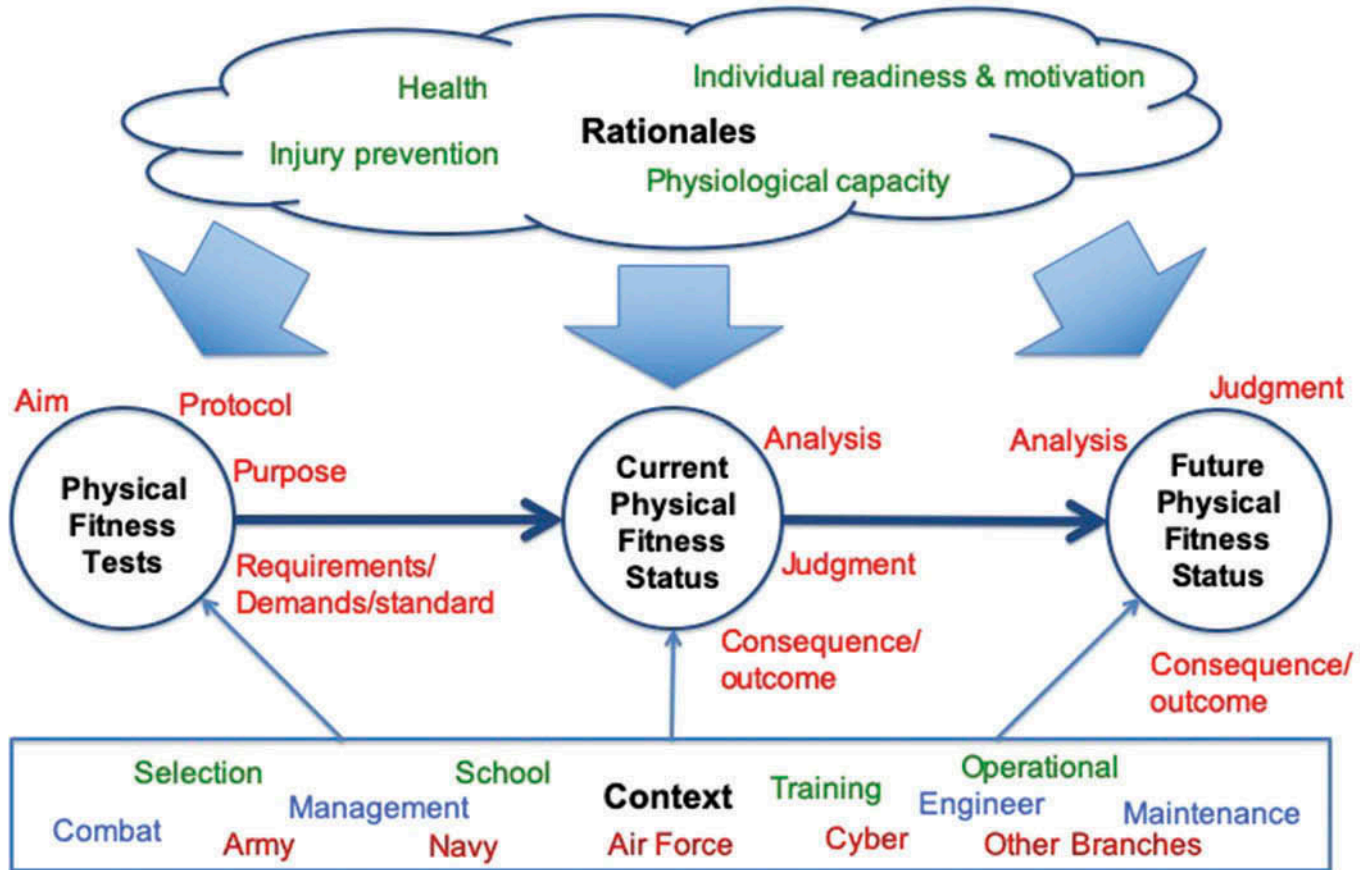


Physical Fitness Test Discourse Model



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The physical fitness test discourse model

Anders McD Sookermary^{1*} and Trond Sveta Sand²

Abstract: In general, when applying physical fitness tests a physiological capacity rationale is normally the hegemonic explanation. Still, soldiers' performance and fitness capture more than physiological capacity alone, and physical fitness tests are used to monitor a variety of physical fitness related components like health, motivation, and readiness. Thus, the scope of this paper is to explore and sketch out a model for physical fitness testing in the armed forces context from an interdisciplinary viewpoint applying a discourse framework. In doing so we utilize four different rationales (physiological capacity, injury prevention, health, and individual readiness) as grinding stones to debate how a specific rationale enables, constrains, and constructs test protocols.

Subjects: Military Sociology; Sports and Leisure; Sociology & Social Policy; Behavioral Sciences

Keywords: Physical fitness test; physiological capacity; injury prevention; health; individual readiness; interdisciplinary viewpoint; military; armed forces; soldier

1. Introduction

It is fairly uncontroversial to claim that a physiological capacity rationale is the hegemonic explanation for the use of physical fitness tests in general. Likewise, physical fitness tests applied to the work sphere are typically grounded in occupational fitness standards which are developed to "base the suitability for employment on the physical and physiological components of individual

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PUBLIC INTEREST STATEMENT

Physical fitness testing in the military has largely been related to soldiers ability to physically carry out their soldiering tasks. Which in itself makes perfectly good sense. Still, physical fitness tests have the potential of doing more. In fact, the military itself argue the relevance of physical fitness tests to a range of other purposes, like health, motivation and readiness, to name a few. In themselves, each of these purposes contains a framework that enables, constrains and constructs a specific understanding of what physical fitness tests are and are able to do, and consequently how one can make meaningful judgments from the test scores. Accordingly, this article explores and sketches out a model for physical fitness testing that displays how different rationales for testing put emphasize on distinctive aspects of soldiers physicality. Our hope is to nurture a more nuanced debate within the armed forces community and among those who use physical fitness tests in their units to optimize soldier and unit performance.

tasks that are considered to be ‘criterion’, ‘generic’ and ‘critical’ or ‘essential’ to the safe and successful completion of a job” (Tipton, Milligan, & Reilly, 2013, p. 2434). This is no different with regard to the purpose and use of physical fitness test protocols in military occupational contexts, as its operational environment is generally considered to be physically demanding. Thus, soldier performance is traditionally broken down to individual requirements set to meet defined minimum standards in the physical domain of military performance. Accordingly, physical fitness test protocols used in the armed forces context are predominately associated with soldiers’ physiological capacity. Selection of individuals with preferred physical characteristics followed by training and monitoring of those selected is the conventional way to optimize soldiers’ performance.

However, soldiers’ performance and fitness are not only to be seen as a matter of physiological capacity. Dees, Nestler, and Kewley (2013) address the need for a holistic approach which includes moral, cognitive, and physical domains when considering soldiers’ performance. Correspondingly, Michael Mullen, at the time Chairman of the U.S. Joint Chiefs of Staff, has underscored that “fitness is not just something that is merely physical; it is holistic” (Mullen, 2010, p. 1). Along these lines the paradigm *Total Force Fitness* has been introduced where both mind (spiritual, psychological, behavioral, social) and body (physical, nutritional, medical, environmental) are included to better understand, analyze, and judge the fitness requirements and the test scores of today’s soldiers (Jonas et al., 2010).

Accordingly, we will argue the benefits of applying a broader, more interdisciplinary rationale than merely that of physiological capacity in the reasoning of physical fitness tests. As such, we will display a narrative/discursive approach to physical fitness tests that bring added sensitivity to its intended aim, purpose, requirements, and outcome. Our intention is to demonstrate that such sensitivity will help govern the mentality of how physical fitness tests are designed and relevant test protocols are developed, as well as how meaningful analysis of the scores is influenced by the prevailing conceptualization. In our view, an interdisciplinary approach can open the way for a more comprehensive and profound debate on the use of physical fitness tests, and in that way improve the conditions for optimizing soldier performance.

Therefore, the scope of this paper is to explore and sketch out a model for physical fitness testing in the armed forces context from an interdisciplinary viewpoint applying a discourse framework. In doing so we intend to utilize four different rationales (physiological capacity, injury prevention, health, and individual readiness) as **grinding stones** to debate how a specific rationale enables, constrains, and constructs test protocols. Hence, the aim of this paper is to outline the complexity in reasoning for physical fitness tests and with that provide a **springboard** for a more comprehensive and nuanced debate within the armed forces community and among those who use physical fitness tests in their units to optimize soldier and unit performance. Research wise, our purpose is not to present a research paper per se, but rather to offer a novel perspective on the physical fitness test that can be used to change future research on the subject.

2. Physical fitness and physical fitness tests

The term “physical fitness” is foremost associated with attributes that people have or achieve and is related to their ability to perform physical activity (Caspersen, Powell, & Christenson, 1985). Firstly, physical fitness includes health-related components such as cardiorespiratory endurance, muscle strength and endurance, body composition, and flexibility. Secondly, it comprises skills that are related to athletic ability: agility, balance, coordination, speed, power, and reaction time (Bouchard & Shephard, 1994). Both perspectives have traditionally been addressed in relation to the military, hence military physical fitness has been described as “the ability to physically accomplish all aspects of the mission while remaining healthy/uninjured” (Roy, Springer, McNulty, & Butler, 2010, p. 14).

Throughout history, military life has been dominated by tasks and missions where physical skills are needed. Thus, good physical fitness has been seen as a prerequisite for military service, and physical

training to improve soldiers' operational performance is recognized as essential for this matter. Correspondingly, physical fitness tests are used to assure that candidates and personnel have the appropriate level of physical fitness. This has an obvious short-term perspective in the assessment of current physical fitness status. In addition, there is a long-term perspective in that current physical fitness status predicts future physical fitness status (Malina, 1996, 2001; Telema, 2009).

3. Physical fitness tests as discourse

As stated in the introduction the rationalization for physical fitness tests is predominately grounded in physiological capacity requirements. Less visible is the fact that the domination of the physiological capacity rationale may have negative consequences for optimizing soldier performance, as there are other, more or less pronounced, rationales that exist as well. This can be illustrated by looking at military physical fitness tests as a *discourse*.

In general, the concept of discourse is related to how we use and understand language as a conveyer of a certain kind of meaning. In the literature on discourse, the term is defined in numerous ways depending on disciplinary, thematical, or other contextual connection (Jaworski & Coupland, 2014, pp. 1–3). Still, in the *Handbook of Discourse Analysis*, Tannen, Hamilton, and Schiffrin (2015, p. 1) argue that there are three main categories into which all the definitions fall. The first category is discourse rooted in a formal linguistic approach to language. Here discourse is perceived as being “anything beyond the sentence”. The meaning that is linguistically conveyed beyond the details of the singular sentence, such as when we string two or more sentences together or we engage in a conversation. The second category refers to “language in use” as the empirical application of language (written or oral) in a specific social setting. In this case, discourse signals the conversational meaning of language in use in a particular situation at a certain time. Finally, the third category, and the one we will mainly pursue in this article, sees discourse as “a broader range of social practice that includes non-linguistic and non-specific instances of language”. Here discourse points towards a much more general conception than the individual and situational conversation. Here the essence is that we can understand the concept of discourse as being “language reflecting social order but also language shaping social order, and shaping individuals' interaction with society” (Jaworski & Coupland, 2014, p. 3). Accordingly, it carries the notion of “a larger system of thought within a particular historical location that make certain things ‘thinkable’ and ‘sayable’, and regulating who can say them” (Educational Foundations and Research, 2015).

This third category is very much related to the Foucauldian understanding of a critical discourse found in Michel Foucault's work on post-structuralism, where he argues that discourses are “practices that systematically form the objects of which they speak” (Foucault, 1972, p. 49). In this sense, the concept of discourse is closely related to the formation of opinion and is often associated with what we take for granted. As such, it is comprised of thoughts and attitudes and can be expressed through written or oral communication, signs, and symbols. It includes the unspoken and implicit and comprises the structure or context the discourse takes place in or is related to. Thus, in this sense, a discourse can be seen as a social practice or phenomenon in which we consciously and unconsciously engage. A key point in a Foucauldian discourse is power as it grants meaning and designates what is conventional or unusual, relevant or irrelevant, and so on.

In essence, Neuman argues that Foucault talks of three modes of power (OpenLearn from The Open University, 2014). The first is the classic **game between individuals** where one person wants to do something, another wants to do something else and so as to resolve the dispute they “fight” it out (by force, struggle, or discussion). Foucault argues that in this mode power is everywhere, in everyday life. The second mode is **disciplinary** power where the system is so tightly set up that there is no game to play. This is the power that we find in established institutions (like prisons, the assembly line, the military, etc.) where you can challenge and resist the prevailing order, but in essence, it won't change the situation. Rather one is in a sense disciplined into an obedient and compliant servant of the institutional mentality. The third mode of power Foucault terms

governmentality, which is a concept combining the terms “government” and “rationality” where the former refers to conduct, or an activity meant to shape, guide, or affect the conduct of people, whilst the latter is seen as a form of thinking that strives to be systematic and clear about how things are or ought to be (Huff, 2013). Neuman argues that the Foucauldian governmentality is a radically different way of looking at power, since it accepts people as acting individuals where power is to orchestrate the situation into a condition where people want to do something because it is the natural thing to do (OpenLearn from The Open University, 2014–10-03). Hence, governmentality should be seen as the indirect way of getting people to choose to do by free will what they otherwise would not have done. Therefore, according to Foucault, we can assert that a discourse is seen as a practice that systematically forms the objects of which it speaks. In essence, a discourse works in three ways: it *enables*, it *constrains*, and it *constitutes*.

With respect to physical fitness tests, the institutional governmentality orchestrates the dominating physical fitness test discourse in a way that enables the understanding of its existing practice. However, it also constrains the prevailing mentality as the dominating rationale in the discourse, i.e. physiological capacity, which may suppress other relevant rationales. Together the enabling and constraining constitutes the image of physical fitness tests. In other words, people in and outside the military speak, write, and perceive physical fitness tests in a particular way, which both enables and constrains how physical fitness tests are understood, applied, and analyzed. Addressing *the meaning of context* and the existence of additional rationales for physical fitness tests can thus reduce constraints produced by the dominating rationale and enable decision makers to make better choices with respect to the use of physical fitness tests. Such as, the epistemological change in thought and attitude required to contemplate the transformational change of the concept of fitness being merely physical to a holistic approach as seen in the narrative/concept of Total Force Fitness (Mullen, 2010; Sookermary, 2011).

4. Military physical fitness tests and the meaning of context

As underscored in the introduction, the military community widely acknowledges the use of physical fitness tests from a physiological capacity rationale. However, both the historical and present uses of physical fitness tests show that context is of great importance. An illustrative example is the considerable organizational transformations that have taken place during the last two decades. The traditional invasion-based defense forces from the Cold War era have altered into flexible expeditionary forces characterized by the ability to act flexibly and individually, which is reflected in great variety in soldiers’ bodily actions and skills (Fürst & Kümmel, 2011; Moskos, Williams, & Segal, 2000; Sookermary, 2012). This has increased the need for better qualified, but also more specialized personnel. Furthermore, most member states of NATO have replaced their mobilization forces based on conscription with professional enlisted personnel in all-volunteer forces (Moskos et al., 2000). Consequently, we have witnessed a huge downsizing of military organizations on a global scale. More so, the rapid technological innovation witnessed over the last couple of decades has introduced a whole new set of fields of operation, such as drone and cyber warfare, where soldier performance is no longer connected to a physical presence in an operational theater. Yet, at the same time assignments in Iraq and Afghanistan have been characterized by strenuous physical requirements. In other words, new tasks and missions and a need for fewer, but more qualified and specialized personnel have influenced physical fitness requirements and, as a result, the use of physical fitness tests. This is, however, nothing new as the armed forces have had to adapt to different scenarios and new technology throughout history. For example, the US Army has had several different test protocols since the first tests were developed in 1858 (Knapik & East, 2014). Correspondingly, current physical fitness tests also differ and can be observed both horizontally and vertically with respect to aspects such as type of tests and minimum requirements for passing scores (see for example Malmberg, 2011; NATO, 2009). Furthermore, physical fitness is assessed and monitored before admission to military training, during training, and in service. Differences may also be observed with respect to the type of education or training and designation of position and/or branch. In addition, historically it has

not been uncommon to have differentiated requirements for age and gender (women) (NATO, 2009). And last, but not least, tests also vary between countries.

Thus, the reasoning for the use of physical fitness tests may seem uncomplicated; however, the examples mentioned above clearly show that physical fitness tests are *not* uniform, but vary *inside* militaries, *between* militaries, and *in time*. The contextual implications have obvious consequences for how physical fitness tests are recognized, structured, and conducted. Furthermore, in addition to the dominating physiological capacity rationale for the use of physical fitness tests, there may be other, valuable but less recognized, rationales that can be put forward for *why* one should assess and monitor physical fitness.

5. Rationales for military physical fitness tests

In the following section, we will display the physical fitness discourse by describing the dominant “physiological capacity rationale” alongside three other rationales: an “injury prevention rationale”, a “health rationale”, and an “individual readiness rationale”. This will help to sketch out a model that demonstrates the diversity in reasoning for physical fitness tests. Although there may be other relevant rationales, the purpose of the paper is not to give an all-inclusive overview of test rationales, but rather to field a set of rationales with **sufficient nuances** to serve as grinding stones for further elaboration on the phenomenon. So, as stated earlier, the aim of the model is to outline the complexity in reasoning for physical fitness tests and with that provide a springboard for a more comprehensive and nuanced debate.

The four rationales have a common feature in that physical fitness is somehow recognized as important for soldier performance and, thus, has an impact on military performance. Furthermore, they also address physical fitness tests as being effective tools to assess and monitor whether candidates and personnel have the preferred physical fitness status. However, what preferred physical fitness status is, who should be tested, and how it should be assessed depends on which rationale is emphasized.

5.1. The physiological capacity rationale

As already stated, physiological capacity is by far the most common rationale for the use of physical fitness tests in the military. It is well recognized that a substantial volume of soldiers are exposed to tasks and missions that require a considerable amount of physiological capacity (NATO, 2009). An archetypical example is the need for soldiers to carry loads (Knapik, Harman, Steelman, & Graham, 2012; Knapik, Reynolds, & Harman, 2004; Ricciardi, Deuster, & Talbot, 2008), and several studies have documented the physiological capacity needs in a wide range of military sub-groups such as naval personnel (Bilzon, Scarpello, Bilzon, & Allsopp, 2002), firefighters (Bilzon, Scarpello, Smith, Ravenhill, & Rayson, 2001; Rogers, Docherty, & Petersen, 2014), and air force personnel (Richmond et al., 2008; Worden & White, 2012). Moreover, it has been detected that physiological capacity increases during training (Dyrstad, Soltvedt, & Hallén, 2006; Mikkola et al., 2012; Nindl et al., 2007) and the fact that military personnel’s physical fitness profiles are relatively good (e.g. Aandstad, Hageberg, Holme, & Anderssen, 2014; Bartlett, Phillips, & Galarneau, 2015; Thomas, Lumpp, Schreiber, & Keith, 2004; Warr et al., 2011; Williams & Evans, 2007) is an effect of physical training enabling soldiers to meet their required physical fitness standards. The physiological capacity rationale thus points at the necessity for candidates and personnel to have a certain physiological capacity to undertake their job. Accordingly, numerous studies have been carried out to validate physical fitness test protocols that can be used to assess physical fitness status (e.g. Aandstad, Holme, Berntsen, & Anderssen, 2011; Pandorf et al., 2003; Wilkinson, Blacker, Richmond, Rayson, & Bilzon, 2014). However, as the physiological capacity requirements vary extensively across positions it follows that the use of physical fitness tests ought to reflect this from a physiological capacity rationale viewpoint. For example, soldiers in an infantry battalion are exposed to completely different tasks and missions than fighter pilots, whereas the work day of a sailor is yet something else. An important part of this is the call for physical fitness tests that are contextually relevant on an occupational level, as it has been indicated that the relation between

performance on some types of general physical fitness tests, and performance on common soldier tasks may be poor (Mitchell, White, & Ritschel, 2014; Spiering et al., 2012; Vanderburgh, Mickley, Anloague, & Lucius, 2011). In addition, it should be noticed that for a number of positions in the armed forces the physical performance demands are very limited. Hence, in such situations, it could be argued from a strict physiological capacity rationale viewpoint that physical fitness tests are, or at least could be, of lesser value in assessing soldiers' performance.

In summary, the physiological capacity rationale is closely connected to the purpose of assessing the physiological capacity status of an individual and its group, so as to provide a baseline for a well-adjusted training regime/period with the aim of increasing/optimizing their physiological capacity. As such, the test protocols are designed to either monitor valued aspects of the soldiers' working skills that are seen as especially physically demanding or test some basic physiological capacities that are known to support the execution of such military skills.

5.2. The injury prevention rationale

The relationship between physical fitness and risk of injury is covered extensively in the research literature (e.g. Allsopp, Scarpello, Andrews, & Pethybridge, 2003; Wyss, Roos, Hofstetter, Frey, & MäDer, 2014). Training- and combat-related injuries are major problems and represent a loss of time from work/duty and training (Hauret, Pacha, Taylor, & Jones, 2016). Needless to say, this has a negative effect on soldier performance and military readiness. Studies of military personnel have shown that lower levels of aerobic capacity (Blacker, Wilkinson, Bilzon, & Rayson, 2008; Knapik et al., 2001; Kupferer et al., 2014; Lisman, O'Connor, Deuster, & Knapik, 2013), lower limb functional capacity (Larsson & Harms-Ringdahl, 2006), and low muscular endurance (Grier, Morrison, Knapik, Canham-Chervak, & Jones, 2011; Knapik et al., 2001; Kupferer et al., 2014; Larsson & Harms-Ringdahl, 2006; Wyss, Von, Frey, & MäDer, 2012) are all associated with increased risk of injuries. Accordingly, armed forces in general invest in fitness policies sensitive to soldiers' physical fitness status. In relation to physical fitness testing, candidates for military service are, to some extent, screened during recruitment for medical history, and put through physical fitness tests that are in part meant to predict future injury probability. Examples are the Biering-Sorensen test (or just Sorensen test) which has been found to be both reliable and able to discriminate between those with and without lower back pain (Biering-Sorensen, 1984; Flanagan & Kulig, 2007), and the Lower-Limb Functional Capacity Test for enlistment into Swedish Armed Forces ranger units which is shown to have a high discriminating ability and predictive value for discharge caused by knee problems (Larsson & Harms-Ringdahl, 2006). Moreover, from a retention perspective, the military, for example, use annual physical fitness tests to monitor soldiers' general physical capacity as an indirect method of identifying those who are physically at risk of being injured.

As with the physiological capacity rationale where test protocols are designed to simulate demanding work-specific requirements, test protocols derived from the injury prevention rationale are constructed to make predictions towards a specific task (Flanagan & Kulig, 2007; Larsson & Harms-Ringdahl, 2006). Accordingly, analysis and evaluation of test scores within this rationale follow a path that identifies factors which enable, constrain, and constitute consequences or outcomes that lead to reducing injury prevention. Hence, while occupationally relevant tests seem to be appropriate in the physiological capacity rationale, it has been indicated that more general and simple tests can be suitable from an injury prevention viewpoint. An illustrative example is that the association between aerobic capacity and injury risk can be uncovered by the 5-min step test (Bedno, Cowan, Urban, & Niebuhr, 2013; Cowan, Bedno, Urban, Lee, & Niebuhr, 2012).

To summarize, the injury prevention rationale's purpose in relation to physical fitness tests is not primarily to just monitor physical capacity, but rather to use the fitness status revealed by the test

as a means of identifying those at risk of injury due to low physical fitness status. Thus, this rationale constitutes a physical fitness test discourse that emphasizes individual capacities/characteristics rather than occupational demands, and, accordingly, fosters a test protocol that is less context-dependent.

5.3. The health rationale

The health rationale derives from the correlational relationship between both physical fitness and health status, as low physical fitness is related to basic health problems. For example, research on military personnel has shown that low aerobic endurance predicts risk of cardiovascular diseases (Cederberg et al., 2011; Talbot, Weinstein, & Fleg, 2009), has a negative influence on sickness absence (Kyröläinen et al., 2008), and is associated with obesity (Macera et al., 2011; Robbins, Chao, Fonseca, Snedecor, & Knapik, 2001). Likewise, there are studies that show a correlation between low physical fitness and mental disorder diagnosis (Gubata, Urban, Cowan, & Niebuhr, 2013) and PTSD (LeardMann, Smith, Smith, Wells, & Ryan, 2009). Thus, selecting individuals with an appropriate physical fitness capacity followed by a continuous monitoring of military personnel's physical fitness status will potentially uphold a healthier force with reduced sickness absence and withdrawal due to health-related problems. Moreover, the health rationale indicates differentiation in the use of test protocols, as risk of health problems is determined by factors such as age and living habits. While the physiological capacity and injury prevention rationales predominately aim at military personnel in physically demanding positions, the health rationale has its primary value in relation to those with sedentary work, particularly older personnel, as the consequences of an unfavorable lifestyle are more severe in this group. The purpose of monitoring physical fitness status is, therefore, less about measuring the suitability of personnel doing their jobs, but more a question of screening for health risks. Still, with respect to younger personnel, it can be argued that physical fitness tests may be beneficial from a preventive point of view, although they are generally at lower risk of health-related problems. For example, there are studies indicating that mandatory physical fitness tests intrinsically have a positive effect on health promotion among military personnel (Grósz, Tóth, & Péter, 2007; Wynd & Ryan-Wenger, 2004). Such findings suggest that occupational relevancy is of lesser importance when the aim of physical fitness testing is to gain the desired effect in relation to general health issues. In fact, research has uncovered that military personnel who exercise because of their military obligation are less likely to score highly on physical fitness tests compared to those who are motivated to exercise for health benefits (Wilson, Markey, & Markey, 2012). Thus, it may be favorable to use health rather than occupational needs in reasoning for the necessity of physical fitness tests. Furthermore, while physical fitness tests seem to be less important for preventive effects among younger personnel, it is crucial to target and individualize tests towards older cohorts.

In summation, physical fitness testing based on a health rationale serves the purpose of identifying the general health status of individuals to enable the monitoring of general health through physical fitness within a cohort/group. As such, the health rationale, like the injury prevention rationale, is not primarily directed towards the fulfillment of specific job demands. Rather, within a military context, its strength lies in its ability to enable a methodological grip/tool to better analyze and make a sound judgment over the general health status of individual soldiers and their units. Thus, the essence of the health rationale is that physical fitness tests are not about measuring suitability, but rather using results as guidance and intervention to prevent health problems.

5.4. The individual readiness rationale

Soldiers are not only met with physical demands but must also handle stressful and potentially mentally traumatic situations. Here physical fitness plays a role as it may influence the ability to handle and adapt to such stressors. Physical training volume seems to have a positive association with soldiers' mental strength (Dyrstad, Giske, Barlaug, & Pensgaard, 2010), and it has been uncovered that soldiers with strong psychological skills are associated with better performance on physical fitness tests (Hammermeister, Pickering, McGraw, & Ohlson, 2010). Likewise, self-

control has been revealed as a strong predictor of physical fitness (Kinnunen, Suihko, Hankonen, Absetz, & Jallinoja, 2012). More so, it has been indicated that good physical fitness can buffer stress symptoms after extreme military stress (Taylor et al., 2008), which can be supported by the fact that personnel with lower physical fitness status' seem to correlate with hormonal stress reactions after field training (Tyyskä, Kokko, Salonen, Koivu, & KyröLäinen, 2010). Accordingly, psychological hardiness, which is partly a personality trait responsive to change based upon contextual factors (Bartone, Valdes, & Sandvik, 2016), is acknowledged to moderate occupational stressors (Dolan & Adler, 2006), and research indicates that there is a relationship between hardiness and physical fitness (Bartone et al., 2016; Johnsen et al., 2013; Maddi, Matthews, Kelly, Villarreal, & White, 2012). The indicated positive correlation between physical fitness and psychological strength highlights recruitment and retention of physically fit individuals to build and continuously (re)develop a mentally strong military workforce.

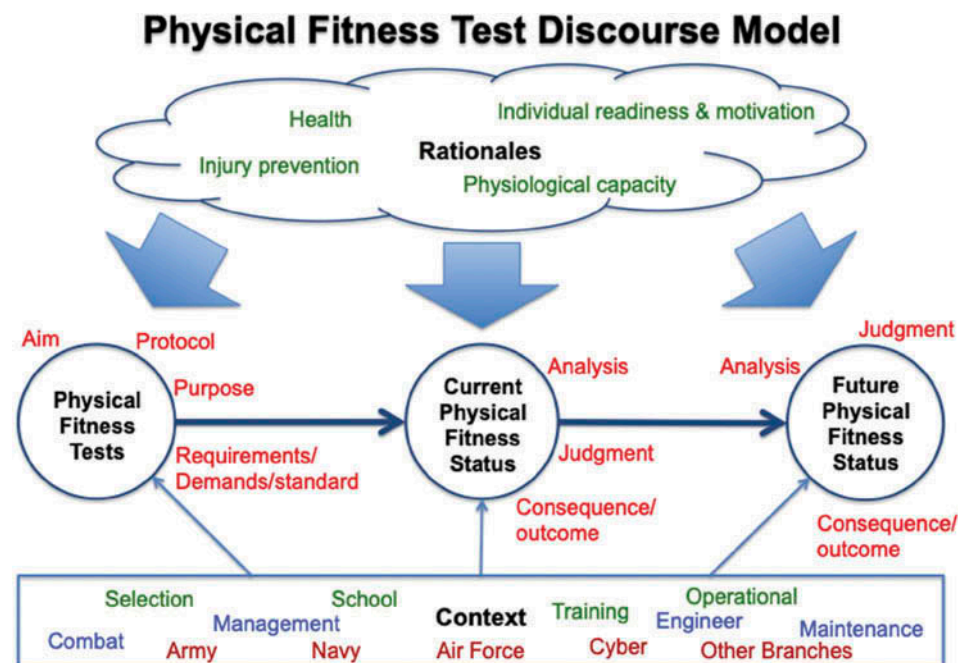
In sum, the purpose in the individual readiness rationale is foremost to provide objective information about individuals' readiness for stressful duty, enabling an analysis of the test scores in relation to given mental demands, requirements, and standards. As such, physical fitness test protocols in the individual readiness rationale are not necessarily linked or designed to monitor soldiers' fitness status in relation to the physical requirements per se, but rather as an indication of their influence on readiness for dealing with stressful situations. Consequently, analysis and judgment of test outcomes within this rationale focus on readiness as a relationship to the physical and mental sense of being prepared, rather than being merely physically prepared.

5.5. The physical fitness test discourse model

Based on the assumptions/evidence/understanding of physical fitness tests being influenced by both context and the reason or rationale for testing we can derive the following physical fitness test discourse model (see Figure 1).

Basically, the figure displays a three-layer model where the middle layer is the conduct of physical fitness testing presented as a developmental process: the first circle representing the actual *physical fitness test*, the second circle signifying the interpretations of the test results as

Figure 1. The physical fitness test discourse model.



a *current physical fitness status*, and the third circle symbolizing a *future physical fitness status* as a long-term goal. All three circles are surrounded by meaningful narrative descriptors (in red) at their stages of a developmental process that, in essence, define (enable, constrain, and constitute) our understanding of a given physical fitness test.

The bottom layer is intended to represent the *contextual surrounding* that provides a kind of concrete environmental and cultural foundation for physical fitness testing. In the model, it is exemplified with three kinds of contextual signifiers relevant to the military context, namely that of branch (in red), vocation (in blue), and circumstantial setting (in green). Hence, there could be others and, as such, their role in the model is to show that the military context is diverse on several levels of what we see as being military. And more so, that these contextual nuances play an integral and important part when we define and conduct physical fitness testing in relation to the military.

Finally, the top layer is meant to communicate possible rationales as a kind of conceptual mindset for physical fitness testing. Therefore, signaling that, depending upon which rationale you follow as being the hegemonic, you will add specific narrative meaning into the way you enable, constrain, and constitute physical fitness testing. As we laid out earlier, a specific rationale will essentially bring a certain conceptual understanding of what is meant by a physical fitness test with regards to its aim, protocol, purpose, and requirements/demands/standards. And likewise, how the analysis, judgment, and consequences/outcomes are interpreted based on a given narrative understanding.

As such, the model should be seen as a visualization of how context and rationales narratively enable, constrain, and constitute the mindset/understanding and conduct of physical fitness testing within an armed forces environment. In consequence, it should also be read as an attempt to theorize physical fitness testing from a discursive perspective—as in how a specific context such as different branches of the military (Army, Navy, Air Force, Cyber etc.), type of vocation (combat, management, engineer, maintenance, etc.), or service (selection, school, training, operational) together with different rationales influence the way we perceive physical fitness tests by establishing specific aims, protocols, purposes and requirements, demands and standards. And likewise, how their influence guides the analysis, judgment, and consequence of the outcome—said differently, why and how we interpret the test results/scores as we do.

In real life, physical fitness tests are conducted for a purpose (assessing physiological capacity, injury prevention, health care, individual readiness and motivation, and others) with a specific aim of revealing/measuring the physical status of the candidate by the use of a customized protocol sensitive to the valued and predefined requirements, demands, or standards of the given context and rationale. As displayed in the sections on the four rationales, different rationales value different aspects, which lead to a diverse set of aims and requirements that are measured through a distinct test protocol and analyzed in concert with predestined demands and standards.

For instance, a physical fitness test with the purpose of uncovering the physiological capacity of soldiers in relation to a specific job requirement will have a protocol that enables us to assess the capacity we look for. In developing such a test, one will seek to optimize the protocol in a way that highlights the valued capacity. A stringent test isolating the capacity we are monitoring will consequently be constrained by censoring other capacities. Thus, when assessing the current physical fitness status, the judgment of the analysis will focus on consequences and outcomes relevant to the purpose and notably downplay issues of less perceived value. Still, what we see and perceive as relevant and valuable has been systematically shaped, guided, or affected by the mentalities, rationalities, or context through which subjects are governed and influenced.

6. Conclusion

The scope of this paper, as stated in the introduction, was to explore and sketch out a model for physical fitness testing in the armed forces context from an interdisciplinary viewpoint applying

a discourse framework. As shown in this paper the armed forces communities tend to give “the physiological capacity rationale” a hegemonic position when debating the value and meaningfulness of physical fitness tests. We, on the other hand, have argued for an interdisciplinary approach more sensitive towards plurality and diversity. Moreover, by utilizing a Foucauldian understanding of the “discourse” as a conceptual framework we have sketched a model that displays how different physical fitness rationales have the power to enable, constrain, and constitute nuanced and valuable meaning to the conceptualization and conduct of physical fitness testing in general, and in armed forces communities in particular. Accordingly, the intention was not to provide any new protocols, but rather to *enable* us to identify and acknowledge the complexity as well as the contextual sensitivity of different physical fitness test rationales. As such, the argument should help us liberate our thinking from the *constraints* of being too closely centered on one dominant rationale, for example by over-simplifying the value and meaning of soldier physical fitness and performance. Consequently, the model should better help those who use physical fitness tests in their service to *constitute* a mindset that will be incremental for the design of test protocols that are more adept at monitoring those diverse elements of soldier fitness.

Still, at the end of this paper it seems germane to once again stress that the purpose of our effort was not to provide an all-inclusive overview of all possible test rationales, but rather to utilize a set of multiple rationales with adequate nuances to serve as grinding stones for further elaboration on the implication of physical fitness testing rationales on the physical fitness testing practice. As such, our aim was merely to provide a springboard for a more comprehensive and nuanced debate to come. Accordingly, we would, at the end of this article, like to put forward that we understand that our own “discourse model” approach in itself offers an instrumental rationality that enables, constrains, and constitutes meaning within the physical fitness test discourse. Thus, we argue and expect that any interaction with or application of the model should be done with a certain amount of critical curiosity and practical sensitivity.

In summary, we believe the essence of the model should contribute to developing physical fitness tests and protocols that are sensitive to the local aim and purpose for which they were primarily carried out. Thus, physical fitness tests should be more meaningful and relevant in the process for both the tested and those testing, and by that improve the conditions for optimizing soldier performance.

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