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The Lethality-Fitness Paradox—Part 1: What Is Lethality?

By Jeremy Carter, NSCA-CSCS*D, ACSM-EP
True Performance Realization

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Abstract

Strength and conditioning (S&C) professionals provide an enhancing role in preparing Service members (SMs) for combat. While S&C professionals need to increase fitness levels, promote recovery, and reduce injuries for SMs, ultimately, S&C professionals' purpose is to support the SMs' pursuit of lethality. This article is the first in a three-part series regarding lethality, the lethality-fitness paradox, and the proposed interdependent and integrated (I&I) role of the S&C professional in eliciting lethality in SMs. This article will describe what lethality is and what lethality is not, with the second article describing the lethality-fitness paradox. The final article will describe the I&I role of the S&C professional in supporting the SM's chase of lethality.

Introduction

The National Strength and Conditioning Association (NSCA) is the "worldwide authority on strength and conditioning" and "supports and disseminates research-based knowledge, and its practical application to improve athletic performance and fitness."[1] The NSCA offers five different certifications, including the Tactical Strength and Conditioning-Facilitator (TSAC-F) certification. According to the NSCA, the role of their TSAC-F is "to develop strength and conditioning programs for tactical athletes based on the athlete's individual needs," and includes responsibilities such as prescreening individuals prior to testing, training, or selection courses; evaluating the physical demands of the occupation; optimizing occupational physical preparedness; and reducing injuries.[2] Additionally, the NSCA states that "TSAC Facilitators are part of a team of experts working to improve the health, performance, and longevity of tactical athletes."[3]

The author proposes that an additional role of the military strength and conditioning (S&C) professional (i.e., S&C professionals working with SMs) is to elicit lethality for the SM population. This article is the first part of a three-part series regarding lethality, the lethality-fitness paradox, and the role of the military S&C professional in eliciting lethality. The current article will describe what lethality is and what lethality is not. The second article will describe the lethality-fitness paradox. The final article will describe the desired interdependent and integrated (I&I) role of the military S&C professional in eliciting lethality. The end-state of this series is to provide an understanding of how military S&C professionals can elicit lethality, not just fitness.

Of note, lethality is necessary for every SM, not just those in ground combat arms or special operations forces (SOF). While those in ground combat arms or SOF need higher levels of lethality, each SM must be lethal. One notable example of the need to be lethal for every SM can be seen in the story of Jessica Lynch. On March 23, 2003, then Private First Class Lynch's convoy from the 507th Maintenance Company (composed of non-ground combat arms Army Soldiers) was ambushed, resulting in ten soldiers killed in action and the capture of Private First Class



Figure 1: The Spectrum of Perception in Tactical Strength and Conditioning (S&C) Professionals Regarding Their Role in Eliciting Lethality and Performance.

Lynch and seven other soldiers.[4] Nine days later Jessica Lynch was rescued by United States' (US') SOF.[5] None of the Army Soldiers in the convoy were combat arms, but that does not matter, as they were in a combat zone in a foreign country as part of the US' military and therefore must possess lethality. We must recognize that anyone who states that non-ground combat arms SMs do not need to be lethal is an injustice to them, their families, the mission, and the nation.

Origin of this Article

The content of this article is based on experiences at numerous S&C conferences, to include talking with various S&C professionals on the concept of lethality; early 21st Century Warfighting Performance (CWP); and the perceived role of the S&C professional in eliciting lethality and early 21st CWP. Unfortunately, many tactical S&C professionals limit their role to fitness alone or the role that fitness provides to lethality and early 21st CWP; demonstrated in Figure 1 as the "Marginalist" S&C Professional. Contrarily, the author has talked with several S&C professionals who are on the opposite end of the spectrum, where there is an overinflation of one's role in a military unit and the influence that fitness imparts on lethality and early 21st CWP. This indicates an "Imperialist" S&C Professional shown in Figure 1. The tactical S&C professional who overinflates their role wrongly believe that they should control every S&C session, as "they are the professionals." While they may be the professional in fitness, these tactical S&C coaches are not the professionals in lethality or early 21st CWP. As will be discussed in detail in the second part of this article series, the lethality-fitness paradox states that *lethality can be influenced negatively, positively, or minimally by fitness, which depends on the context at a fleeting moment.* Therefore, it is only through the optimal relationship with the SMs, other human-performance professionals, and the S&C professionals that the collective team can facilitate the highest level of lethality.

"The lethality-fitness paradox states that lethality can be influenced negatively, positively, or minimally by fitness . . ."

Lethality Defined

There are diverging views on what *lethality* means, even within the same organization. For example, the US Army's Futures Command defines *lethality* as "a weapon (or capability) that is explicitly designed and employed to produce effects that result in great harm, death, or destruction in designated targets within acceptable levels of collateral damage to property, personnel, and the environment."[6] Meanwhile, the *US Army Field Manual 3-0* defines *lethality* as "the capability and capacity to destroy."[7] The author proposes the following definition of *lethality*, as it promotes a comprehensive preparation strategy to elicit lethality. *Lethality* is the transient and relative state to kill or destroy

the enemy and is dependent on efficiency, effectiveness, survivability, abilities, capacity, and mindset, while being impacted by chance.

Lethality is transient because it is subject to degradation, meaning that without continually being trained, educated, equipped, and tested, it will atrophy. Lethality is relative because being lethal in one scenario (e.g., physical environment, enemy, political situation) does not mean one is as lethal in a different scenario. Lethality is tied to efficiency (e.g., accuracy, precision, effects, effort), as destroying the enemy with less material (i.e., ammunition, weapons) and in less time makes one more lethal. Additionally, logistics and material availability can dictate follow-on actions, thus making efficiency part of the lethality equation in future actions. Lethality is directly correlated to effectiveness and can be viewed as a zero-sum game, where there is a distinct winner and loser.

On today's battlefield, if something can be sensed (found), then it can be targeted (attacked). Therefore, lethality is tied to survivability. Lethality is also tied to abilities, as you must possess the training, education, equipment, permission, relationships, and the aptitude to withstand friction to unleash one's potential effects (Figure 2).

Capacity has been defined as the "maximum output and/or effect that can be produced and coordinated to achieve mission success."[8] Thus, lethality is tied to capacity as it relates to the maximum output and/or effect that an entity can coordinate. Meaning that if we have more combat power ("total destructive force we can bring to bear on our enemy at a given time")[9] we will likely increase our lethality.

Lethality will always be influenced by chance. The US Marine Corps defines *chance* as the ". . . turns of events that cannot reasonably be foreseen and over which we and our enemy have no control."[10] While proper preparation tries to mitigate chance, one can never remove chance from combat. However, chance does not favor either opponent and should not be viewed myopically as a threat but rather viewed as a potential opportunity.[11]

Staff Sergeant Smith, an operator in the United States Special Operations Command, is a member of a raid of strategic importance on behalf of his country. The United States has spent millions of dollars on Staff Sergeant Smith's lethality, teaching him various tactics, techniques, and procedures. The raid force has been sequestered at an undisclosed location for the last twenty days in preparation for the raid. During their sequester, the raid force has watched live feed of the objective using various Intelligence, Surveillance, and Reconnaissance (ISR) assets. The raid force has conducted rehearsals of concepts (ROC) walks, practiced their battle drills, conducted marksmanship training, and performed several full-dress rehearsals for actions on the objective.

To maintain the element of surprise, the raid force conducted a night foot infiltration. Overhead is numerous ISR and Close Air Support (CAS) assets providing real time information on the objective and the surrounding areas. Both the ISR and CAS assets possess the ability to destroy anything that poses a threat to the raid force. Two hours after midnight, the cordon forces and the assault force are set and are undetected. Following the explosive breach, the raid force enters the compound. Staff Sergeant Smith, entering a dark room using his night vision goggles for sight, digs his corner, and is immediately met by a combative. Staff Sergeant Smith and the combative go to the ground, with Staff Sergeant Smith unable to use and engage his primary weapon system.

Is Staff Sergeant Smith lethal?

Fictional Case Study—Part 1: Is Staff Sergeant Smith Lethal?

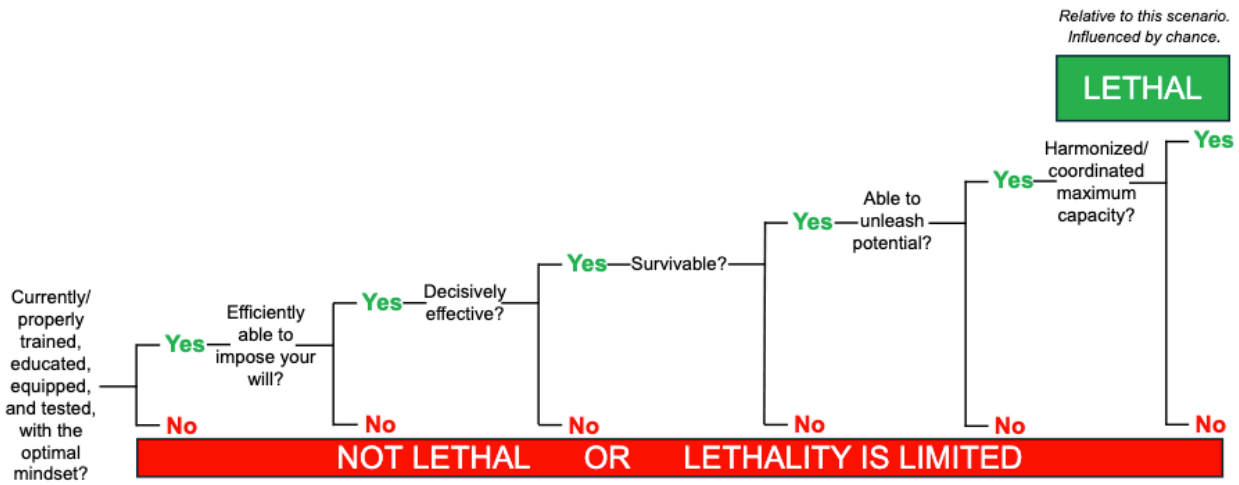


Figure 2: Flow Chart for "Lethality" to "Not Lethal" or "Lethality Is Limited."

Lastly, lethality is influenced by one's mindset. A lethal mindset must be cultivated and sustained. While such a mindset is influenced by one's perception, it is not a perception, as the enemy, chance, and the environment can influence the ever-changing moments of combat.

Unique to this proposed concept of lethality is the humility needed to be lethal. Amer Kaissi states that "humility is about having a true understanding of your strengths and weaknesses."[12] James Kerr writes that "humility allows us to ask a simple question: how can we do this better?"[13] The proposed definition on lethality should stimulate humility and, ultimately, increased lethality, as we can appreciate the relative and transient nature of lethality.

"Lethality is the transient and relative state to kill or destroy the enemy and is dependent on efficiency, effectiveness, survivability, abilities, capacity, and mindset, while being impacted by chance."

What Lethality Is Not

Some research and researchers isolate lethality to weapons and their potential effects.[14] However, we know this is not an accurate definition of *lethality*, as lethal capabilities and abilities are dependent on factors greater than equipment or technology in isolation.[15,16] Additionally, lethality cannot be equated to training by itself. Regarding the lethality of the infantry and SOF warfighters in close-combat, Roper writes that "small units cannot achieve overmatch with field training alone" and that adapting to the next war requires "changes in equipment, training methods, and personnel policies . . ."[17]

To create a lethal ability, a warfighter must be trained and educated with the needed quality, quantity, and availability of equipment needed, with the permission, relationships, and ability to withstand friction needed for the situation.[18] Additionally, for SMs to be lethal, their equipment must be readily available to be used at the critical mass needed. *Critical mass* has been defined as "the minimum amount of output and/ or effect needed to elicit the desired result."[19] Simply stated, putting a low amount of high-quality lethal weapons in an untrained force who lacks the permission to use the weapons does not equate lethality (Figure 2). Thus, lethality cannot simply be boiled down to equipment, initial training, or education.

Is Staff Sergeant Smith lethal? Meaning, is Staff Sergeant Smith able to kill the enemy? The answer is unknown, as lethality is transient and relative. But here is what we do know:

Staff Sergeant Smith's lethality, at this fleeting moment, has nothing to do with his marksmanship skills. Staff Sergeant Smith's lethality has nothing to do with the amount of Intelligence, Surveillance, and Reconnaissance (ISR) and Close Air Support (CAS) assets overhead. Staff Sergeant Smith's lethality has nothing to do with the cordon forces outside the target building. Staff Sergeant Smith's lethality is tied to his fitness; but, even so, other attributes of lethality, such as proficiency in hand-to-hand fighting, are more important.

We know that lethality is transient, as the moment that Staff Sergeant Smith went to the ground his lethality decreased, as he lost the initiative and is now on the response. We know that lethality is relative; relative to Staff Sergeant Smith's training in hand-to-hand combat compared to the combative. Lastly, lethality is influenced by chance, as Staff Sergeant Smith could be superior to the combative in every way, but the one time it matters, the combative may come out the victor.

Fictional Case Study—Part 2: Lethality Is Transient and Relative.

"Thus, lethality cannot simply be boiled down to equipment or initial training or education."

Centric to lethality is its transient and relative nature. How well and recently we have trained to be lethal is essential in maintaining or increasing our lethality. As stated, lethality is not a perception. Trachik et al. (2025) believe that self-perceived lethality can serve as an assessment for unit performance as well as a modality for intervention.[20] While self-perception is important, as self-perception can increase or decrease performance, lethality is not ultimately about self-perception, as it is relevant to the enemy and situation at that moment. We do want our SMs to perceive themselves as lethal, but we want this self-perception to be grounded in the humility and reality that lethality is relative, transient, and impacted by chance. Plainly stated, perception influences lethality but does not define lethality. Therefore, we must always pursue to increase our lethality.

Conclusion

The purpose of this three-part series is to describe what lethality is, the lethality-fitness paradox, and describe the I&I role of the military S&C professionals have in eliciting lethality. However, one cannot understand the lethality-fitness paradox or how to facilitate lethality if one does not understand what lethality is and is not. Therefore, the purpose of this article was help to the reader understand lethality using the framework that lethality is the transient and relative state to kill or destroy the enemy and is dependent on efficiency, effectiveness, survivability, abilities, capacity, and mindset, while being impacted by chance. The next part of this article series will describe the lethality-fitness paradox.

Centric to lethality is its transient and relative nature.

Biography

Jeremy Carter (featured right) is the Founder, Owner, and President of True Performance Realization (TPR), and serves as the Editor-in-Chief for the *True Performance Realization Applied Journal* (TPRAJ). With over eighteen years of experience in human performance, Jeremy has earned numerous certifications, including the National Strength and Conditioning Association's (NSCA's) Certified Strength and Conditioning Specialist with

What is the role of the military strength and conditioning (S&C) professional in making Staff Sergeant Smith lethal? The answer should be that the S&C professional should be interdependent and integrated (I&I) into all aspects of lethal preparation to varying degrees. The S&C professional should be I&I into the mindset, fitness, cognition, skills, leadership, and overall preparation of each SM, as a supporting and enhancing role.

The S&C professional should start off by asking questions to better become I&I within the preparation. Simple questions include: Does Staff Sergeant Smith need to train hand-to-hand fighting? When is the last time that Staff Sergeant Smith trained hand-to-hand fighting? Can we integrate hand-to-hand fighting into Staff Sergeant Smith's physical training (PT) sessions? Can we integrate PT into Staff Sergeant Smith's hand-to-hand fighting sessions? Can we measure the effectiveness of Staff Sergeant Smith's hand-to-hand fighting program? Similar questions should be asked for other aspects of lethality and performance (e.g., decision-making, marksmanship, tactical combat casualty care).

Lastly, while the three parts of the case study emphasized a Special Operations Force operator, any Service member (SM's) can find themselves engaged in hand-to-hand combat with a belligerent, to include support personnel on a non-combat deployment. Thus, training that increases lethality (not just hand-to-hand fighting) should be integrated into each SM's training, as each SM needs to be lethal.

Fictional Case Study—Part 3: The Role of the Military Strength and Conditioning Professional.

Distinction and the American College of Sports Medicine's Exercise Physiologist. He is a current reviewer for the NSCA's *Strength and Conditioning Journal* (*SCJ*), a founding member and editor for the *Journal of Sport and Human Performance*, and a recipient of the NSCA's *SCJ*'s 2023 Editorial Excellence Award.



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