

IMPLEMENTING MISSION COMMAND PHILOSOPHY

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fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

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ABSTRACT

IMPLEMENTING MISSION COMMAND PHILOSOPHY, by Major Derek F. Bartlett,
94 pages

The United States Army's transition from counter-insurgency operations to large-scale ground combat has brought to light concerns on using mission command philosophy, specifically decentralized operations, to defeat a peer threat. A peer threat has technology that can break down U.S. Army command and control architecture, outrange U.S. artillery, and attack individual weapon systems with cyber capabilities. A peer threat places a focus on how a company, platoon, or section should be able to operate without immediate feedback from a higher headquarters. The problem, according to the 2015 Department of the Army Inspector General Survey, is the inexperienced leaders at the company echelon and below do not understand how to implement mission command philosophy. This research used psychology, specifically self-determination theory, to find a basis for the Army to develop tools to implement mission command philosophy at the lowest echelon of leadership.

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ACRONYMS

LSCO	Large-Scale Combat Operations
COIN	Counter-Insurgency Operations
DAIG	Department of the Army Inspector General
CASAL	Center for Army Leadership Annual Survey of Army Leadership
NCO	Non-Commissioned Officer
TRADOC	Training and Doctrine Command
CAC	Combined Arms Center
ALDS	Army Leader Development Strategy
SDT	Self-Determination Theory

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CHAPTER 1

INTRODUCTION

No skill to understand it, mastery to write it.

—Arabic expression, *Anti-fragile*

In October 2017, the United States Army released Field Manual (FM) 3-0, *Operations*. FM 3-0 illustrated the Army shifting focus from counter-insurgency operations to large-scale ground combat. The shift to large-scale ground combat placed the focus of combat operations on a peer threat. FM 3-0 highlights how, now that the Army is dependent on technology, the threat to communications is a concern. With the communications threatened, company-sized units and below must be prepared to operate with limited guidance and remain effective in complex, violent, and ambiguous operational contexts. Therefore, it seems prudent to organize as many small unit activities as possible to train and develop small-unit unit leaders for this anticipated environment. Implementing the principles of mission command philosophy is part of the solution.

The Army defines mission command philosophy as the “exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander’s intent to empower agile and adaptive leaders in the conduct of unified land operations.”¹ The Army’s definition further delineates mission command into six principles: build cohesive teams through mutual trust, create a shared understanding, provide clear commander’s intent, exercise disciplined initiative, use mission orders, and

¹ Headquarters, Department of the Army (HQDA), Army Doctrine Publication (ADP) 6-0, *Mission Command* (Washington, DC: Government Printing Office, 2012) 1-1.

accept prudent risk.² These principles are the guide to understanding mission command philosophy. In 2015, a Department of the Army Inspector General (DAIG) inspection report showed there is a difference in understanding the mission command philosophy by rank.³ The inspection report concluded higher echelons of command understand mission command philosophy. For example, eight of ten battalion and brigade command teams understand and incorporate mission command philosophy into training.⁴

Brigade commanders reported they executed mission command because their commands were large, geographically dispersed, and conducted decentralized operations.⁵ Many brigade commanders believe the mission command philosophy starts with sponsorship, tied to resiliency, and engaged leadership is the key to success.⁶ Brigade commanders believe leaders can promote mission command through counseling focused on duties, responsibilities, and trust.⁷

Battalion commanders believed task organization and command relationships promote mission command and healthy command climates.⁸ Most battalion commanders

² HQDA, ADP 6-0, 1-1.

³ Department of the Army (DoA), Inspector General (IG), *Army Leader Development Inspection: 13 June 2014-05 December 2014* (Washington, DC: Government Printing Office, 2014).

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

cited examples using exercises: provide intent and then conduct a series of in-progress reviews to confirm shared understanding.⁹ For example, a battalion commander gives intent for a combined arms live fire exercise, and then conducts meetings to ensure understanding. Battalion command teams expressed challenges when translating mission command philosophy to the garrison environment. This is where the problem of translating mission command philosophy begins. The study found it common that the battalion command teams tended to focus on the science of control, rather than the art of command. A Command General Staff College instructor drew this picture (see figure 1) to explain how battalion commanders apply the mission command philosophy.

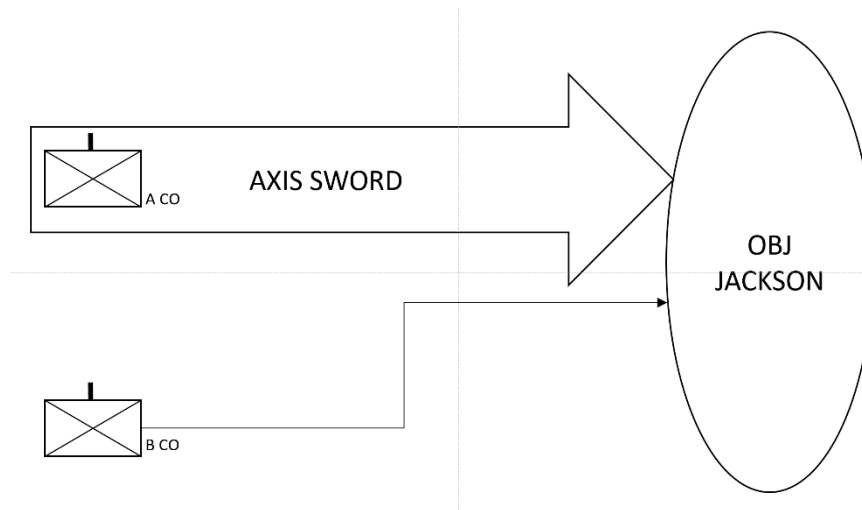


Figure 1. Diagram of Explaining Mission Command Philosophy to CGSC Students

Source: David Batchelor, (M200 Course Instruction, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2018).

⁹ DoA IG, *Army Leader Development Inspection: 13 June 2014-05 December 2014*.

Hypothetically, A CO has more leniency to maneuver on the battlefield on a broad axis due to a high level of experience. B CO has less leniency to maneuver due to less experience and is required to follow a specific route to the objective. The battalion commander has empowered A CO because he or she has a higher belief in the experience of the commander and competency to employ that unit. The drawing suggests B CO is not as empowered, therefore has less maneuver space to arrive at OBJ Jackson. These graphics can depict how accepting prudent risk and letting commanders exercise disciplined initiative depending on the subordinate's level of experience are key to understanding how battalion commanders apply mission command philosophy.

The DAIG findings report only four of every ten company command teams understand or incorporated mission command philosophy into their training plans.¹⁰ Company command teams struggled with how to execute and translate mission command into daily, garrison events. Many commanders admitted, "Mission command was neither understood, nor could it be articulated."¹¹ The company command teams were quick to discuss micromanagement, and few believed the current culture in their unit accepted prudent risk to execute mission command.

As an example, company commanders may dictate movements, ranges, when to pick up food, and training mission essential tasks to the platoon leaders and their unit. This causes a gap in understanding the mission command philosophy, due to how prescriptive company commanders may need to be for these tasks. This may be why at

¹⁰ DoA IG, *Army Leader Development Inspection: 13 June 2014-05 December 2014*.

¹¹ Ibid.

the lowest echelons of leadership, non-commissioned officers and young officers do not feel trusted.

The 2016 Center for Army Leadership's Annual Survey of Army Leadership (CASAL) portrays 25% of sergeants and staff sergeants surveyed do not feel trusted in their organization.¹² In addition, 20% of second lieutenants, first lieutenants, and captains do not feel senior leaders trust them. Inexperience may cause this mistrust, since the younger ranks may not have a full appreciation or understanding of the mission command philosophy. Historically, we have placed inexperienced leaders in positions with a high degree of responsibility. One example is the empowerment of airborne paratroopers in World War II.

The rule of LGOPs (Little Groups of Paratroopers) suggests that even after the expiration of the best airborne plan, a frightening effect occurs on the battlefield.¹³ This is, in its purest form, small groups of 19-year old American paratroopers. They are well-trained, armed, and collectively remember the intent as "March to the sound of the guns and kill anyone who is not dressed like you...." The rule of LGOPs is important. Soldiers understood the commander's intent, and did not ask for permission to accomplish the mission.

¹² Center for Army Leadership (CAL), *Annual Survey for Army Leadership (CASAL) Military Leader Findings* (Fort Leavenworth, KS: Leadership Research, Assessment and Doctrine Division, 2016), accessed October 24, 2018, <https://apps.dtic.mil/dtic/tr/fulltext/u2/1056630.pdf>.

¹³ Christopher Freeman, "Little Group, Big Effects," U.S. Army, 2016, accessed February 04, 2018, https://www.army.mil/article/168450/little_group_big_effects.

LGOPs suggests that the U.S. Army understood the epitome of mission command philosophy in combat at one point. What the Army does not have is a basis for training or implementing the mission command philosophy at the lowest echelon for inexperienced leaders. Psychological studies specifically looking at an individual's psychological needs may offer suggestions toward creative methods to aid junior leaders in gaining experience in the application of mission command philosophy. Self-determination theory may offer several methods on implementing mission command philosophy. Self-determination theory examines how biological, social, and cultural conditions either enhance or undermine the human ability for psychological growth, engagement, and wellness.¹⁴

Within self-determination theory, common threads on how to practice psychological growth, engagement, and wellness are through peer-to-peer learning, providing choices, and experimentation. These three threads all focus on the individual psychological need for autonomy, which is one of the basic psychological needs according to Self-determination theory. Autonomy, the feeling of being the origin of one's own behaviors, is the basis for using psychological studies on peer-to-peer learning, providing choices, and experimentation. This research focuses on each of these ideas through the synthesis of hundreds of psychological studies to find simple, straightforward ways that are easy to implement at the lowest echelon for inexperienced leaders. Leaders need to have ways to implement mission command philosophy before combat, as the following example shows.

¹⁴ Richard M. Ryan and Edward L. Deci, "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," *American Psychologist* (January 2000): 68-74.

A recent anecdotal example from the U.S. Army is a commander places a non-commissioned officer and a lieutenant in the mountains of Afghanistan with a radio. The inexperienced ones will ask for forgiveness not permission when accomplishing a task. Try to micromanage them and they will find the off switch. This is the American method of mission command philosophy. This method can lead to disastrous results, due to the inexperience at that echelon. Inexperienced leaders need a method to implement the mission command philosophy. The Army can build tools through peer-to-peer learning, providing choices, and experimentation as a way to solve this problem.

Purpose

The U.S. Army published FM 3-0 in October 2017, with a new focus on large-scale combat operations. Large-scale combat operations are intense, lethal, and brutal.¹⁵ A near-peer threat will have jamming assets capable of degrading any type of communication.¹⁶ This degradation in communication causes ambiguity on the battlefield, requiring inexperienced leaders to make decisions in the moment. The expected operational context of large-scale combat operations describes the need of why we need to practice implementing mission command at the lowest echelon of leadership. If a platoon leader or a platoon sergeant loses communications with their higher headquarters, they should have confidence in themselves to make decisions that align with the brigade and battalion commanders' intent.

¹⁵ Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 1-3.

¹⁶ Ibid.

Holistically, mission command is complicated to extract from the body of literature. This is because the U.S. Army uses the words mission command to label several different concepts: one is the mission command philosophy, another is the mission command warfighting function, and the third is the collection of mission command systems. Therefore, this research explores the origination of mission command as a philosophy and the transformation into what U.S. Army doctrine states currently.

This research is important due to the doctrinal shift from counter-insurgency operations to large-scale ground combat. Younger U.S. Army leaders have become accustomed to receiving minute-to-minute feedback from their higher headquarters when an incident occurs in combat. As an Army, we do not have that luxury in large-scale ground combat. Now, more than ever, we need to implement the mission command philosophy from garrison to the training centers, so we prepare our inexperienced young leaders and inspire confidence in them to lead when no one can answer the radio.

Issues

This thesis addresses the issues of (1) what method is the Army using currently to implement mission command philosophy? In addition, (2) why are these methods not working at the lowest echelons of leadership?

Problem

Large-scale ground combat may cause a complex and ambiguous environment where inexperienced junior leaders must be prepared to operate with limited guidance. The 2015 DAIG survey portraying how company commanders do not understand mission command philosophy suggests a relationship with the 2017 CASAL data on Soldiers not

feeling developed or trusted. Soldiers not feeling developed or trusted may exacerbate the complex and ambiguous environment because the Army does not have a base to develop tools for company echelon and below in implementing mission command philosophy. This thesis sought to study the basis for developing tools to implement mission command philosophy for junior leaders.

Research Questions

Primary Research Question

How can the Army better implement the mission command philosophy with inexperienced leaders at company-level and below?

Secondary Research Questions

1. Does intrinsic motivation relate to the idea of mission command philosophy?
2. Can the research behind peer-to-peer learning, providing choices, and experimentation aid junior leaders in implementing the mission command philosophy?
3. Can other fields, i.e. education or business, help with understanding the fundamental ideas of mission command philosophy?

Assumptions

There are three assumptions:

1. The 2015 DAIG results of company commander's not understanding mission command philosophy relates to the 2017 CASAL data on lower echelon leadership not feeling developed or trusted.

2. Mission command philosophy at the lowest echelon of leadership is not widely accepted as useful by inexperienced leaders.
3. The Army can use peer-to-peer learning, provide choices, and experimentation as a source to create tools in implementing mission command philosophy at the lowest echelon of leadership.

Limitations

The time allocated for completing and submitting the thesis was approximately nine months. Therefore, the data researched was all secondary sources from either history, psychological studies, or past Army studies. The research did not include surveys and interviews, which narrowed the ideas within the thesis.

Scope and Delimitations

This research will not determine how Soldiers, non-commissioned officers, or officers feel about mission command philosophy. The researcher did not consider doctrinal changes in ADRP 6-22, *Army Leadership*, and ADP 6-0, *Mission Command*, in 2019 due to the timing of the updated publications.

Significance of this Study

The purpose of this study was to find an approach to tailoring tools for inexperienced junior leaders in implementing mission command philosophy. The anticipated context of large-scale ground combat will require much from our lower echelon junior leaders.¹⁷ The Army should foster the ability for inexperienced leaders at

¹⁷ HQDA, FM 3-0, 1-16.

all echelons to give a coherent end-state and subordinates to understand that end-state quickly. A way to develop the ability to implement mission command philosophy is through peer-to-peer learning, providing choices, and experimentation. The next generation will need leaders that understand mission command; giving a base for the Army to develop tools to train mission command is a part of that process.

CHAPTER 2

LITERATURE REVIEW

To plan maneuvers so that some of the elements of friction are involved which will train officer's judgement, common sense and resolution is far more worthwhile than experience people might think.

—Carl von Clausewitz, *On War*

Introduction

This research began with the question of how to make the mission command philosophy implementable at the lowest echelons of leadership for relatively inexperienced leaders. The literature review begins with the introduction of FM 3-0, and how the Army is shifting away from counter-insurgency operations to large-scale ground combat. Junior leaders will have to operate in a violent, ambiguous, and complex environment against a peer threat with all of the same capabilities the U.S. has. Company-sized units and below must be prepared to operate with incomplete guidance and remain effective in ambiguous operational contexts. Therefore, the inexperienced lowest echelon of leadership should train for this anticipated environment.

The literature review continues with the 2015 DAIG inspection. The inspection produced findings that suggest, in general, company commanders do not understand the mission command philosophy, and therefore, struggle in applying the principles of the philosophy. The 2017 CASAL data highlights a high amount of younger NCOs and officers do not feel developed or trusted. To find methods for the Army to implement mission command philosophy, this research focused on a brief history of mission command philosophy and how it relates to motivational psychology.

The literature review then moves to *Auftragstaktik*, the German version of mission command philosophy. The history portion of mission command philosophy of this research ends with the TRADOC publication in 2018, and some new ways the Army is looking at the mission command philosophy. This research then examines the development of the theory of motivation and its relationship to self-determination theory (SDT). SDT has a wide range of research, but this research focuses on psychological studies examining peer-to-peer learning, providing choices, and experimentation.

The research focuses on these specific studies due to each study using college students, which is the same age range as junior leaders in the Army. In addition, each study attained results by taking a control group and experiment group, taking an action, and that action improved motivation for the task in the experiment group. Each action taken in the experiment group fulfilled individual psychological needs of competence, relatedness, and autonomy. According to SDT, meeting these psychological needs fosters an individual's intrinsic motivation to apply oneself to tasks.¹⁸

This research uses SDT as a lens to illuminate ideas on how the Army can use peer-to-peer learning, providing choices, and experimentation to make the mission command philosophy implementable at the lowest echelon of leadership for inexperienced leaders. If the philosophy is implementable, then inexperienced leaders at the lowest echelon of leadership can be prepared for the complexity of the next war, especially against a peer threat that can disrupt command and control communications.

¹⁸ Edward L. Deci and Richard M. Ryan, "An Introduction to Self Determination Theory," in *Intrinsic Motivation and Self-Determination in Human Behavior* (Boston, MA: Springer, 1985), 3-10, doi:10.1007/978-1-4899-2271-7_1.

FM 3-0 highlights why as an Army we need to prepare for large scale ground combat, and how we should shift our thinking from the counter-insurgency fight.

Field Manual 3-0

Traditionally, battlefields in large-scale combat operations have been chaotic, with violence and uncertainty throughout the combat zone. A near-peer threat will employ conventional tactics, offensive cyber operations, and electromagnetic spectrum disruptions, which the U.S did not experience conducting counter-insurgency operations within Afghanistan or Iraq. Enemy cyberspace capabilities can disrupt friendly information systems and degrade radio communications. Treaty, law, and policy restrictions do not encumber threat operations in cyber operations like those imposed on U.S. forces, which may allow adversaries or enemies an initial advantage. The U.S. recognizes the spread of cyberspace capabilities and the impact of these capabilities on combat operations.¹⁹

The U.S. Army defines the electromagnetic spectrum (EMS) as the range of frequencies of electromagnetic radiation from zero to infinity.²⁰ The EMS crosses all domains, and it provides a vital link between the space and cyberspace domains. Space operations depend on the EMS for the transport of information and the control of space assets, including Global Positioning System. Space operations provide a specific capability of transport through the space domain for long-haul and limited access communications. Space assets provide a key global connectivity capability for

¹⁹ HQDA, FM 3-0, 1-4.

²⁰ Ibid.

cyberspace operations. Conversely, cyberspace operations provide a capability to execute space operations. This interrelationship is an important consideration across cyberspace operations, and it is particularly important when conducting targeting in cyberspace.²¹ Peer threat capability to degrade American command and control systems through cyberspace or space may create complex and ambiguous situations at all levels of leadership. The disruption of the command and control architecture is bound to happen, creating fluid situations for inexperienced leaders at the lowest echelons.

The more fluid a situation becomes, the more important and difficult it is for commanders to visualize the battlefield.²² The philosophy of mission command guides commanders, staffs, and subordinates in their approach to fluid operations.²³ The principles of the mission command philosophy help mitigate the risk of a fluid situation, granting the ability of a lower echelon or subordinate leader to exploit the initiative while out of contact with their higher headquarters.²⁴ A possible problem in solving these fluid situations with mission command philosophy is that company commander's struggle with instilling mission command philosophy within their formations, according to the 2015 Department of the Army Inspector General Survey.²⁵

²¹ HQDA, FM 3-0. 1-7.

²² Ibid., 1-4.

²³ Ibid., ix.

²⁴ Ibid., 1-4.

²⁵ DoA IG, *Army Leader Development Inspection: 13 June 2014-05 December 2014*, 22.

2015 Department of the Army Inspector General Survey (DAIG)

In February 2009, Training and Doctrine Command (TRADOC) directed the U.S. Army Combined Arms Center (CAC) at Fort Leavenworth, KS, to develop an Army Leader Development Strategy (ALDS) by the end of fiscal year.²⁶ The strategy built on the Army's experiences from the end of the Cold War to eight years of war in Iraq and Afghanistan. Four years later in 2013, after a decade at war and the assessment that the future operational environment would be even more uncertain, the ALDS underwent a major re-write. The ALDS introduced a new vision, mission, framework, and several imperatives to synchronize leadership training at all echelons. The DAIG survey focused on the implementation of ALDS 2013 with three objectives.²⁷

The first objective was to assess implementation of ALDS 2013 through guidance at the brigade level and below and collect leader development best practices to share across the Army. The second was to determine how Army units implemented the ALDS 2013 through unit-based programs. The third objective was to determine where current policies, regulations, procedures, resources, and culture inhibit execution of ALDS 2013.²⁸

The DAIG survey finding specific to the third objective suggested company and below level leaders struggled to understand and apply mission command philosophy. For example, the survey found that less than half of company command teams did not

²⁶ DoA IG, *Army Leader Development Inspection: 13 June 2014-05 December 2014*, 22.

²⁷ Ibid.

²⁸ Ibid.

understand mission command nor incorporate it into training. Company commanders were uncomfortable talking about mission command and quick to talk about micro-management. Few company command teams believed the current culture accepted prudent risk to execute mission command, specifically not allowing Soldiers to learn from their mistakes.²⁹

Company commanders struggle with translating the mission command philosophy into daily garrison events.³⁰ Building trust and creating a shared understanding are two of the principles of mission command philosophy. The Center for Army Leadership (CAL) Annual Survey of Army Leadership found that, at the lowest echelon, Soldiers do not feel trusted or developed. This research suggests that because company commanders struggle with translating the mission command philosophy into training, Soldiers at the lowest echelons may not feel trusted or developed.

2017 CASAL Survey

The Center for Army Leadership (CAL) Annual Survey of Army Leadership (CASAL) is a recurring, longitudinal study to capture assessments from the field about leader development.³¹ CASAL informs senior leaders about leadership quality and associated upward or downward trends since 2005. Soldiers completed the 2016 CASAL

²⁹ DoA IG, *Army Leader Development Inspection: 13 June 2014-05 December 2014*, 22.

³⁰ Ibid.

³¹ CAL, *CASAL Military Leader Findings*.

survey from October 26 through November 28, 2016. Survey respondents consisted of 7,798 active component Soldiers in the ranks of sergeant through colonel.

The CASAL found that developing others continues to be a problem. The survey authors state, “As in past years, the competency develops others continues to be a concern across all leader cohorts”.³² Figure 2 displays the percentage of respondents who reported that their immediate superior is effective in developing their subordinates. Junior leaders, specifically second lieutenant, first lieutenant, captain, sergeant, and staff sergeant all scored the lowest on feeling developed.

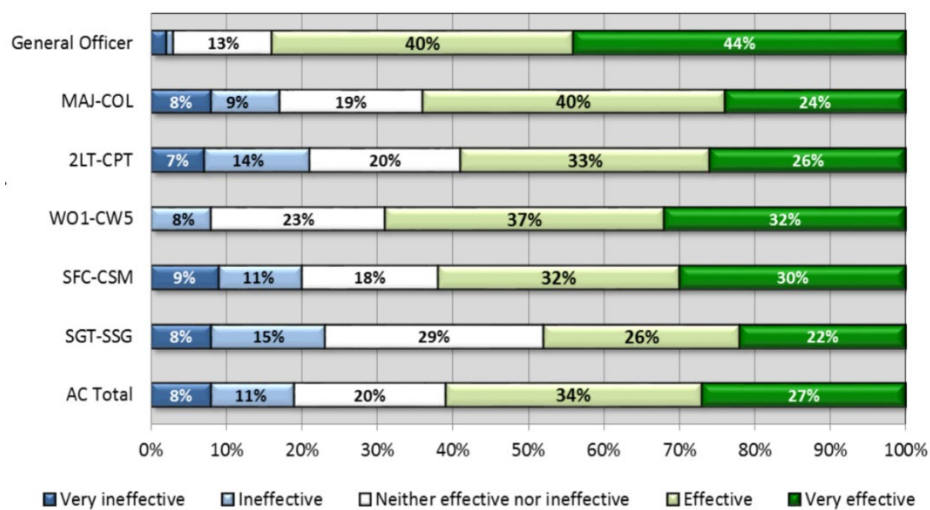


Figure 2. Effectiveness of AC Leaders in Developing Subordinates

Source: Center for Army Leadership, *Annual Survey for Army Leadership (CASAL) Military Leader Findings* (Fort Leavenworth, KS: Leadership Research, Assessment and Doctrine Division, 2016), accessed October 24, 2018, <https://apps.dtic.mil/dtic/tr/fulltext/u2/1056630.pdf>.

³² CAL, *CASAL Military Leader Findings*.

Specifically, the CASAL looked at the details of how leaders have taken action to develop their subordinates.³³ Figure 3 displays the percentage of respondents who reported that their immediate superior had taken various developmental actions in the past 12 months. The CASAL data found that enhanced learning items, specifically coaching and developing, were reported as some of the lowest rated categories.

Percentage of AC and RC Respondents Perceiving Actions that Their Immediate Superiors Took in the Past 12 Months to Develop the Respondents' Leadership Skills (2015 CASAL)	
	AC
Setting Conditions for Development	
1. Remained approachable for me to seek input and ask questions	61%
2. Fostered a climate for development (e.g., allowed learning from honest mistakes)	52%
Providing Feedback	
3. Provided encouragement and/or praise	60%
4. Provided me with feedback on my performance (e.g., formal or informal counseling)	46%
Enhancing Learning	
5. Involved me in a decision-making or planning process	56%
6. Shared experiences, lessons learned, or advice	53%
7. Encouraged or recommended continuing education (e.g., college courses, job certifications)	29%
8. Provided training, teaching, coaching or skill development	28%
9. Provided mentoring to prepare me for future roles or assignments	27%
10. Authorized or allowed me to attend resident training or education	26%
11. Referred me to developmental resources (e.g., online courses, readings, study topics)	19%
Creating Opportunities	
12. Delegated tasks to develop me	49%
13. Provided me with new opportunities to lead	37%
14. Created or called attention to challenging job assignments or opportunities	26%

Figure 3. Developing Leadership Skills

Source: Center for Army Leadership, *Annual Survey for Army Leadership (CASAL) Military Leader Findings* (Fort Leavenworth, KS: Leadership Research, Assessment and Doctrine Division, 2016), accessed October 24, 2018, <https://apps.dtic.mil/dtic/tr/fulltext/u2/1056630.pdf>.

³³ CAL, *CASAL Military Leader Findings*.

The CASAL data suggests that the biggest problem is that Soldiers do not feel developed. These ideas can relate directly to empowerment, initiative, and trust within an organization. A key point to highlight here is that 52% of respondents believe their superior allows them to learn from honest mistakes. Another problem identified is trust within the organization, specifically for younger leaders as seen in Figure 4.

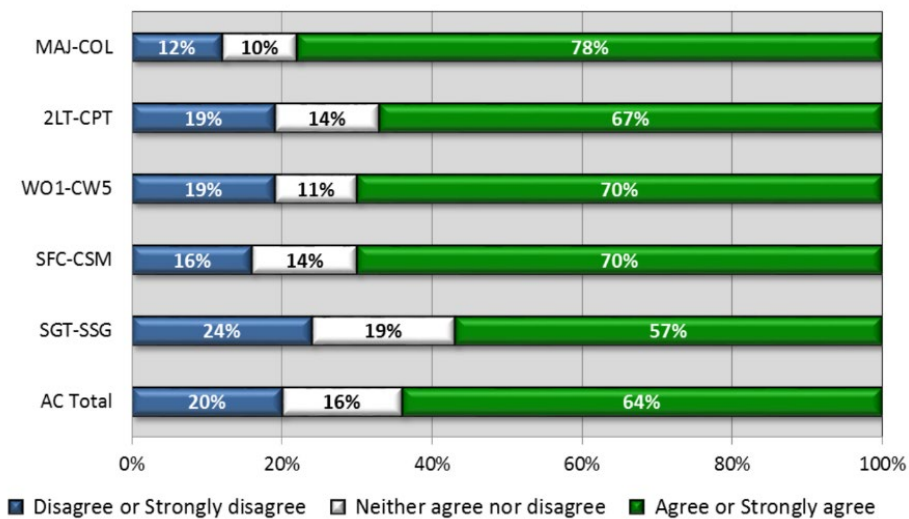


Figure 4. Perceptions of Collective Trust in Units and Organizations by Rank

Source: Center for Army Leadership, *Annual Survey for Army Leadership (CASAL) Military Leader Findings* (Fort Leavenworth, KS: Leadership Research, Assessment and Doctrine Division, 2016), accessed October 24, 2018, <https://apps.dtic.mil/dtic/tr/fulltext/u2/1056630.pdf>.

Trust is an important part of an organization. Figure 4 shows that our junior leaders, as in second lieutenant, first lieutenant, captain, sergeant, and staff sergeant, all feel the lowest amount of trust in the organization. This may be due to inexperience of the company commander with the use and implementation of the mission command philosophy.

These problems of development and trust suggest a relationship with company commanders struggling to integrate the mission command philosophy into daily training events. The principles of mission command philosophy, specifically building trust and creating a shared understanding, require leaders to provide training and coaching. According to the survey, only 28% of subordinates believe that their immediate superior trained or coached them. The CASAL data reinforces the idea that the U.S. Army should look at different ways to coach and train the lowest echelons of leadership, specifically company commanders on integrating mission command philosophy into daily training. Mission command philosophy traces its roots to the Germans of the early 19th century, and understanding how their army understood the philosophy can help the U.S. Army understand it as well.

History of Mission Command

U.S. Army mission command philosophy traces its roots to the German concept of *Auftragstaktik* introduced by Field Marshal Helmut von Moltke, Chief of the General Staff of the Prussian Army from 1857 to 1888.³⁴ He states, “Diverse are the situations under which an officer has to act on the basis of his own view of the situation. It would be wrong if he had to wait for orders at times when no orders are given. But most

³⁴ Werner Widder, “Auftragstaktik & Innere Führung: Trademarks of German Leadership,” *Military Review* (September-October 2002): 3-6, accessed October 30, 2018, <https://www.scribd.com/document/58814248/Auftragstaktik-Innere-fuehrung-Trademarks-of-German-Leadership>.

productive are his actions when he acts within the framework of his senior commander's intent.”³⁵

An old German Army regulation describes *Auftragstaktik* as the “pre-eminent command and control principle in the Army. It is based on mutual trust and requires each Soldier's unwavering commitment to perform his duty.”³⁶ The regulation goes on to say, “The military leader informs what his intention is, sets clear achievable objectives, and provides the required forces and resources.”³⁷

Moltke believed that once fighting has begun, planning gives way to general directives and subordinate initiative. Victory depends on the ability of tactical level subordinates to identify and exploit fleeting opportunities for the benefit of the strategic objective.³⁸ Moltke identified three main ideas central to *Auftragstaktik*.³⁹

The first concept is concise orders. The training of officers centers on using orders where only a mission statement, statement of intent, disposition of enemy and friendly forces, and occasionally special instructions are included. The grading of officers includes how short and concise the statement is and fails if it is too long or complex.

³⁵ Widder, “Auftragstaktik & Innere Führung: Trademarks of German Leadership.”

³⁶ Ibid.

³⁷ Ibid.

³⁸ Eitan Shamir, *Transforming Command: The Pursuit of Mission Command in the U.S., British, and Israeli Armies* (Stanford, CA: Stanford Security Studies, 2011), 14.

³⁹ Martin Samuels, *Command or Control? Command, Training and Tactics in the British and German Armies 1888-1918* (London: Frank Cass and Co., 1995), 6.

The second idea is feedback from intent. A written letter, given to the individual in charge, has a short commander's intent, no more than one page. The subordinate officer receiving the orders can carry out the action however they would like. The superior officer who is observing the training rides along and observes the unit conducting the training.⁴⁰ When the officer believes operations have reached a climax, he assembles the unit and provides feedback on what has taken place. This is where the superior officer demonstrates whether the way the operation occurred was in accordance with their views or not.⁴¹

The third idea is experimentation. Elastic defense in depth, shock troops, and *blitzkrieg* in World War I and II created by the Germans began as an experiment.⁴² A trained squad leader could experiment with an idea in combat or training and pass the idea up the chain of command. Each of these ideas originated with the lowest echelon leaders, and made it into new doctrine.⁴³

Fast forward to the 1990s and U.S. leadership hypothesized that technologies would lift the fog of war to allow unprecedented understanding, permit near-perfect

⁴⁰ Samuels, *Command or Control? Command, Training and Tactics in the British and German Armies 1888-1918*, 6.

⁴¹ Ibid.

⁴² Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004), 72.

⁴³ Ibid.

decisions, and facilitate absolute precision.⁴⁴ However, the last few decades have proven that operations are a human undertaking.⁴⁵ Relationships and actions of groups that are difficult to understand are invisible to technology, but are the focus in counterinsurgency operations. Army leaders need to adapt quickly to changing conditions, maintain a shared understanding of the environment, and create a culture that fosters trust, initiative, and prudent risk taking.

The Army adopted the mission command philosophy to guide how it trains and fights to help Army leaders adapt to this changing environment and guide them on changing the culture to foster trust, initiative, and prudent risk. The mission command philosophy endeavored to move the Army beyond a technological focus and sought to reestablish the importance of people over enabling technologies. Fundamentally, this shift sought to make the art of command less about controlling individual Soldiers and more about empowering leaders to act within an intent.⁴⁶

There is a cultural bias that mission command is “commander’s business” when in reality, mission command applies to all Army professionals. TRADOC published the U.S. Army Functional Concept for Mission Command 2020-2040 in February 2017. The manual points out that to build on the current doctrinal foundation, the Army must clarify and take steps to affect a culture of mission command into institutional and operational

⁴⁴ U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-3-3, *The United States Army Function Concept for Mission Command 2016-2028*. (Fort Eustis, VA: U.S. Army Training and Doctrine Command, 2010).

⁴⁵ Ibid.

⁴⁶ Ibid.

Army activities..⁴⁷ A proposed definition from the TRADOC pamphlet (see figure 5) is leaders convey a clear intent and empower subordinates to take disciplined initiative.

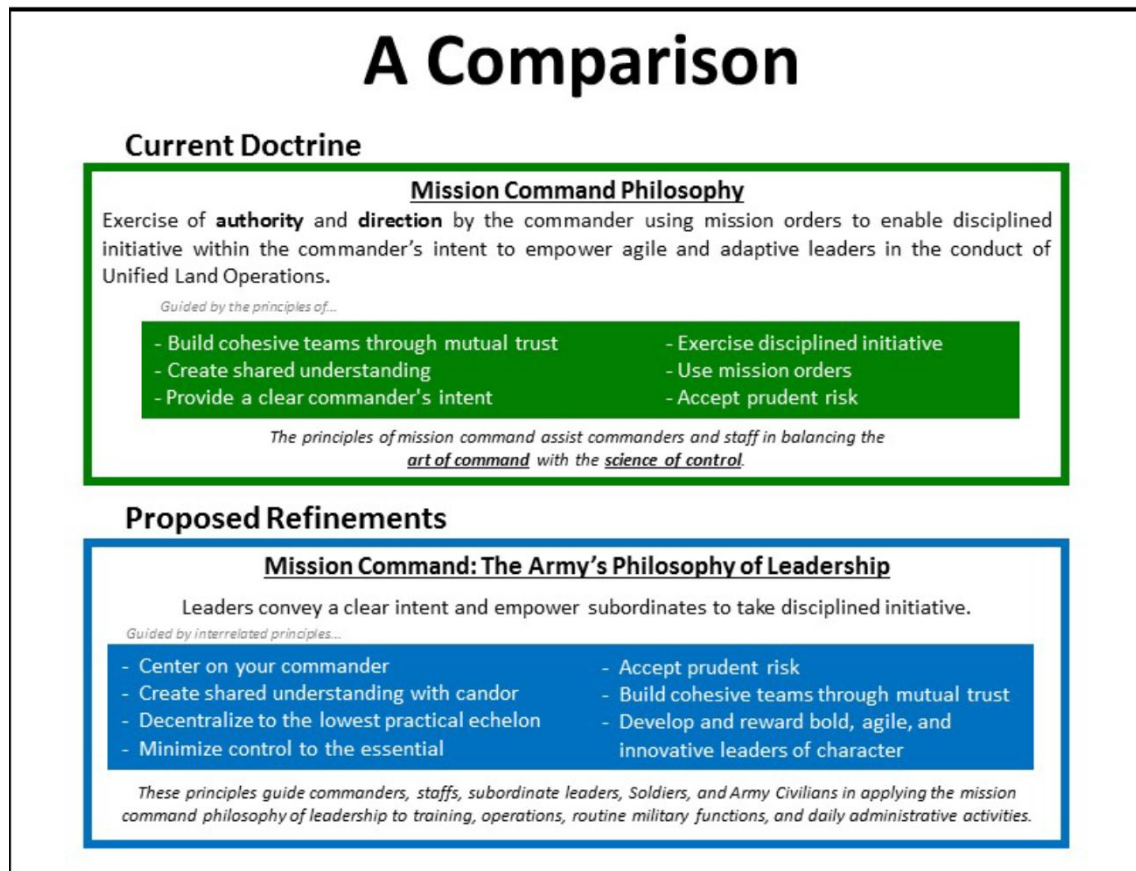


Figure 5. Proposed Refinements to Mission Command Philosophy

Source: U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-3-3, *The United States Army Function Concept for Mission Command 2016-2028*. (Fort Eustis, VA: U.S. Army Training and Doctrine Command, 2010).

The proposed refinements show how the mission command philosophy is moving more towards a focus on leaders within a unit versus a commander and staff. A problem

⁴⁷ TRADOC, TRADOC Pamphlet 525-3-3.

that the new definition addresses is that the mission command philosophy should not be commander centric, but leader centric instead. A counterargument is that each leader needs a commander for intent, which is one of the guiding principles in the mission command philosophy. This helps create the dialogue that the U.S. Army needs to have about how to implement the mission command philosophy.

A second refinement that the TRADOC pamphlet discussed is to what degree should a commander use mission command philosophy. The pamphlet looks at factors affecting decentralization and control (see figure 6)—to make it clearer for commanders at all echelons on when and when not to use the idea of mission command.

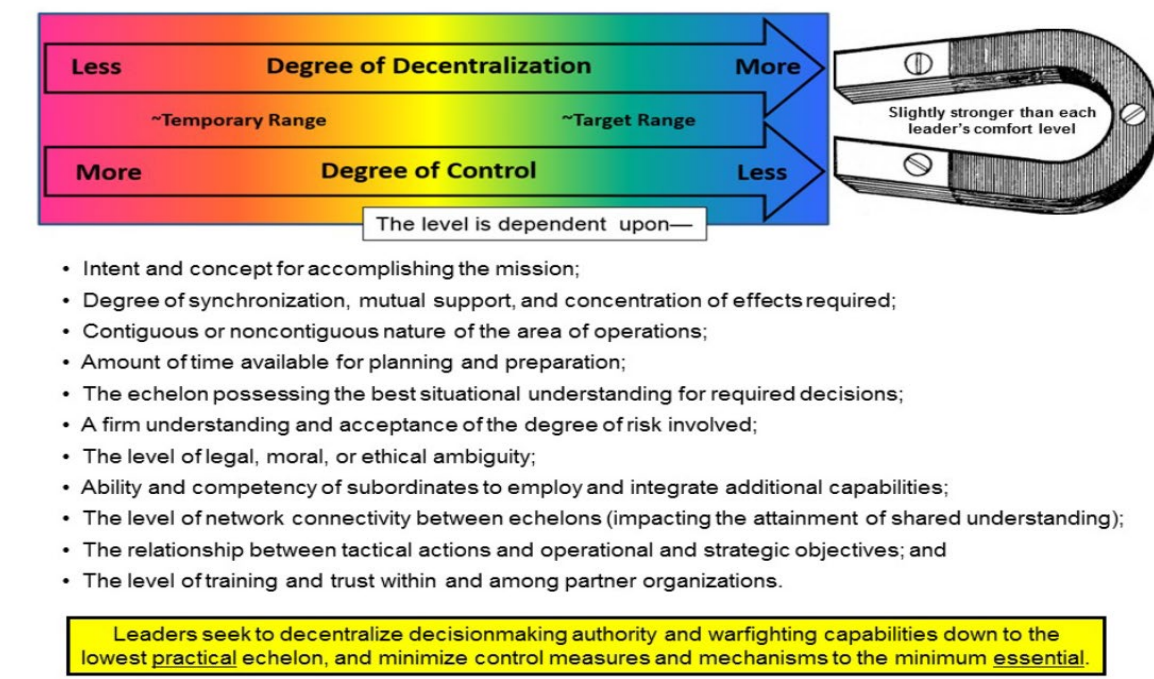


Figure 6. Factors Affecting Decentralization and Control

Source: U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-3-3, *The United States Army Function Concept for Mission Command 2016-2028* (Fort Eustis, VA: U.S. Army Training and Doctrine Command, 2010).

TRADOC Pamphlet 525-3-3 presents some ideas on how to help understand the mission command philosophy. The U.S. Army has taken a hard look at the mission command philosophy, moving more towards leaders using mission command instead of just commanders. To help further understand the mission command philosophy, the goal is to understand how lower echelon leaders understand and receive the mission command philosophy. Looking at how the lowest echelon leader is motivated can help develop a base of understanding on how to implement the mission command philosophy.

Motivation

Motivation has been a central field of psychological study because it is at the core of biological, cognitive, and social guidelines.⁴⁸ In the early 1900s, Frederick Winslow Taylor found that hourly paid work consists mainly of simple, not particularly interesting, tasks.⁴⁹ He believed the only way to get people to do what you want is to incentivize them properly and monitor them carefully. This timeframe was during the Industrial Revolution, where manual labor was the focus of work.

In 1962, Abraham Maslow brought the topic of human motivation the forefront of psychology.⁵⁰ Maslow put forth the common assumptions that he believed unified humanistic psychologists. One of his key ideas was that psychological health and productivity is the result when individuals are encouraged to actualize their inner

⁴⁸ Ryan and Deci. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," 68-74.

⁴⁹ Daniel H. Pink, *Drive* (New York: Riverhead Books, 2009), 27.

⁵⁰ Marvin R. Gottlieb, *Motivation The Managers Key to Closing the Commitment Gap* (Santa Barbara: ABC-CLIO, LLC, 2017), 8.

nature.⁵¹ His five levels of needs are physiological, safety, belongingness, esteem, and self-actualization (see figure 7).

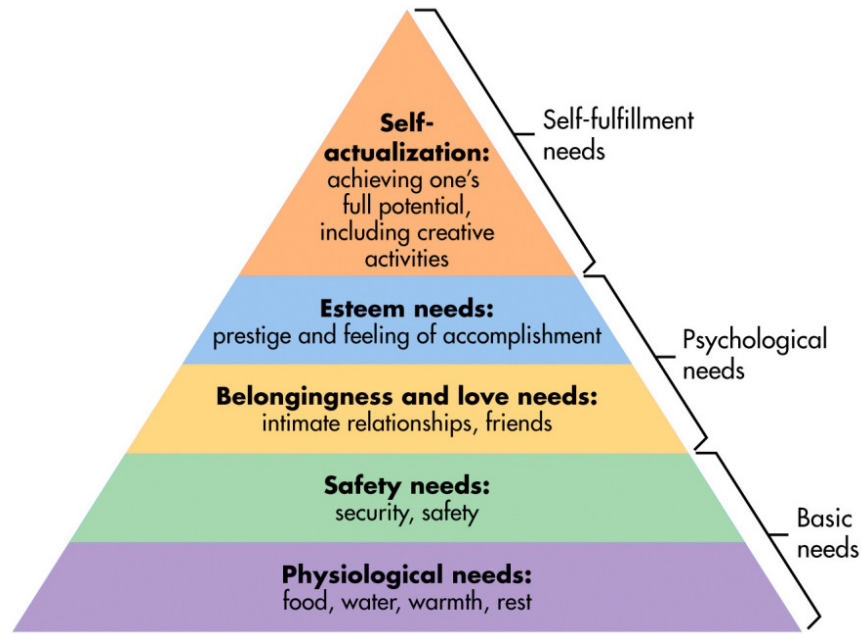


Figure 7. Maslow's Needs

Source: Saul McLeod, "Maslow's Needs, Simple Psychology, 2018, simplepsychology.org/maslow.html.

The introduction of Frederick Herzberg's theory of hygiene and motivational factors theory happened during the same period.⁵² He was concerned with people's well-

⁵¹ Gottlieb, *Motivation The Managers Key to Closing the Commitment Gap*, 8.

⁵² Richard M. Ryan and Edward L. Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness* (New York: Guilford, 2018), 29.

being and worth.⁵³ Herzberg believed that company policies, supervision, work conditions, salary, and relationship with peers lead to dissatisfaction (hygiene). Factors leading to satisfaction include achievement, recognition, work itself, responsibility, advancement, and growth as seen in Table 1.

Table 1. Factors Leading to Satisfaction or Dissatisfaction

Factors leading to Dissatisfaction (Hygiene)	Factors Leading to Satisfaction (Motivation)
Company Policy	Achievement
Supervision	Recognition
Relationship with Boss	Work Itself
Work Conditions	Responsibility
Salary	Advancement
Relationship with Peers	Growth

Source: Richard M. Ryan and Edward L. Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness* (New York: Guilford, 2018), 11.

Maslow and Herzberg's theories led to Peter Drucker coining the term "knowledge workers" in 1967.⁵⁴ These were the workers that did not just follow step-by-step instructions at work, they had to think about what they were doing. Behavioral scientists often divided what individuals do at a job into either algorithmic or heuristic.⁵⁵ An algorithmic task is one in which you follow a set of established instructions down a

⁵³ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 29.

⁵⁴ Ibid., 7.

⁵⁵ Pink, *Drive*, 27.

single pathway to one conclusion. A heuristic task is one where you have to experiment with possibilities and devise a novel solution; there is no one pathway to come to the conclusion. These ideas and others led to the creation of SDT.

Self-Determination Theory

Self-determination theory is centrally concerned with the social conditions that facilitate or hinder human flourishing.⁵⁶ One of the mini theories within SDT is concerned with supporting the individual's natural or intrinsic tendencies to behave in effective ways. Edward L. Deci and Richard M. Ryan developed the theory.

Humans, as functioning organisms, have an inherent need, and thus move towards psychological growth according to SDT. To be considered self-determinate, one must “engage in an activity with a full sense of wanting, choosing, and personal endorsement”.⁵⁷ SDT believes that there are psychological needs for every individual. Once the individual fulfills these psychological needs, they lead to intrinsic motivation. According to SDT, the three psychological needs are competence, relatedness, and autonomy.⁵⁸

Competence is the natural active tendency to influence the environment, from which we derive the feeling of satisfaction that comes with producing effects.⁵⁹ It is the

⁵⁶ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 3.

⁵⁷ Ibid., 2.

⁵⁸ Ibid., 80.

⁵⁹ Ibid., 95.

need to feel effective in one's own environment. Attaining appropriate feelings of competence, through either competition with others or with oneself, can be responsible for increased intrinsic motivation. An example is a Soldier within his or her military occupational specialty completing a mission essential task.

Relatedness is the feeling of belonging to a social group or unit, as well as the act of feeling connected to and caring for other people.⁶⁰ Relatedness is responsible for boosts in intrinsic motivation. An example of relatedness is a Soldier joining a unit and becoming a part of the team.

Autonomy is the ability to self-regulate one's behaviors and actions while achieving goals.⁶¹ Autonomy also manifests in one's abilities to "act in accord with one's sense of self".⁶² Although some scholars have argued that the need for autonomy is not universal and confined to western culture, many researchers argue that the desire for autonomy manifests as a basic human trait. The essence of autonomy is the idea behind the mission command philosophy.

Competence, relatedness, and autonomy are psychological needs that lead to intrinsic motivation. Every person experiences different motivations based on their perceived relationship to these three psychological needs. As a result, individuals may experience motivation ranging on a scale from unmotivated to intrinsic motivation on a specific job or topic.

⁶⁰ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 96.

⁶¹ Ibid., 97.

⁶² Ibid., 98.

Intrinsic motivation is the natural tendency to seek out novelty and challenges, to extend and exercise one's capacities to explore and to learn.⁶³ Children, in their healthiest states, are active, inquisitive, curious, and playful even in the absence of specific rewards.⁶⁴ The construct of intrinsic motivation describes the natural inclination towards assimilation, mastery, spontaneous interest, and exploration that is so essential to cognitive and social development and that represents a principal source of enjoyment and vitality through life.⁶⁵

Intrinsic motivation comes from within the individual. It inspires action even when there is no perceived external stimulus or incentive. Extrinsic motivation, in contrast, provides incentive to engage in action which may not be engaging, but instead benefits in terms of perceived potential outcomes or rewards. Punishments and rewards only elicit temporary compliance in many cases and, in turn, create a cyclical need for more punishments and rewards to complete a task. ⁶⁶

Intrinsic motivation is an important type of motivation when individuals are children, but social pressures after early childhood increase the likelihood of completing activities that are not interesting.⁶⁷ According to SDT, when a child grows up they have to make money, get a job, and survive the world without any support. This makes the

⁶³ Ryan and Deci, "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," 68-74.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

individual's mind switch from intrinsic motivation to extrinsic motivation. However, Deci and Edwards have found that using practical applications within their theory, this switch from intrinsic to extrinsic motivation is reversible.

SDT applies a wide scope of research. Where it becomes useful for the Army is the study of how peer-to-peer learning, providing choices, and experimentation provide support for an individual's psychological needs. How the Army teaches at the lowest echelons, implementing the use of choice, and how to use experimentation are all ways SDT can help evolve thinking about the mission command philosophy. This thesis bases its research around peer-to-peer learning, providing choices, and experimentation because of the possible practical applications in the Army in regards to SDT.

Peer-to-Peer Learning

Peer-to-peer learning is a construct that can be useful to the Army. The learning involves individuals exchanging knowledge and experience with each other and using this information to affect an organization.⁶⁸ Studies within SDT reinforce this idea.

Psychologists Benware and Deci asked participants to spend three hours studying relatively complex material on a subject.⁶⁹ The researchers informed half of the students they would have the opportunity to put the material to active use by teaching it to others,

⁶⁸ Matt Andrews and Nick Manning, "A Guide to Peer-to-Peer Learning" Effective Institutions Platform, 2016, 2, accessed May 10, 2019, https://www.effectiveinstitutions.org/media/The_EIP_P_to_P_Learning_Guide.pdf.

⁶⁹ C. Benware and Edward L. Deci, "The quality of learning with an active versus passive motivational set," *American Educational Research Journal* 21 (1984): 755-766, accessed February 05, 2019, https://selfdeterminationtheory.org/authors/edward-deci/1984_BenwareDeci.pdf.

while informing the other half they should study because they would be tested on the material. After studying the material, the researchers gave all students the same examination, even though the students who thought they would be teaching did not know of the examination. Results revealed that participants who studied in order to use the material to teach others demonstrated significantly better conceptual understanding than participants who learned they were taking an exam..⁷⁰

A different learning experiment, introduced by Grolnick and Ryan, involved an elementary school setting. The researchers brought fifth grade students to a reading laboratory in the school and asked each student to read a textbook. The researchers told students they would be tested and graded on their learning, whereas others would be reading in order to answer questions about how interesting and difficult the passage was. The students were tested; the students told to answer questions on how interesting and difficult the passage was scored higher, with evidence of greater motivation. The students told to discuss how interesting and difficult the passage was indicated that they had a greater conceptual understanding than the controlling condition at both testing sessions..⁷¹

Grolnick and Ryan performed a second experiment looking at the style of teachers and their effect on learning as seen in Table 2. The researchers collected the students' perceptions of their teacher's classroom motivational style and examined the relations of

⁷⁰ Benware and Deci, "The quality of learning with an active versus passive motivational set," 755-766.

⁷¹ W. S. Grolnick and Richard M. Ryan, "Autonomy in children's learning: An experimental and individual difference investigation," *Journal of Personality and Social Psychology* 52, no. 5 (1987): 890-898, accessed January 12, 2019, <https://www.ncbi.nlm.nih.gov/pubmed/3585701>.

these styles to the students' motivation. Those who experienced a more autonomous style of learning perceived greater cognitive competence, motivation, and self-worth than those who perceived their classrooms as more controlling. The construct of student and teacher relates to leader and subordinate relationships and may inform how the U.S. Army approaches mission command philosophy education and training.

Table 2. Autonomy Supportive Learning vs. Controlled Learning

Autonomy Supportive Learning	Controlling Learning
Takes the Subordinates Perspective -Invites subordinates input in learning -Is aware of subordinates needs, wants, goals, and priorities	Takes only the Leader's perspective - Attends to and prioritizes only the leader's plans and needs - Leader is out of sync with subordinates, unresponsive to learning needs
Utilizes experimentation in learning environment - Piques curiosity with different ideas to experiment on - Frames training with the subordinates goals for the unit	Introduces incentives for compliance - Gives consequences for desired and undesired behaviors - Focused on assignments, directives, and commands
Provides the "why" for requests, rules, and uninteresting activities - Explains why; i.e. "The reason is" - Identifies the value, importance, benefit, use, utility of request	Neglects to provide "why" for requests, rules and uninteresting activities - Directives without explanation - Requests without explanation
Acknowledges negative feedback - Listens carefully, non defensively - Acknowledges subordinates negative feedback - Accepts complaints as valid	Counters and tries to change negative feedback - Argues against subordinates negative attitudes, complaining - Attempts to force subordinates negative attitude into compliance
Displays Patience - Allows subordinates to work on problems at their own pace - Calmly waits for subordinates signals of initiative, input, and willingness	Displays Impatience - Rushes subordinates to produce an answer or a desired behavior - Intrudes into subordinates learning environment once given the problem to solve

Source: Richard M. Ryan and Edward L. Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness* (New York: Guilford, 2018), 46.

Google has realized the potential of students teaching students and the use of an autonomy-supportive learning environment.⁷² The company created a program called Googler to Googler, which places employees from across departments into teaching roles

⁷² ReWork, "Create an Employee-to-Employee Learning Program," Google, 2019, accessed March 23, 2019, <https://rework.withgoogle.com/guides/learning-development-employee-to-employee/steps/introduction/>.

that typically authoritative figures fill. Google has created a core curriculum, which includes courses on public speaking, management, and even kick boxing. A class created by an employee called “Creative Skills for Innovation” became a process for design thinking across the company. Their goal is not to save money, but to promote a culture of learning where everyone has their chance to teach a subject. When the employees are involved and know they have to teach, they pay more attention to the class taught by their peers as well because they want the same respect given to them.

This thesis did not choose certain studies in regards to peer-to-peer learning based on low practical application to the U.S. Army. In one of the psychological studies on peer-to-peer learning, Deci, Schwartz, Sheinman, and Ryan in 1981 looked at how autonomy supportive teachers versus controlling style might improve peer-to-peer learning. Their subjects were 2nd to 4th graders, where they found the same results that autonomy supportive learning is useful for that age, as it is for college students and above. This thesis did not include the study due to the low practical application of it for U.S. Army Soldiers.

Peer-to-peer learning can become an important part of the U.S. Army culture. The Army brought on 70,000 new recruits in 2018. Leaders teach these recruits at the unit level, and the way the unit teaches them can have a positive or negative impact on their competence and autonomy. In addition, Soldiers at platoon and company levels having a choice in their environment can help them feel a higher relatedness to their leaders.

Providing Choices

The ability of an individual having choice is important psychologically according to SDT. What makes it useful for the Army is that arbitrary choice, with no effect on the

mission, can have a positive effect on Soldiers' psychological needs. This fulfillment of psychological needs at an individual level through choice is simple, and the Army can use it as a base to develop tools for implementation at the lowest echelon.

Lewthwaite, Chiviacowsky, Drews, and Wulf created an experiment in 2015 that investigated whether arbitrary choices might support participant's feelings of autonomy during training, and thus heighten motivation and increase motor learning and performance. In two experiments, the researchers let participants in one half of the study undergo training at a golf putting task, but were given the opportunity to choose the color of the golf balls. The other half of the experiment only completed training on the golf putting task. Once all participants were tested, the researchers found that the participants that had the ability to choose the color of their balls had enhanced performance and motivation.⁷³ The researchers found that an arbitrary choice made the participants feel in control, therefore helping them focus more on the task.

Meng and Ma, two Chinese psychologists, had university students engage in tasks of equal difficulty in 2015, sometimes chosen and sometimes externally assigned. Investigators examined the effect of having choice both behaviorally and through electrophysiological methods. The researchers found that when choice was available, participants showed enhanced positive expectations.⁷⁴ This study illustrates how choices

⁷³ R. Lewthwaite, S. Chiviacowsky, R. Drews, and G. Wulf, "Choose to move: the motivational impact of autonomy support on motor learning," *Psychonomic Bulletin and Review* 22, no. 5 (2015): 1383-1388, accessed September 04, 2018, <https://www.ncbi.nlm.nih.gov/pubmed/25732095>.

⁷⁴ L. Meng, and Q. Ma, "Live as we choose: The role of autonomy support in facilitating intrinsic motivation," *International Journal of Psychophysiology* 98, no 3

can improve competence and autonomy in a task, therefore developing a greater intrinsic motivation towards the task.

Bao and Lam in 2008 examined choice effects in elementary Chinese children from Hong Kong and they measured a number of variables. They argued that when others, such as parents and teachers, make choices for their children or students, the youth could feel quite autonomous in performing the behaviors selected for them if they had a close relationship with that adult figure. As such, they would not have had to personally make the decision themselves in order to feel autonomous. However, if they did not feel such close support from the adult, they would be less likely to feel autonomous when the adult chose for them, showing the undermining effect.⁷⁵ This study is important in that Soldiers within a unit need to feel trust with their leadership to make the correct decision.

Reeve, Nix, and Hamm also investigated the issues of choice in 2003, making a distinction between option and action choice. Whereas option choice involves allowing people to choose from an array of diverse options (which topic will we discuss in today's class?), action choice involves providing ongoing choice during the activity engagement itself. Such action choice can have to do with when, where, how, and with whom activities are carried out. For instance, teachers can give choice surrounding the order of executing a series of actions and the rhythm of switching between different activities. In

(2015): 441-447, accessed September 04, 2018, <https://www.ncbi.nlm.nih.gov/pubmed/26344180>.

⁷⁵ Xue-Hua Bao and Shui-Fong Lam, "Who makes the choice? Rethinking the role of autonomy and relatedness in Chinese children's motivation," *Child Development* 79, no. 2 (2008): 269-283, accessed January 04, 2019, <https://eric.ed.gov/?id=EJ789403>.

three experimental studies, they found that action choice was the more beneficial for eliciting a sense of volition and intrinsic motivation. Reeve and colleagues concluded that, in order for the provision of choice to positively affect intrinsic motivation, allowing ongoing action choices within activities may be most effective..⁷⁶

In 1994, a group of psychologists had participants perform a relatively boring task to prove explaining why a task is important and that a sense of choice improves motivation for a task. The participants watched a screen for dots that flashed randomly from place to place across the screen, pressing a key as quickly as possible once they saw the light. Think of this as a visual representation of the audio test that Soldiers take annually. The researchers hypothesized that using three separate factors will allow participants to experience greater satisfaction..⁷⁷

First, the researchers gave some participants a meaningful rationale so that they could find value or personal importance in this activity; the researchers informed the participants that the purpose of the task was a potential attention training activity. Second, some participants had an experimenter who acknowledged their feelings, explicitly recognizing that a task of this nature could be boring. This second element conveyed that the experimenter was concerned with the participant's internal frame of reference.

⁷⁶ J. Reeve, Nix, G., and D. Hamm, "Testing models of the experience of self-determination in intrinsic motivation and the conundrum of choice," *Journal of Educational Psychology* (2003): 375-392.

⁷⁷ Edward L. Deci, Haleh Eghari, Brian C. Patrick, and Dean R. Leone, "Facilitating internalization: the self-determination theory perspective," *Journal of Personality* 62, no. 1 (1994): 119-142, accessed October 12, 2018, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-6494.1994.tb00797.x>.

Finally, for some participants, the experimenter's instructions emphasized choice and minimized control, whereas for others, the instructional set was more controlling and directive. Results of this activity revealed that these three facilitating factors—providing rationale, acknowledging potential negative feelings, and highlighting choice—led to a greater motivation as reflected in more free time spent with the activity once the activity was complete.⁷⁸

A meta-analysis done by Lee, Willis, and Tian about leaders empowering subordinates in the work force examined the results of 105 studies, including data from more than 30,000 employees from 30 countries. First, they found that empowering leaders that used choices are effective at influencing employee creativity, but not as helpful during routine task performance. Second, leaders that empower their employees through choice are more likely trusted compared to leaders who do not empower their employees. Third, leaders empowering their employees through choice had a more positive impact on employees with less experience working in their organizations.⁷⁹

This author chose these psychological studies because of the type of study done and the practical application of its findings to the U.S. Army. One of the many studies not chosen was Sundar and Marthe who conducted research on video games and the use of choice in 2010. The basis of their research is the idea of being able to choose the type of

⁷⁸ Deci et al., "Facilitating internalization: the self-determination theory perspective," 119-142.

⁷⁹ Allan Lee, Sarah Willis, and Amy Wei Tian, "When Empowering Employees Works, and When It Doesn't," *Harvard Business Review*, 2018, accessed March 5, 2019, <https://hbr.org/2018/03/when-empowering-employees-works-and-when-it-doesnt>.

character, i.e. hair color, body type, helps with motivation in the game.⁸⁰ This is not useful due to the low practical application to the U.S. Army.

These studies show how choices can have a positive impact on an organization, even when the choices mean little to the organization as a whole. Choices can help the Army develop tools to implement and train the mission command philosophy. Experimentation at the lowest echelon is another simple solution to fulfill individual psychological needs.

Experimentation

Helmuth Von Moltke, head of the Prussian Army in the 19th century, said “no plan survives first contact with the enemy.”⁸¹ If no plan survives first contact, and the enemy has done something unexpected, then the Soldier at the lowest echelon needs to have the necessary experience and training to experiment. This experimentation leads to the individual Soldier feeling autonomy, fulfilling one of the psychological needs according to SDT.

Harry F. Harlow established a laboratory for studying primate behavior in the 1940s. In 1949, he and his colleagues created an experiment on learning with monkeys. Harlow built a puzzle that required three steps: 1) pull out pin, 2) undo hook, and 3) lift hinged cover.⁸² The initial experiment required researchers to place monkeys in a cage

⁸⁰ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 514.

⁸¹ The Economist, “The first casualty,” 2012, accessed October 12, 2018, <https://www.economist.com/britain/2011/05/19/the-first-casualty>.

⁸² Pink, *Drive*, 1.

and watch them for two weeks to see if they can learn how to complete the puzzle. The monkeys immediately began experimenting with the puzzle. Within two weeks, the monkeys were solving the puzzle in under 60 seconds.⁸³

At the time, the only two motivations that scientists believed in were physiological drives (hunger, thirst, etc.) and the use of rewards/punishments. Harlow offered that there is a third drive—the performance of experimenting with a task is motivation enough. He believed the intrinsic reward of a task, or the joy of the task is its own reward.⁸⁴ Harlow tested his hypothesis, attempting to reward the monkeys with raisins for solving the puzzles. His hypothesis is if the monkeys can complete the task, a reward will make them faster. The reward of the raisins caused more errors, causing him to conclude, “Introduction of food in the present experiment served to disrupt performance, a phenomenon not reported in literature.”⁸⁵

Edward Deci continued these experiments on humans in 1969.⁸⁶ He chose an experiment on university students using a Soma puzzle cube. The puzzle has 7 pieces that individuals can assemble in millions of configurations. The study divided male and female university students into two categories. The university student walked into the

⁸³ Pink, *Drive*, 1.

⁸⁴ Harry F. Harlow, *Motivation as a factor in the acquisition of new responses*, *Current Theory and Research on Motivation* (Lincoln: University of Nebraska Press, 1953), 18.

⁸⁵ *Ibid.*, 22.

⁸⁶ Edward L. Deci, “Effects of Externally Mediated Rewards on Intrinsic Motivation,” *Journal of Personality and Social Psychology* 18, no. 1 (1971): 105-115, accessed March 02, 2019, <http://dx.doi.org/10.1037/h0030644>.

room for three days for an hour session. Deci told both groups to replicate building a model with the cubes according to a drawing on the table. The only difference was on day two one of the groups received one dollar as a reward for their efforts. Midway through the experiment, Deci halted the proceedings to feed the times into a computer, giving a few minutes for the student to do what they would like while he was gone. For eight minutes, Deci would watch each student to see what they would do while left alone. He wanted to see if they would continue to play and experiment with the puzzle, reproduce another drawing, or read one of the magazines provided.

On the first day, there was no difference between the groups. On average, both groups continued to play with the puzzle for four minutes, suggesting they found it entertaining. On the second day, Group A participants were paid for each successful configuration, while Group B participants were not paid. When Deci left the room, Group A participants spent more than 5 minutes playing with the puzzle, attempting to solve the third drawing to get a head start on the last challenge. On the last day, Group A participants were told there was only enough money to pay on the second day, therefore the third session is unpaid. Once the group found this out, they spent significant less time playing with the puzzle once Deci left the room, while Group B continued to experiment and explore the puzzle. Deci concluded that rewards hurt individual motivation to experiment, especially if a task is contingent on that reward..⁸⁷

Experimentation is all about not knowing what is going to come next. An individual takes an action, and then tries to accomplish the task through that action. If the

⁸⁷ Deci, "Effects of Externally Mediated Rewards on Intrinsic Motivation," 105-115.

action fails, the individual tries a different action. This is useful, as long as task-contingent rewards to experiment are used.

In combat, the lowest echelon leaders need creativity. The problems are not simple, especially when no plan survives first contact with the enemy. A possible solution to this is implementing experimentation at the lowest echelon without the use of rewards. A business example of this is with 3M and the creation of sticky notes.

3M's president and chairman was William McKnight.⁸⁸ He believed that autonomy and experimentation for his employees would keep 3M above its competitors. 3M's staff could spend 15 % of the workday on projects of their own choosing. A scientist, Art Fry, came up with the idea for Post-It notes during the 15% time when he was experimenting with a sticky substance.⁸⁹ Today, more than six-hundred sticky note products are offered in more than 100 countries.⁹⁰ A military example of how experimentation can work is the hedgerow country in World War II.

Norman farmers for centuries followed a practice on enclosing their plots of land with thick hedgerows.⁹¹ The hedgerows are half earth, half hedge and vary in thickness from one to four feet, growing as high as fifteen feet. The Germans used the hedgerows as cover and concealment, creating a natural defense in depth.⁹² The hedgerows also

⁸⁸ Deci, "Effects of Externally Mediated Rewards on Intrinsic Motivation," 93.

⁸⁹ Ibid., 94.

⁹⁰ Ibid.

⁹¹ Michael D. Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945* (Lawrence: University Press of Kansas, 1995), 4.

⁹² Ibid., 44.

restricted observation, making it impossible to adjust artillery on to the German positions. The U.S. Army struggled with these positions, losing hundreds of lives as they learned to assault into the hedgerows. After several failed attempts with using demolitions, First Lieutenant Charles B. Green decided to fix the problem. He began experimenting with the tank, installing a bumper device to run over the hedgerows.⁹³ Lieutenant Green, a lower echelon leader, built a bumper device with salvaged railroad tracks and installed it in front of the tank to run through the hedgerows. After proving successful in combat, maintenance teams throughout First Army welded the bumper onto the Sherman tank.⁹⁴ Lower echelon leaders need experimentation, where inexperienced leaders can train in garrison to help build their autonomy.

Conclusion

The discussion began with FM 3-0 explaining how large-scale ground combat creates a need for the mission command philosophy more than ever. The research then looked at the 2015 DAIG survey portraying how company commanders do not understand the mission command philosophy. The 2017 CASAL data highlights this misunderstanding. The data shows that a high amount of inexperienced NCOs and officers do not feel developed or trusted.

The U.S. Army needs a better understanding of the mission command philosophy, and the best place to start is history. Beginning with the Germans and ending with how

⁹³ Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945*, 45.

⁹⁴ Ibid.

TRADOC sees the mission command philosophy today, the Army's initial ideas do not match how the Germans intended. The Germans believed the basis of mission command is on the lowest echelon Soldiers. The Army should research further into understanding the psychology of the individual Soldier to help aid leaders to better understand how to implement mission command philosophy. This lead to the motivational theory of self-determination theory and the three psychological needs of each individual.

The literature review concluded with studies based on SDT focused on peer-to-peer learning, providing choices, and experimentation. Specifically, how different professions use this theory to intrinsically motivate their organizations, whether it is businesses or university students. These studies are the basis of the research design and analysis.

Methodology Introduction

The principles of mission command philosophy are translatable to SDT using peer-to-peer learning, providing choices, and experimentation. The methodology compares the six principles of mission command philosophy (build trust, create a shared understanding, use mission orders, clear commanders intent, accept prudent risk, and disciplined initiative) to peer-to-peer learning, providing choices, and experimentation. It synthesizes these two ideas (mission command philosophy and SDT) through the basic psychological needs of competence, relatedness, and autonomy. This comparison looks at research studies ranging from education, business, and psychology to understand how to implement peer-to-peer learning, providing choices, and experimentation to create a base for the U.S. Army to create tools to implement the mission command philosophy. This

comparison can help make the mission command philosophy more practical at the lowest echelons of leadership.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

This study attempted to answer the primary research question: How can the Army better implement the mission command philosophy with inexperienced leaders at company level and below? This section presents the methodology to answer both the primary research question and secondary research questions provided in Chapter 1. This research examined the six principles of the mission command philosophy and compared them to the ideas of peer-to-peer learning, providing choices, and experimentation, which derives from self-determination theory. It does this through choosing one research study within each of these categories and then analyzing each study to identify tools to implement mission command for inexperienced junior leaders.

The 2015 DAIG report's findings of company commanders struggling with translating mission command philosophy into daily activities paired with the 2017 CASAL findings that at the lowest echelon leaders do not feel trusted or developed warrants investigation. These findings prompted two additional research questions. Are there better ways for company-level leadership and below to integrate the mission command philosophy into daily activities? Are there different ways to motivate inexperienced junior leaders through the philosophy of mission command? This research focused on how the ideas of SDT may shed some possible solutions for the Army to develop tools in aiding inexperienced junior leaders implement mission command philosophy.

Research Design

The researcher used exploratory research design to determine if the Army can better implement mission command philosophy with inexperienced junior leaders at company echelon and below through studies based on the self-determination theory. The researcher explored psychological research studies, articles, books on mission command philosophy, Army doctrine, and various websites to analyze possible relationships between self-determination theory and mission command philosophy. The researcher identified three concepts to improve motivation from self-determination theory: peer-to-peer learning, providing choices, and experimentation. The researcher chose these concepts because of their focus on the psychological need of autonomy, which has a close relationship to decentralized decision making within mission command philosophy. The researcher founds these concepts thru analysis of hundreds of psychological studies. Within each concept the researcher chose a specific case study based on college students, an age cohort closely resembling junior leaders within the Army. To analyze each case study, the researcher used the psychological needs of competence, relatedness and autonomy to provide depth in the analysis.

Researchers use exploratory research to explore an issue when the scope is unclear, allowing them to explore issues in detail in order to familiarize themselves with the problem studied.⁹⁵ This research was exploratory in nature because it assisted the researcher with understanding the mission command philosophy, gaining insight on the history of the philosophy, and determining if self-determination theory is an applicable

⁹⁵ Kultar Singh, *Qualitative Social Research Method* (Thousand Oaks, CA: Sage Publications, 2007), 27.

lens to implement the philosophy. The exploratory research resulted in researching the relationship between self-determination theory and mission command philosophy.

The researcher constructed the research design to explore the relationship between self-determination theory and mission command philosophy through the presentation of research studies that analyze the three SDT concepts of peer-to-peer learning, providing choices, and experimentation. Mission command philosophy intends to decentralize decision-making authority and grant junior leaders freedom of action. Decentralization of decision-making relates to the psychological need of autonomy, or the ability to regulate one's own behaviors and actions. The researcher chose the SDT concepts of peer-to-peer learning, providing choices, and experimentation because of their focus on autonomy, which junior leaders could use to prepare for decentralized decision-making authorities.

The researcher chose each study in the categories of peer-to-peer learning, providing choices, and experimentation from the literature review because of the focus on college students, which the majority of inexperienced junior leaders in the Army are within the same age range. A second reason is that each of the research studies achieved results in raising an individual's motivation by fostering a higher level of autonomy. This higher level of autonomy relates closely to junior leaders having freedom of action for decentralized decision-making.

To analyze each psychological study, the researcher used the lens of competence, relatedness, and autonomy to analyze the mission command philosophy and peer-to-peer learning, providing choices, and experimentation. SDT states that competence,

relatedness, and autonomy are psychological needs for every individual.⁹⁶ Fulfilling these psychological needs leads to intrinsic motivation. These psychological needs provided further depth in the analysis, with an emphasis on autonomy and its relationship with the mission command philosophy principles.

The researcher organized the analysis using the three SDT concepts of peer-to-peer learning, providing choices, and experimentation as criteria. Depicted in Table 3 are those three SDT concepts, and how they are addressed by selected studies in relation to the concepts of mission command philosophy. The researcher further delineated peer-to-peer learning, providing choices, and experimentation sections by which mission command philosophy principle provides the closest relationship to each specific concept. If Table 3 shows an N, the researcher deduced there is little to no relationship with that mission command philosophy principle. Each section then uses competence, relatedness, and autonomy to provide depth in the relationship between the self-determination theory concept and the mission command philosophy principles.

Table 3. Mission Command Philosophy and Self-Determination Theory

	Builds Trust	Creates a Shared Understanding	Use Mission Orders	Clear Commanders Intent	Accept Prudent Risk	Disciplined Initiative
Peer to Peer Learning (Bandura & Deci)	Competence Relatedness Autonomy	Competence Relatedness	N	N	N	N
Choices (Lewthwaite, Chiviacowsky, Drews and Wulf)	Autonomy	N	Competence Autonomy	Autonomy	Autonomy	Autonomy
Experimentation (Deci)	N	N	N	N	Autonomy	Competence Autonomy

Source: Created by author.

⁹⁶ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 246.

Summary

In order to analyze the mission command philosophy, it was important for the researcher to analyze hundreds of psychological studies and identify those most relatable to the U.S. Army. Analyzing these studies thru the SDT concepts of peer-to-peer learning, providing choices, and experimentation shaped the research into relatable topics for the mission command philosophy. Within these categories the researcher identified the most applicable research study to compare to the mission command philosophy principles. Comparing each study to the mission command philosophy principles allowed the researcher to analyze in-depth comparisons between SDT and mission command philosophy. The research design attempts to provide a connection between self-determination theory and the mission command philosophy principles, in order to answer how the Army can better implement mission command philosophy with inexperienced leaders at company level and below.

CHAPTER 4

ANALYSIS

Introduction

FM 3-0 describes large-scale ground combat as an ambiguous and complex environment where the breakdown of command and control architecture could devastate U.S. Army forces in combat.⁹⁷ The breakdown in command and control architecture places a demand on inexperienced junior leaders to execute operations through the application of mission command philosophy. The DAIG survey and CASAL data suggests that inexperienced junior leaders of the U.S. Army have a problem with understanding the mission command philosophy therefore hindering its implementation. Research studies examining SDT may offer insights on making the mission command philosophy implementable, and therefore more understandable for inexperienced junior leaders.

Peer-to-peer learning, providing choices, and experimentation are concepts that may be usable for inexperienced junior leaders within the Army. This research used studies with a focus on college students, which corresponds with the age and maturity of the majority of inexperienced junior leaders in the Army. The research used the SDT psychological needs of competence, relatedness, and autonomy as a lens to analyze peer-to-peer learning, providing choices, and experimentation with the six mission command philosophy principles. Peer-to-peer learning references learning from the people around you versus a subject matter expert. Choices, in the context of this research, offer one the

⁹⁷ HQDA, FM 3-0, 1-2.

autonomy to make or possibility of making a decision. Experimentation is the action or process of trying out new ideas, methods, or activities within an organized environment.

Peer-to-Peer Learning

Peer-to-peer learning is an educational practice in which peers within an organization interact with each other to attain an educational goal. The psychologists Benware and Deci found that when testing college students on specific material, the ones that studied to teach their peers understood the material better than studying for an examination according to their conceptual test scores.⁹⁸ The analysis of the research studies led the researcher to believe leaders can use peer-to-peer learning to implement the mission command philosophy principles of building trust and creating a shared understanding.

Builds Trust

Army Doctrine Reference Publication (ADRP) 6-0 points out that there are few shortcuts to building cohesive teams through mutual trust.⁹⁹ It goes on to say that an individual can gain or lose trust through everyday actions, rather than grand gestures.¹⁰⁰ The full chain of command must be trusted and subordinates must trust each other. A Soldier learning through teaching is one method that may help build trust in an organization.

⁹⁸ Benware and Deci, “The quality of learning with an active versus passive motivational set.”

⁹⁹ HQDA, ADRP 6-0, 2-1.

¹⁰⁰ Ibid.

Benware and Deci found that teaching others is the best way to learn material. They concluded the best test of whether or not an individual comprehends a subject is teaching it to someone else. While learning, the brain fools the individual into believing that they understand an idea before they grasp the concept. Preparing to teach a subject removes self-deceit by allowing challenging questions by the student's peers. It creates an opportunity for the one teaching to grapple with challenging questions, cementing an understanding of the subject, fostering a level of competence.

Competence is the psychological need to influence the environment, from which an individual derives feelings of satisfaction that comes with producing effects..¹⁰¹ Leaders build trust through professional competence, personal example, and integrity. When a junior leader teaches another junior leader it is a way that an individual can feel competence and effective in their environment. Additionally, trust comes from successful shared experiences and producing effects as a team, usually gained incidentally to operations. Peer-to-peer learning can be one of those methods to attain a level of trust within the organization.

Relatedness is the feeling of belonging to a unit or feeling connected to others..¹⁰² Developing trust, or relatedness, takes time. Since there are no shortcuts to building trust, fulfilling that psychological need of relatedness could be a first step to building that trust. Peer-to-peer learning is a simple and straightforward way to feeling connected to others.

¹⁰¹ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 95.

¹⁰² Ibid., 96.

It provides an opportunity for individuals to interact with their peers in a safe learning environment, possibly providing a context to help build those initial feelings of trust.

Autonomy is the ability to regulate one's own behaviors and actions while achieving goals. Autonomy centralizes around the idea of to what extent an individual experiences their behavior as self-endorsed.¹⁰³ Peer-to-peer learning is a self-endorsed behavior, allowing an individual to teach a peer in the best way they see fit. This can fulfill that psychological need of autonomy and help build trust within the unit.

Inexperienced junior leaders in the Army sometimes teach by rote memorization and examinations, especially at the lowest echelon of leadership. These leaders teach this way because they may not have the experience to see a better way. This may not fully maximize the gain from satisfying an individual's competence, relatedness, and autonomy, therefore degrading the feeling of trust within the unit. According to Benware and Deci, learning through the use of examination does not provide the same benefit as teaching a subject.¹⁰⁴ During the research, the students demonstrated significantly better conceptual understanding of the material when learning to teach versus learning for an examination.

For example if a leader assigns an individual material for an examination on a Technical Manual, learning can end up more passive. Individuals may absorb the information but are less active in interpreting and integrating the information. This may

¹⁰³ Ryan and Deci, *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, 243.

¹⁰⁴ Benware and Deci, "The quality of learning with an active versus passive motivational set."

cause a loss of trust between the junior leader assigning the examination and the Soldier taking the examination. A junior leader may expect that by assigning an examination, it will cause a Soldier to interpret and integrate the facts from the examination. When the Soldier does not, it may cause a mistrust between the junior leader and Soldier.

Inexperienced junior leaders could harness this idea of peer-to-peer learning to provide a better learning environment for young Soldiers to learn, rather than use examinations or rote memorization. Having junior leaders teach others on what they learn every day gives ownership and may help build trust within the organization. Another way peer-to-peer learning can help inexperienced junior leaders is create a shared understanding within the formation.

Creating a Shared Understanding

Creating a shared understanding requires collaboration. ADRP 6-0 states collaboration is not merely coordination, but two or more people working together towards a common goal.¹⁰⁵ Shared understanding and purpose form the basis for unity of effort and trust. Through collaboration, participants share information, exchange ideas, and question assumptions to resolve potential misunderstandings and maintain a shared understanding.

Benware and Deci found that peer-to-peer learning is more useful to the learning process than examinations. Their study tested whether student's test scores would improve by having students learn material with the expectation of teaching another

¹⁰⁵ Benware and Deci, "The quality of learning with an active versus passive motivational set." 2-2.

student versus learning material to pass an examination. The research suggests that learning with the expectation of using the material is more conducive to creating a team than by examinations.

Through collaboration, leaders establish human connections to create a shared understanding. These human connections are what can help fulfill the psychological need of competence, helping individuals influence the environment around them. ADRP 6-0 states leaders use dialogue to build trust and facilitate information sharing.¹⁰⁶ They use this dialogue to create a shared understanding of the operational issues, concerns, and approaches to solving them. This can fulfill the psychological need of relatedness, or the feeling of belonging. This collaboration can start at the lowest echelon through peer-to-peer learning. Peer-to-peer learning establishes a human connection at the lowest echelon. One junior leader teaching another in support of an overarching objective or goal creates this human connection, which can build a better shared understanding within the organization.

ADRP 6-0 states that establishing a culture of collaboration is difficult but necessary.¹⁰⁷ Participants exchange ideas to help create and maintain shared understanding, question assumptions, and resolve potential misunderstandings. This exchange of ideas can help fulfill an individual's psychological needs of competence and relatedness. This shared understanding can begin with peer-to-peer learning for the inexperienced junior leader.

¹⁰⁶ Benware and Deci, "The quality of learning with an active versus passive motivational set." 2-2.

¹⁰⁷ Ibid.

Excluded Principles

The research into peer-to-peer learning did not include using mission orders, clear commander's intent, accepting prudent risk, or utilizing disciplined initiative. The research did not include mission orders because during peer-to-peer learning the task peers are teaching each other is specific. Using mission orders gives more of a concept, therefore peer to peer learning does not make mission orders more implementable. Peer-to-peer learning may not help understand the commander's intent due to its focus on peer-to-peer relationship. It could help build disciplined initiative, but only as a secondary role since the focus is on Soldiers interacting with each other to build the team and creating a shared understanding. Accepting prudent risk had a low relationship as well due to juniors learning from each other has a low risk in itself. Therefore, the researcher reported limited findings with these four principles in regards to peer-to-peer learning.

Conclusion

Benware and Deci's study on peer-to-peer learning relates to building trust and creating a shared understanding. Peer-to-peer learning can fulfill the psychological needs of competence, relatedness, and autonomy. Their findings that examinations and rote memorization may not lead to understanding of material like peer-to-peer learning could help the Army develop tools to implement the mission command philosophy for inexperienced junior leaders. Providing choices can also help the mission command philosophy become implementable at the lowest echelon of leadership.

Providing Choices

Lewthwaite, Chiviacowsky, Drews, and Wulf conducted an experiment in 2015 that investigated whether a person with authority can use choices to improve motivation and performance on a task. The researchers let participants in one-half of the study undergo training for a golf putting task and have the opportunity to choose the color of the golf balls. The other half of the experiment only completed training on the golf putting task. Once all participants were tested, the researchers found that the participants with the ability to choose the color of their golf balls had enhanced performance and motivation resulting in a higher level of making putts.¹⁰⁸ The researchers found that a choice made the participants feel a higher level of autonomy, therefore, helping them focus more on the task.

Builds Trust

ADRP 6-0 states that Soldiers must see values in action before they become a basis for trust.¹⁰⁹ Leaders at all levels gain or lose trust through daily activities, which more than likely come from successful shared experiences and training. If a leader provides a choice in a daily activity to a subordinate, it can show a level of trust the leader feels with the subordinate. Lewthwaite, Chiviacowsky, Drews, and Wulf found that choice within training enhances performance and motivation.

¹⁰⁸ Lewthwaite, Chiviacowsky, and Wulf, “Choose to move: the motivational impact of autonomy support on motor learning.”

¹⁰⁹ HQDA, ADRP 6-0, 2-1.

Lewthwaite, Chiviacowsky, Drews, and Wulf found that tasks with choices can result in superior outcomes versus tasks with no choice. In the experiment, participants completed a golf putting task where half of the participants were able to choose the color of their golf ball, while the other half were not. Once the training for the golf-putting task was complete, the results found that the participants given the choice of color demonstrated enhanced performance.

Autonomy is the psychological need to regulate one's own behaviors and actions while achieving goals. According to SDT, individuals resist when someone controls their behavior, hence why choices are useful in a training context. If a junior leader is able to give their subordinate a choice, no matter what the choice is, it may satisfy the psychological need of autonomy. When the subordinate does not feel controlled, he may feel a level of increased trust with the junior leader. Soldiers must see values in action before they can trust—a simple way for junior leaders to build trust through daily activities.

Building trust in an organization is hard work. Inexperienced leaders need options to build that trust. The fulfillment of the psychological need of autonomy may help foster that trust. One option in using autonomy is choices for everyday tasks. This can help build that trust at the lowest echelon of leadership. Another way choices can help is through training mission orders.

Mission Orders

ADRP 6-0 defines mission orders as directives that emphasize the results to be attained, not how they are achieved.¹¹⁰ This provides the maximum freedom of action to determining how best to accomplish a mission.¹¹¹ Mission orders do not include all of the details, hence they require the subordinate to make choices when the order does not state clearly the action to take next. Lewthwaite, Chiviacowsky, Drews, and Wulf found that the use of choice is useful in improving performance.

Competence is the need for an individual to have influence in the environment and to produce effects in that environment. When junior leaders give choices to subordinates, the leader can use it as a building block for issuing mission orders. This can help the junior leader gain confidence in their abilities and have that influence in their own environment.

Autonomy is the ability to feel in control of one's own behavior versus controlled by others. A choice, no matter how small, given to a subordinate is allowing them to feel in control of their experiences. A way of helping Soldiers learn, and let them feel more in control, is providing choices that will not have a direct impact on the mission. For example, a mission order from a junior leader to a Soldier is to choose a location for the howitzer within a 50-meter radius, conceal the howitzer position, and be ready to fire in twenty minutes. These are all directives at the lowest level that emphasize results to be

¹¹⁰ HQDA, ADRP 6-0, 2-4.

¹¹¹ Ibid.

attained, not how to achieve them. It also provides a choice for the Soldier and creates that interaction between leader and subordinate.

A junior leader can allow choices for their subordinates at the lowest echelon. This helps the Soldier feel competent and a sense of autonomy within the mission set. Moltke the Elder said it best: “as a rule an order should contain only what the subordinate for the achievement of his goals cannot determine on his own”.¹¹² Leaders can use this developmental approach of increasing scope and responsibility for tasks at every echelon. Another way choices can help the Army build tools to implement the mission command philosophy is through understanding commander’s intent.

Understanding Commander’s Intent

According to ADRP 6-0, the commander’s intent is a clear and concise expression that nests within the higher commander’s intent.¹¹³ The goal of the intent is to achieve the commander’s desired results without further orders, even when an operation does not unfold as planned. Understanding commander’s intent requires a comprehension of the scope of the task by the subordinate. In doctrine, the general rule is to write the commander’s intent in the form of purpose, key tasks, and end state. At the lowest echelon, a Soldier needs to understand his role in achieving the commander’s intent.

Lewthwaite, Chiviacowsky, Drews, and Wulf understood that choices improve performance. When inexperienced leaders at the lowest echelon need to describe the

¹¹² Widder. “Auftragstaktik & Innere Führung: Trademarks of German Leadership.”

¹¹³ HQDA, ADRP 6-0, 2-3.

commander's intent, a way to do this is through choice. An example is a junior leader looking at the commander's intent and understanding the choices that the unit has within the intent at the junior leader's echelon. This is useful for when a mission does not go as planned, a junior leader can reflect back on the possible choices within the commander's intent and choose something else. The inexperienced junior leader now has several possible solutions, versus not being able to react under pressure.

Autonomy is the ability to control one's own behavior versus controlled by others. The concept of commander's intent has a relationship with providing a sense of autonomy to a subordinate, so when the operation does not go as planned, the subordinate can react within the intent. Understanding the commander's intent for a junior leader and translating it to subordinates may be hard for an inexperienced junior leader. Translating the commander's intent into choices for inexperienced junior leaders can offer a building block to begin understanding commander's intent. This may help give subordinates a sense of autonomy within the organization, and a fuller appreciation of commander's intent. Another way choices are useful is through the use of disciplined initiative.

Disciplined Initiative

ADRP 6-0 states that leaders and subordinates who exercise disciplined initiative create opportunity by taking action in the absence of orders, when existing orders no longer fit the situation.¹¹⁴ In this case, it is necessary for leaders to train subordinates on ways to practice disciplined initiative. Commanders rely on subordinates to act, to seize

¹¹⁴ HQDA, ADRP 6-0, 2-4.

the tactical initiative when actions do not go as planned. A way the Army can build tools to train this is through the use of choice.

Lewthwaite, Chiviacowsky, Drews, and Wulf found that choice motivates and improves performance of an individual. The study suggests that if a Soldier has a choice, instead of a prescriptive way to conduct an action, then the choice may encourage further initiative and increase the feeling of autonomy when it matters in combat. Commanders encourage disciplined initiative, as it frees them to focus on higher-level tasks and decisions. As commanders focus on higher-level problems, subordinate leaders at the lower echelons strive to solve unanticipated problems at their level.

Fulfilling the psychological need of autonomy through the use of choice can enable a subordinate to select a course of action among a number of actions in lieu of a single directed method to accomplish an assigned task. In line with Lewthwaite, Chiviacowsky, Drews, and Wulf's findings, junior leaders should be able to foster motivation with choices for a subordinate which can result in enhanced performance. Implementing disciplined initiative can aid junior leaders understanding their choices when existing orders no longer fit the situation. Individuals do not appreciate leaders unnecessarily constraining their autonomy or freedom of action according to SDT, and allowing subordinate's discretion when selecting tasks may help improve disciplined initiative in an organization. Allowing subordinates to choose leads to how practicing and implementing the use of choice can help junior leaders accept prudent risk.

Accept Prudent Risk

Accepting prudent risk as a leader is necessary because uncertainty exists in all military operations. ADRP 6-0 describes prudent risk as a deliberate exposure to potential

injury or loss when the commander judges the outcome in terms of mission accomplishment is worth the cost.¹¹⁵ Lewthwaite, Chiviacowsky, Drews, and Wulf found that choices are useful in improving performance and motivation. A side effect to inexperienced junior leaders utilizing the concept of choices may lead to unintended risk.

Autonomy, the ability to be self-directed, leads to risk if a leader is inexperienced. Giving subordinates a choice in an operation creates risk by allowing a junior leaders or subordinates to make mistakes within the mission. A mistake could lead to loss of life in combat. A way for inexperienced lower-echelon leaders to accept prudent risk is to allow their Soldiers choices in a training environment. This can fulfill the sense of autonomy for the Soldier and help train junior leaders on accepting negligible risks.

These small risks can help train junior leaders on accepting prudent risk and gives inexperienced leaders a conceptual understanding of what risks they can and cannot take. Junior leaders can develop subordinates by providing choices and when a subordinate chooses incorrectly, leaders can analyze and correct accordingly.

Excluded Principles

The research in regards to choices did not include the mission command philosophy principle of creating a shared understanding. This was due to the need for collaboration, where choices focus on the individual's level of competence and autonomy. The higher levels of competence and autonomy may have a second order effect of helping the organization collaborate, but does not have a strong enough

¹¹⁵ HQDA, ADRP 6-0, 2-5.

relationship to make creating a shared understanding implementable for inexperienced junior leaders.

Conclusion

Lewthwaite, Chiviacowsky, Drews, and Wulf found that choice can help performance and motivation. The U.S. Army can build tools to help inexperienced leaders use choices at the lowest echelon to build trust, use mission orders, build disciplined initiative, understand the commander's intent, and accept prudent risk. These mission command philosophy principles can become practical and useful at the lowest echelon for the inexperienced leaders who would benefit. Peer-to-peer learning and choice are both foundational concepts to build tools in implementing mission command philosophy within an organization. Experimentation may offer another option to build tools in helping implement mission command philosophy.

Experimentation

Experimentation is the action or process of trying out new ideas, methods, or activities. Self-determination theory considers this the need for exploration. Experimentation focuses on an individual's need for autonomy, and how individuals enjoy interacting with their environment with limited constraints.

Edward Deci conducted an experiment with college students using a puzzle cube. The puzzle has seven pieces that individuals could assemble in millions of configurations. Students in the experiment created certain configurations and then Deci timed the students on how quickly they could complete the task. Halfway through the experiment, Deci would leave the room and watch through a one-way mirror to see

whether the students would experiment with the puzzle cube or read magazines. Deci found that students naturally enjoyed experimenting with the puzzle cube, but when rewarded for experimenting the students became much less motivated and interested in the task. Deci considers the reward he gave the college students performance-contingent rewards. Performance-contingent rewards are given specifically for performing well, where individuals feel pressured to meet an externally specified standard to receive a reward.¹¹⁶ Deci believes these rewards thwarted autonomy by controlling the college student's motivation while playing with the puzzle cube.

ADRP 6-0 mentions creativity ten times. According to SDT, autonomy supports creativity.¹¹⁷ The mission command philosophy principle of disciplined initiative relates to junior leaders taking action when unforeseen opportunities or threats arise.¹¹⁸ This causes a need for inexperienced junior leader to be more autonomous and creative when orders do not suffice. The use of experimentation is a part of how junior leaders can provide an approach to improve autonomy and foster creativity. Inexperienced junior leaders may want to control experimentation, but Deci found that attempting to control behavior during experimentation causes a loss of autonomy. The U.S. Army can use experimentation as a tool to implement mission command philosophy, as long as leaders do not attempt to control experimentation unnecessarily. One example of how leaders can use and understand experimentation is through disciplined initiative.

¹¹⁶ Ryan and Deci, "Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness," 132.

¹¹⁷ Ibid., 177.

¹¹⁸ HQDA, ADRP 6-0, 2-4.

Disciplined Initiative

ADRP 6-0 states that a subordinate's disciplined initiative may be the starting point for seizing the tactical initiative.¹¹⁹ The enemy always has a vote in combat, and the U.S Army trains to react quickly when combat does not go as planned. The solution is to seize the tactical advantage, but before subordinates do this, they need to experiment to find what works and what does not in new and unanticipated situations. A lower-echelon leader experimenting frees the higher headquarters commander to focus on higher-level tasks and decisions. When a lower-echelon leader experiments to solve problems, it allows the leader to seize the tactical advantage.

Deci found that college students enjoy experimenting naturally when given a task. What the students did not enjoy was the loss of autonomy, or the loss of control, when they received performance-contingent rewards. Lower-echelon leaders can use this idea by not attempting to control Soldiers through performance-contingent rewards when experimenting with a new piece of equipment or a task while in a training environment. A Soldier may lose motivation for a task when an inexperienced junior leader attempts to control the Soldier experimenting with a task or an idea.

Autonomy is the idea that individuals need to feel in control of their experiences and when controlled by others, this need becomes unfulfilled. Experimentation may be useful for junior leaders to use at a small scale, as long as the leader does not attempt to control the experiment. Soldiers experimenting can be risky for an inexperienced junior leader. When Soldiers in the formation are experimenting, a junior leader may want to

¹¹⁹ HQDA, ADRP 6-0, 2-4.

control and restrict this to where the experimenting becomes useless and overall lowers performance of the junior leader's subordinates. Disciplined initiative at the lowest echelon can be subdued in this case, causing subordinates not to act quickly and seize, retain, or exploit the initiative.

Disciplined initiative is a principle that junior leaders may want to train on with subordinates. The results from Deci's experiment suggest that experimentation is a method to train disciplined initiative, as long as rewards or another controlling mechanism is not used. The U.S. Army can use experimentation as an idea to build a tool for use in implementing mission command philosophy at the lowest echelon of leadership. Accepting prudent risk coincides with disciplined initiative, since to allow subordinates freedom can create a habituated risk unless trained and practiced.

Accepting Prudent Risk

ADRP 6-0 defines accepting prudent risk as a deliberate exposure to potential injury or loss when the commander determines that mission accomplishment is worth the cost.¹²⁰ This is a commander-driven process, focused on creating opportunities to expose an enemy's weakness. Allowing Soldiers to experiment at the lowest echelon by definition is accepting prudent risk.

A way to mitigate this risk of experimentation in combat is leveraging opportunities in garrison to experiment as early as possible in a Soldier's military career. If a junior leader develops subordinates in the Army by allowing experimentation in their

¹²⁰ HQDA, ADRP 6-0, 2-5.

daily activities, they are more likely to be comfortable with experimentation when they become NCOs.

In the Army, junior leaders may have to make decisions without discussing them with subordinates. Sometimes the junior leader's decision may place Soldiers at risk. A way to mitigate that risk is providing junior leaders the opportunity to allow subordinates to experiment without feeling controlled. This can increase the competence of the junior leader and help fulfill the need for autonomy for their subordinates. Inexperienced leaders can develop confidence in accepting prudent risk when Soldiers experiment.

Excluded Principles

The research into experimentation did not include using building trust, creating a shared understanding, using mission orders, or clear commander's intent. Through the analysis, the researcher found little supporting data for building trust or creating a shared understanding because experimentation without disrupting one's autonomy focuses more on the individual psychological need, versus building trust or creating a shared trust within an organization. Using mission orders may be a type of experiment, but the research did not provide enough support in helping mission orders more implementable for junior leaders. Understanding the commander's intent has no relationship with providing junior leaders the ability or structure to experiment within their formations. Therefore, the analysis did not use these four principles in regards to experimentation.

Conclusion

Implementing the mission command philosophy is hard to do for an inexperienced leader. It starts with finding simple methods to foster experimentation in

subordinates in date to day unit activities, specifically focused on improving disciplined initiative and accepting prudent risk. These mission command philosophy principles can fulfill the individual psychological needs of competence and autonomy for junior leaders and their subordinates. Deci helped explain this through how inexperienced college students enjoyed experimentation, but once Deci took away the students autonomy the enjoyment and motivation for the experimentation was lost.

Analysis Conclusion

The analysis attempted to answer the primary and secondary research questions of can peer-to-peer learning, providing choices, and experimentation aid junior leaders in implementing mission command philosophy and if education or business can help understand the fundamental ideas of mission command philosophy. Through the research design and analysis, the research suggests that underlying principles of mission command philosophy can become implementable using these concepts. The U.S. Army can use peer-to-peer learning, providing choices, and experimentation to create a basis for tools to implement mission command philosophy at the lowest echelon.

This research chose to focus specifically on Benware and Deci, Lewthwaite, Chiviacowsky, Drews, and Wulf, and Deci's studies because of the relation with inexperienced college students to inexperienced leaders within the Army. The basic human psychological needs of competence, relatedness, and autonomy helped explore these topics to analyze the mission command philosophy principles and the concepts of peer-to-peer learning, providing choices, and experimentation. Junior leaders can recognize the mission command philosophy principles of building trust, creating a shared understanding, disciplined initiative, clear commander's intent, using mission orders, and

accepting prudent risk as implementable for junior leaders at the lowest echelon using these three ideas as the basis.

CHAPTER 5

CONCLUSIONS

Conclusions

In a letter to General Marshall, Van Horn points to the fact that most commanders did not excel in theory. They were successful because they were highly practical.¹²¹ FM 3-0 has shown the future of how the Army will train, educate, equip and develop leaders over the next several years. The Army's focus has shifted from counter-insurgency operations to large-scale ground combat. In large-scale ground combat, the breakdown of communications could disrupt our forces in combat. The DAIG survey and CASAL data suggests that the U.S. Army has a problem with the lower echelon of leaders understanding the mission command philosophy.

A way to provide a practical implementation of the mission command philosophy at the lowest echelon is seeing the philosophy through the lens of peer-to-peer learning, providing choices, and experimentation based on the self-determination theory. The psychological needs of competence, relatedness, and autonomy are the basis for this theory. Using different fields of study to include business and psychology, the Army can find ways of implementing different parts of the theory to help fulfill the psychological needs of Soldiers. The fulfillment of these psychological needs contributes to Soldiers becoming intrinsically motivated to complete the task, even with a higher headquarters not watching.

¹²¹ Letter from J. H. Van Horn to George C. Marshall, May 8-16, 1938, *George C. Marshall Papers* (George C. Marshall Library, Lexington, VA).

The lowest echelon leaders need simple, straightforward concepts they can use and experiment with. In a typical day, leaders at all levels experience physical training, motor pool maintenance, and sergeant's time training. The U.S. Army can start with these three ideas (competence, relatedness, and autonomy) as a basis and use some of these examples for leaders to integrate the mission command philosophy in these garrison activities.

Physical Training

Physical training is a daily event for Army Soldiers. It involves 60 to 90 minutes of physical activity beginning with a stretch, a run or set of exercises, and a cool down. The end state is a physically fit unit that can successfully pass the Army Physical Fitness Test. Soldiers can experiment with physical training and use all the things learned from psychology, i.e., teaching, providing choices, and the negative impact of rewards.

Companies and battalions run physical training generally from the top down, with the company or battalion indicating specific cardio and muscle endurance days. Soldiers are generally physically fit and understand what works and what does not while working out. If leaders at the lowest echelon rotate Soldiers to teach a specific running technique or a different type of workout, it can build trust within the unit. This type of workout helps build the competence of the Soldier teaching, provides autonomy, and gives them the responsibility for that day as shown in a similar fashion through Benware and Deci's research study on peer-to-peer learning.

Benware and Deci illustrates that individuals need choices to feel they are in control. Inexperienced junior leaders can use this idea by allowing Soldiers to choose the specific type of workout within a range of possibilities. Soldiers can try at least 82

different pushup variations—it would be a workout just to attempt all of them.¹²² Any choice, even an arbitrary one, can provide a positive reaction from Soldiers as seen from the experiment by Lewthwaite, Chivacowsky, Drews, and Wulf.

As seen by Deci's experiment, when an individual attempts to controls another's behavior while they are experimenting, the individual's performance drops due to the loss of autonomy. Physical training is no exception, so when leaders use performance-contingent rewards for Soldiers with the highest score on a physical training test it may not help the individual or formations feeling of autonomy. It may, according to Deci, provide a negative impact on the Soldiers around the highest achiever.

Leaders within the Army drive physical training through a physical training test currently. What the lowest echelon leaders can do is use this test and achieve results by practicing mission command philosophy in the process. These seem like small tasks, but as leaders test these ideas, they can adjust and play with the concepts to work for their specific unit.

Motor Pool Maintenance

Motor pool maintenance is another weekly, sometimes daily, task for Soldiers in the garrison environment. This task usually entails maintenance on vehicles like a howitzer, tank, or High Mobility Multipurpose Wheeled Vehicle and assigned pieces of equipment. Through the researcher's experience, junior leaders may ignore these maintenance days or they may become last in priority during training.

¹²² Nick English, "82 Push-Up Variations for Every Fitness Level," Greatist, 2018, accessed December 20, 2018, <https://greatist.com/fitness/bodyweight-push-up-variations>.

Either way, Soldiers at the lowest echelon usually have some expertise in vehicles or equipment that can be useful in a unit. Having a Soldier that has a good understanding of a system or specific piece of equipment, whether it is the engine, brakes, transmission, or muffler, they can talk other Soldiers through how the system works. This is a form of peer-to-peer learning. Hands-on knowledge will not just build the competence of the teacher, as we have learned from psychology, but also helps build relatedness within the unit and a higher confidence in the piece of equipment. Leaders cannot treat this as an individual experience, but more like a common battle rhythm where a learning curve happens on a weekly basis. The overall purpose is to have a newer Soldier teach the classes as Soldiers pass through the unit.

There are always multiple pieces of equipment that a unit can work on during motor pool maintenance, so instead of leaders becoming prescriptive, they can provide choice to the Soldier. A choice between working on Vehicle A, B, or C is still a choice, and provides that little autonomy that each individual needs. The central idea is that if Soldiers feel they have choice, they feel trusted and more connected with the unit as a result.

Providing performance-contingent rewards during experimentation, on the other hand, may take away the feeling of trust and make a result contingent on the reward. For example, when a leader awards a unit for the best maintenance record or best mechanic, this may actually cause a detrimental effect on the individual or unit. This can be especially harmful when a mechanic comes up with a new way of organizing the motor pool. The reward reduces the intrinsic motivation of doing their very best on the task according to Deci.

Motor pool maintenance is a daily or weekly grinding task for each Soldier in garrison. Using some of these ideas can help integrate the mission command philosophy more practically at the lowest echelon. These simple ideas may not sound like they will have an impact, but experimenting with them may give an individual further ideas for exploration in their specific unit.

Sergeant's Time Training

Leaders at the lowest echelon can be creative and provide Soldiers a way to experiment with the use of peer-to-peer learning and providing choices through Sergeant's Time Training. Soldiers can teach in multiple ways during this time. A chapter out of a manual taught through only pictures, a uniform regulation taught through several uniforms with incorrect ribbon placements, or creating small uniform infractions to see if Soldiers can spot them. There are many ways to use peer-to-peer learning; as long as the Soldiers are running the lesson, they are more motivated. This idea does not just help the Soldier, but also puts less pressure on the inexperienced lower-echelon leader with always coming up with different ideas for training.

Choices on a topic are another easy way to build Soldier competence and autonomy. A choice on a topic to study helps the Soldier build disciplined initiative, where they now have chosen the topic and are more likely to focus on it. This is a simple opportunity to use mission command philosophy, and help a Soldier feel more competent and autonomous.

The lowest echelon leader may not always use Sergeant's Time Training effectively, but from the researchers experience it may be because there may not be many ideas on how to use it. Support from subordinates can come through structure, peer-to-

peer learning, and providing choices are all useful in this situation. When leaders give Soldiers the responsibility for topics, they are much more inclined to bring a topic up when there is a free moment, so they can share what they know. This helps develop that lowest echelon leader and places the stress more evenly on the Soldier's shoulders while practicing the mission command philosophy.

Recommendations for Further Study

Based on the research and case study analysis conducted, the researcher recommends the following as the Army builds tools to implement mission command philosophy for junior leaders. Researchers should further study and analyze the relationship between the DAIG survey and CASAL data as it was a critical assumption for this research. Researchers should also further study on how junior leaders are leading in their formations, and if they are taking part in counter-productive leadership.

From what this researcher has seen, SDT and mission command philosophy seem to have a relationship. Researchers should further study other motivational theories to include Skinner's reinforcement theory and Vrooms's expectancy theory, which may have a relationship with mission command philosophy. The research should delve into how these other theories could help mission command philosophy become more implementable.

Summary and Conclusions

Based on the analysis and findings the Army can create tools to help junior incorporate self-determination theory concepts into making mission command philosophy implementable for junior leaders. By doing this the Army can help inexperienced junior

leaders understand mission command philosophy in a garrison environment and better prepare for combat operations. Mission command philosophy is implementable for inexperienced junior leaders, the Army just needs to build tools to help them along.

Junior leaders should attempt to place Soldiers in a teaching opportunity whenever is possible. The younger the Soldier, the more confidence they can gain from that position. As leaders place Soldiers in these positions, they gain confidence and knowledge on the topic.

Junior leaders should attempt to provide choices for subordinates in every training event. The choice can be arbitrary, as simple as placement of an attack by fire position or location of an artillery piece. Another way to approach choices is that a leader understands the end state for the task or training. Leaders can give subordinates the choice on how they learn, at what pace, or how they would like to be assessed. These simple choices increase autonomy for Soldiers. The results of this change can build trust and increase a subordinate leader's confidence for disciplined initiative, two principles of mission command philosophy. To keep it simple, junior leaders should be able to integrate and implement mission command philosophy in an organization by providing peer-to-peer learning, providing choices, and experimentation for their subordinates.

The U.S. Army can use these ideas to build tools to implement the mission command philosophy and determine if there are positive results. Leaders must keep experimenting at the lowest echelon; to build from the bottom up, helping achieve the overall result of integrating the mission command philosophy.

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