

Intelligence and Morale in the Army of a Democracy: The Genesis of Military Psychology During the First World War

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Much has been written about the introduction of intelligence testing during the First World War when civilian psychologists convinced the Army to experiment with its selection and classification procedures. Many Army officers remained skeptical of intelligence testing, fearing the infringement of civilian "hobbyists" into their area of expertise. Intelligence testing, however, was only one facet of the evolving military psychology movement. The celebration of the 100th anniversary of the American Psychological Association is perhaps an appropriate time to reevaluate the broad agenda these pioneering military psychologists set for themselves in studying problems relating to the psychology of the soldier. Psychologists in the newly created Morale Division, for example, initiated rudimentary studies on issues that would become staples of 20th-century military psychology, such as the adjustment of recruits to Army life, the effectiveness of Army propaganda in changing attitudes, the reasons soldiers desert, and the impact of military service on civilian soldiers. By encouraging military policymakers to consider the importance of soldier psychology in a mass army, the Morale Division introduced a new and somewhat controversial perspective into the organization. Consequently, plans to develop soldier morale were integral to the interwar mobilization plans prepared by the Army War College, considerations notably absent in 1917.

Caught up in the celebratory mood that engulfed the United States in the afterglow of its triumphant victory over Germany in the First World War, one

war participant, Major E. B. Johns, wrote and marketed a keepsake book that commemorated the role of Camp Travis, Texas, in the war effort (Johns, 1919). As he sentimentally chronicled how the Army had turned motley groups of civilians into the kind of disciplined troops capable of defeating the most respected army in the world, Johns took a couple pages to describe what must certainly have been one of the most bizarre episodes during a young recruit's first few bewildering weeks as a soldier: his visit to the Psychological Testing building for intelligence testing. Using the experiences of two fictionalized characters, John Thompson and Zeke Gray, Johns created a vivid portrait of what nearly 1.75 million recruits (out of the 4 million mobilized) experienced during their first, and probably only, direct encounter with military psychologists. The conversation between John Thompson, a bookkeeper in civilian life, and Zeke Gray, the son of a tenant farmer, as they nervously waited in an unfurnished room with a hundred others for their intelligence exam to begin, foreshadowed the ultimate fates of the two men within the wartime army.

"I thought they had chairs and tables in schools," Zeke ventured.

"If the room was full of furniture, how do you think they would get all these men in here?" John countered. (Johns, 1919, p. 44)

The examinees sat on the ground in neatly aligned rows, and an intelligence examiner barked instructions while the two men completed the first section of the Alpha exam, the test designed to evaluate the intelligence of literate recruits.¹ After the initial scores were quickly tabulated, the significance of this initial exchange to the moral of the story became clear. John was instructed to remain seated and complete the exam, on which he would eventually receive an A score of superior intelligence. Zeke, who perhaps had never even held a pencil before, was taken to the Beta room, where, the author noted, "illiterates and foreigners were being examined" (Johns, 1919, p. 44) with a pictorial exam.

Faring no better on the Beta exam, Zeke was soon on his way to a personal interview with a camp psychologist.

"What is foolish about this?" the examiner asked. "A bicycle rider, being thrown from his bicycle in an accident, struck his head against a stone and was instantly killed. They picked him up and carried him to the hospital, and they do not think he will get well again."

"He should not have been riding so fast," answered Zeke. (Johns, 1919, p. 44)

¹For the true-to-life quality of the fictional Camp Travis story, see the well-known Signal Corps' photographs of enlisted men sitting on the ground filling out their intelligence test forms reprinted in Drucker and Zeidner (1988).

Wrong answer, according to the examiner's correction sheet. From a series of replies like these, the psychologist gave Zeke a D-, which, in the jargon of the day, branded him a moron. Zeke subsequently received a permanent assignment in a labor battalion.

Johns' illustration of the practical use of intelligence tests in classifying incoming recruits resonates poorly with late 20th-century readers, whose attention tends to focus more on the ridiculousness of the questions asked than on the inferiority of the answers given. Now-classic examples of the cultural bias inherent in these early exams include (a) a question on the Beta exam that pictured an empty tennis court and expected the soldier to draw a net to complete the portrait and (b) Alpha exam questions like "Crisco is a ...patent medicine, disinfectant, toothpaste, food product" that tested merely familiarity with brand-name products (Gould, 1981).

Such considerations were not lost on contemporary military commanders, many of whom considered the experimental testing program a waste of time. "You rate one of my cooks a 'D' and brand him as 'illiterate,'" noted one irate Divisional Commander quoted by General Staff officer Colonel R. J. Burt in his report on initial reactions to the testing experiment (Burt, 1918, p. 14). "[Yet] it would be a difficult matter to find as good a cook; he is worth his weight in gold to the military service. What do we care of his 'intelligence'?" Throughout the war, commanders like these remained steadfast in their conviction that intelligence tests could not measure the zeal, confidence, and initiative intrinsic to a good soldier. The crux of the intelligence testing debate within the wartime Army was aptly summed up by Colonel Burt, who was "not convinced that the stupid man, with proper training and leading, is necessarily going to give way in the trenches" (Burt, 1918, p. 5).

Such outspoken criticism should have doomed military psychology to obscurity. Instead, by the end of the war these pioneering Army psychologists were advising military officials in no fewer than six wartime departments (Camfield, 1969).²

A typical day for the psychologists in Camp Grant, Illinois, during the demobilization period revealed how far afield military psychologists would go in seeking an appropriate place for their expertise within the Army. On this particular December afternoon, Camp Grant psychologists were busy

²A total of 400 psychologists participated in at least one of their profession's wartime experiments. Psychologists administered the intelligence-testing program in the Office of the Surgeon General and the personnel-classification exams in the Adjutant General's Office, and they tried to develop a profile of an aviator's aptitude and personality for the Army Signal Corps. The Training and Intelligence Branches of the General Staff also solicited preliminary studies from Army psychologists on education and propaganda, but it was in the General Staff's Morale Division that psychologists would make their greatest mark.

recording the responses and remarks of a group of Black servicemen as they watched a film entitled *Damaged Goods* (Terry, 1918). Their assignment was to assess how effectively the film conveyed the horrors of syphilis, encouraged abstinence among troops, and illustrated the foolishness of trusting “quack” doctors. First Lieutenant Paul Terry (1918), the psychological examiner in charge of the experiment, realized that “it is very difficult to discover what actually goes on in the heads of a group of men” (p. 1). Nonetheless Terry and his team tried their best.

Damaged Goods recounted the sad tale of a well-to-do young man unhappy with the marriage his mother had arranged between the daughter of a Senator and him. He became uncontrollably drunk at his bachelor party and picked up a “girl of the streets” (Terry, 1918, p. 3). The story climaxed by portraying the repercussions of the disease, not only for the guilty party but also the unknowing infection of his wife and unborn child.

The invidious ruin of women and children made a strong impression on soldiers who had just completed a national crusade to protect their own home and hearth from the bestial German Hun. However, after watching the film, Terry (1918) was quick to point out that the film contained too many sexually arousing scenes. “The sex instinct is primitive and powerful, very easily aroused. When men make remarks concerning the ‘Girl in the Streets’ such as ‘That would make a man catch somethin,’ ... ‘By God, Some Stuff’ ... ‘Go to it boy’ ... they are not at the same time susceptible to social hygiene instruction,” he noted (Terry, 1918, p. 3). On the other hand, Terry conceded that the erring youth’s

investigation of his own condition evidently went home to many of them who became quiet and eagerly followed the scene. ... The hospital scenes silenced almost all. “That’s the syph.” ... “They can’t cure the damned stuff.” “Needn’t show me that, I’s got syphilis too.” (p. 3)

Terry’s (1918) evaluation of the film as a “military morale agent” (p. 1) provides a poignant illustration of military psychologists’ attempts by the end of the war to help the Army not just to classify men but to manage them as well. In their personnel work, Army psychologists sought practical applications for the results of their intelligence-testing experiment, something Army officials were reluctant to do.

In the Camp Grant example, for instance, Army psychologists’ general preoccupation with hereditarian theories of racial intelligence (Gould, 1981; Montagu, 1945; Rury, 1988), bolstered by Black soldiers’ poor performance on the culturally biased exams, shaded their conclusions about the overall educational value of the film. Having analyzed Black soldiers’ reactions to the film, Terry (1918) was unwilling to concede that a group of White soldiers might react similarly. Instead, Terry argued, it was reasonable to assume that “the colored men being more primitive and of lower intelligence would be more easily distracted and excited by sex suggestion and less

permanently impressed with moral and social restraints" (p. 6) than White soldiers.³

Thus, the civilian psychologists recruited to administer the testing program did not restrict their interest solely to measuring the intelligence of incoming recruits. Rather, by the end of the war—a year and a half after America's entry into the conflict—they considered any problem relating to the psychology of the soldier as appropriately under their domain.

Psychologists' broad conception of their professional terrain coincided with the expansion of wartime responsibilities for another group of experts. The nation's professional officers, the heart and soul of the peacetime Regular Army, were faced with a distinctly new task when President Woodrow Wilson, with the approval of Congress, decided to form a national mass-conscripted army to fight the war the country entered on April 2, 1917. Abandoning the state-oriented, volunteer character of previous wartime armies, the challenge of assimilating millions of civilians was as new to federal Army officials as entering the National Army was for the American civilians inducted for the duration.⁴ Training and commanding a force of this type and size created specific challenges, beginning with how to place these men within the vast array of support and technical battalions that would form 60% of the wartime force without diluting the quality of the traditional combatant units. Doubts about how civilian soldiers might react, first to compulsory military service and subsequently to trench warfare, prompted debates over how far the Army needed or wanted to go in molding the attitudes of its temporary wartime population.

Consideration of these questions roughly followed the chronology of the American war experience. In the early months of the war effort, Army officials were preoccupied with questions of placement. During the war, they

³Contemporary psychologists also ignored the quite apparent regional disparities in their intelligence-test results in which Northern Blacks scored significantly higher than Southern Blacks and many Southern Whites. Robert M. Yerkes, the director of the Army intelligence-testing program, tried to explain away disparate scores among Blacks by arguing that more intelligent Blacks were clever enough to move North where opportunities were greater, but he never broached the subject of Northern Blacks surpassing Southern Whites on the exam. Psychologists and historians now acknowledge that early intelligence tests were better indicators of social and educational conditions throughout the country than of native intelligence.

⁴When war was declared, the Regular Army included roughly 127,588 officers and men, with an additional 80,446 National Guard officers and troops in federal service along the Mexican border. Federal Army forces would grow to almost 3.6 million, 72% of whom were drafted. National Guard divisions received state volunteers until December 15, 1917; after this date these divisions received enough recruits, transfers, and replacements from the national draft to lose their state affiliation quickly. This manpower situation, coupled with the fact that all troops were inducted into federal service for the duration of the war, gave the Regular Army professionals who dominated the General Staff free rein over the command and construction of the wartime army. In April, 1918, all distinctions between Regular Army, National Guard, and National Army divisions were formally eliminated, and all became units of the U.S. Army.

worried about civilian soldiers' reactions to Army life. During the demobilization period, they were concerned about whether wartime soldiers would return to civilian life with a positive view of their military experience. This article will examine how American military psychologists' responses to these questions of placement, morale, and political education left an indelible mark on the 20th-century military establishment and on the discipline of military psychology.

PLACING MEN: THE INTRODUCTION OF INTELLIGENCE TESTING

Psychology came of age as a profession during the Progressive Era, a period between the turn of the century and the First World War when Americans placed a premium on scientific management and professional expertise. Regarded as a "soft" science within the academic community, psychologists turned to other sources to establish some legitimacy for their profession. The success of their prewar educational and commercial endeavors gave psychologists the courage to approach Army officials when war was declared. Psychologists' efforts to help prewar employers match the right man with the right job became the basis for the Army's trade-testing program. Under the direction of Walter Dill Scott, an applied psychologist from Carnegie Institute of Technology, the Committee on the Classification of Personnel spent the first 6 months of the war designing tests that would appropriately correlate civilian skills and military tasks. Psychologists' other main prewar interest, the development of intelligence tests, provided the impetus for the wartime testing program.

Personnel Classification

When Scott approached Army officials with a plan to classify recruits according to their occupational skills, he received immediate approval to codify the Army's personnel structure. In embracing this civilian management expert, the Army was reacting as had other overwhelmed governmental agencies that turned to a series of Dollar-a-Year Men to help organize the economy and the populace for total war. The frustration Army officials eventually expressed with Scott's work bore no relation to the value they placed on it, but rather reflected their impatience with its slow pace (Brown, 1918b). Scott and his staff simply spent too much time perfecting their classification cards and designing trade tests for any of the information they painstakingly collected to be of much use. Army officials' receptivity to the concept of personnel classification contrasted sharply with their lukewarm response to the mass intelligence-testing program (Camfield, 1969; Kevles, 1968; von Mayrhauser, 1987).

Intelligence Testing

Unlike Scott, Robert M. Yerkes had no trouble devising an efficient testing system that placed results in commanders' hands within a few days. Although Yerkes' lightning speed at disseminating his results won him General Staff approval to expand the testing after an initial trial period, Yerkes and his band of psychologists faced an uphill battle convincing divisional and unit commanders that the "intelligence" of troops really mattered (Burt, 1918, p. 14).⁵

American psychologists' interest in mental measurement was in some respects a continuation of the 19th-century phrenology phenomenon. Instead of using cranial measurements to infer racial differences in intelligence, 20th-century psychologists used the responses to a series of written and oral examinations. The work of French psychologist Alfred Binet in developing an individual examination to diagnose feeble-minded schoolchildren piqued American psychologists' interest in using mental tests to organize factories, schools, and armies more efficiently. Henry Goddard introduced American psychologists to the Binet scale; but it was the revision of Binet's exam by Lewis Terman, a Stanford University psychologist, that became the standard prewar mental exam (Gould, 1981; Minton, 1987).

Terman met in the summer of 1917 with other prominent psychologists in Vineland, New Jersey, to design the Army's mass intelligence examinations (Drucker & Zeidner, 1988). However, it was Yerkes who made the most crucial contribution to the wartime testing movement by single-handedly fighting the necessary political battles within the Army.

Yerkes' first triumph was establishing an experimental bureau of psychological testing in the Office of the Surgeon General. To gain permanent acceptance for his program, Yerkes had to demonstrate not just that his examiners could effectively test men within the first week of their arrival in a training camp (no small accomplishment given their disarray in 1917), but also show that he was helping the Army solve the pressing problem of placing men.

In Camp Lee, Virginia, one of four divisional cantonments selected by the War Department for trial testing in the winter of 1917, the evidence was doubtful that intelligence scores actually influenced where soldiers were assigned (Samuelson, 1977; H. A. Shaw, 1917). Sent by the War Department to report on the Camp Lee experience, Colonel Henry A. Shaw was unable to

⁵This General Staff decision was made after an initial probationary period and against most of the recommendations solicited from both high-ranking and low-ranking officers. Out of the 35 officers randomly selected by Colonel R. J. Burt, 29% reported unfavorably, 43% claimed the tests' value was doubtful, 23% had a favorable opinion, and 3% were very impressed. Burt detected that younger officers with little experience commanding men were more willing to believe the tests had value, a significant finding, because these were the officers responsible for classifying the majority of incoming troops.

verify that many placement officers were using intelligence scores. After interviewing resistant officers who felt psychologists were infringing on their traditional capacity to assign and to transfer men at will, H. A. Shaw, an advocate of intelligence testing, underscored how modern mass testing would attain the same results as traditional, personal methods of selection, but more efficiently (Bradley, 1917; H. A. Shaw, 1917). Eager to highlight how the sheer complexity of the task necessitated a scientifically foolproof response, Colonel Shaw gave the remarks of the Base Hospital commander a prominent position in his final report. According to Colonel Shaw, this officer's support for the testing program was based on his realization "that the man who had received the highest rating had been sidetracked in the assignments and detailed on some very insignificant duty" (H. A. Shaw, 1917, p. 4). After reassigning the man to a more responsible position, the soldier immediately, in the commander's words, "made good" (H. A. Shaw, 1917, p. 4). Even more inspiring, however, was the commander's confession that

sometime previous to this occurrence [his] attention had been called to a young man of excellent appearance and address, and apparently better educated than the average soldier. He decided to make him a corporal. Soon afterward this man got into serious trouble, left his post of duty and involved himself in all sorts of difficulties. When the psychological ratings came in, it was found that his score was 81, far below the noncommissioned officer grade and almost approaching feeble-minded. Further acquaintance with this man showed that, in [the commander's] words, he was an out and out "bonehead." (H. A. Shaw, 1917, p. 4)

Still, despite testimonials from supportive officers, the evidence that psychologists were helping psychiatrists purge incompetent soldiers from the ranks, and psychologists' acknowledgment that an intelligence score should be only one of the factors considered in placing and promoting soldiers, many officers remained leery of the program. Even supporters in the General Staff urged the War Department to keep a close rein on the testing program to ensure that no psychologists "ride it as a hobby for the purpose of obtaining data for research work and the future benefit of the human race ... at the expense of present military training" (Burt, 1918, p. 3).

Young psychologists completing the newly instituted training course for intelligence testers were well aware of their precarious position within the institution. "Attention! I am going to shout some commands at you to see what will happen!" was how one student began his graduation banquet parody of the intelligence examination process (Larrabee, 1918, p. 1). "The words (POOR) SOME PSYCHOLOGISTS BOOBS ARE in that order are slightly twisted and do not make a sentence," he continued. "But if they were put in the right order: SOME BOOBS ARE POOR PSYCHOLOGISTS ... the statement is true," he deadpanned to his sympathetic audience (Larrabee, 1918, p. 2).

Aware of the controversy their testing program was generating within the military, Yerkes and his colleagues went on the offensive to demonstrate the broader policy implications of their work (Kevles, 1968; Yerkes, 1918a). Two compelling studies pinpointed a problem of tremendous import to General Staff officials: whether or not the nation's manpower resources were of high-enough quality to sustain what they expected to be another 2 years of war. The first study evaluated the declining quality of officer candidates; the other analyzed the startling high rate of illiteracy among the nation's drafted troops (Foster, n.d.; Yerkes, 1918b).

Officer study. Yerkes' overall conclusion that the intelligence of the third National Army officer class was lower than previous groups confirmed the Army's general fears about the ultimate repercussions of its high line-officer casualty rate (Lynch, 1919). Yerkes, however, had a different point to make. He did not dwell on the possibility that the nation's supply of officer candidates might be exhausted but, instead, suggested that these men had not been selected from a large enough pool of recruits. The distribution of intelligence scores within the whole armed forces, Yerkes argued, provided the ratios that indicated how many men the Army needed to call up to maintain the quality of its officer corps. Yerkes estimated that it would take 75,918 new draftees to find 10,000 officers of comparable intelligence to those presently in uniform.⁶

Illiteracy. The Psychological Division's figures on illiteracy, however, received much broader circulation than Yerkes' officer study (Foster, n.d.; Johnson, 1924; Malone, 1919). Examiners expected high illiteracy rates among Black and foreign recruits, but the discovery that practically 50% of the White recruits from South Carolina and 20% from most other states could not read a newspaper or write a letter home disturbed military and civilian officials alike. Pinpointing this deficiency in education provoked none of the skepticism that greeted intelligence test results.

Even before the Psychological Division circulated its figures, Army trainers had spoken of the education problem they were facing in the camps. Yet why was literacy so important during this war? After all, many other wars had been fought successfully with illiterate recruits. Now, however, without

⁶At the time of Yerkes' April 5, 1918, study, there were 10 million men between the ages of 21 and 30 serving or available to serve, all of whom had registered during the first national draft registration day on June 5, 1917. A second registration day on June 5, 1918, was held for all those who had turned 21 in the intervening year. The Army received a big boost in potential manpower in August when Congress extended the age limits to 18 and 45, yielding 13.4 million more registrants on September 12, 1918 (Chambers, 1987).

basic reading and writing skills, soldiers had tremendous difficulty communicating within an increasingly bureaucratic organization. These men could not fill out the basic induction questionnaire, read passes if assigned to guard duty, or direction signs if carrying messages through the trenches. They were more isolated from their families than soldiers who could write letters home and more insulated from camp morale workers who used camp newspapers to distribute wartime propaganda among its civilian soldiers. Finally, men without a formal education often did not exhibit the patience needed to learn in a structured setting, an ability the Army did not have time to teach. Needless to say, these men were not accustomed to taking examinations (Johnson, 1924; Malone, 1919). Yet, unlike the officer study, which actually proposed a solution, in this case there was little Army psychologists could do except lament the shortcomings of American public education.

These two studies were in keeping with the ambitious agenda psychologists had set for themselves since the declaration of war. In 1917, the American Psychological Association created no fewer than 12 committees (Camfield, 1969) to develop a recruit examination program; to create a psychological profile of aviators; and to explore the relation among motivation, military training, and discipline. Few of these committees actually met. To Yerkes, the self-appointed leader of the wartime movement, came exhortations from civilian colleagues that Army psychologists investigate ways to rehabilitate crippled soldiers, to motivate men to enlist, to subvert German morale, and to test the mendacity of German spies and court-martialed American soldiers. Yet with no previous independent research in any of these areas to support these aspirations, the Psychological Division's experimental mandate remained confined to intelligence testing. Midway through the war, however, an opportunity to enhance their military worth presented itself to military psychologists when they were offered a role in the newly created Morale Division.

PSYCHOLOGISTS' MORALE WORK: PROBING THE PSYCHOLOGY OF THE SOLDIER

Like the Psychological Division, the Morale Division came into being due to the intense efforts of a group of enthusiasts who felt commanders had an insufficient appreciation for the human component in the Army of a democracy. Scattered throughout the wartime Army were officials who believed that the challenge of absorbing millions of drafted civilian soldiers had brought with it distinct problems of motivation, discipline, and leadership unlike anything experienced in the peacetime Regular Army. Reports of increasing disaffection within the British and French Armies, along with a series of captured German documents that detailed the German Army's extensive political educational program, inspired two independent proposals

that the Army systematically begin to cultivate morale among its wartime troops. A February overture from Major General J. F. Morrison (1918), the Director of Training in the War Plans Division, put too much emphasis on simply mimicking the German program, and was rejected quickly.

With Yerkes' help, however, Colonel Edward L. Munson of the Medical Corps was more successful in demonstrating an endemic need for morale building within the American Army (Brown, 1918a; Munson, 1918). Munson, Director of Medical Officers' Training in the Office of the Surgeon General, met Yerkes when the psychologist decided to establish a training school for intelligence testers. Yerkes believed military morale work was perfect for the self-proclaimed experts in individual, group, national, and racial psychology whom he had recruited into his office. Consequently, when Munson's March memorandum languished in the Chief of Staff's office, Yerkes urged Munson to press the issue. Hoping to create a groundswell of support for Munson's scheme, Yerkes invited supportive officials from throughout the Army to an Informal Conference on Morale ("Report of Informal Conference," 1918; "Report on Second Conference," 1918).

In a savvy political gesture, Munson also included Assistant Secretary of War Frederick Keppel on the guest list. The passion of these morale enthusiasts inspired Keppel, who immediately after the meeting ordered the War Plans Division to reconsider the issue. Undergoing a change of heart, officials from the War Plans Division attended the second morale conference and, at the end of a comprehensive General Staff review, the Chief of Staff agreed in May, 1918, to create a Morale Division (Brown, 1918a; Churchill, 1918a; Memorandum, 1918). The wisdom of soliciting early support from officials in the Psychological Division and the Intelligence Division became apparent when these agencies agreed to furnish the new Morale Division with psychologists and undercover agents who were accustomed to observing civilian soldiers adjust to military life.

In his initial memo, Munson (1918) highlighted the consensus emerging among intelligence officers that many recruits seemed unclear about the purpose of the war. Wondering how dedicated even knowledgeable conscripts were to a war they had been drafted to fight, Munson predicted that a morale crisis was imminent once the United States began to sustain the kinds of losses suffered by the European armies during their first year at war. According to Munson, Army officials had yet to realize that

the efficiency of an army as a fighting force ... depends on the willingness of its component individuals to contend—and if necessary to die for an idea and an ideal. ... This country is grossly materialist where the military service is concerned. It thinks only in terms of men, money, and munitions, which it assumes make the soldier. ... We give the ability to fight, and let the will to fight look out for itself. This is neither logical [n]or practical. Few are born fighters. (Munson, 1918, pp. 1-2)

Munson (1918) concentrated primarily on an anticipated problem, motivating men to fight, in his initial proposal. Ironically, however, the first few morale conferences focused almost exclusively on the more immediate predicament in training-camp discipline and morale. When psychologists, intelligence officers, General Staff policymakers, and Committee of Public Information officials, none of whom had even visited the Western Front, met to define the scope of military morale work, they invariably fell to discussing the problems they knew best, those obvious in the very camps in which they worked. Ultimately, this proved to be time well spent. Unable to gain permission from Commander-in-Chief General John J. Pershing to travel abroad and monitor troops in the American Expeditionary Forces, training camp problems were the only ones morale workers would tackle during the war.

The letdown in enthusiasm on a recruit's actual arrival in camp was one pressing problem painfully obvious to all conference participants (Baker, 1920; Churchill, 1918b). Sent to Camp Meade, Maryland, to observe the Army's induction procedure firsthand, Captain E. R. Padgett (1918) watched hundreds of drafted men arrive each day and stand for hours in the summer sun with their suitcases, satchels, and bundles lying on the ground near their feet. "Some of these draftees were laughing [and] joking, [but] others (many, many of them) were sullen, subdued, sad," Padgett (1918) reported to his superiors in the Morale Division, "and I saw a good many of them who were having a hard time (and not always successfully) in keeping the tears back" (p. 6). At a loss to explain why these men seemed so resentful of being called into service, Padgett noticed that many of the noncommissioned officers monitoring each line of recruits had large, loosely furled American flags under their arms. These were, Padgett (1918) realized

evidently flags taken from the drafted men as they came into camp; evidently flags used by groups of drafted men from the same respective towns when they marched down to the depot amid the cheers and applause of their fellowtownsmen, who gave them a good "send-off." Then, when they hit Meade, the first crack out of the box, they were let down with a thud and their flag taken away from them. (p. 6)

From their own newly assigned vantage points, Morale Division psychologists, welfare workers, and intelligence officers concurred that receptions like these sent a terrible message to new recruits. Padgett (1918) recommended that

we could at least implant among them the idea that they are not conscripts, taken in the draft, but men selected through the draft to serve the Government, and therefore, they have been honored—which to most of them, I dare say, is a brand new idea. (p. 7)

Morale Division workers consequently defined their mission as reversing the disenchantment, or even worse, indiscipline, bred among troops by unfamiliar military customs, tedious training, fears of missing the "great

adventure" overseas, or worries about how families were faring without them. It was almost as an afterthought that the Morale Division also designed a systematic political-education program to prepare recruits to fight.

The empathetic perspective that morale advocates offered often annoyed more traditionally oriented military officials who dismissively accused them of trying to turn military training into summer camp. Like psychologists in the Psychological Division, Morale officials soon realized that establishing credibility was essential (Morale Branch, n.d.). When General Staff officials, therefore, expressed interest in developing preventative measures to reduce military crime, Munson immediately embraced this as a chance to demonstrate the policy relevance of morale work (McIntyre, 1918; Munson, 1921; R. C. Shaw, 1918; Woodbury, 1920).

For the next 2 years, Morale Division researchers perused court-martial records from before, during, and after the war, grouping offenders according to the type of offense committed, and then recording their civil criminal record, intelligence, character, and apparent motive for thwarting military authority (R. C. Shaw, 1919, 1920). When Munson periodically reported the results of these studies, he emphasized ways to perfect the relationship between the Army and the soldier. It was significant to Munson that most court-martial convictions were for offenses that were crimes only in military society. To Munson, this fact signaled that most errant soldiers were not criminals, but were reacting in some way against the military's unique ethos. For those soldiers whose poor character or low intelligence prevented them from adjusting to military life and accepting its rules, the best solution was separation from service. Those conducting the investigations steadfastly insisted, however, that not all fault lay with maladjusted soldiers. There were, they suggested, unappealing aspects of military life that appeared to drive soldiers to rebel.

When Assistant Chief of Staff, Brigadier General William Hahn (1921), reviewed the final desertion study in 1921, he agreed that the basic "problem consists of creating a state of mind where the men want to do what the commander wants them to do" (p. 2). Hahn's receptivity to probing the psychology of the soldier was, however, atypical of postwar commanders' reaction to the Morale Division's crime studies. More commonly, their comments were reminiscent of the hostile reaction intelligence testers had received when they trespassed into the area of command (Griffith, 1982).

ASSESSING CIVILIAN SOLDIER OPINION: THE TURN TOWARD POLITICAL EDUCATION

Besides the crime studies series, the Morale Division's other main postwar innovation was the creation and administration of the military's first internal soldier surveys. Whether or not commanders chose to heed their specific policy recommendations, Morale Division officials successfully provided

the General Staff with weekly reports on what the average citizen soldier was thinking during the demobilization period.

Rudimentary surveys in hand, camp psychologists recorded whether soldiers would return home with a favorable or unfavorable opinion of military service, their opinions of the Allies, their proclivity to criticize the government, and their postwar plans. Comparable in cultural orientation to the intelligence tests, these surveys revealed as much about the examiners as they did about American soldiers.

By the end of the war, for example, the conviction that good soldiers must be ideologically committed ones had become a widely accepted truth within the Morale Division. Allied and American government propaganda sought to sway public opinion before and during the war with shocking atrocity stories of German soldiers ravaging Belgium and unmerciful German naval commanders torpedoing neutral passenger ships. It was, the Wilson administration proclaimed, America's moral responsibility to "make the world safe for democracy." Within this historical context, therefore, it was not surprising that, when a Camp Grant psychologist ("A Study in Morale," 1919) interviewed a group of men with high intelligence-test scores about their army experiences, he did not emphasize their physical attributes, occupational aptitudes, or military careers when commenting on their superior soldiering skills. Instead, his discovery that these men had wanted "to save their country from the fate of Belgium, form a strong league of peace, and end ruthless warfare" ("A Study," 1919, p. 3) was convincing enough for him to report confidently that these men had had "the fundamental intellectual and moral background to make them good soldiers right from the start" ("A Study," 1919, p. 3).

This unprecedented query into soldiers' political opinions was part of the new orientation toward the civilian soldier emerging within the military. No episode better demonstrated how sustained contact with millions of drafted troops had changed internal attitudes than postwar preparation for the impending battle over the defense budget. With the war won, Army officials hoped to preserve the robust organization they had created during the war. Suggestions that an endorsement from war veterans might ease civilians' traditional concerns about a large standing army intensified official interest in the attitudes of returning soldiers. There was much difference of opinion among Regular Army officers over the proposed shape of the postwar Army, most notably concerning the country's traditional reliance on the citizen soldier. Although some officers stubbornly held out hopes for a large, professional postwar army, other factions put more faith in the establishment of a universal military training (UMT) program.

Sympathetic to the latter scheme, the Morale Division conducted its largest soldier survey up to that point on the UMT question (Hahn, 1919; "Our Military System," 1919). The soldiers selected to participate in the study were all members of the Twelfth Division, most of whom were just completing their 6-month training course when the Armistice was declared on November

11, 1918. UMT proponents could argue, therefore, that the experiences of these 1,440 men were analogous to what all young American men would undergo in a UMT program. Released to the civilian press, "Our Military System As It Appears to America's Citizen Soldiers," was the Morale Division's most widely publicized undertaking of the war (Brown, 1919).

Little was revealed in the rather unspectacular tabulated results, in that soldiers listed health, discipline, and improved moral values among the benefits of military training. It was their impromptu comments, however, that convinced UMT advocates that they had an airtight case to present to the American people:

I can not use words large enough to express the benefits I have received. For instance I have become a wireless operator and could go out into civilian life and obtain employment with good wages. (a recruit of 11 months)

The Army taught me the value of my vote. (6 months service)

When I came into the service I had quite a stomach on me but now I am thin around the waist, but have a great chest. (served 10 months)

It was a benefit, I believe, to come into contact with men from different walks of life and from different parts of the world. (completed 6-month training course) ("Our Military System," 1919, p. 10)

Their enthusiasm about their own military experience translated into a direct political gain for the postwar Army as more than 88% approved of establishing a UMT program in the United States.⁷ Support, however, for expanding the Army's postwar role in American society was not as unanimous among soldiers who had served overseas. Without veterans or the Army able to present a unified front, the UMT proposal, along with most other hopes for a large, peacetime army, ultimately fell victim to the partisan stranglehold that descended on Congress during its deadlocked debate over the Versailles Treaty.

Like the soldiers drafted to serve for the duration of the war, psychologists found their attention drifting back to concerns about their future in the civilian world. Leaving the military and its problems behind was easy after public attention and debate centered on the controversial findings of the intelligence-testing experiment. To help make intelligence-test scores on the Alpha and Beta exams useful to military officers, psychologists had devised a series of letter scores (remember Zeke Gray's D-?) to denote raw intelligence. After the war, seeking to refine these crude letter ratings, psycholo-

⁷The Morale Division next surveyed 2,000 wartime officers on the merits of UMT. They were somewhat more reserved in their endorsement, in that only 59% favored it without hesitation, whereas 35% favored it with some qualifications, and 6% did not favor it (Hahn, 1919).

gists developed a complicated statistical procedure to encapsulate the “mental age,” indicated by three sets of raw test scores (Pastore, 1978). “How intelligent was the Army?” was the question posed in the seminal final report of the wartime testing movement edited by Yerkes (Yerkes, 1921).⁸

There was no time to reflect on psychologists’ work in the Morale Division when a national controversy erupted over the report’s assertion that intelligence-tests revealed the average mental age of American soldiers to be 13 years. Because Yerkes returned to his prewar work with primates, it was Terman who would bear the burden of defending the wartime record of the Army psychologists. Terman would also be the one to profit from the overwhelming number of schools and businesses who wanted to adapt the Army tests for educational and corporate use (Gould, 1981; Pastore, 1978).

With enough ideological controversy and commercial opportunity to keep them occupied in the civilian world, psychologists left the Army to its own devices in 1919. The Army was eager to have them go, having discontinued the intelligence-testing program as soon as the Armistice was declared.

The Morale Division survived a few more years under the patronage of Secretary of War Newton D. Baker (1920), who incorporated the principle of “considerate and thoughtful treatment of the newly-enlisted men” into his short-lived postwar New Army campaign. In 1921, however, both the Morale Division and the New Army succumbed to budget cuts. Only the Committee on the Classification of Personnel became a permanent fixture of the peacetime Army.

However, the memory of the Army’s wartime experience with military psychology lingered. In the 1920s, intelligence tests slowly reappeared in Army recruiting offices, administered at the discretion of the recruiter. Similarly, investigation into the psychology of the wartime soldier became increasingly popular among officers attending the Army War College in the interwar years. Course studies, with titles like “Morale and Propaganda,” “Historical and Psychological Aspects of the Use of Rewards,” and “The Individual Mind In Relation to Military Service” (“G-1 Course,” 1926a, 1926b; “G-1 Course,” 1927; “G-1 Course,” 1934-35a, 1934-35b) would have been inconceivable before the war. They were now integral parts of the War College curriculum. The true test, of course, came during World War II, when military psychologists built on the foundation that World War I-era psychologists had established for their profession in classification and mo-

⁸This is a comprehensive and detailed description of the wartime intelligence testing program. Unlike many of the references cited in this article, it is readily available in most university libraries for the psychology student interested in pursuing this topic further without necessitating a trip to the National Archives. Psychology students should keep in mind, however, that this work highlights the aspects of the program, often methodological, that were important to psychologists, whereas the Army General Staff records reveal the impact of these experiments on actual military practice.

rale (Hoffman, 1992; Napoli, 1988; Stouffer, Suchman, DeVinney, Star, & Williams, 1949). Even today, the legacy of these World War I psychologists continues to reverberate as contemporary military psychologists grapple with many of the questions their predecessors posed about the human experience of war.

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