The Office of Strategic Services
Psychological Selection Program

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
Fulfillment of the requirements for the
Degree

MASTER OF MILITARY ART AND SCIENCE

By

LOUIE M. BANKS, III, MAJ, USA
B.A., University of New Orleans, Louisiana, 1980
M.A., University of Southern Mississippi, 1983
Ph.D., University of Southern Mississippi, 1985

Fort Leavenworth, Kansas
1995

Approved for public release; distribution is unlimited.
Abstract

THE OFFICE OF STRATEGIC SERVICES’ PSYCHOLOGICAL SELECTION PROGRAM by MAJ Louie M. Banks, III, USA, 103 pages.

This study investigates the development and effectiveness of the Office of Strategic Services (OSS) psychological selection program. The OSS was created in response to the Second World War to collect intelligence, and to conduct espionage, subversion, and psychological warfare. To better perform these functions, they developed the first psychological assessment center in the United States. This study evaluated this assessment program.

First, the history and development of Army selection from World War I through World War II is examined and evaluated. Second, the German and British programs are described, and their influence on the OSS program is discussed. Third, the specific program designed by Henry Murray, the Chief psychologist for the OSS, is reviewed in detail. Fourth, the effectiveness of the program is examined.

This study concludes that the program was at least moderately successful, and functioned as a model for future assessment programs. Further, this study concludes that, for similar settings, psychological assessment can improve the quality of assigned personnel, will likely reduce training attrition, and can reduce Combat Stress casualties. Specific recommendations on the conduct of psychological assessment are discussed.
CHAPTER 1
INTRODUCTION

In mid 1943, following a war driven expansion and having recruited an ever increasing number of volunteers, the U.S. Office of Strategic Services (OSS) had a problem. The OSS had been created in response to World War II as a national agency responsible for intelligence collection, espionage, subversion, and psychological warfare. In the sometimes high threat environments required by these missions, reports began to come back of problems. A significant number of the people who were deployed overseas were having difficulty adjusting to the danger and stress required by OSS operations. One of the solutions to this problem was the development of the first psychological assessment center\(^1\) in the United States.\(^2\) Over the next year and a half, more than five thousand prospective candidates were evaluated before acceptance into the OSS. This assessment was performed at no small cost and was the precursor to both the civilian personnel assessment center movement\(^3\) and to several Special Operations\(^4\) selection programs currently in existence.

The purpose of this thesis, first, is to study the development and evolution, and then to evaluate the overall effectiveness of the OSS assessment program. In particular, the history of psychology's involvement in selection and assessment, from World War I through World War II and the OSS experience, will be addressed in detail. The lessons
learned from the analysis of the OSS process should provide some insight into military selection within the context of World War II espionage and guerrilla warfare. The usefulness of these insights to current programs will be discussed in the conclusion of this paper. In summary then, how was the OSS selection program developed, was it effective, and can an analysis of it provide some insight into modern selection?

The OSS, originally named the Office of Coordinator of Information, was created in July 1941 to conduct "espionage, propaganda, subversion, and related activities," including waging unconventional warfare. The nature of the work that the OSS performed made a valid appraisal of the effectiveness of the selection difficult. Individuals would often be assigned to positions different from the one expected during the assessment. Some measure of how well each individual had performed, i.e., success on the job, had to be either collected from superiors or co-workers in the field, or from written evaluations. For a variety of reasons, reliable and valid outcome data was only available on 19 percent of the assessed individuals. In some cases this was due to administrative difficulties, and in others to the death of the individual. Of course, very few of the individuals who performed poorly in the assessment were accepted for deployment, and this reduced the range of comparisons available, since only those who did well and were subsequently deployed were used in the analysis. The program evaluation, therefore, was weaker than one would hope. This is problematic, not only because of the seminal nature of this selection program, but because it is the best
documented instance where a selection program for United States Special Operations Forces (SOF) has been tested in combat.⁷

Although the study of the effectiveness of this program would be interesting even in isolation, at the present time a number of programs, based at least roughly on the OSS selection, are in use to assess the potential of U.S. SOF personnel. These selection programs are not without cost, both in time and resources. Lessons learned from the OSS experience may provide valuable understanding of current SOF selection and may allow recommendations to improve current selection practices.
Endnotes

Chapter 1

1. The primary characteristic that distinguishes an assessment center is the use of actual behavior samples to assess individuals in addition to personality assessment and detailed interviews. This concept is currently in wide use in industry.


3. This was, and is, an extremely popular movement that uses assessment centers to select applicants for various, usually high level, civilian positions. Many major corporations use assessment centers for this purpose.

4. Special Operations includes operations by military and paramilitary forces conducted by unconventional means, and usually includes most of the missions that were conducted by the OSS.


6. Technically, this reduction in range reduces the size of the correlation, since the bottom portion (in this case) of the sample is missing.

7. Although SOF forces have certainly been exposed to combat since 1948, either psychological selection was not consistently used, poor records were maintained, or whatever records exist are classified.
CHAPTER 2

THE OFFICE OF STRATEGIC SERVICES

At the conclusion of World War I, Herbert Yardley established the first modern U.S. code breaking and counterespionage organization. It was remarkably successful in cracking the diplomatic codes of a number of countries, including England, France, Germany, and the Soviet Union. Its existence was a closely guarded secret known only to selected government officials. Unfortunately, Herbert Hoover's Secretary of State, Henry L. Stimson, was appalled when he discovered this "Black Chamber." He ordered the group disbanded, making the famous comment, "Gentlemen don't read each other's mail!" Presumably, he was not aware that most of the countries whose codes the U.S. was breaking were actively conducting the same activities against the U.S. Although by the beginning of World War II, both the Army and the Navy had intelligence sections; there was no national oversight or analysis of all U.S. gathered intelligence. In other words, there was no one agency that could view what intelligence the Navy had gathered, put that together with what the Army had, and perhaps even add in what the Federal Bureau of Investigation had collected. Perhaps worse, there still existed a distaste among many in government for the entire concept of espionage.

William Donovan, a World War I Medal of Honor winner, successful New York lawyer, political figure, and confidant of the president, had a different view. A
world traveler, he knew that most of the world's nations considered intelligence collection and analysis to be a required part of international relations. In July 1941 Secretary of the Navy Knox recommended that he be sent to Great Britain to study both how the British were holding up and the danger of the German fifth column activities in Europe.9 (The fear of enemy espionage, and the desire to fight the Germans with irregular warfare had led both Winston Churchill and Neville Chamberlain to create the British equivalent of the OSS, the Special Operations Executive in 1940.10) During this trip and another he took to the Mediterranean area later, he became convinced that the British would hold out against the Germans (not a common view at the time) and that the United States would eventually end up involved in the war. Additionally, he became a strong supporter of the need for U.S. competence not only in the area of intelligence collection, but also in less conventional methods of war fighting. In particular, he believed that the U.S. needed strong capabilities in conducting psychological and guerilla warfare. He was very impressed with the British, was able to gain their trust, and was shown some of the inner workings of their intelligence organizations. For their part, the British believed they needed the U.S. support and knew that Donovan was Roosevelt's personal representative. Therefore, they opened up much of their classified operations to Donovan in an effort to gain his support. This positive relationship that developed between the British and Donovan had far reaching implications. When the U.S. began to create the OSS, the British were willing to share sensitive information on training, on tactics, and, as will be discussed later, on selection.
Partly, or perhaps largely, because of his close relationship with President Roosevelt, Donovan was able to convince the President of the need for a national intelligence agency\textsuperscript{11} that would be similar to what he had seen in Great Britain. Consequently, on 11 July 1941 the President signed an executive order which established the position of the Coordinator of Information (COI) and named Donovan to fill the position.\textsuperscript{12} The actual order is rather vague, as both Donovan and the President agreed that it was best not to list specific functions in writing. The order did, however, state that the COI had the authority to, "collect and analyze all information and data, which may bear upon national security," and to, "carry out, when requested by the President, such supplementary activities as may facilitate the securing of information important for national security." The unwritten purpose was for the COI to also conduct espionage, propaganda, and subversion. Of significant interest, the COI was an executive agency, and Donovan reported directly to the President. This structure did not provide the close working relationship with the Army and Navy that was necessary for the sharing of information, and then increased the tension between his organization and the services. Following Pearl Harbor and some other initial organizational difficulties, the COI was renamed the Office of Strategic Services, and all overt propaganda was transferred to the new Office of War Information.\textsuperscript{13} Shortly thereafter, the OSS was placed under the command and control of the Joint Chiefs of Staff. Theoretically, this should have made the OSS more responsive to the war effort, but disagreements continued between the OSS and the intelligence services of the Army and Navy, and even the Federal Bureau of Investigation, until the end of the war. In fact, there was no single agency responsible for
all U.S. intelligence until the establishment of the Central Intelligence Agency following the dissolution of the OSS after the war.

The final organization of the OSS had nine major branches\(^\text{14}\) (see Figure) and included such diverse interests as the research and analysis of open source information, the development of concealable explosives and midget submarines, the determination of the medical needs of guerrilla units, the conduct of covert psychological warfare, and behind the lines combat operations. Stewart Alsop and Thomas Braden, in their book *Sub Rosa*, explained it this way:

While a professor in Washington was studying the transportation system in France, an ex-Hollywood cameraman was making movies of war crimes for the benefit of the Joint Chiefs of Staff, a sergeant in Washington was drawing a chart for the use of generals in Kandy, an Italian-speaking American was parachuting into the area of the Brenner Pass, and a major in London was cabling home in secret code, asking about his promotion.\(^\text{15}\)

Of interest to this study are the people who were involved in work behind the lines, whether collecting intelligence, supporting resistance organizations, or conducting combat operations. After all, these are the people who were not only under the greatest danger, but for whom a negative stress reaction would have had the greatest consequences. In fact, only the operational and support personnel being considered for overseas deployment were formally assessed by the OSS.\(^\text{16}\) One example is particularly illuminating. An OSS agent was behind enemy lines, returning to the Bordeaux area of France from Paris. He had just finished establishing a safe house\(^\text{17}\) and was taking the train back to Bordeaux. He noticed that the train station was empty when he arrived, but he got on the train anyway. As soon as the train departed, he realized his mistake. Not only was the train reserved for German staff officers, but directly across
from him was Field Marshal Rommel. The agent quickly assessed the situation, apologized to the Field Marshal, and asked to get off. Instead, Rommel sat down with the man he thought was a French businessman and discussed the terror campaign being conducted by the resistance. After talking with the agent, Rommel left. During the entire discussion, the OSS agent had his radio transmitter in his suitcase next to him. If he had been discovered, he would have been interrogated, likely tortured, and then killed. Instead, he was able to maintain his composure, discuss the resistance with Rommel, and continue his mission. Obviously, this agent was able to cope effectively with fairly high levels of stress.

On a more tragic note, not all the stressors for agents were psychological. One agent, a woman, was dropped over German occupied territory with a team of two others. Her team made no contact with Allied forces, and all were presumed dead. The only survivor of the team, the woman, was discovered when Dachau was liberated. She had been tortured, raped, and had all of her teeth yanked out, but had resisted until the end. Her last heroic effort had been to bite a chunk of flesh off a guard who was raping her, attempting to commit suicide by having him kill her. It was then that her teeth had been pulled.

Unfortunately, not all agents were well selected. One agent, frustrated at having to hide his identity, crossed the Yugoslavian border into Germany long before D-Day and mailed a postcard to Adolf Hitler, Wilhelmstrasse, Berlin. It had the following message: Dear Hitler, ---- you. (Signed) An American captain IN GERMANY.
humorous and certainly displaying a sense of elan, this does not speak well of the agent's frustration tolerance.

And some of the agents were simply incompetent. One OSS agent who had been an advertising executive was working in a neutral country. He had so romanticized himself and his trade that whenever he went to his favorite restaurant, the band begin to play a song called, "Boo, Boo, I'm a Spy."\textsuperscript{21}

There were also reports of men, "the high-strung or emotional type,"\textsuperscript{22} who were not successful as agents. One report complained of the number of these men, stating that, "in most cases these men have suffered nervous breakdowns and other nervous ailments."\textsuperscript{23}

Unfortunately, as time went on, and the need for men and women to work dangerous missions behind the lines increased, the number of agents who could not handle the stress also increased. Reports began to come in from the field that a better job of selection should be performed. As will be discussed in Chapter 4, this eventually led to the establishment of a formal selection program, involving psychological assessment. First, however, it is important to review the history of military assessment.
Chapter 2


11. Ibid., 7.

12. Ibid., 8.


14. Ibid., 78.


17. A safe house is a location where an agent can hide from the enemy while behind the lines. It may often be occupied with friendly members of the resistance.


20. Ibid., 36-37.

21. Ibid., 35.


23. Ibid., 13.
CHAPTER 3
HISTORY OF SELECTION

The organized study of warfare probably began shortly after the first organized fight. Students of Military Science conceptualize warfare in a number of ways, but all models include a study of the human factors that lead to success on the battlefield. Some authors may study leadership at the platoon level, others generalship at the Army level, and many attempt to describe the effect of combat on individual soldiers. Although dissimilar, all these models address the human dimension. S. L. A. Marshall, Ernie Pyle, Stephen Crane, John Keegan, and hundreds of psychologists and sociologists have attempted to describe the effect of battle on soldiers. These seemingly dissimilar writers have one major goal in common: Describing the behavior of men in combat, or, conversely, the effect of combat on men. One practical use of this body of knowledge is to assist in the selection and training of soldiers and their leaders, and indirectly, in the winning of wars.

Often, but by no means inevitably, through the experience of combat, leaders and successful soldiers rise to the top. U. S. Grant's rise from relative obscurity to command of all Union forces is one well-known example. Unfortunately, this traditional (or natural) selection is on a trial and error basis, usually making many selection errors before success, and heavily dependent upon chance. Certainly many
individuals who would be successful are wrongly not chosen, and many who are not successful are chosen. These selection errors can be quite costly, potentially resulting in inadequate leaders in charge and incompetent subordinates. While a solid definition of success can be difficult, this type of selection does tend to occur over time. The factors that effect this selection are not particularly valid or even consistent, although it is probably true that better leaders and soldiers stand a greater likelihood of success on the battlefield. The concept of selecting the best soldiers before battle begins is not a new one. However, it was not systematically practiced until the twentieth century. If a valid method can be found that will allow the screening out of unsuitable soldiers, and the selection (or screening in) of the best soldiers, then a commander ends up with only the best soldiers on the battlefield, and presumably, with a more effective force. Probably the most common way to attempt this today is through difficult training. If tough training is required prior to battle, and the training is sufficiently similar to the type of battle expected, then generally (so goes common wisdom) the individuals who successfully complete the training are the best suited to that type of combat. As an obvious bonus, they are also well trained for the fight and have presumably become accustomed to many of the stimuli that will occur in actual combat. There are many novel stimuli associated with combat. For example, noise, heat, cold, confusion, hunger, and the potential of injury or death can all accompany combat. The underlying assumption is that the fewer the number of new stimuli to which the soldier is exposed, the quicker he will adjust to combat. Although this argument is logical, it is a difficult one to prove empirically. In
actual use, selection and training begin to blur as soon as the training becomes sufficiently intense.

There are some negative side effects to this selection process. One must necessarily attempt to train all individuals, spending time and money on those who will not be successful. Additionally, there will always be a conflict between providing the best training possible and screening out poor candidates. How much extra effort should be expended training an individual having difficulty? Should the individual be screened out instead? The cost involved with training must be compared to the availability of men and the requirement for soldiers. Also, the balance between the need for quality versus quantity will play a major role. Because of these reasons, there can never be a single answer for this question, but only one dependent on the situation at the time. For the U.S. before World War I, this question was generally moot. Time for training (and the implicit assessment) was available, and the overall cost of training was relatively small. Also, it should be remembered that our history and traditions had emphasized the militia, the citizen soldier, the mobilization of civilians to meet the needs of the nation in time of war. The work of a common soldier was not seen by the nation as a highly skilled job, but one that most, if not all, citizens had a responsibility to perform.

**World War I**

The first major use of selection for U.S forces occurred during World War I. The technological changes which accompanied that war began to require more specialized training. No longer did soldiers simply need to learn how to drill with their
weapons, shoot, reload, and march on the battlefield. The U.S. began to need soldiers trained in areas such as airplane mechanics, chemical weapons, artillery registration, and flying. Even the basic weapons of the infantry soldier had changed. All combatants now used bolt action, cartridge-firing rifles; and the machine gun, an enormous technological advantage, required detailed maintenance and specialized repair. Artillery fire became much more accurate, and the need for computing trajectories required greater competency in mathematics than ever before. This training was not only time-consuming, but relatively expensive, compared to earlier training. This pointed to a greater need for matching soldiers individually to specific jobs, trying to fit the right soldier to the right position. Offensive doctrine of the time was beginning to recognize the need for more open formations, accepting the danger of modern firepower on closed rank formations. This, in turn, would require more independent action and initiative of soldiers as they moved under fire.\(^{29}\)

At the same time, and for the first time, U.S. soldiers were placed under fire by an enemy they could not even see. The use of long-range artillery, and the concomitant use of smokeless powder, decreased the ability of the average soldier to strike back while under fire. And as if to compound his problems, a soldier stayed in the trenches, in a vulnerable position, susceptible to artillery fire for weeks (or longer) at a time. Unlike earlier wars, he was not safe when the day was over; he could not eat his meals in peace; and there was no "safe zone" for a soldier in the trenches. When the pressure of combat under these conditions began to build, he had few options. Unlike many of his predecessors in the American Civil War and the Revolutionary War, he could not desert.
and return to his home and family. Unless his unit were rotated out of the trenches, there was no easy way for him to get relief. It should come as no surprise, then, in hindsight, that reports began to come back from Europe of large numbers of psychiatric casualties, and General Pershing personally requested better elimination of unsuitable recruits.³⁰

At this time, much of the U.S. was still agricultural and rural. The Army needed a way to measure the aptitude of the incoming recruits in order to predict who would be successful at these more complicated tasks, and to predict differentially who would be successful at which job. To understand the enormous difficulty involved in this screening project, however, it is helpful to remember that scientifically based intelligence testing was still a relatively recent phenomenon in this country. (The first U.S. intelligence test, the Stanford-Binet, was not published until 1916.³¹)

One of the foremost American psychologists of the day Robert M. Yerkes from Harvard University, (later president of the American Psychological Association) aggressively promoted the use of psychology to help in screening and selecting soldiers. Under his leadership, committees were organized to provide expert psychological research and advice to the Army. These committees ranged from the Committee on Psychological Problems of Aviation, including Examination of Aviation Recruits, to the Committee on "Propaganda Behind the German Lines," and the Committee on Tests for Deception. (This committee investigated the use of physiological measures to determine truthfulness, an early polygraph.) Two committees gained the greatest recognition and produced the clearest results. One, the Committee on the Psychological Examination of Recruits, under the chairmanship of Yerkes, developed the precursors of all (English
language) group intelligence tests, the Army Alpha and Army Beta. The Army Alpha was for literate inductees, while the Army Beta did not require literacy and was used for both illiterate and non-English speaking inductees. These two tests were the first major effort in America to utilize group administered intelligence tests. They were validated on over 5,000 officers and 80,000 men and were used to test 1,726,966 men. Of this total, 0.5 percent were rejected because of "mental inferiority."  

The Committee on the Selection of Men for Tasks Requiring Special Aptitude, led by Walter Dill Scott and Edward L. Thorndike, resulted in the establishment of the Army's Committee on Classification of Personnel in the Army. This committee oversaw the testing and classification of almost 3,500,000 men by the end of the war, under the control of the Adjutant General. By being separate from the Medical Department, and recognized independently of medicine, this committee was able to work unmolested by professional rivalry, e.g., authority and control of the testing program was uncontested. 

Yerkes' committee, on the other hand, continuously faced challenges from medicine, and psychiatry in particular, over the role of psychologists in screening. The end result of this rivalry with psychiatry was the requirement that psychologists only work under the supervision of a physician, which naturally inhibited the development of psychological testing to measure mental illness. Only one personality test was developed, the Woodworth Personal Data Sheet, but too late in the war to be of much use. Perhaps of more long lasting import, this professional animosity made many (if not most) psychologists wary of working with the Army Medical Department, and encouraged their work with the Adjutant General Corps. Despite these difficulties, or
perhaps because of them, the use of group administered, written tests to measure intelligence and aptitude was off to a running start.

This tremendous growth in knowledge, not uncommon during wartime, was, however, largely forgotten by the military following the war (also not uncommon). In fact, most of the collaboration between psychology and the Army was gradually lost. Part of this was because of the general reduction in the size of the Army, since the "War to end all wars" had ended, and part was because of the professional split between Military Psychology and Medicine.

In World War I, Dr. Yerkes had received assurances that active duty psychologists would be commissioned as officers in the Medical Corps. This did not occur. As discussed above, the Army Medical Department required that any psychological examination be performed under the supervision of a physician. Many psychologists at the time took this as an insult, and consequently a great deal of friction developed. In fact, the few psychologists who were eventually commissioned were placed in the less prestigious Sanitary Corps. After World War I, little was done to improve the situation, and as World War II approached the psychological testing program for Army forces was supervised by the Adjutant General's Office. The bad feelings had remained so strong, in fact, that in September, 1940, the Clinical Section of the American Association for the Advancement of Psychology (AAAP) voted that psychologists should not be assigned to the Army Medical Department because of the belief they would not be granted equality with physicians in diagnosis of mental disorders. The AAAP recommended that psychologists should instead serve the Army in the areas of personnel
and morale. A clear, if artificial, distinction had developed between evaluating a person's intelligence, aptitudes, and educational level, and the same person's emotional stability. This resulted in the development of personnel assessment screening by psychologists,\textsuperscript{39} for the purpose of induction, assignment, and training, but screening for mental stability was performed by psychiatrists, who had little or no background in screening non-clinical populations or the scientific evaluation of predictive validity.\textsuperscript{40}

Medical Training and Psychiatry

Whereas the profession of psychology had developed from the academic environment of universities, and even today is still closely tied to a traditional Doctor of Philosophy degree, with the approach of World War I, medicine was a thriving independent profession. Medical schools were (at least) semi-independent of other academic disciplines, and were clearly professional in nature. Unfortunately, psychiatry was still relatively neglected within medicine, and there was very minimal formal training in the area. At the entry of the U.S. into World War I, most practicing psychiatrists had "received their education through routine performance of their duties," in various State hospitals.\textsuperscript{41} (With few exceptions, these institutions were simply warehouses for the insane, and provided little effective treatment.) As might be imagined, most of the experience they did receive was with institutionalized (and therefore more severely impaired) patients. Neurology was not in much better shape. As the need for Army psychiatrists became apparent, specialized training, of approximately six weeks duration, was instituted. This training was essentially clinical, focusing on the
problems they were most likely to encounter, such as "shell shock" and the "psychoneuroses." Of interest to this paper, however, is a six hour course of instruction on the use of psychometric tests to assess "defectives and delinquents." For most of these psychiatrists, this was the only exposure they received in psychometric prediction.

The situation for non-psychiatrists was even worse. They may have received a few lectures in neuropsychiatry as an undergraduate, but few, if any, would have any experience evaluating or treating mental disorders, much less attempting to predict their occurrence.

By 1940, there had been little improvement. The U.S. Army had 35 psychiatric positions within its ranks, but only four individuals who were board certified in psychiatry and neurology, and only 20 medical officers with any significant training or experience in psychiatry. The official U.S. Army Medical history states that no specialty was as poorly prepared for the war as psychiatry, and that during the early North African operations, "organized psychiatric effort was nonexistent." In fact, the position of Division Psychiatrist was deleted from the Army divisions in November 1940, and not re-established until November, 1943. Because of the assignment problems inherent in the mass mobilization that occurred as the U.S. entered the war, initially many mobilized psychiatrists were misassigned to non-psychiatric positions. Also, as with the psychiatrists brought from civilian settings in World War I, most of their experience had been in institutional settings. For this reason the Army established the School of Military Neuropsychiatry at Lawson General Hospital, Ga., on 20 December 1942. In October 1943, it was moved to Mason General Hospital, Long Island, New York. Initially this
school prepared civilian psychiatrists to function in a military environment, but later it became a psychiatric training center, training general medical officers to function as psychiatrists. While attending this school, students received between 6 and 18 hours of instruction in the use of psychological tests, but most of this would have been focused less on screening than on diagnosis and evaluation. It is highly unlikely that the instruction covered test construction, e.g., test reliability and validity, psychometric properties, but would have concentrated on the use of psychological testing in diagnosis and treatment.

Again, as in World War I, the average non-psychiatrist physician received minimal training in psychiatry while in medical school. This became even more of an issue as the need for psychiatrists became more pressing, requiring non-psychiatrists to fill psychiatric positions, often without attending the military school. One of the areas where this was felt most strongly was in the screening of recruits. Initially this was performed under the control of the Selective Service System. An individual would be evaluated by a civilian physician, and then, if no defects were found, by another physician at the Army induction station. As the pace of the mobilization increased, the initial evaluation was dropped.

There had been little experience with this type of screening within psychiatry since World War I. In fact, the prevalent view in much of medicine at this time was that a quick private interview, less than five minutes, would be sufficient for a physician to screen out unsuitable candidates. This view in medicine predominated throughout World War II, and led to near-disastrous results. No valid psychological tests were
available, and the need for taking a detailed background history was usually not well understood. Of particular interest to psychologists is the fact that many psychiatrists in such circumstances began to develop written tests to determine emotional stability. One test, the Neuropsychiatric Screening Adjunct, was initiated by the Surgeon General's Office, but later discarded. The author has been unable to discover the use of psychologists in this instrument's development.

Often, even if the requirement for a detailed interview was understood, the psychiatrists and other medical officers responsible were unable to spend more than a few moments with each inductee because of the large number of people to be screened. Even psychiatrists were unable to spend more than 2 to 5 minutes examining a soldier.\(^{52}\) In fact, one authoritative source stated that a trained neuropsychiatrist could interview 50 inductees a day, averaging 6 minutes per person.\(^{53}\) It should also be noted, that the psychiatric screen was essentially a medical screen, that is, either a person was medically qualified or was not medically qualified. There was little room, especially given the massive numbers of men being screened, for a personality assessment in light of a specific military job. (Over 10 million enlisted men were accessed into the Army during World War II.\(^ {54}\) ) Ordinarily, a positive psychiatric finding would result in an individual begin disqualified as, "not suited for military service."\(^{55}\)

Psychiatric screening was not able to reduce the rate of Battle Fatigue casualties in the Army in World War II.\(^ {56}\) Because of this, psychiatric screening for the U.S. Army was eliminated after the War. Psychological testing for aptitude and
intelligence was continued and has expanded into today's Armed Services Vocational Aptitude Battery (ASVAB).

**Battle Fatigue and Combat Stress**

World War I was the first time that large numbers of U. S. soldiers became ineffective in combat due to what has come to be labeled Battle Fatigue or Combat Stress. It can be argued that all armies have had some soldiers who found themselves unable to fight due to the psychological stress of combat. During the American Civil War a diagnosis was given of "nostalgia," caused by disappointment and a longing for home.\(^{57}\) Certainly, many historical examples of cowardice, or other so-called moral lapses, would today be viewed as a result of the continued stress of combat. Earlier wars had usually involved actual combat for only brief periods. There were recognized safe zones, usually out of the range of weapons, and fighting generally stopped at dark. During the trench warfare common in World War I, none of this was true. A man could be in the trenches, in danger from artillery or possible attack, for months at a time. For a variety of reasons, it was not easy for a soldier to leave his unit, legally or illegally. Straggling, or desertion, had become much more difficult. Consequently, large numbers of shell shock casualties began to appear on the battlefield, usually directly related to the intensity of the combat.\(^{58}\) One effect of this was the screening of recruits in the U.S., in an attempt to prevent these casualties. Over time, treatment of these Combat Stress casualties also improved, and psychiatrists were assigned down to division level for treatment and prevention purposes.\(^{59}\)
Although the U.S. Army had experienced large numbers of these "shell shock" casualties during World War I, and had learned to treat them with a relatively high degree of efficiency, most of that knowledge was lost by the time the US entered World War II. In fact, rather than being seen as a result of combat per se, Combat Stress casualties, diagnosed as "psychoneurotics", were viewed as having a mental disease that was a result of unresolved intrapsychic conflict. It was not until U.S. forces were mauled in the initial stages of the North Africa campaign that the principles of treatment were rediscovered. The number of Combat Stress casualties was totally unexpected, and there was no real treatment program in place. During the battles of Faid Pass and Kasserine Pass, in February 1943, between 20 and 34 percent of all nonfatal battle casualties were Combat Stress casualties. The medical system became overwhelmed with this flood of casualties, and evacuated them to the rear for treatment. Because of this poor (or in some cases non-existent) treatment, only 3 percent of these casualties were returned to duty.

The misunderstanding of the causes and treatment of Combat Stress was not limited to the medical department. Confusion and prejudice was common, even in the higher ranks. Probably the best known incident in the Theater of Operations concerning Combat Stress casualties involved the U.S. commander, then Major General George S. Patton. The first of two well-known slapping incidents occurred while Patton was touring an Army hospital, visiting hospitalized soldiers. After talking with a number of injured soldiers, he came across a soldier who had a preliminary diagnosis of "psychoneurosis anxiety state--moderate severe." The soldier was sitting on his bed and
shaking. When Patton asked him what was wrong, the soldier stated, "I guess I can't take it." Patton flew into a rage, slapped the man with his gloves, and had him thrown out of the ward. After Patton left, it turned out that the man actually had chronic dysentery and malaria. This incident is instructive in that it demonstrated not only the frustration that the commander was feeling in regard to the number of Combat Stress casualties, but also the lack of a coherent, understandable treatment and prevention policy in the theater.

Happily, the U.S. Army, and in particular, the Medical Department, was a quick study. It was not long before a coherent program was developed; and, in fact, by the time of the Patton incident, during the 1943 Sicily Campaign, a fairly effective treatment program was off the ground and was beginning to show some results. Not all of the specific treatment regimens, however, were to prove successful. A number of ideas were tried out to prevent or reduce the casualties. Among them were the use of heavy sedation and the use of chemically induced "hypnosis" by injection of sodium pentothal while having the casualty relive the incident. Neither of these techniques were particularly useful, and the use of sodium pentothal appeared to actually reduce the return to duty rate.

Although later experience would downplay the role of screening in reducing Combat Stress, these initially high rates initiated the massive screening program discussed earlier. As knowledge and experience with Combat Stress grew, the importance of other factors, such as leadership, cohesion, illness, weather, and military training became known. Unfortunately, the screening process, with little chance of success as practiced, was off to a running start.
Chapter 3

24. Stated more precisely, more effective leaders have a greater chance of success than less effective leaders, and will therefore be more likely to receive greater responsibility and rank over time, assuming they survive. More likely, however, does not mean guaranteed.

25. U.S. Grant, at the outbreak of the American Civil War, was a civilian, having left the military to pursue a (unsuccessful) career in business. When he reentered active duty, he was a Colonel in charge of a Regiment. At the end of the war, he was a Lieutenant General, the highest ranking officer in the U.S. Army.

26. This type of error is a selection error. It is a given that all selection procedures will make errors of this type. This should be contrasted with the error variance associated with measuring success. For example, many soldiers may be unsuccessful on the battlefield due to chance, simply being in the wrong place at the wrong time. This would not be considered a selection error.


28. In this paper, the terms screening, selection, and assessment will be used interchangeably. However, the reader may wish to note that screening usually refers to a process of filtering out obviously unsuitable candidates, selection generally refers to a more detailed screening procedure, and assessment is usually reserved for a detailed evaluation process, looking at both positive and negative aspects of an individual.


42. Ibid., 33.


47. Ibid., 43.


49. Ibid., 54.


52. Ibid., 743.


56. Ibid., 740-741.


60. The term shell shock was originally used to describe BS/CS casualties in World War I. This was because of an initial misdiagnosis that such behavior was the result of concussion due to artillery bombardment. Although this cause was quickly refuted, the label remained in common use, rather than the medical term, war neurosis.


64. Ibid., 8.


66. Ibid., 15-17.
The actual screening process which was eventually instituted by the OSS had roots, first, in the heritage of the World War I screening efforts, and second, in the pre-war work of Henry Murray. (Murray's work will be discussed in Chapter 5.) Of at least equal importance, and given credit by the OSS in *The Assessment of Men*, was the work of German and British psychologists and psychiatrists in the screening of officer candidates. It is instructive to review how both of these countries developed their programs, and what the major influences on them were.

**Germany**

During World War I, while Yerkes was working with intelligence testing in the U.S., Germany began to use psychologists to assist in the testing of pilots and in the training of artillery range finders. Although this use of psychologists was not extensive, especially when compared with the massive program in the United States, it did lead to the formal establishment of a psychological section in the German Army in 1922. After Germany's defeat in the First World War, the Treaty of Versailles severely restricted the size of her army. This placed even more than the usual importance on the selection of what few officers were allowed. As Germany began to rearm, the importance of insuring
the quality of the officer corps, given the initial size limitations, became increasingly vital. In April, 1927, the German War Ministry issued a directive that required a psychological examination of all candidates for officer training.\textsuperscript{71} By 1936, 114 psychologists were working for the German Army,\textsuperscript{72} and by 1941, there were between 450 and 500 psychologists working for the Wehrmacht, to include those in the Army, Navy, and Air Force.\textsuperscript{73}

During the period between the World Wars, the profession of psychology (as opposed to the science) had developed somewhat more slowly than in the United States. Historically, Germany had a strong reputation for developing the experimental method in psychology, and much of American experimental psychology can be traced to German scholarship. However, the German experimentalists took longer to break with the academic discipline of philosophy and to establish a separate professional identity. Not until the 1920s did German universities begin to establish separate chairs for psychology. Even then, many psychologists resisted, as did psychologists in the United States, the movement to establish an applied profession. As late as 1978, the chairman of the German Society of Psychologists, fearful of the move to professionalism, discussed the danger that, "from a science psychology will become a trade guild of health practitioners."\textsuperscript{74}

If the use of psychological testing during World Wars I and II had helped American psychologists establish their value to the military and to society in general, the use of German psychologists during World War II not only established, but defined the profession of psychology in Germany. (At the same time, one scholar has estimated that
Germany lost over 40 percent of its academic psychologists due to the Nazi regime, and it virtually ceased publication of scholarly journals.) The effect of this use of professional psychologists by the German government established the model for professional practice which lasts even today. Until quite recently, the professional status of psychology in Germany was as a civil service occupation, and not primarily one of independent practice, as in this country.

The requirements for a permanent position as a military psychologist were written into German law in 1937. These requirements included having a Doctor of Philosophy degree, working for three years under probationary supervision, and a comprehensive examination. This examination was conducted by a General Officer, two army psychologists, and a research (academic) psychologist.

Among these psychologists, Max Simoneit, as the head of the center for psychological research at the University of Berlin, was perhaps the best known. He developed techniques and a process that were distinctly different from the American methods of selection discussed earlier. Instead of approaching the problem as one requiring a series of separate measures of ability or skill, he preferred to look at a person more qualitatively. Whereas the American school tended to use a series of unique tests, for which each person tested would receive a separate score, breaking personality down into its component parts, Simoneit wanted to "reconstruct the total personality."

To understand the German assessment framework, it is necessary to understand the theoretical framework extant in German psychology. During the interwar years, and for some time after, two overlapping schools of thought predominated. These were the
Gestalt school, and the characterology approach to personality description. The
Gestaltists had argued that studying individual components of behavior, i.e., breaking
down behavior to its smallest pieces, did not lead to better understanding. In fact, they
argued, one must view the person in the entire context in which he lives to understand
him, and one must study the person "as a whole." The Gestaltists discovered, through
experiments, that some observations could only be explained by looking at an entire
phenomenon, and that breaking down their observations into separate components was
counterproductive. One well known example is the phi phenomenon, where a bar of light
is shown again a wall in a darkened room. As the light for one bar is extinguished,
another bar is lit next to it. If several bars are consecutively lit and then darkened, the
observer will perceive one bar of light moving across the wall. Studying this by looking
at the response to each bar will not provide any understanding of the phenomenon; only
when the entire series is projected does the perceived movement occur.\textsuperscript{79}

One of these Gestalt psychologists was Wolfgang Kohler, a professor at the
University of Berlin. He had studied under Max Plank, the renowned physicist, and Max
Wertheimer, who had performed the initial experiments which led to the Gestalt
approach. Kohler had produced several books which argued for this qualitative method
of viewing behavior. Most of these books were translated into English, and published in
the United States, where they were quite influential and controversial. Although Kohler
was a strong supporter of Germany during World War I (and may have actually
conducted espionage against British shipping),\textsuperscript{80} he became a vocal anti-Nazi during the
late twenties and early thirties. His importance in the German academic world is
underscored by the fact that even with these views, he maintained his position in Berlin until 1935, when he emigrated permanently to the United States.

The characterology movement, still somewhat prevalent in Germany today, defined character as the structure of personality, the underlying basis that leads to observable behavior. Although similar to work done in America, characterology rejects much of the empirical requirements of American psychology, believing that psychology falls somewhere between the rigid experimental methodology of the natural sciences, and the more descriptive social sciences. While most American psychologists were attempting to break down behavior and personality into smaller and smaller pieces, characterology focused on the whole person. In other words, American theorists tended to break down an individual's personality into separate traits, each of which would be studied in detail (and isolation), while Germans preferred to see personality as a unified whole. Of important historical interest, characterology put forth the idea that the development of character was based on a person's natural dispositions, e.g., constitutional, mental, and emotional. That these dispositions were possibly genetic certainly was consistent with the political climate in Germany, and accounted for much of its acceptability. (There is evidence, however, that Simoneit personally did not place much emphasis on the effect of heredity, and less yet on race, per se.) The Gestalt theorists were not as acceptable to the Nazi philosophy, as the founder of Gestalt psychology, Max Wertheimer, was Jewish, and had been forced to flee Germany in 1933.
All of these factors, the influence of Gestalt psychology and characterology, the need for high quality officers, and the World War I experience, led to the selection process used by Simoneit. The influence of these factors can be seen in the assessment he used. It was conducted by a board consisting of two officers, one physician, and three psychologists and took two full days.

Simoneit believed that the candidate's manner of performing a task was more important (and prognostic) than his actual achievement on the task. In other words, was the candidate cheerful as he began the task, but then, as it got harder, did he become irritable and quit with an outburst of emotion? Or perhaps he approached the task with confidence, maintaining his composure, even in the face of difficulty. It becomes obvious very quickly that the judgment of such traits must be subjective. In order to make the judgment of these traits as consistent and meaningful (reliable and valid) as possible, Simoneit required several examiners to concur before a trait was ascribed to someone.

Simoneit set forth several principles to guide his method of assessment. First, he felt that the scientific and experimental nature of psychological assessment must be combined with a practical knowledge of human nature. He argued for a "down-to-earth," common sense approach to assessment, one that does not hide behind jargon, or theory. Next, he believed that the whole personality needed to be considered. This means that one should evaluate the person not simply as a total of specific traits, or as to how well he fits the model of a "perfect" soldier, but instead, "whether the candidate will be likely to live up to the best in his own personality." This view clearly was influenced by both

37
the characterology and Gestalt schools. He also felt that the examination should be conducted in a manner similar to what is found in common experiences, and not be a series of artificial experimental situations. Simoneit believed that the candidate's behavior should be observed during the entire course of an assessment. As mentioned earlier, he thought that the manner in which the candidate performed the task was more important than his score. Although it did not seem to be used very much, he also stated that constitution, i.e., physical or morphological type, and race should be considered. These requirements may have been a concession to the prevailing political climate.

Finally, he believed that how a candidate compensates for weaknesses by using his strengths must also be addressed. This again reinforces his view that the whole man must be considered, and that simple measures of traits in isolation do not give an adequate measure of the man, and owes its heritage to the characterology school of thought.

To perform this assessment, Simoneit broke the measurement into four parts, intelligence analysis, behavior or action analysis, expressive analysis, and a life history interview. These are best viewed as four methods that he used to measure the same thing, a person's character.

Overall, the Germans did not follow the American model of intelligence testing. Instead, they concentrated on more subjective measures of practical intelligence. For example, a candidate would be presented with a picture, and then asked to describe it in writing. Or, he might be asked to describe in an essay how he would deal with various leadership challenges. Of equal importance was the impression given during the interview. This process violates most of the American concerns with testing.
consistency, but does address the often heard complaint that written intelligence tests are too far removed from actual behavior. Consistent with both Gestalt and characterology, Simoneit believed this would provide him a view of a person's practical, usable intelligence. He also felt that a man's character was more important than his intelligence, and this method of measuring intelligence allowed them to be studied together.

Information for the action analysis was collected from several sources. One test involved teaching the candidate to respond in a certain way to specific stimuli, for example, to pull a lever with the right hand when a red light is shown, and with the left hand when a blue light is shown. These tests actually became quite involved, using both hands and feet, and both light and sound as stimuli. During the test, not only would the actual score be recorded, but also the candidate's conduct during the test, his facial expressions, and any extraneous behavior. As this test became quite intense as it progressed, it also provided a measure of stress tolerance.

The candidate would also be asked to perform several tasks at once, specifically involving some form of stress. For example, a candidate would be asked to put on his rucksack, helmet, and rifle, and then to walk on a free swinging pole. At the same time, he was required to throw a rope over several hooks on his left and right. As this was performed, the candidate would be criticized severely, and his response to perceived failure noted. Finally, he would be asked to instruct a group of soldiers in some mechanical task, and then to lecture them on some topic of interest to the candidate.
This was believed to measure not only the candidates' motor skills, but also their social skills and ability to deal with stress.

Although there is some similarity between the techniques discussed above, and what was current in the American school of thought, the analysis of expression was much more novel. This was based on the measurement of various expressions, facial, body language, verbal, and even handwriting, in order to determine personality. During several of the specific tests discussed earlier, the candidate would be monitored, and even filmed, and his various expressions categorized and related to an underlying personality characteristic. One rather unique test required the candidate to pull a bar away from a wall, against the tension of a spring. While he did this, an electric current would be passed through the bar. Therefore, the candidate had two physical stressors to deal with at the same time, the physical endurance of pulling the bar, and the pain of the shock. As he performed this, unknown to him, a camera was recording his facial expressions. When the test was concluded, the psychologists would evaluate his expressions in terms of his character. This was where handwriting analysis was also used.

Finally, much emphasis was placed on the interview, where a detailed life history was recorded. This was a technique that allowed the psychologist to validate, or refute, previous hypotheses. In the interview, a developmental picture was painted, one that hopefully placed the candidate's character in perspective. A German translation of an American vocational interest questionnaire, the "Strong Interest Blank," was used at this time, as was the "Rorschach Ink Blot" test. The interview was the culmination of the
assessment, bringing together the pieces of the puzzle that had been previously collected, and putting them together into a coherent whole.

Once Simoneit and his colleagues believed they had a clear picture of the man's character, they would present this to the commanding officer. The final decision rested in his hands, not in Simoneit's. As will be discussed later, this was also the case with the OSS selection. Once a decision had been made to accept a man, his performance continued to be monitored during his training. This not only helped in a continuing evaluation of the specific person, but provided feedback to Simoneit on the effectiveness of his selection program.

One reported study (using the translated "Strong Interest Blank," ) looked at the causes of rejection for German officer candidates. One-fourth of the men were rejected for temperamental weakness, one-fourth for introversion and egocentricity, one-fourth for lack of poise, and the last fourth for a lack of will. The study also noted that the rejected candidates liked practical subjects more, and cultural subjects less than the selected candidates, and had less self-confidence and a greater need for security. 

(Of course, this does not validate the effectiveness of the selection, only demonstrate the characteristics of rejected candidates. In other words, this should not be considered evidence that these rejected candidates would not have performed successfully, only that they were rejected.) While this picture of what Simoneit was looking for may not be in keeping with the stereotype of the German officer, it is consistent with the purpose of the selection program, which was to, "select personnel carefully in order to develop a leader army ready for expansion in case of war."
The British were very heavily involved in helping Donovan create and design the OSS. They had been providing information to Donovan since his early trips to Great Britain before the U.S. entered the war. In fact, Donovan used the British Special Operations Executive (SOE), responsible for sabotage and subversion, and the Psychological Warfare Executive, responsible for propaganda, as a model for the OSS. Because the British viewed Donovan, and later the OSS, as friends of their cause, they were remarkably open in providing assistance to the fledgling organization. This included establishing training programs, and eventually resulted in combined operations headquartered in Great Britain. The idea for psychological selection of OSS personnel, then, came from observing the British method of officer selection.

At the beginning of 1941, there was no large scale use of psychological tests for personnel selection in the British Army. Even intelligence testing was only gradually gaining acceptance. For officers in particular, the rejection rate of officer candidates ran from 20 percent up to 50 percent. That is, up to 50 percent of the men put into the officer training program for the British Army did not successfully complete the program. As the war progressed, this large scale waste of resources became more and more of an issue. One rather obvious solution was to do a better job of screening the candidates prior to placing them in officer training. In June 1941 two psychiatrists Lieutenant Colonel T. F. Rodger, and Major E. Wittkower were given the task of designing a program that would reduce this rejection rate in officer training.
Intelligence testing was beginning to appear in the British Army, but had not yet been used in officer selection. In fact, there was a great deal of resistance to any type of testing of officers, and only the strong demands of the war overrode this reluctance. (A couple of years earlier, one senior officer who had actually observed the Simoneit's officer selection program before the war had suggested that the British Army adopt similar procedures. His recommendation had been firmly rejected.\textsuperscript{98} In 1939, a request to simply investigate the use of intelligence and aptitude tests for screening enlisted soldiers was also rejected.\textsuperscript{99} ) Rodger and Wittkower began by having the officer candidates take an intelligence test and then gave them each a one hour interview. On the basis of this, they found a 90 percent agreement between their opinions and the final opinions of the staff of the officer training school. They then included two psychologists in the design, Lieutenant Colonel J. D. Sutherland and Lieutenant Colonel E. L. Trist, who assisted in the research design and the development of a standard battery of written tests.\textsuperscript{100}

They knew of the work the Germans were doing with their selection, and clearly integrated some of their techniques. One technique called the "Leaderless Group" method was designed by Major W. R. Bion. The idea was similar to some of those used by the Germans, but it allowed even more freedom to the candidate and provided a different type of stress. Bion would place men in a group of eight or nine other candidates and give them a task to perform, for example, to build a bridge. The men would be given no guidance as to who was in charge, or how to actually build the bridge. As they began to work together (or not), an observer team would monitor their progress.
To the candidates, it was clear that their performance on building the bridge was being graded. In fact, the observer team was actually performing personality assessments of the candidates by watching their way of interacting with each other. For example, the man for whom winning is everything will begin to place completing the bridge quickly over gaining the cooperation of the other men. He may begin to argue or even fight, or might begin to perform all the work by himself. Another man, while he might have a very good record, might stay in the background, waiting to be told what to do and showing no initiative. This particular technique, that is, assessing men while they believe they are being measured on some other trait, is probably the most valuable addition to the selection process that the British made. As will be discussed later, it took on even greater importance in the OSS selection.

The first War Officer Selection Board (WOSB) was formed in January 1942 and consisted of a president (a senior regular officer), a Military Testing Officer, two psychiatrists, one psychologist, and two Sergeant Testers. The final decision, as in the German Army, was left up to a regular army officer, in this case, the president of the board, with the selection personnel describing the candidate and making recommendations. This board proved a successful formula, and in March 1942 WOSBs were established throughout the United Kingdom, and later, overseas.

As the war ended, as is unfortunately true of many things, the lessons learned were discarded by the British. In December 1946, due somewhat to a manpower shortage, but mostly due to prejudice, all psychologists and psychiatrists were removed from the WOSBs, in spite of impressive results presented on their effectiveness.
Chapter 4


70. Ibid., 293.


75. Cocks and Jarausch, *German Professions*, 302.


78. Ansbacher, "German Military Psychology," 379.


83. H. L. Ansbacher, "German Military Psychology," 373


85. H. L. Ansbacher, "German Military Psychology," 379.

86. Psychologists use the terms reliable, referring to the consistency of the measurement, and validity, meaning whether or not something measures what it intends to measure.

87. Although the word trait is used here to describe what is being measured, it can best be described as an integral piece of a puzzle, and not as a separate entity, as the Americans were more likely to view it.

88. H.L. Ansbacher, "German Military Psychology," 379.

89. H.L. Ansbacher, 380.

90. Ibid., 381.


98. Ibid., 64.

99. Ibid., 31.

100. Ibid., 57-58.

101. Ibid., 57.

102. Ibid., 66, 71-76.
The OSS, as a new and separate agency, did not carry with it the major professional disputes that existed elsewhere in the United States Army between medicine and psychology, nor was there any fine dichotomy between what each profession was allowed to do. When the need for screening men and women for high risk operational positions became apparent, it was answered, as in World War I, by some of the most distinguished psychologists of the day, and by equally distinguished psychiatrists. These two professions worked hand-in-hand for the OSS, and the major conflicts which developed (and still exist) in the Army, never materialized. In fact, the diversity of professions and of theoretical orientations which co-existed in the OSS assessment is remarkable. There are at least two possible explanations.

The first may have been due to the "fresh sheet of paper" outlook that permeated the OSS. There were no traditions to get in the way, nor were there any powerful professional groups (e.g., medicine) with which to contend. The OSS was attempting to learn as much as possible about espionage from outside sources, especially the British, and so were more open than would be an organization with a long history. The British example clearly had psychologists and psychiatrists working closely together, contrary to current practice in the U.S. Army.
Secondly, it certainly did not hurt that the Deputy Chief, Planning Staff of the OSS, Robert C. Tryon was a strong supporter of the British approach. Dr. Tryon was a psychologist on leave from the University of California. He was aware of some of the problems occurring in the field, and heard the reports of the British program. He recommended the establishment of the assessment program, and he was responsible for providing support for it from the top.

This paper started by stating that in 1943 the OSS had a problem. This problem was that a significant number of deployed personnel were either incompetent, or in a few cases, had "dramatic mental crack-ups." According to the records of the Medical Branch of the OSS, (a unit distinct from selection and assessment) 52 agents had emotional difficulties severe enough to require that they be removed from duty. This was a rate of roughly .29 percent (3 out of 1,000) of the total nonassessed population that worked for the OSS. This rate is based on the best estimate of the total number of people who worked for the OSS. Most of the people in this total were not in a deployed, operational status. Because the majority of the emotional problems would be expected to occur in the smaller, operational population, then the actual rate of psychiatric casualties in the operational population was certainly much higher. (An accurate estimate of the number of overseas operatives, or even better, of those who conducted operations in enemy territory, is difficult to determine. Approximately three-fifths of those who went through the assessment program were deployed overseas. Because not all personnel were screened, it would seem that a reasonable, high estimate of the deployed population would be one-half of the total population. If this is accurate, then the rate would double
to .58). Although small, these problems usually occurred to people in the most stressful and concomitantly most critical positions. As the OSS had matured and as the war progressed, more requests came from the field to prevent these psychiatric casualties. Specifically, a better job of screening candidates was needed.

At about the same time as this request for help arrived from the field, word came from an OSS official in London of the success of a British psychological-psychiatric selection assessment unit in screening British officer candidates. An OSS official had visited the War Office Selection Board in Great Britain, and suggested that a similar unit be established for the OSS. The idea to begin assessing OSS personnel took hold. The biggest supporters of this concept were the Colonels in charge of the OSS Schools and Training Branch, who had "carried the brunt of too many cases of bad recruitment." Also strongly supporting, as mentioned above, was Dr. Tryon, the Deputy Chief of the Planning Staff. It should also be noted that the general climate, even among laymen, in regards to the use of psychology to predict behavior was very positive. To some degree, this was seen as (and was) a new technology, and then, as today, new technology was viewed as a powerful advantage over an adversary.

How, then, was the assessment program devised, and how was it run?

The Assessment

At the time of the establishment of the OSS, there was very limited institutional (or official) knowledge about what actually made a good spy or saboteur. In fact, there was little living experience in this area in the entire U.S. The OSS recruitment of both
military and civilian personnel was usually done by chance or on the basis of friendship. At one point, the OSS reportedly recruited men for work in Italy directly from Murder, Inc, and the Philadelphia Purple Gang.\textsuperscript{108} Although this allegation may be apocryphal, it does point to the haphazard manner in which the OSS initially recruited its members. Too, the OSS was not uncommonly referred to as "Oh, So Social," because so many of its original members were personal friends of William Donovan and prominent members of society. In fact, much of the initial recruiting was done on the basis of friendship. This method certainly recruited many extremely talented individuals (Robert Sherwood, the playwright, for example). Unfortunately, some of the positions in the OSS required rather unique skills, (e.g., dissembling under threat of torture by the Gestapo, or properly accounting for large sums of money with little supervision) that simply being bright or successful or talented did not predict well. As the results of this haphazard selection began to filter back, a strong movement inside the OSS (especially from the field) for something better began to build. As discussed above, this led to the establishment of a formal assessment program, under the Schools and Training Branch.

The assessment program was lucky in the caliber of the psychologists who established it. Mostly academic psychologists, they were among the leaders in the field at the time. As mentioned earlier, Robert Tryon, a psychologist on leave from the University of California, was the Deputy Chief of the Planning Staff of the OSS, and became involved initially in supporting the establishment of the selection program when it was first suggested. He recruited James A. Hamilton, John W. Gardner, and Joseph Gengerelli, who already worked for the OSS, to assist with the program. They were
quickly joined by Henry A. Murray, Donald Adams, and Donald Fiske, and together, they designed and planned the first assessment. While Dr. Gardner's name is perhaps the most familiar to non-psychologist readers, all six of these individuals were highly respected in the field at the time, and continued to garner academic honors after the war.

John Gardner received his Doctor of Philosophy degree from the University of California in 1938 and prior to the war was an assistant professor of psychology. Although not well known before the war, after it he became quite active in politics, working for, and then president of, the Carnegie Corporation. He was the Secretary of Health, Education, and Welfare under the Johnson administration from 1965 to 1968 and was the founder of Common Cause. He continued to support applied psychology with the military, working with the U.S. Air Force Science Advisory Board, and held the rank of Captain in the U.S. Marine Corps from 1943 to 1946.

Henry Murray, on the other hand, was eminent, at least in academic circles, before the war. His early training had been in medicine and biology, and he had worked as a surgeon in New York before receiving a doctorate in biochemistry. Around 1927, he began his lifelong study of psychology. One of the fathers of clinical psychology, by 1937 he had been teaching (and studying) at Harvard for ten years, and was the director of the well known Harvard Psychological Clinic. By this time, he had developed a fairly comprehensive theory of personality structure and assessment. By working with Harvard students (an early use of undergraduates as subjects) he began to form his ideas of using multiple means of gathering information about a person, and then synthesizing all the data until a consensus was reached. The theoretical design of his assessment process was
remarkably similar to Simoneit's. There is evidence that both initially developed independently, but by the time of U.S. involvement in the war Murray and his associates would have been well acquainted with Simoneit's work and well as specific information on the British selection program. In fact, one article by H. L. Ansbacher in 1941 outlined the significant similarities between Murray's techniques and Simoneit's.\textsuperscript{112}

Murray was also an early proponent of the use of projective techniques, i.e., using an unstructured stimulus to allow maximum freedom of expression in a response. Most of the official documents that describe the OSS selection have a corporate author, and little individual credit is documented. There is little doubt, however, that Murray's influence, both on the theoretical constructs underlying the assessment, and on the techniques and procedures used, was tremendous. Although many individuals made important contributions to the process, Lieutenant Colonel Murray's\textsuperscript{113} was the unifying force.\textsuperscript{114}

Another of the psychologists who had a major impact on the program was Donald W. MacKinnon. He had also received his Ph.D. from Harvard and was a friend of Murray's. While working on his doctorate, he had spent a year (1930-1931) studying in Europe. Although there is little record of what influence Simoneit may have had on MacKinnon, it is at least likely that he was familiar with Simoneit's work. MacKinnon was the eventual director of the major (and first) OSS assessment program, and was a coauthor of the book, \textit{The Assessment of Men}. Following the war, he continued to work in the area of personality assessment, and in the development of assessment centers.\textsuperscript{115}
Unfortunately, none of the psychologists who were setting up the program had any actual OSS field experience. Only brief job descriptions existed, and no real job analysis had been performed, or would be performed, on the positions for which the assessment was run. Because of the disrepute in which espionage was held, the U.S. had limited institutional knowledge about successful spies and saboteurs. Although more information became available as the war progressed, a thorough scientific analysis of the job requirements was never successfully performed. In fact, most of the knowledge about the requirements for success in this whole area was based on information from the British. Initially, most OSS operatives were trained in Britain, by the SOE. Later, a training camp was established, again by the British, in Canada, so as to hide the fact of their involvement.

To further compound the difficulty facing the psychologists, all candidates had to maintain their anonymity while undergoing the assessment. Presumably, this was done in order to protect the identity of the possible operatives from the enemy. In other words, the assessment staff did not know the actual identity of the individuals they were assessing. Although this may seem bizarre to the modern assessment center, at least one author has opined that this limitation at least prevented the influence of nepotism on the selection. In their favor, the psychologists measured the ability of each of the candidates to maintain the security of their real identity during the assessment, and used this information in their evaluation.

Because of this lack of specific information, the assessment focused less on specific job skills, and more on the "man as a whole," what is commonly referred to
today as the "whole man concept." The assessors took this approach for both theoretical and practical reasons. The theoretical origin of this concept came, for these psychologists, from the work of the Gestalt psychologists discussed earlier. These German researchers had demonstrated, less than fifteen years earlier, the necessity of viewing objects (and personality) in their entirety, and not as a simple collections of parts. Although their revelations did not revolutionize American psychology, they did require a change from simply adding up the traits observed in an individual to a more interactive view. Said another way, the Gestaltists demonstrated that a person was not simply a sum total of his traits, but was much more complex. At the least, psychology had to account for the interactions among various traits, a much more complex way of viewing human behavior. Murray, although not a true Gestaltist, had, by the time the war broke out, integrated a number of the Gestalt concepts into his model of personality. Although it is difficult to say with certainty, Murray's own theoretical conclusions, (as discussed below,) regarding personality may have played an even more important role.

Practicality also was a major factor, since because of the theoretical diversity among the psychologists and psychiatrists, no single theory of behavior could be adopted. During World War I, there was still much argument about whether psychology should study behavior or the mind. Even during World War II, there was no complete consensus over the domain under study. The assessment staff included psychoanalysts and behaviorists, clinicians and researchers, sociologists and cultural anthropologists. It is doubtful that such a group could ever agree on a common theoretical basis for their analyses. Instead, they settled on a rather vague description of the personality "as a
They specifically used the term "sufficient formulation" of the personality, meaning they would attempt to describe an individual's personality in only sufficient detail to answer the selection decision with which they were faced. In other words, they did not attempt to come up with a complete personality description of each candidate, only enough of one to make the selection decision. By doing this, they focused on finding agreement among the various viewpoints, and not on specific points of dogma. This entailed trying to evaluate a person based not on a single measure, or even a series of measures, with pass-fail criteria, but instead, to attempt to integrate all of the pieces, strengths and weaknesses, into a coherent whole. This approach is less precise in its product, but tends to provide a more three dimensional view of an individual.

The second result of having limited information on job requirements was the decision to first attempt to identify individuals who were clearly unsuitable, as opposed to trying to find the best suited individuals. This process, still used today, is often referred to as the "ruling out," as opposed to the "selecting in," of personnel. It is always much easier to distinguish those individuals who will clearly not be successful, than it is to determine who will be the top performers. After this first cut, then more sophisticated judgements can be attempted.

As discussed above, not only was it true that none of the psychologists setting up this program had any first-hand experience in espionage, but no job analysis was available even for second-hand study. Both the actual techniques used, discussed in Chapter 5, and the general theoretical approach finally adopted, however, have a clear stamp of Murray's hand. As he and others began to make decisions about what traits to
measure, how to measure them, and how to interpret them once gathered, they brought together several distinct sources of information. For one, they had knowledge about the British selection program for officer personnel. The British were providing advice and assistance to the fledgling OSS in a number of areas, and selection was one. Although Murray developed an early prototype of the assessment program apparently without the knowledge of what the Germans were doing, it is unlikely that he did not know by this time, at least in generalities, of what the Germans were doing with their pre-war selection. (At least one excellent summary in English of Simoneit's work had been published in 1941.)

Certainly the development of personality testing, both objective (with the most famous objective test, the Minnesota Multiphasic Personality Inventory originating in 1940) and projective (Murray being a leading advocate, with his Thematic Apperception Test,) influenced their belief that measurement was possible and could be reliable and valid. The belief that early experiences, both from Freud and Adler, but also others, could strongly influence later behavior had gathered growing acceptance. This raised the level of importance of a detailed life history interview, at the time not a common personnel selection technique. Murray and the others also discussed the selection extensively with as many actual operatives as possible, and integrated closely with the OSS chain of command. Finally, Murray used his own beliefs about personality, and about consensual validation (i.e., having more than one observer measuring more than one trait) in making the final determinations. By integrating all these elements, along with the logistic limitations required, they were able to devise some seemingly common
sense criteria. They eventually settled on seven major variables for general qualification, and three for special qualification. The variables measured for general assessment were:

Motivation for Assignment: This was how dedicated an individual was to the war effort, and to the proposed assignment. The assessors believed that an individual had to have a strong desire to work for the OSS. If a person were lukewarm in his or her motivation, then reliability under pressure would become a problem. Some of the missions required of these volunteers would involve great danger while performing tasks on their own initiative. If they were not strongly committed to the mission, it could be very easy for them to stop putting themselves at risk, or at least, to take fewer chances.

Energy and Initiative: This was overall energy level, drive, and initiative. The assessors believed that, because most of the positions would require independent operations, far from any direct supervision, the candidates should possess the drive and energy level to not only continue a mission under difficult circumstances, but to create and develop new missions in the absence of orders.

Effective Intelligence: This concept encompassed more than just measured IQ. It was a measure of the individual's ability to use his intelligence in practical problem solving, often under stressful conditions. In fact, the assessors used the term "effective intelligence" to specifically differentiate it from measured IQ. One of the variables measured during the situation tests (see below) was the candidate's "mental effectiveness under conditions of social stress." The assessors believed that practical intelligence, especially under stress, was critical to mission success. This variable was measured
using a clinical interview, verbal-social tests, an observed group discussion, the situation tests, pencil-and-paper tests, and peer ratings.  

Emotional Stability: This was considered a central issue in the assessment, of critical importance in predicting success in the field. As stated by the assessment staff:

It was not enough to know that a man's motivation was high and his skills were adequate; we had also in the light of our assessment of his emotional stability to estimate what his operating efficiency would be when called upon to work under conditions of frustration and of danger to life and limb.

The assessors conceptualized (at least) two dimensions of emotional stability. The first was the ability to control undesirable emotions. This is not to be seen as an absence of emotion, but a lack of inappropriate emotions. Within this dimension was the concept of the potential for a neuropsychiatric breakdown. The assessors believed that while, "every man has his breaking point," an individual's susceptibility to battle fatigue varied and could be predicted with some degree of accuracy. The individuals who scored in the bottom third, therefore, on this measure, were predicted to have higher rates of breakdown, and were usually not recommended for overseas assignments. The top two-thirds were seen as within the range of acceptability, but with varying degrees of resistance to stress.

The other dimension studied under emotional stability was the presence of psychopathic personality traits. The assessors believed that the psychopath's "irresponsibility and antisocial tendencies would quickly make them a liability to the group." Although the missions would often require independence and initiative, the lack of loyalty and responsibility of the psychopath could easily endanger the mission,
and the antisocial behavior associated with psychopaths would prevent successful work with partisans and teams.

Three major sources were used to assess emotional stability: The detailed interview, which included previous written and projective tests, the situation tests, and casual observations by the staff. Because of the dangers associated with psychiatric breakdown and criminal behavior, this was one of the major "rule out" categories.

Social Relations: The ability of a candidate to work effectively with others, what we might today call social skills, was also considered critical. Many, if not most, of the missions envisioned for the candidates involved working with others, as members of a team, or as leaders of partisans, or both. Some of these missions required fairly sophisticated skill in getting others, e.g., French partisans who were not under direct Allied control, to conform to the wishes of the Allied high command. Not only did the OSS operative need to have the ability to convince others to do his wishes, but he needed to be able to continue to work with partisans even if they disregarded his wishes, as not uncommonly happened. Incorporated within this variable was the absence of prejudice, since many missions required the operatives to work in vastly different cultures. This trait was considered the most time consuming and difficult to measure by the assessors. (This trait, and the skills associated with it, are still considered important in this field. Cross-cultural communication, negotiation, and non-verbal communication are all taught to present day Special Forces soldiers as part of their initial training.)

Leadership: This was the ability of an individual to lead others, measured under stressful conditions. It included acceptance of responsibility and the fostering of
teamwork, the ability to plan and organize, and to take the initiative in social situations. This did not always mean the man who was most assertive in his leadership style. Like the measure of intelligence, the measure of leadership was based on the conception of effective and practical leadership. It was measured by the situation tests, by peer reports, and by the interview.

Security: This was the ability to keep secrets, to lie and mislead, and to maintain a cover, again measured under stress. This variable is one for which the direct relationship to the mission is most obvious. A man who could not control his speech would be a risk to himself and those around him. It was measured by the situation tests and by constant observation by the staff.

This constellation of variables was used to determine the overall acceptability of an individual to the OSS. The assessment staff used these variables to attempt to put together a picture of the "whole man." They believed that these variables were important and relevant to all OSS missions. Based on the general proposed assignment of an individual, however, three additional variables were measured. They were:

Physical Ability: Overall stamina and agility. Included in this was some measure of the individual's willingness to take physical risks. Most of these jobs required at least some physical labor. Many would involve living and fighting outdoors in difficult climates, walking long distances, carrying heavy loads, and parachuting. The assessors assumed that most "behind enemy lines" missions would require at least moderately good physical ability, while functioning as a secretary in a field office in Burma was less physically demanding.
Observing and Reporting: This was mostly a matter of an individual's ability to attend to and remember important details, and then to report those details clearly. This was considered important for those who would be gathering and reporting intelligence from the field. The assessors broke this down into five areas: Gathering information, remembering that information, evaluating it, making inferences concerning the information, and then reporting it. These areas were measured discretely in specific tests on each area.

Propaganda Skills: The ability to sway the opinion and behavior of others, in particular of the enemy, through various media was obviously important only for those individuals involved in propaganda production. This variable was not used to select individuals for high risk or operational assignments, and will not be discussed here.

Although some of the concepts for this program came from the British, most of the program was developed by the staff, based on a number of principles. First, the job assessment skills of personnel psychologists were used as a framework for the overall program, focusing on the concepts of outcome criteria and predictive validity. The psychiatrists brought with them their skill in interviewing and diagnosing psychopathology, and the clinical psychologists brought their arsenal of test batteries and the measurement of personality variables. Social psychologists, experimental psychologists, and many others were also involved in the assessment, and brought their diverse and often divergent views to the subject. Included were Freudians, neo-Freudians, Gestaltists, and behaviorists, all attempting to use their skills to predict successful OSS candidates. The actual assessment process they devised reflected this
diversity. Finally, active regular military officers were also involved, and as field experience was gained, it was fed back into the program.
Chapter 5


107. Ibid., 4.


113. LTC Murray is the only psychologist in World War Two to be commissioned in the Medical Corps. This was because of his early training as a physician apparently granted him the credentials in the eyes of the U.S. Army.

115. Donald W. MacKinnon, How Assessment Centers were Stated in the United States: The OSS Assessment Program (Pittsburg: Development Dimensions International, 1980), 0.

116. A Job Analysis is a technical study of the requirements of a specific job. Its purpose is to describe, in detail, the duties required in performing the job, and the environment in which the job is performed. This is ordinarily the first requirement of designing a personnel selection program.

117. The OSS Assessment Staff, Assessment of Men, 11.


120. Obviously, it is dangerous for an operative if the enemy has personal information that can be used against him. It is not so obvious that the awkwardness this additional level of secrecy must have caused the assessment team when attempting to understand the candidates background was worth the trouble. Even today, security concerns may create more problems than they solve.

121. The OSS Assessment Staff, Assessment of Men, 21.


123. In an ironic twist, prior to U.S. involvement in the war, Yerkes, who was known for his work with primates, visited Wolfgang Kohler in the Canary Islands to study Kohler's primate research. A recent book has persuasively argued that Kohler was conducting espionage against allied shipping at the time.


125. The OSS Assessment Staff, The Assessment of Men, 43-53.

126. Ibid., 45.


128. The OSS Assessment Staff, The Assessment of Men, 30-31.
129. Ibid., 266.

130. Ibid., 274.

131. A technical discussion of the development and utilization of these measures is in The Assessment of Men, 264-281. The non-psychologist will likely find the detail of analysis remarkable, while the present-day psychologist may be surprised at the high value placed on the clinical interview.

132. The OSS Assessment Staff, The Assessment of Men, 282.

133. Ibid., 286.

134. Ibid., 286.

135. Personal communication.

136. The author was instrumental in establishing the specific lessons on negotiation and non-verbal communication. The author is aware that Cross cultural communication has been taught as part of the Special Forces Qualification Course for several years.
CHAPTER 6

STATION S

For the assessment, the candidates were brought to a country estate on the outskirts of Washington, D.C. The majority of the assessments were conducted at this location. As the need for agents increased to the point that this location could no longer handle them all, additional centers were created. Eventually, there was another assessment center on the west coast, a brief assessment center for administrative personnel in Washington, D.C.; and before the end of the war, centers in India, Ceylon, and China. (Because the model program was the original one, referred to as Station S, and because it assessed by far the largest number of operational personnel, it will be the only assessment location discussed in detail here. At total of 2,372 candidates were assessed there. Additionally, 3,071 candidates were assessed in Washington, D.C., mostly for administrative positions.)

The candidates would stay at Station S for three and one-half days. Their clothes were replaced by military fatigues and boots, and they were required to invent a cover story that would hide all of their personal history. They would maintain this cover during the entire assessment. First, they would take a number of written tests, including projective and intelligence tests, and would then undergo a detailed life-history interview. After this was completed, a series of situational tests would begin. Some of these were
relatively straightforward, such as the "Belongings Test," which measured a candidate's practical memory and intelligence. In this test, a candidate would have four minutes to examine a room, looking at all the items in the room, and would then take a written test which measured his memory of what was in the room and, more importantly, what conclusions he could make about the person who lived in the room.

Another seemingly obvious test was the "Interrogation Test," in which a candidate was interrogated by several experienced questioners under stressful conditions. He was required to maintain a cover story during this interrogation. At the end of the questioning, he was curtly told that he had failed the test. He was then told to report to a staff member in another room. This began a much more subtle portion of the test. This second interview was designed to put the candidate at ease and to allow him to drop his guard. He was told to relax and sit down and then encouraged to discuss his thoughts on the assessment process. A hidden purpose of the interviewer was to get the candidate to break his cover. This allowed a good assessment of how easily the candidate was controlled by his emotional state, and if this could be used against him. Specifically, this measured his ability to maintain cover, even when emotionally distraught, his emotional stability, and his continued motivation for assignment to the OSS.

Other situational tests involved groups of candidates and measured, again in rather subtle ways, the variables discussed earlier. Usually, the candidates would be put into a group of four and would be given a difficult task to accomplish. This would allow the measurement of the leadership and social relations variables, in addition to physical ability and effective intelligence.
One unique test of leadership and social relations was called the "Construction Test." In it, a candidate was given ten minutes to construct a five foot square box with an assortment of materials. He was assigned two "helpers," to perform the actual work. In fact, both helpers were stooges, one seemingly incompetent, and the other critical and aggressive. This task was never completed within the time limit, and was a tremendous test of not just leadership and social relations, but of emotional stability as well. Several of the candidates actually physically attacked the helpers during the test, a measure of its intensity.139

From this assessment, a final report was made, based on all of the observations, and heavily influenced by the detailed interview. The report contained a specific recommendation, based on a five point scale. The possible recommendations for overseas assignment were:

1. Not Recommended
2. Doubtful
3. Recommended with Qualifications
4. Recommended
5. Highly Recommended140

It is critical to note, however, that the final decision on the assignment of the candidate was done by OSS Headquarters in Washington, not by the assessment staff. This was a critical difference between the OSS assessment and, for example, the psychiatric screening of inductees during World War II. The OSS assessment did not take a medical model, i.e., fitness for duty, approach, but instead attempted to look at the
"whole man." In other words, rather than looking for disqualifications, the staff tried to put together a picture of the candidate's strengths and weaknesses and to make a judgment based on the entire picture. As in the German and British programs, the assessment staff then made assignment recommendations, not decisions. This distinction between the psychological assessment recommendation and the final authority of a third party, usually a commander or traditional assignment personnel, still exists today.
Chapter 6


140. Ibid., 217.
What then, was the effectiveness of the selection program? The best way to evaluate a selection program such as this, from a purely research point of view, is fairly straightforward. First, information on all of the possible candidates must be collected, e.g., psychological test scores, interview information, physical performance measures, and peer ratings. It is useful to collect more information than will eventually be used by the assessment at this time, since what will turn out to be a useful predictor is not yet known. The second step requires that as many candidates as possible should be accepted into the jobs in question, in this case, operational positions in the OSS, regardless of how they performed at the first step. This insures that bias and unwarranted assumptions are fairly tested. For the third step, a reliable, valid measure of each individual's performance must be collected and then compared to the information originally collected. Finally, a statistical analysis can be conducted to determine the relative value of each predictor. If possible, the entire process should then be repeated, and the predictors would be validated on a new group of individuals.

The men and women who designed the assessment program understood the requirements of scientific validation, and in fact, were well known authorities in the field. Unfortunately, from even a cursory review of the above requirements it was obvious that...
a comprehensive evaluation of the program, using the accepted rules of scientific
evidence, was not possible. Nevertheless, having designed and implemented the
program, Murray and his colleagues were determined to perform some evaluation of the
program, even if it were constrained by war-time requirements. In fact, Assessment of
Men spends fifty-eight pages, not including tables in the appendices, just discussing the
evaluation of the program. What were the specific methodological problems they faced,
and how did they cope with them?

The first requirement, as discussed above, is to collect information on all the
candidates. This they were able to accomplish successfully, at least once the program
was under way. All of the candidates' records were collected and maintained by the
assessment staff, allowing the establishment of a data base. (This information, however,
was not collected on people who joined the OSS prior to the establishment of the
assessment, and therefore most of the analyses were only performed on personnel who
joined later in the war.)

The second requirement for a pure analysis is to allow as many candidates as
possible into the OSS, regardless of their performance during assessment. Quite
obviously, this could not be followed. This requirement assumes that some of the
candidates would perform poorly once in the OSS, and that this would then allow the
assessors to go back and determine what the best predictors were of this poor
performance. The OSS would not take kindly to this process, and regardless of the
scientific leanings of the psychologists, there is no record of this ever being proposed.
This limitation required, then, that the assessors make an *a priori* determination of what characteristics were critical to successful performance. Sometimes this was relatively easy. For example, an assumption could be made, and easily agreed to, that individuals with a history of psychotic episodes could likely have such episodes again. Another assumption could be made that having a psychotic episode while deployed is not compatible with successful mission accomplishment. Therefore, screening out psychotic individuals, or those with a history of psychotic behavior, could be justified on a rational (i.e., logical, vs. empirical) basis. At other times it can be very difficult, for example, as when measuring talkativeness. One might assume that an extremely talkative individual would be unable to keep secrets from those around him, but it may also be true that he can gather more intelligence from others than a quieter man. If a judgement is made that only reserved, fairly quiet candidates will be accepted, then there are no means to determine, even after deployed performance data is collected, whether or not the correct decision was made, since no talkative candidates were accepted. The net result of this is to reduce the ability of the psychologists to analyze the effectiveness of their program. The only method the assessment staff had to compensate for this deficiency was to rely on authority. They questioned as many current operatives, those with recent experience, as possible, and logically tried to think out what traits should relate to success in the field.

The third step in validation requires that a reliable (i.e., consistent) and valid measure be taken of the performance of the candidates. This too, proved problematic.

First, many of the candidates, once selected, were sent to positions other than what had been originally proposed. If the assessment recommendations were made in
light of a specific job, and then the individual was assigned elsewhere, the assessment cannot easily be given responsibility for the performance of the operative.

Second, as is true today, it is extremely difficult to get a reliable and accurate measure of a soldier's job performance. To compensate for this, the assessment staff decided to gather information from several sources, hoping to offset one measure's weaknesses with another's strengths. In some instances, the staff was able to directly interview the immediate supervisor of the operative. Another measure was a questionnaire on personality traits, filled out by the immediate supervisor when an individual was returning from an overseas assignment. A third source of information was collected by a group of psychologists who performed a re-evaluation of the operatives as they returned from overseas assignments. The purpose of this reassessment was to evaluate each person's suitability for further assignments. (This is the only indication the author has found of the use of psychologists performing what would today be called a debriefing. Although an agent's suitability for assignment was re-assessed, there is no record of whether or not any clinical assessment of an agent's emotional well being was also performed. Nor is there any record of whether or not any treatment, either preventative or ameliorative, was performed.) Finally, as the operatives returned from overseas, they were interviewed in detail about the performance of others they may have known in their theater of operations. This last procedure was conducted at the end of the war, and allowed information to be collected from peers, superiors, and subordinates. These assessments (of the assessment program) did, in spite of the limitations discussed
above, find some interesting trends. These trends, discussed below, take into account all four outcome measures.

One of the most important outcomes studied was the number of assessed personnel who, after being deployed, turned out to be not satisfactory. This is the critical element of any selection program, and is the one of most interest to the commanders in the field. The number of operatives who were recommended by Station S, and who later were rated unsatisfactory by the field, ran from 11 to 16 percent, depending on which of the outcome measures was used. Because of the limitations in the outcome measures themselves, the psychologists suggested that 10 percent is probably the most accurate estimate. Unfortunately, these numbers include those individuals who were assigned to positions different from that for which they had been assessed. The only analysis that attempted to measure the outcome of operatives who had been placed in the jobs for which they had been assessed, concluded that the error rate was much probably lower. (Because the number of people for whom the assessors had this data was quite small, they were not able to publish firm percentages.)

Another, and perhaps even more serious concern, is the number of deployed individuals who had "neuropsychiatric breakdowns" while in the field. Looking at the evaluation performed at Station S, the success of the program is remarkable. A total of 2,372 people were evaluated by Station S. Of these, two were reported to the OSS Medical Branch as having emotional difficulty severe enough to be removed from duty. Of those two individuals, one had received a negative recommendation from the assessment staff because his emotional problems had been recognized. In spite of this,
and remembering that the assessment staff made recommendations only, and did not have the final say, he had been deployed. The second person was "recommended with great caution, with the condition that he be watched carefully...and used only if the doubts which existed in the minds of the assessment staff appear unjustified."^144

It should be remembered that while the assessment did not begin until a great many operatives had already deployed. Once the assessment began, it was required for all who were going to overseas positions. Overall, including the two individuals who were assessed at Station S and including those who were screened at other locations and those who were not assessed, the OSS recorded 52 "neuropsychiatric breakdowns." This is out of a total population of approximately 20,000. (It became extremely difficult to estimate the total number of personnel working for the OSS. This is an estimate. Other estimates have ranged as high as 30,000 and as low as 12,000.) Overall, then, if the two individuals above are included, the assessment process reduced the rate of psychiatric casualties from 52 out of 20,000 (1:385) to 2 out of 2,372 (1:1186), or to one-third the previous rate.^145 If the two individuals discussed above are not included as assessment errors, then the assessment apparently eliminated psychiatric casualties from deployment. This finding is remarkable when compared to the ineffectiveness of U.S. Army World War II psychiatric screening.

Perhaps the most interesting analyses from the psychologists' viewpoint is that concerning predictor variables. Of all the variables studied (motivation, effective intelligence, emotional stability, social relations, and leadership,) effective intelligence was by far the best predictor of success. The strength of the relationship between
intelligence and the outcome measures of performance (discussed above) was twice that of the next strongest predictor. Ten percent of the variability in performance as measured by the appraisals was predicted by intelligence. This finding is made even more remarkable, since most of the agents who were selected were of above average intelligence. Given this restriction in range, intelligence was clearly a useful predictor of successful performance. The other usefulness of the other predictors are more difficult to determine. Following intelligence in predictive value were leadership, and then motivation. Leadership accounted for 3 percent of the variability in performance, and motivation accounted for only 1 percent. Although these last two predictors were consistent, their actual value may be limited. As discussed earlier, a number of practical problems may have reduced the measured effect of these variables. It is likely that their real contribution is much higher, but there are no hard data to prove it.

Further on in their analysis, the psychologists found several personality traits that they were unable to effectively measure, but that they believed would effect the candidate's performance in the field. The first was physical fitness, or endurance. The assessors realized that physical endurance is often a function of the current state of training of a person, and that additional training can dramatically improve an average performance. Because of this, the assessors had to estimate the ability of an individual who was presently not in top physical shape. Obviously, this will be greatly effected by motivation.

The assessors also understood that both emotional endurance and long-term social relations were difficult to measure over three days. Although the candidate was
placed in somewhat stressful situations, they were certainly not life threatening. Although the various tests were useful in predicting a candidate's response to similar types of stressors, the ability of the tests to predict stress tolerance under combat, or torture by the Gestapo, could only be guessed. The assessors also believed that a picture of a candidate's long term social relations needed more than three days to measure. The only solution to this was to lengthen the assessment, or to realize that this was not well measured, and should be monitored after assignment.

Finally, the assessors believed that imagination, what we might today refer to as anticipation or war-gaming ability, was useful for effective operatives. In effect, they were referring to a type of practical creativity. They felt that this also took some time to become apparent, even with the various situational tests, and so was not usually seen over three days.

In summary, then, Henry Murray and his colleagues, the authors of *The Assessment of Men*, found that the selection program had provided a reasonably useful program of assessment. As psychologists are often wont, they spent more time discussing the limitations of the project than the successes, but several important trends are clear. First, they had a false positive rate, that is, the number of people recommended that were not successful, of less than ten percent. Although it was not possible to discover what this rate was previous to the program, the strong requests for the program establishment from field supervisors suggests it was much higher.

Secondly, the rate of psychiatric casualties was greatly reduced (or eliminated). Although not conclusive, the data available suggest that this was a large improvement
over non-assessed personnel. This is a remarkable finding when compared to the overall failure of screening to reduce psychiatric casualties in conventional U.S. Army forces.

Finally, they found intelligence to be a useful predictor of operational success. Perhaps not surprisingly, more intelligent agents were more successful. Leadership and motivation were also reliable predictors, but their actual usefulness was inconclusive at best.

The Assessment of Men is the most exhaustive study of the assessment process, and perhaps because of this, there were few other studies of its effectiveness. Also, after the OSS was disbanded, many former members were recruited into the Central Intelligence Agency. This likely reduced publication of further work in this area by these individuals. Nevertheless, there are a few analyses available, most written by various participants.

One useful analysis was written by Eugenia Hanfmann, from Harvard University. As one of the psychologists who took part in the selection program, her particular interest was in the effectiveness of what psychologists refer to as projective tests. These are tests and measures that "permit an almost unlimited variety of possible responses." In other words, a person is given a relatively unstructured task to perform, sometimes written, sometimes verbal, and sometimes even a play acting situation, and his or her responses are measured. The idea is that the person will "project" his or her typical pattern of behaving onto the situation. Because of the unstructured nature of these tests, it is extremely difficult for a person to "fool" the psychologist, since no simple response is expected. Additionally, it allows the psychologist to observe a much broader spectrum
of behavior.\textsuperscript{149} In her analysis, Hanfmann stated that the value of these tests were, like much of the assessment, driven by the limited information concerning the actual job requirements. This gave more importance to evaluating the person's general effectiveness, especially in situations involving novelty, frustration, and stress.\textsuperscript{150} She believed that the assessment was valuable, and that the use of projective instruments should be focused on the more manifest, or behavioral, aspects of personality, as opposed to the more latent, or unconscious aspects. The most valuable techniques, in her opinion, were the sentence completion test and improvisations, or modified psychodrama. The sentence completion measure simply asks a person to complete a half-written sentence, such as "I admire ______", or "I am most afraid of ____." The second method, that of "Improvisations," simply gave the candidates a problem, and then asked them to solve it among themselves. They would solve the problem in front of others, who would then discuss what occurred. Both the problem solving exercise and the discussion after would provide significant insights into the individual's personality. Such traits as intelligence, creativity, social skills, and leadership could be easily monitored. There are some obvious similarities between "Improvisations" and the Leaderless Group tasks the British devised.

On the other hand, MacKinnon, one of the designers of the assessment program, and the director of Station S from June 1944 until V-J Day, in a 1980 review of the program stated that it was not very successful in predicting performance overseas and, "that the appraisal process as carried out left very much to be desired."\textsuperscript{151} He made this statement, however, looking back over thirty years of improvements in assessment
centers. In fact, after the war, MacKinnon, Tryon, and two other staff members at Station S, R. Nevitt Sanford and Edward C. Tolman, joined together to form the Institute of Personality Assessment and Research on the Berkeley campus of the University of California. The purpose of this institute was to perform basic research in personality assessment. So, although MacKinnon may have felt that the OSS selection program was a primitive start, especially looking back on it, the program was still the major impetus to the use of assessment centers in the U.S.

Jerry S. Wiggins performed an analysis of the program in 1973, and using improved methods of estimating prediction outcomes, estimated that Station S increased the number of correct selection decisions by 14%, (from 63% correct to 77% correct) when compared to a random selection process. Although a 14% improvement is certainly helpful, it is not as dramatic as one might hope. The major critique that Wiggins made, however, was that at no time did Murray consider that the holistic approach might be in error. In other words, although Murray spent many pages discussing the limitations of the analysis of the program, he (and his colleagues) never really questioned the use of the "whole man" concept.

A much less (or non) scientific way of assessing the program is to ask what the participants thought of its value. Although psychologists call this face validity, and play down its value, it can, in fact, determine the very survival of the program. For example, although the British WOSB had strong scientific support, the psychiatric and psychological portion of its assessment was discarded after the war. This was done in
spite of the benefits it had brought about, arguably because of the negative stigma
associated with psychiatry and psychology.

Although quite a bit was written about the OSS after the war, few of those
writings mentioned the selection. Of those that do mention it, there is usually only brief
mention of the fact that it existed and was conducted by "distinguished" psychologists.\textsuperscript{153}

R. Harris Smith's book, \textit{OSS} discusses the thought processes that went into the selection
criteria, and what type of operatives the assessors tried to select, but does not really
evaluate the program, other than saying that the psychologists' policy of selecting officers
who had a "freedom from disturbing prejudices," and could "get along with other
people," was effective.\textsuperscript{154}

The official history of the OSS, Kermit Roosevelt's \textit{War Report of the O.S.S.},
describes the assessment in some detail. He states that "the assessment program was
most effective in providing a psychological evaluation of the candidate," but that it "was
less effective in determining the candidate's suitability for a particular job." He also
stated that the program "certainly succeeded in screening out the 15\% to 20\% who were
obviously unfit." He then goes on to say that no assessment like it had been performed
before in the United States, and that the program set a precedent that was later used in
many other settings.\textsuperscript{155}

Edward Hymoff's excellent book, \textit{The OSS in World War II}, gives a rather
detailed account of the selection process. He lays out many of the problems that the OSS
initially had in recruiting operatives, and how and why the selection program was started.
Although Hymoff presents the assessment program in a very positive manner, other than
mentioning the very low rate of emotional breakdowns among the assessed population, he makes no clear claims as to its actual usefulness. 156

Likewise, E. Howard Hunt, of Watergate fame, writes about his experiences undergoing assessment. While he gives an excellent account of the process from the point of view of a candidate, and while he appears to view the process as positive, he also made no claims as to its effectiveness. 157

In conducting the research for this paper, the author was able to contact a few former OSS operatives. Although far from a random (or large) sample, they did generally have very positive things to say about the program. Colonel (Ret.) Frank Mills was an OSS operative during World War II, and went on to help create U.S. Army Special Forces, eventually commanding the 1st Special Forces Group in Okinawa. 158 He wrote that, "I'm certain the program was of great value in the selection of men for OSS operations." 159 He quotes his experience working under the stress of fighting the Japanese in north China, and credits at least some of the fine performance of his soldiers with the psychological assessment program.

Another OSS agent, Joseph A. de Francesco, underwent an assessment essentially similar to that at Station S, near London. It had the purpose of selecting the personnel who would be dropped behind German lines to work with the French resistance (Jedburgh teams). He states that he believed the selection to be a success, as "only an infinitesimal number of Jedburgs washed out during training." 160

Finally, no evaluation would be complete without the comments of Dr. William J. Morgan. Dr. Morgan was a psychologist who was recruited into the OSS personally by
Henry Murray. Because of his own strong desires to "play a fighting role in this war," he was able to initially get himself assigned to the British assessment program in England, and then subsequently, to be assigned as an agent.\textsuperscript{161} He was the only psychologist who both performed assessments, and then deployed operationally. His book, \textit{The OSS and I}, is a chronicle of his experiences, both performing assessments, and working behind enemy lines in France. (He later also fought in China.) After the war, he was the Deputy Chief of the CIA Training Staff from 1947 to 1949, and Chief of the CIA's Psychological Assessment Staff from 1949 until 1952. As might be expected, he is a strong proponent of the assessment process. He recently wrote that, "I believe that intelligence operations can not be successfully carried out by operatives unless those operatives have been put through assessment."\textsuperscript{162} On perhaps a more difficult note, he also recommended that more psychologists performing assessment should have operational experience.
Chapter 7


142. In technical terms, a restriction of range has occurred. This reduces the magnitude of any correlations between, say, talkativeness and performance. Statistically, if a relationship exists, the magnitude of that relationship will be increased as the range of the variables is increased, and will decrease when the ranges are restricted.


144. Ibid., 433.

145. The actual size of the OSS was never precisely known. A large percentage of this number did not deploy, and fewer still were used in high stress combat positions. If, however, it is true that psychiatric casualties were more likely under conditions of combat (and espionage behind the lines), then the effectiveness of the selection in preventing psychiatric casualties is grossly underestimated here.

146. The median correlation between Effective Intelligence and appraisal was .32, accounting for 10% of the variability in performance as measured by the appraisals; Leadership correlated .16, accounting for 3%, and Motivation correlated .12, accounting for only 1%. Given the restriction in range discussed above, intelligence was clearly a useful predictor.


149. In a technical sense, the situation tests were projective instruments, as they essentially allowed an infinite number of possible responses due to the unstructured nature of the tasks, and the fact that the subjects were not always aware of precisely what was being measured.


159. Frank B. Mills, personal communication to the author.


162. William J. Morgan, personal communication to the author.
CHAPTER 8
CONCLUSIONS

In summary, then, Murray and his associates devised a method of assessment that took the traditions of American measurement, combined these with Murray's own conceptualization of assessment, and finally built on the experiences of Simoneit and then the British. The resulting program had much in common with its progenitors. The strict objective measurement, coming from the work of Americans like Yerkes, was a foundation upon which Murray built. His own prewar assessment techniques which used multiple means of measurement were later expanded and demonstrated in the OSS program. Certainly the "whole man" view of Simoneit and his belief that the process was more important than the product can be seen throughout the OSS assessment. This concept reached its zenith when the candidates were given tasks to perform that they stood no chance of successfully completing, e.g., the Construction Test, and were measured instead on how they coped with the difficulty and stress involved. The British Leaderless Group tasks had emphasized the importance of giving unstructured tasks, a type of projective assessment, and had found an excellent reception and use with Murray. The program did not develop in isolation, but was the result, perhaps the war-time culmination, of the work of many people. Most ironically, the work of the Germans, the U.S.'s enemy at the time.
The effectiveness of the program is much more difficult to assess. While it was certainly seminal, the objective measurement of its success is cautious. Much of this caution has to do with the inability to analyze the success of the program in a scientifically consistent and accurate manner. Science requires that the burden of proof is on the positive, i.e., that Murray prove that the program worked. Because of the limitations of the war and of data collection, the scientific analysis was inconclusive. On the other hand, the comments from the field were and are uniformly positive. (It should be noted that here again, a biased sample exists. Only those who were selected ended up voicing an opinion.) The overall perception among the OSS agents and administrators appears to have been a positive one. The scientific data analysis says that, at worst, the program only helped a small amount. In total, the results demonstrate that the assessment program, at the least, did some good in screening recruits, and created a model for future civilian selection programs (assessment centers) in the United States. In line with that reasoning, there are a number of trends and lessons learned that are apparent from this study.

1. More specialized requirements lead to more detailed assessment. This trend really began in World War I with Yerkes and was followed by Simoneit in his selection of officers. This need for assessment has followed two roads. One has been the measurement of aptitudes and is currently performed by the U.S. military and others. The other road is that of personality assessment, and this, with few exceptions, has been neglected. The only current U.S. Army use of personality assessment for selection that the author is aware of is conducted by Special Operations Forces (SOF). (Several
reasons may account for this. Certainly a major factor is time and manpower requirement 
for personality assessment, which requires a one-on-one interview. Aptitude testing can 
be effectively performed with pencil and paper tests.) There is little reason to suspect 
that this trend toward more detailed assessment will decline.

2. The actual effectiveness of assessment is very difficult to measure. The 
more critical the position, the more difficult it is to evaluate the assessment, since the 
range of accepted candidates will be small. Perhaps the best evaluation of any of the 
assessment programs discussed in this paper would be a study of the actual effectiveness 
of the German Officer Corps during the early years of World War II. This problem is 
still a difficult one, and solid evaluations of selection programs will continue to be rare. 
In most cases, a rational evaluation of predictors may be as valuable as the limited 
empirical analysis.

3. In all three of the assessment centers discussed, the OSS, the German, and 
the British WOSB, regular army commanders made the final decisions. Although the 
psychologists and psychiatrists may have had a powerful recommendation, in the end, it 
was only that, a recommendation. The commander, a nonpsychologist, preferably with 
actual field experience, made the final determination of selection. There is little reason to 
change this model, and much to recommend it. To the author's knowledge, all current 
U.S. Army selection programs (in SOF) use this model. (This is distinctly different from 
the medical model, used for physical screening, where a physician ordinarily makes a 
determination as to a candidate's suitability.)

90
4. Also consistent across the three programs was the belief that the best measure of a candidate was gathered by assessing the process, the manner in which a person performed a task, rather than simply looking at the end product. This was a shift from the traditional American school, which had, up until Murray, focused on objective, goal-oriented measures. The value of this approach, although supported by Murray, Simoneit, and others, was not rigorously tested or compared to the traditional American methods. Therefore, its actual value (vs. more objective, elementalistic measurement) remains unproven.

5. In line with the previous point, all of the assessments attempted to look at each man, "as a whole," and not as a compilation of separate parts. Again, the American school of thought emphasized individual traits, often studied in isolation. Murray began with the recognition that a person often has strengths that offset weaknesses, and that the assessor must have a picture of the whole person before making a judgement. Again, although this approach has many supporters, its value when compared to other approaches has not been clearly proven.

6. Professional rivalry in the U.S. prevented the most effective screening in World War I (and World War II). All three of these later assessments did not allow those guild issues to surface. Although there are no reports of psychiatrists begin used in Germany, both psychologists and psychiatrists worked well together in Britain and in the OSS. This professional rivalry still exists today, and continues to be major source of conflict.\textsuperscript{164}
7. The use of the in-depth, clinical interview was important in all three assessments. It seemed to be the place where all the previous observations about a candidate could be confirmed, modified, or discarded. This was the place where all of the various pieces could be put together to form the "whole man." In all three assessments, it was considered the most important measure. Its value is undiminished today. It is the one place where the psychologist pulls together everything he or she knows about a candidate, unifying the separate bits of knowledge into a whole.

8. All the assessment programs used a decision model that stressed ruling out poor candidates, as opposed to trying to find the perfect candidate. All three recognized that good soldiers come in many shapes and sizes and that complete homogeneity was not necessarily a good thing. It is, after all, much easier to pick out characteristics that rule out success, than it is to determine the perfect model soldier.

9. The difficulty overcoming the stigma of using psychologists and psychiatrists for assessment is also apparent. In Britain, the stigma was so bad, that even though the WOSBs were successful, the use of psychologists and psychiatrists was discontinued toward the end of the war. This did not happen in Germany or with the OSS, and although the reasons why are not clear, it is clear that perception of the selection process is critical to its survival. In other words, for the survival of the program, the way in which senior leadership views the program is just as important as its actual effectiveness.

10. There is evidence that the proper use of psychological screening can prevent or reduce the number of Combat Stress casualties. The reduction in Combat
Stress casualties which occurred as a result of the OSS selection program is remarkable. Certainly, screening cannot totally prevent these casualties, but there is not doubt that they can be severely reduced. At the same time, poor screening is worse than no screening at all, as the U.S. Army World War II experience demonstrates. The question then becomes one of value added, given the cost of the proper assessment. It is very manpower and time intensive to reduce the Combat Stress casualty rate. The important lesson learned, though, is that the rate can be reduced, if the need is high. (One of the major lessons learned from World War II was the efficacy of objective tests in screening candidates, especially when compared to psychiatric screening as practiced.165)

11. Finally, there is little recorded concerning the use of psychologists or psychiatrists to provide treatment of the returning agents. Many of the agents had been under severe stress for extended periods, and little was done formally to assist them in returning to non-combat life. Although there were few actual casualties, the number of agents who suffered from long term problems as a result of their experiences is unknown. Likewise, the value of a psychological debriefing can only be speculative, but it clearly deserves further study.

Conclusions

The proper use of psychological assessment can improve the quality of assigned personnel, will likely reduce training attrition, and can reduce Combat Stress casualties. As far as these factors can effect mission success, psychological assessment
can positively effect mission outcome. Psychological assessment programs for selected military personnel should use the following guidelines:

1. A detailed interview should be part of the assessment, preferably as the final step.

2. The assessor should concentrate on ruling out unsuitable candidates, rather than ruling in the best candidates.

3. The final decision should be a command decision, and the psychologist should make recommendations only.

4. The psychologist must work hard to de-stigmatize his or her function, and to de-pathologize his or her interactions with candidates. The perception of the candidates, assigned personnel, and leaders is critical if the program is to survive.

5. Linked to the above, psychologists should be involved in debriefing personnel following high stress operations. This functions not only to re-assess individuals, but perhaps more importantly, to insure that any stress reactions are prevented or treated.
Chapter 8


164. The U.S. Army is currently training psychologists to prescribe psychotropic medication as part of a trial project. This training has met extremely stiff resistance from the American Psychiatric Association. It is the author's guess that if the Army began to train psychiatrists in psychometric testing, the American Psychological Association would be just as resistant.


**PERIODICALS**


