were collected following the completion of each rotation. The Leader's Guide for Offensive Operations was given to each unit in the experimental group prior to their rotation. The OCTs were aware of the purpose of the research, including which rotations were in the control group and which rotations were in the experimental group as well as the purpose of the Leader's Guide for Offensive Operations.

Results

As previously mentioned, 171 checklists from non-Active Component units (as well as units whose component was not annotated on the checklist) were excluded from further analysis after preliminary results revealed that National Guard units were overrepresented in the experimental group (79 units in the experimental group versus 3 in the control group). The final sample consisted of 318 checklists from Active Component units, 177 checklists from units in the control group (i.e., the initial four rotations) and 144 checklists from units in the experimental group (i.e., the final four rotations). Additionally, for the continuous/scaled items, the "Not Applicable" responses (indicated by a "5" on the checklist) were recoded so as to not inaccurately increase the means and possibly affect the significance of our statistical tests. Analyses are discussed in the following sections.

The analyses described in this report followed the same structure. Chi-square tests for independence were used to analyze the dichotomous items (Yes or No responses). Independent t-tests were used to analyze scale items (0-4 responses). Throughout the results and discussion, scale items are referred to as "continuous" items because the items ask "how well" the unit performed on a task instead of simply whether the unit performed the task (Yes/No). The magnitude of the differences (i.e., effect size) is also reported; we report *Phi coefficients* for the dichotomous data (Kotrlik & Williams, 2003) and *Cohen's d* for the continuous data (Cohen, 1988).

In order to control for possible Type I errors, we used a conservative alpha level of $p < 0.01$ as the threshold for statistical significance for all analyses. Though this stringent threshold for significance increases the likelihood of failing to find an effect when an effect exists, we thought it was necessary given the factors of our design and methodology that we could not control (e.g., how the guide was introduced to leaders, whether or not the leaders used the guides, etc.). Adjusting the alpha reduced the likelihood of mistaking a false result for a true effect.

Control Versus Experimental Group Comparisons

Chi-square tests for independence revealed two significant results. First, compared to the Soldiers and leaders in the control group, Soldiers and leaders in the experimental group were significantly more likely to be familiar with the unit's Offensive Operations Tactical Standing Operating Procedure (TACSOP) χ^2 (1) = 7.36, $p = 0.007$, $\phi = 0.17$. Additionally, units in the experimental group were more likely to develop and issue an Operations Order χ^2 (1) = 11.68, $p = 0.001$, $\phi = 0.20$. Chi-square tests for independence also revealed two marginally significant results. First, compared to units in the control group, units in the experimental group were more likely to have a current TACSOP χ^2 (1) = 6.38, $p = 0.012$, $\phi = 0.15$. Moreover, compared to units in the control group, units in the experimental group were more likely to conduct a rehearsal χ^2 (1) = 6.49, $p = 0.011$, $\phi = 0.15$. No other significant (or marginally significant) differences between the control group and the experimental group were found for any of the other dichotomous items on the checklist (all $p > 0.01$).

Independent samples t-tests revealed two significant results. First, units in the experimental group were rated as performing better during the planning phase (μ = 2.38, *SE* = 0.07) than did units in the control group (μ = 1.93, *SE* = 0.08), $t(292) = -3.11$, $p = 0.002$, $d = 0.47$. Additionally, units in the experimental group were rated higher on the characteristic of offense, audacity (μ = 2.31, *SE* = 0.09) than were units in the control group (μ = 1.92, *SE* = 0.09), $t(292) = -2.92$, $p = 0.004$, $d = 0.36$. Independent samples t-tests also revealed a marginally significant result such that units in the experimental group were rated higher in their understanding of the mission (μ = 2.70, *SE* = .08) than were units in the control group (μ = 2.42, *SE* = 0.08), $t(292) = -2.48$, $p = 0.014$, $d = 0.27$. No other significant (or marginally significant) differences between the control group and the experimental group were found for any of the other continuous items on the checklist (all $p > 0.01$).

Control Versus Experimental Group Discussion

The Leader's Guide for Offensive Operations was a brief reference that covered the primary mission phases necessary for the successful completion of offensive operations (e.g., planning, execution, and overall performance). Units that received a guide were more likely to have a current TACSOP, were more likely to develop and issue an operations order, and were more likely to conduct a rehearsal. Further, Soldiers and leaders in units that were given guides were more likely to be familiar with their unit's TACSOP. Moreover, units that received the Leader's Guide for Offensive Operations were rated as performing better during the planning phase, were rated higher in their understanding of the mission, and were rated higher on the audacity characteristic of their offense. Importantly, these improvements were all minimal. In fact, the mean score for all the continuous items that were positively affected by the leader's guide were still below the standard (i.e. a mean of 3). Moreover, most of the key tasks included on the Offensive Operations Checklist were not statistically different for the experimental group compared to the control group. Overall, the Leader's Guide for Offensive Operations was largely ineffective.

Additional Analyses

TACSOP Versus No TACSOP

Previous research examining unit performance during JRTC rotations has shown that units with a standard operating procedure (SOP) tend to perform better during the rotation (e.g., Vowels, Scroggins, Daniels, & Volino, 2017). Therefore, we examined whether units that had a TACSOP for offensive operations performed better (as indicated by the Offensive Operations Checklist) compared to units that did not have a TACSOP. The results of the statistical tests for all sections of the checklist are shown in Table 1 (non-parametric) and Tables 2, 3, and 4 (parametric). Analysis of the dichotomous measures of offensive operations revealed that units who did not have a TACSOP often did not complete routine offensive operations tasks (such as conducting reconnaissance of the objective or developing and issuing operations orders). Units that had an established TACSOP performed better on the majority of continuous checklist items in the planning and execution phases of an offensive action. Additionally, units with a TACSOP had a higher item mean than units without a TACSOP on 24 of the 25 continuous items. Nine of those 24 differences in means reached statistical significance.

Table 1

Non-parametric Tests: TACSOP Versus No TACSOP

Checklist Item	Sample Size	*Pearson's* χ^2	*p*	*Phi Coefficient*
II 2B Familiar	253	66.47	0.0001*	0.513
II 4 Situational Template (SITEMP)	257	2.31	0.129	0.095
II 6A Rehearsal	286	5.08	0.024	0.133
II 7A Recon	267	7.83	0.005*	0.171
II 7C Sub Leaders	209	3.71	0.054	0.133
II 7D Security	166	4.38	0.036	0.162
II 7E Identify	189	13.54	0.0001*	0.268
II 8 Integrate	240	1.07	0.302	0.067
II 9A Operations Order (OPORD)	286	7.95	0.005*	0.167
II 9D Litter	245	5.95	0.015±	0.156
II 9D Detainee	216	0.22	0.642	0.032
II 9D Breaching	186	3.01	0.083	0.127
II 11 Refine	272	2.29	0.131	0.092
II 12 Fire Support Team (FIST)	178	9.16	0.002*	0.227
II 13 Classes of Supply	291	2.02	0.156	0.083
III 1A Pre-Combat Inspection	286	11.39	0.001*	0.200
III 1B Depart	282	3.59	0.058	0.113
III 2A Account	281	7.76	0.005*	0.166
III 3A Undetected	279	3.60	0.058	0.114
III 3B Neutralize	164	6.83	0.009*	0.204
III 3 Password	291	4.49	0.034	0.124
III 4B Weapon	220	3.31	0.069	0.123
III 6 Techniques	181	4.82	0.028	0.163
III 7A Signal	235	11.41	0.001*	0.220
III 7B Fratricide	218	5.24	0.022	0.155
III 8A Objective Secured	181	1.85	0.174	0.101
III 8B Exploitation	221	2.48	0.116	0.106
III 9 Situation Report	244	3.05	0.081	0.112
III 10 Posts	261	0.001	0.978	0.002
III 11 Casualties	258	5.31	0.021	0.143
III 12 Detainees	195	0.041	0.839	0.015
III 13 Redistribute	257	5.57	0.018±	0.147
III 14 Ammo, casualty, equipment report (ACE) Report	249	7.31	0.007*	0.171
III 16 Supplies	256	0.030	0.862	0.011
III 17 Find, Fix, and Finish	246	3.10	0.078	0.112
III 18 Accomplished	270	1.02	0.313	0.061

Note. For *Phi* coefficients, associations range from 0.00 to 0.01 for *negligible associations*, 0.20 to 0.40 for *moderate associations* and 0.80 to 1.00 for *very strong associations* (Kotrlik & Williams, 2003). *Indicates a statistically significant difference at the alpha level of 0.01. ±Indicates a marginally significant difference at the alpha level of 0.01.

Table 2

Parametric Tests: TACSOP Versus No TACSOP, Section II (Planning)

Checklist Item	Group	*N*	*Mean*	*SD*	*t*	*p*	*Cohen's d*
II 1 Understanding	TACSOP	167	2.62	1.010	1.73	0.086	0.20
	No TACSOP	122	2.42	0.978			
II 5 Terrain	TACSOP	160	2.19	1.031	3.57	0.001*	0.43
	No TACSOP	116	1.75	1.003			
II 6A Effective Rehearsal	TACSOP	109	2.47	0.958	2.40	0.017±	0.36
	No TACSOP	67	2.12	0.896			
II 10 Coordinate	TACSOP	156	1.93	1.066	2.18	0.031	0.27
	No TACSOP	109	1.63	1.128			
II 14A Resupply	TACSOP	157	2.18	1.003	1.43	0.155	0.17
	No TACSOP	115	1.99	1.151			
II 14B MaintRecovery	TACSOP	137	1.85	1.198	-0.46	0.964	-0.06
	No TACSOP	108	1.86	1.219			
II 14C CASEVAC	TACSOP	153	2.31	1.166	2.33	0.020	0.29
	No TACSOP	109	1.95	1.265			
II 14D Transportation	TACSOP	121	2.16	1.072	1.45	0.149	0.20
	No TACSOP	89	1.93	1.156			
II 15 Civil	TACSOP	110	1.75	1.096	2.85	0.005*	0.41
	No TACSOP	88	1.28	1.174			

Note. For *Cohen's d* 0.20 = small effect, 0.50 = medium effect, and 0.80 = large effect (Cohen, 1988).
*Indicates a statistically significant difference at the alpha level of 0.01.
±Indicates a marginally significant difference at the alpha level of 0.01

Table 3

Parametric Tests: TACSOP Versus No TACSOP, Section III (Execution)

Checklist Item	Group	*N*	*Mean*	*SD*	*t*	*p*	*Cohen's d*
III 4A Attack/Support	TACSOP	125	2.20	1.032	3.56	0.001*	0.49
	No TACSOP	87	1.69	1.015			
III 4C Fires	TACSOP	121	2.13	1.056	3.38	0.001*	0.49
	No TACSOP	87	1.63	1.047			
III 5 Suppress	TACSOP	114	1.84	1.172	2.00	0.047	0.25
	No TACSOP	78	1.50	1.148			
III 15 Track Classes	TACSOP	149	2.36	1.066	1.55	0.123	0.22
	No TACSOP	101	2.14	1.123			

Note. For *Cohen's d* 0.20 = small effect, 0.50 = medium effect, and 0.80 = large effect (Cohen, 1988). *Indicates a statistically significant difference at the alpha level of 0.01.

Table 4

Parametric Tests: TACSOP Versus No TACSOP, Section IV (Overall)

Checklist Item	Group	*N*	*Mean*	*SD*	*t*	*p*	*Cohen's d*
Offensive Phases							
IV 1 Planning	TACSOP	151	2.23	0.990	2.62	0.009*	0.32
	No TACSOP	120	1.92	0.975			
IV 2 Rehearsals	TACSOP	152	1.91	1.127	3.70	0.0001*	0.45
	No TACSOP	119	1.41	1.085			
IV 3 Execution	TACSOP	152	2.30	1.028	2.36	0.019±	0.29
	No TACSOP	120	2.01	0.957			
IV 4 Exploitation	TACSOP	129	1.32	1.125	1.38	0.169	0.18
	No TACSOP	109	1.12	1.086			
IV 5 Consolidation	TACSOP	140	2.16	1.183	1.38	0.169	0.17
	No TACSOP	112	1.96	1.118			
Characteristics of Defense							
IV 1 Surprise	TACSOP	135	2.04	1.085	3.36	0.001*	0.43
	No TACSOP	111	1.57	1.133			
IV 2 Tempo	TACSOP	138	2.12	1.134	2.39	0.017±	0.30
	No TACSOP	110	1.77	1.106			
IV 3 Concentration	TACSOP	136	2.13	1.067	1.44	0.151	0.18
	No TACSOP	109	1.94	1.057			
IV 4 Audacity	TACSOP	137	2.24	1.115	2.55	0.011±	0.33
	No TACSOP	109	1.88	1.078			
IV 5 Flexibility	TACSOP	140	2.55	1.055	3.17	0.002*	0.40
	No TACSOP	111	2.12	1.102			
IV 6 Preparation	TACSOP	140	2.18	1.081	1.96	0.052	0.25
	No TACSOP	112	1.92	0.997			
IV 7 Security	TACSOP	138	2.17	1.057	3.22	0.001*	0.41
	No TACSOP	110	1.74	1.029			

Note. For *Cohen's d* 0.20 = small effect, 0.50 = medium effect, and 0.80 = large effect (Cohen, 1988). *Indicates a statistically significant difference at the alpha level of 0.01. ±Indicates a marginally significant difference at the alpha level of 0.01

General Discussion

The goal of the current project was to evaluate the Leader's Guide for Offensive Operations, a guide developed to improve units' offensive operations. Based on the performance of four baseline rotations (control group), the WLC developed the Leader's Guide. The guide was distributed to the remaining four rotations (experimental group) in order to determine if it could improve performance on key tasks. In the primary analysis, the experimental group was compared to the control group on the tasks scored by OCTs using the checklist. The results of these analyses revealed that, aside from a couple of tasks, the guide was largely ineffective. Subsequent analyses found that, independent of whether or not a unit received a copy of the guide, units that had an established TACSOP for offensive operations were more likely to conduct key tasks, and perform them better, than units that did not have a TACSOP. Units with a TACSOP had higher item means than units without a TACSOP on 24 of the 25 continuous items from the Offensive Operations Checklist. Nine of those 24 differences in means reached statistical significance. These results are consistent with previous research that has repeatedly found that units with an established SOP outperform units that do not have an SOP (Dasse, Vowels, Fair, & Boyer, 2017; Vowels, Scroggins, Daniels, & Volino, 2017).

A primary finding from the current project indicate that units are underperforming during their JRTC training rotation. This is consistent with previous research involving the conduct of various operations that suggests that most units perform at a minimal level (Dasse, Vowels, Daniels, & Volino, 2017; Vowels, Scroggins, Daniels, & Volino, 2017). The fact that these findings persist across various units conducting different operations (sustainment, offensive, defensive) suggests that the source of the underperformance is widespread. At the very least, the recurring finding of minimum performance should warrant a closer look at home station training preparation and CTC training and performance measurement, particularly with regard to the extent SOPs have been developed and implemented during training.

Limitations

Despite our best efforts, the current project has several limitations (many of which are inherent in conducting applied research in a field environment). First, we have limited control over how the guides are disseminated. We also are unable to verify who received a leader's guide and to what extent it was used by those leaders who did receive it. We attempted to collect data regarding these last two questions during this current project, but limitations of the training environment led to scarce and incomplete data. As a result, we are unable to determine that every unit leader in the experimental group received a Leader's Guide. Additionally, OCTs are often replaced over the course of a project which can induce further potential variance. Future research should attempt to minimize these limitations.

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Appendix A

Offensive Operations Checklist

OFFENSIVE OPERATIONS CHECKLIST

Disclosure: Data collected with this form will be used for routine research purposes only. Information will not be used in whole or part in making any determination about an individual or unit. Information gathered will be used for statistical control purposes only and will not be disclosed to any unit undergoing rotations at the Joint Readiness Training Center.

SECTION I: GENERAL INFORMATION

DATES OBSERVED: FROM _____ **TO** _____ ROTATION **NUMBER:** _____

ROTATION TYPE: MRE DATE HYBRID CPX **COMPONENT:** AC RC NG

SIZE UNIT OBSERVED: CO BTRY TRP PLT SECT DET **TYPE UNIT OBSERVED:** IN AR SF MARSOC CAV FA EN OD ADA AVN SC MI MP MS RSTA CHEM QM TC CA PSYOP Multiple Types Other

ROTATION PHASE: FOF FE DEF CPX **TYPE OF OFFENSE:** ATTACK MVMT to CONTACT EXPLOITATION PURSUIT

SCALE: 0= Unsatisfactory/Not at all 1 = Sub-standard/Performed some tasks 2 = Minimum standard/Performed most tasks 3 = Standard/Performed all tasks 4 =Exceeds Standard/Performed all tasks and prepared for contingencies N/A = Not applicable

SECTION II: PLANNING

1A. How well did the unit understand their mission? _____ 0 1 2 3 4 N/A

1B. During what period did the Offensive Operation take place? □ Day □ Night □Transition

2A. Did the unit have a current Offensive Operations TACSOP? _____ Yes No NA

2B. Were Leaders/Soldiers familiar with the TACSOP? _____ Yes No N/A

3. Did the unit issue timely Warning Orders to subordinate units? _____ Yes No N/A

4. Did the unit update the SITEMP that they received from their higher unit? _____ Yes No N/A

5. How well did the unit conduct a terrain analysis of the route to the objective, and objective? _____ 0 1 2 3 4 N/A

6A. Did the unit conduct a rehearsal? Yes No NA How effective were the unit's rehearsals? _____ 0 1 2 3 4 N/A

6B. If so, what type of rehearsal was executed? (Describe the portion of the operation that was rehearsed and annotate the type of rehearsal used)

1. Network 2. Map 3. Sketch Map 4. Digital Terrain Model 5. Terrain Model 6. Key Leader 7. Full Dress

7A. Did the unit conduct a reconnaissance of the objective? _____ Yes No N/A

7. What method of reconnaissance was employed? □ MAP □ UAS □ Aircraft □ Reconnaissance/Surveillance Team □ Other _____

7C. Did the unit commander/leader include key subordinate leaders in the reconnaissance? _____ Yes No N/A

7D. Was security provided during the reconnaissance? _____ Yes No N/A

7E. During the reconnaissance did the unit leaders identify ambush sites, security sites, fighting positions, obstacles? _____ Yes No N/A

8. Did the unit integrate and maximize the use of supporting elements and available enablers? _____ Yes No N/A

9A. Did the unit develop and issue an Operations Order? _____ Yes No

9B. Did the unit leader plan to: □ Mass and distribute direct and indirect fires, air support to accomplish the mission □ Avoid target overkill □ Minimize friendly exposure □ Prevent fratricide ***(Mark X in appropriate box)***

9C. Did the unit plan include the following to control engagements: □ Engagement Criteria (Per key weapon system) □ Engagement Techniques □ Disengagement Criteria □ Direct fire control measures □ Fire commands □ Fire Control Process □ Methods of Fire Adjustment □ Alternate means of communication (Hand and Arm Signals, Pyrotechnics, Others) Other: _____

9D. Did the unit appropriately specify specialty teams according to the mission requirements?

Aid and Litter Team(s) Yes No N/A Detainee Team(s) Yes No N/A Breaching Team(s) Yes No N/A

10. How well did the unit coordinate with adjacent units, to include units to the rear of the attacking unit? _____ 0 1 2 3 4 N/A

11. Did the unit continue to refine their plans and preparations throughout the TLP process? _____ Yes No N/A

12. Did the unit leader and or fire support team (FIST) determine the desired effect fires should have on the enemy? _____ Yes No N/A

13. Did the unit plan, forecast and coordinate for Classes of Supply (Class IV, V) for the operation? _____ Yes No

If Yes, What Classes were requested? _____ (***Please circle appropriate class/classes)*** I II III IV V VI VII VIII

14. Rate each aspect of the unit's concept of support: Resupply _____ 0 1 2 3 4 N/A Maintenance/Recovery_____ 0 1 2 3 4 N/A

CASEVAC _____ 0 1 2 3 4 N/A Transportation _____0 1 2 3 4 N/A

15. How well were civil considerations integrated into the unit plan? _____ 0 1 2 3 4 N/A

Planning Overall: 0 1 2 3 4 _____

OCT Comments: _____

SECTION III: EXECUTION

1A. Did the unit conduct detailed PCIs, PCCs and PMCSs prior to departure? _____ Yes No

1B. Did the unit depart for the mission at the prescribed time? _____ Yes No

2A. Did the unit account for all personnel prior to departure? _____ Yes No

2B. What type of movement did the unit use? Dismounted Mounted on Vehicles Air Assault Airborne Assault

3A. Did the unit move to the objective undetected? _____ Yes No

3B. If the unit was detected during movement to the objective were the appropriate actions taken to neutralize the enemy? _____ Yes No NA

4A. How well were Attack and Supporting Positions established? _____ 0 1 2 3 4 N/A

4B. Did the unit leader employ the appropriate weapon for the type of target engaged within its minimum and maximum ranges? _ Yes No N/A

4C. How effective were direct and indirect fires employed during the attack? _____ 0 1 2 3 4 N/A

5. How effective was the enemy suppressed prior to the assault? _____ 0 1 2 3 4 N/A

6. Did the unit execute proper fire and maneuver techniques during the assault on the objective? _____ Yes No N/A

7A. Did the assaulting element have a signal for the supporting element to shift fires during the assault? _____ Yes No

7B. Was the signal given at the proper time to prevent fratricide? _____ Yes No

8A. Was the objective secured and all of the attacking and supporting elements informed? _____ Yes No N/A

8B. Did the unit conduct a thorough tactical site exploitation of the objective? _____ Yes No

9. Did the unit provide a situation report to higher elements and adjacent units that the objective was secured? _____ Yes No

10. Did the unit establish local security and observations posts? _____ Yes No

11. Did the unit process and timely evacuate casualties? _____ Yes No

12. Were enemy detainees timely searched, silenced, segregated and evacuated? _____ Yes No

13. If needed did the unit redistribute personnel, ammunition, critical equipment and supplies? _____ Yes No

14 Did the unit prepare and submit an ACE report to their higher element? _____ Yes No

15. How well did the unit track classes of supply? _____ 0 1 2 3 4 N/A

16. Did the unit maintain adequate supplies to accomplish their mission? _____ Yes No N/A

17. Did the unit Find, Fix and Finish the Enemy? _____ Yes No

18. Was the mission accomplished? _____ Yes No

Execution Overall: 0 1 2 3 4

OCT Comments: _____

SECTION IV: OVERALL

Rate how the unit planned the various offensive phases:		Rate how the unit employed the characteristics of the offense:	
Planning	0 1 2 3 4	Surprise	0 1 2 3 4
Rehearsals	0 1 2 3 4	Tempo	0 1 2 3 4
Execution	0 1 2 3 4	Concentration	0 1 2 3 4
Site Exploitation	0 1 2 3 4	Audacity	0 1 2 3 4
Consolidation	0 1 2 3 4	Flexibility	0 1 2 3 4
		Preparation	0 1 2 3 4
		Security	0 1 2 3 4

How Many **SQD/SECT PLT CO** Offensive Field Training Exercises did the unit conduct in the last 3 months? _____ 6 months? _____

OCT Initials_____ **OCT Call sign**_____ **Division/Task Force** _____ **Number of rotations OCT has observed** _____

Appendix B

Leader's Guide for Offensive Operations

LEADER'S GUIDE FOR OFFENSIVE OPERATIONS

REFERENCES

ATP/FM 3-90.1, Armor and Mechanized Company Team; ATP/FM 3-21.8, Infantry Rifle Platoon and Squad; ADRP 1-02, Terms and Military Symbols; ADP/ADRP 3-90, Offense and Defense; FM 3-21.10, Infantry Rifle Company; Ranger Handbook.

1. UNIT INFORMATION.

a. Have and update a unit TACSOP for Offensive Operations.
b. Ensure personnel are fully trained and understand the TACSOP. Update the TACSOP as required and designate a responsible person to ensure updates are timely integrated into the TACSOP.
c. Ensure equipment is operational to include weapons (zeroed), communications systems, sensors and vehicles.

2. PLANNING.

a. Issue a WARNING ORDER as soon as possible to subordinate units and individual Soldiers.
b. Develop a plan to suppress, obscure, secure, reduce, assault (SOSRA) the enemy.
c. Develop a PACE plan.

d. Develop a plan for marking buildings (day and night markings). Ensure all personnel are familiar with the markings.
e. Plan, request for, forecast and coordinate materials, classes of supply (Class IV, V) for ammunition, pyrotechnics, fuel and other critical items.
f. Conduct a detailed reconnaissance of the objective area with subordinate leaders and other key personnel (to include FIST).
    1) Ensure security is maintained during the reconnaissance.
    2) Identify ambush sites, security sites, fighting positions, attack positions, supporting positions, and obstacles.
    3) Identify an engagement area to neutralize the enemy force with mass direct and indirect fires.
    4) Identify the most likely and most dangerous enemy counterattack avenues.
    5) Establish control measures for engagements to include hand and arms signals.
    6) Coordinate with adjacent and other units operating in the area.
    7) Plan for survivability and establish indirect fire preplanned targets
    8) Plan for expected and unexpected contact.
    9) Develop a plan for detainee operations.
g. Develop an operations order, issue and rehearse the plan (prioritize and conduct different types of plans).
    1) Conduct PCIs and PCCs.
    2) Use all intelligence resources to include unmanned aerial systems (UASs).
    3) Develop and rehearse a plan for breaching operations.
    4) Keep higher and adjacent units informed.
    5) Develop a plan for civilian traffic in the area and inform unit personnel.
    6) Develop and rehearse a casualty collection/evacuation plan. Ensure that all leaders and Soldiers are familiar with the 9-line system for requesting casualty evacuations.
    7) Develop and rehearse a plan if the enemy executes a counterattack.
    8) Maintain 100% accountability of personnel and equipment.

3. EXECUTION.

a. Depart at the prescribed time. Inform higher elements of departure.
b. Ensure communications are established and maintained with all units.
c. Move to the objective site undetected (find, fix and finish the enemy).
    1) Occupy assault and supporting positions.
    2) Employ appropriate weapon for the type of target to be engaged.
    3) Suppress enemy prior to the assault. Shift fires as needed.
    4) Execute the proper fire and movement techniques during the assault.
    5) Execute breaching operations.
    6) Fix, attack and finish the enemy.
        (a) Notify all elements to include higher elements when the objective is secured.
        (b) Conduct a tactical site exploitation of the objective site.
        (c) Conduct timely evacuation of casualties.

(d) Silence, search, segregate, conduct tactical questioning (by qualified personnel) and evacuate detainees.

4. FOLLOW UP OPERATIONS.

a. Reorganize and Consolidate.
b. Secure area.
c. Conduct debriefing and after action review.
d. Prepare for future operations.

LEADER NOTES