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An Emergent Theory of Executive Leadership Selection: Leveraging Grounded Theory to Study the U.S. Military's Special Forces Assessment and Selection Process

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An Emergent Theory of Executive Leadership Selection: Leveraging
Grounded Theory to Study the U.S. Military's Special Forces
Assessment and Selection Process

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Business Administration
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ABSTRACT

This research documents the assessment and selection process used by the U.S. Military's Special Forces for over 70 years using Grounded Theory Methodology. Three independent studies were used to document the Special Forces process of selection. Through comparative reanalysis of each study's data a model emerged explaining the Special Forces phenomena of assessment and selection.

Analysis was conducted in three phases using open, axial, and selective coding which allowed for the identification of a smaller set of themes which categorized the process of selection. The final step involved the development of two analytical matrices explaining the central theme of selection consistent across all three independent studies.

The contribution to knowledge consists of a single unifying model that was subsequently developed and has potential to be replicated elsewhere.

CHAPTER ONE: INTRODUCTION

Selecting a new CEO or senior executive can be one of the most important responsibilities conducted by a company or its board. This leader decision can have a profound influence on the future prosperity of an organization and shape or change the direction of a company. Thus, leader succession and selection must be planned and executed with great preparation, precision, and most of all process (Automatic Data Processing, 2011).

Statement of the Problem

The Harvard Business Review (HBR) stated 3 out of 5 new CEOs fail in the first 18 months on the job (Charan, 2005). This seemed like an inordinately high ratio considering the importance of having the right person or persons guiding the direction of a company. Because senior executives are such vital contributors to an organization's overall success, their selection should be important to a company. While senior leadership is an important facet of every company's success, the amount of investment in succession planning across the industry is lacking (Zhang & Rajagopalan, 2013).

Fewer than 50% of companies actively engage in succession planning for their CEO (Zhang & Rajagopalan, 2013). This problem or phenomenon is well documented in the existing literature (Automatic Data Processing, 2011; Tanking & Gesner, 2016; Wellins, Smith & Erker, 2006). In particular, there is an increasing emphasis on finding the

singularly most effective assessment method or tool (sometimes referred to in practice as the “silver bullet”) that will identify future leaders with the greatest potential for enhanced development and succession. (Church & Rotolo, 2013).

Business is faced with the problem of selecting the right leaders and how to accomplish this through a succession plan. As a twenty-five-plus-year veteran of Special Forces, my firsthand knowledge and experience suggests that the Special Forces (referred to hereafter as SF) selection process is effective. Given the gap and lack of success documented in corporate succession plan failure rates, I began to wonder if the SF selection process could be leveraged to improve outcomes in corporate practice. To answer this question and others related, I propose a Grounded Theory Study of the SF selection process to see if a unifying theory will emerge. My research and analysis of the phenomenon of SF assessment and selection will contribute new knowledge to the already existing body of literature concerning corporate succession planning and provide new avenues for future research on a problem that continues to face the business world.

Significance of the Study

Based on my 25 years’ experience with the U.S. military Special Forces, I observed that the current Special Force’s Assessment & Selection (referred to hereafter as SFAS) process and its continuous use for over 70 years in selecting the “right person” to fill its force has merit and should be analyzed and documented. For the purpose of this research, documentation will consist of a re-analysis of previous studies that involved

interviews of participants and statistical data collected on the process of SF assessment and selection. The outcome will be a validation of new emergent themes not previously identified across three different SF studies over a 70 year period.

While on active military service and now as a government civil servant employee, I have been closely tied to and worked with SF. During that time, I became very familiar with its process of assessment and selection. They use the phrase “People are more important than hardware.” This very phrase permeates the SF culture throughout the entire force on how SF values its people and its processes to select the “right” personnel to fill the ranks. SF has made significant investment into the structure and procedures to identify the attributes necessary to succeed in the Special Forces. With those attributes, they developed a measurement process through their assessment and selection program that resulted in the filling of its force with highly qualified people.

Throughout the years, Special Forces has evaluated and directed outside studies to review its assessment and selection process (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988 & Beal, 2010). These studies are used to update assessment tools and ensure a continuous refreshment of their long-standing process which has maintained the same baseline since its inception. This baseline consists of a psychological evaluation designed to measure the predetermined attributes of a perspective candidate. It also involves a series of skills tests in which to measure and compare a perspective candidate’s successful accomplishment to the established criteria recorded and validated over many years. Finally, candidates are tested to

evaluate their physical composition, which by the very nature of Special Forces is required to be higher than the rest of the military (Teplitzky, 1991; Freely, 1998; Burwell, 1999)

While the military's end result, combat qualified personnel, differs from executives in business, the high stress environment – the failure is not an option lifestyle – and the physical demands required for the ultimate success of a Special Forces leader may be comparable to the rigors faced by the senior civilian executive. The similarities in the areas of personal attributes and resiliency and skills required for the job can be examined and measured against an established criteria in determining the most qualified individual.

By using Grounded Theory to document SF assessment and selection, this researcher will evaluate the results to see if a single unifying theory can emerge that explains the Special Forces Assessment and Selection process in a way that can be replicated elsewhere. Through this documenting of this 70 year process using Grounded Theory, this researcher hopes to contribute this new theory to the knowledge base.

Furthermore, the intent is that this theory can then be studied in different environments, such as Corporate Executive selection and succession planning, to see if it has any effect on the challenges currently faced by business concerning this challenge and problem.

Research Questions

RQ1: Can Grounded Theory be used to document and identify any new emergent factors through a process of re-analysis and revalidation of three Special Forces' Assessment and Selection studies?

RQ2: What assessment and selection model is suggested by the emerging factors?

Research Design and Motivation

Therefore, the objective of this research is to document through the process of re-analysis and re-validation of the Special Forces' Assessment and Selection program.

This program spanned over 70 years of use in the selection of Special Forces soldiers, transforming and improving throughout the years while meeting our nation's defense and security needs. By documenting the SFAS process, a greater understanding can be shared with regard to its overall purpose, how it is conducted, and intended outcome.

With this understanding, the researcher will graphically develop a model that will describe the "what and how" of Special Forces Assessment and Selection.

CHAPTER TWO: LITERATURE REVIEW

This chapter provides a review of the literature and research related to the process and challenges of assessment and selection and succession planning for senior executives in business. Assessing and selecting executive talent in business continues to be a “Hot Topic,” whether selection comes from within or is external to a company (Stephenson & Beaudin, 2008; Charan, 2005; Day, 2007). The challenge of finding the right individual for key critical positions in an organization continues to have far-reaching impacts. While CEOs and Boards recognize this challenge, according to the existing literature, they fail to adequately prepare for them (Stanford GSB Staff, 2010). In other instances they do not even have the necessary processes or plans in place to execute the assessment and selection of a particular individual (RHR International, 2016). Instead, the issue continues to be selection of the “right” individual, who, with some degree of predictability, will succeed and in turn bring growth and success to a company.

Research Approach

This phase of the research identified multiple sources and avenues to explore. I used the University of South Florida Library and looked at databases such as JSOTR, Google Scholar, EBSCO, and ProQuest. Database searches were limited to peer-reviewed publications to focus on scholarly research and books cited in peer-reviewed articles that I deemed relevant to my study were also examined.

Assessment and selection is a critical component of Industrial and Organization Psychology programs. Leadership is also closely associated with the selection of senior individuals for any business. When looking at sources and literature that describe the process of selection and potentially analyze its benefits and challenges, it is important to identify any comparisons, best practices, and gaps. A search of succession planning in industry also quickly identified extensive writing on the subject and the existing problems that companies are faced with (RHR International, 2016; Stanford GSB Staff, 2010; Wright, Nyberg, Schepker, Cragun & Ulrich 2016).

Keyword searches included: Assessments, Selection, Succession, and Hiring; and key phrases included: Succession Planning, Psychological Evaluations for Leaders, and Talent Management. The initial searches revealed approximately 2,700 articles published worldwide. Limiting the search to the western world produced roughly 1,200 articles. Of those, approximately 200 academic abstracts were reviewed with 80 considered academically rigorous and within the scope of this investigation. The bibliographies of those selected articles were used to focus on specific subject area searches and cross reference the citations to help guarantee a thorough review.

Twenty-five books written by PhDs and well-respected business leaders were also reviewed and deemed academically sound and relevant to my research. A detailed literature analysis focused specifically on research question one and also captured 11 academic articles and books on detailing the processes concerning the military's Special Forces Assessment and Selection (SFAS) and provided added insight and

perspective on how SFAS might be used as a model to better select the most qualified senior executives in business. Those works formed the framework for the researcher's literature review and provided the foundation for this dissertation study.

Framing the Problem

Why place an emphasis on senior leader selection in business? Because research conducted by the Hackett Group reveals "Companies with top-quartile talent management outperformed typical companies across four metrics. They generated EBITDA (earnings before interest, taxes, depreciation, and amortization) of 16.2 percent versus 14.1 percent typical for companies. The gap netted a typical Fortune 500 company (based on \$19 billion revenue) and additional \$399 million annually in improved EBITDA. On average, top talent management performers also generated \$247 million annually via a 22 percent improvement in net profit margin, \$992 million annually through a 40 percent improvement in return assets, and \$340 million annually via 27 percent improvement on equity" (Joyce, Herreman, & Kelly, 2007). Multiple industries, academic and practitioner, have created volumes of literature to answer this question. However, the problem of senior executive leader failures continues. There are over 5,000 publicly traded companies in the United States and research conducted by Pricewaterhouse Coopers reported that of the 30% turn-over in CEOs 40% were due to performance (Larcker & Tayan, 2016). In addition to this failure rate, most companies will eventually be faced with the challenge of changing out their leadership at one point or another.

However, a survey of 140 CEOs and board of directors of North American public and private companies all reported a critical lapse in CEO succession planning (Stanford GSB Staff, 2010). In another survey RHR International, a global firm of management psychologists and consultants, surveyed over 236 directors on the topic of CEO succession and found only 48% rated themselves as effective in the task of selecting a CEO (RHR International, 2011).

Literature and national surveys continue to support the problem of poor succession planning. Witt & Kieffer reported 93% of companies surveyed stated the number one job of the board was to have a viable succession plan in place (Tanking & Genser, 2016). On average, boards spend only 2 hours a year on CEO succession planning and less than 50% have written documents detailing the skills required for the next CEO (Stanford GSB, 2010). Even while companies understand the importance of succession planning data reflects a different outcome.

CEO Succession Planning

The primary responsibility of any company's board is succession planning and the eventual selection of CEO leadership in order to maintain seamless continuity for the company. The process for selecting executive leadership consists of five steps: defining the requirements of the position, designating candidate attributes, recruiting candidates, assessing and evaluating candidates, and making the final selection (Sessa, Kaiser, Taylor, Campbell 1998). Given the importance and complexity of conducting these five

steps, the literature supports and suggests that companies, and in particular boards, would benefit from more focused and complete preparation and planning.

It is not surprising that 40% of directors surveyed consider their involvement in CEO succession planning at less than optimal and just 21% said they were satisfied with their level of participation in developing internal candidates for senior management (Charan, 2005). Whether a candidate is groomed from within the company or is an external hire the process steps are similar. However, the participants in the process are certainly different as in the case of CEO selection by a board of directors rather than the HR department.

Defining the Requirements of the Position:

Any CEO succession planning process must start with a thorough analysis of the organization's strategic and competitive environments so the board can fully understand how an individual candidate's strengths and limitations fit the organization's needs and requirements (Stephenson & Beaudin, 2008). After identifying those requirements, which also informs future strategy, the job analysis occurs to identify the types of jobs required to meet that strategy. Within the job analysis is where a list of attributes, for that particular job, is developed. The board, in conjunction with the current CEO, should clearly articulate the company's future strategy, vision or mission and incorporate that strategy into the position requirements for the CEO. However, survey results of board usage of CEO best practices on developing clear role profiles for a new CEO as aligned with a 5 or more year enterprise business strategy analysis only showed that 63% in

2015 and 62% in 2016 had any such plan (Wright, Nyberg, Schepker, Cragun, & Ulrich, 2016).

Designating Candidate Attributes:

With the speed of change facing business today, the need for effective senior level strategic leaders, who can formulate and execute business strategies to produce desired results, is seen as critical to the very survival of a business (Appelbaum & Paese, 2004). Leadership at this strategic level of an organization requires a different set of attributes than lower level leaders. The three sets of managerial skills an organization's leadership should possess are technical, human (interpersonal), and conceptual (Katz, 1955). In a 2007 study, Mumford, Campion, and Morgeson (2007) further analyzed and redefined these managerial attributes as follows:

- 1) Cognitive Skills: Basic information utilization, problem solving, critical thinking, communication, and reading comprehension.
- 2) Interpersonal Skills: Social awareness, judgment, persuasion, negotiation, and the ability to coordinate with others.
- 3) Business Skills: Business acumen, financial management, material and personnel resources.
- 4) Strategic Skills: Perceptiveness and understanding, visioning, complex problem solving, and developing complex cognitive representations of strategic environments.

The results of a further analysis and ranking by executives showed that while basic cognitive and interpersonal skills continue to contribute to overall success, business acumen and strategic skills became proportionately more important at the CEO / Senior Executive level (Mumford, Capion, & Morgeson, 2007).

In another study the Center for Creative Leadership interviewed hundreds of top executives, while attending their programs, and identified these ten requirements sought in executive candidates: (the top five) specific functional background, managerial skills, interpersonal skills, communication skills and technical knowledge and to a lesser degree (the bottom five) flexible/adaptable, creative/innovative/original, intelligent/fast learner, fits with culture, and strategic planning skills (Sessa, 1998).

The Center for Creative Leadership, in 2007, surveyed 1100 managers and they identified the following leadership skills that would be important over the next five year- collaboration, change leadership, building effective teams, influencing others without authority, driving motivation, coaching, building and mending relationships, adaptability, paying attention (Martin, 2007).

In over 30 years of research and practice in the field of executive assessment, Development Dimensions International, with extensive input from their own clinical psychologists and client senior leader feedback developed the following nine roles of strategic leadership (Appelbaum & Paese, 2004):

- 1) Navigator: Clearly and quickly works through the complexity of key issues, problems and opportunities to affect actions (e.g. leverage opportunities and resolve issues).
- 2) Strategist: Develops a long-range course of action or set of goals to align with the organization's vision.
- 3) Entrepreneur: Identifies and exploits opportunities for new products, services, and markets.
- 4) Mobilizer: Proactively builds and aligns stakeholders, capabilities, and resources for getting things done quickly and achieving complex objectives.
- 5) Talent Advocate: Attracts, develops, and retains talent to ensure that people with the right skills and motivations to meet business needs are in the right place at the right time.
- 6) Captivator: Builds passion and commitment toward a common goal.
- 7) Global Thinker: Integrates information from all sources to develop a well-informed, diverse, perspective that can be used to optimize organizational performance.
- 8) Change Driver: Creates an environment that embraces change; makes change happen – even if the change is radical – and helps others to accept new ideas.
- 9) Enterprise Guardian: Ensures shareholder value through courageous decision making that supports enterprise – or unit-wide interests.

The literature differs on a single set of attributes for business executives and there is no agreement on which set of attributes is more important than another. Results from one

previous research analysis found that relationship skills, rather than performance skills, distinguished successful from unsuccessful executives (Sessa & Taylor, 2000). The elusiveness of developing a single attribute list may also be compounded by the fact that 44% of boards surveyed said that succession is only taken seriously when the organization is struggling (Witt & Kieffer, 2016). Poorly or no defined attributes related to the executive position makes the assessment process much more elusive and more likely to result in an incorrect selection.

Recruiting Candidates:

Candidate availability for executive positions are either internal or external to a company. When companies are performing well and little strategic shift is required internal candidate selection is more likely. However, when companies are performing poorly and require a new strategy the search for external candidates is in many cases a more critical requirement. A question for business now and in the future is how will they identify the next senior leaders and where will they come – from within or external to a company? According to Development Dimensions International (DDI), the shallow pool of qualified executives will shrink further in the next few years due to a wave of retirements by baby boomers and the fact that fewer experienced leaders are left to move up because of widespread cuts in business that thinned the ranks of middle management in the ninety's (Rogers & Smith, 2003-2007). Competition for qualified leaders will continue to be a business challenge.

Assessing and Evaluating Candidates:

The opinion of current senior executives (59%) is the number one method used, in companies, for executive selection, followed by performance appraisals and resume (51%), and then by a formal talent review process (42%) (Church & Rotolo, 2013). Yet, while only 16% of this sample utilized customized 360 feedback based on competency assessments, 14% psychological testing, 9% cognitive measures, 7% assessment centers, and 4% business simulations (Church & Rotolo, 2013). Current selection methodology heavily weights the traditional resume and interview process which focuses primarily on past performance. However, a resume does not speak to potential and it certainly does not tell you if someone will continue to grow into the type of senior leader for which a company might be looking. The reliance on the resume, interview, and opinion process are just several of the contributing factors to the challenges that companies face in selecting the right senior executive. Recently, research regarding specific models, measures, and approaches to assessment theory including the benefits of using multiple methods has re-emerged. However, little is published with respect to what companies are actually using with respect to their formal assessment programs (Church & Rotolo, 2013). The low percentage of use in predictive tools such as psychological testing, cognitive measures testing, assessment center processing, and business simulations means that selection of a senior executive is consistently based on past performance alone.

Final Selection:

For the purposes of my study, this researcher elected not to expend time and resources examining the subject further. The final selection process of senior executives seems to be even more elusive in the literature than determining the attributes required of a CEO for a particular job. This final step in the process can be just as methodical as the previous four steps, however, at this point the likely influences by personalities, biases, and agendas from board members and current senior executives has the potential to skew the selection process. A fair and transparent process leads to a new CEO having more support and a thorough selection process also means a deep knowledge of candidates by board members and insights from experts who are independent of the search adds credibility to the selection process (RHR International Executive Insight, 2016). Written succession and selection rule sets establish process however as indicated earlier in the Stanford School of Business study less than 50% of companies surveyed have written plans (Stanford GSB, 2010).

Summary

This literature review identifies several problem areas faced by business in the selection of the “right” senior executive. As stated, most companies are aware of the challenges they face with regard to the issue of succession planning but still fail to resolve the problem. In each one of the 5 steps of succession planning, companies are challenged with getting the process “right” but are failing to adequately execute each step which would contribute to the successful selection of senior leadership. Another challenge companies are faced with is a reliance on the resume and interview process that weighs

past performance and does not address the potential and possibility of predictive success in the future. Couple this with a lack of written succession plans and this industry gap would welcome a solution.

Given this business problem, identified within the literature, documenting the Special Forces' 70 years of experience associated with its own challenges of assessment and selection has value. By documenting and understanding how SF identifies its own requirements for a position, designates personal attributes, assesses and evaluates candidates and then makes its final selection through analysis a new theory may emerge that could be further studied. Through Grounded Theory Methodology, the development of this new theory could contribute to the challenges identified in the literature review.

CHAPTER THREE: METHODOLOGY

Grounded Theory Using Historical Quantitative Data

The purpose of using Grounded Theory for my study was to understand the gaps identified in the literature review and then to develop a new theory as a result of documenting the Special Forces Assessment and Selection program. This researcher's approach will be to leverage Grounded Theory methodology to study the phenomenon of SF selection process to see if a new theory emerges that can be codified and tested. A key idea is that this theory development does not come "off the shelf," but rather is generated or "grounded" in data from participants who have experienced the process (Strauss & Corbin, 1998). As such the study will leverage existing data collected from the Special Forces candidates who actually attended SFAS (Special Forces Assessment and Selection). The outcome will be a theory or model that explains how SF designed an assessment and selection process, evolving as it did over time, to produce more favorable outcomes.

Therefore, my study will consist of my own analysis and re-validation of three previously documented Special Forces reports, over a 70 year period, each designed with predictive analysis as the end state. The researcher will use Grounded Theory Methodology (GTM) to document, explain, and look at data associated with each process with a goal of producing a theoretical model and framework for future analysis

and study. This resulting theory could potentially be used, by business, to address the problems documented in the literature review.

The literature review revealed several gaps across business resulting in a failure to adequately address the problem of succession planning and senior executive selection. The failure to define position requirements, develop individual attributes needed in a senior executive, and executing a method of assessing future potential rather than past performance all contributed to this industry gap.

The U.S. military's Special Forces perform unique and select special missions that require personal capabilities and skills not ordinarily found in the average soldier. "Indeed, the most important compound of success in all Special Forces missions is the people we commit to them...We are continually seeking new and innovative ways to select the 'right' people,....All of our major programs for the future start with the premise that we must have the 'right' people in the right place with the right training if we are to succeed" (Commanding General of Special Forces, 1996). Because Special Forces places so much emphasis on its people it has invested, emphasized, and analyzed the problem of getting selection correct.

Grounded theory methodology (GTM) is designed to enable the discovery of inductive theory by allowing the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data (Martin and Turner, 1986). John Creswell quotes Corbin & Strauss, 2007,

stating that “the idea of grounded theory study is to move beyond description and to generate or discover a theory, a ‘unified theoretical explanation’ for a process of action” (Creswell, 2013). This research evolved as a qualitative approach anchored by grounded theory design. This allowed for the re-analysis of previous data from within each of these reports while looking for new emergent themes that could be validated and documented by comparing all three Special Forces Assessment and Selection Programs to one another. Something not previously accomplished.

These procedures allowed for the identification of patterns in the data which when analyzed resulted in the establishment of a theory. Because the theory-building process is so intimately tied with evidence, it is very likely the resultant theory will be consistent with empirical observation (Urquhart and Fernandez, 2006).

The research involved the analysis of data gathered by Special Forces at three different historical points over a seventy year period of development and transition of their assessment and selection program. Grounded Theory allows the development of a theoretical account of the general features of SFAS while simultaneously grounding the three studies in empirical observations. This researcher applied grounded theory by focusing on the processes and actions of the distinct steps and phases of assessment and selection as they occurred over time thereby resulting in an explanation of this SF phenomena (Creswell, 2013). The end result will be a full understanding of the Special Forces selection process. The data collected in all three studies consisted of interviews

and a series of established questions, answered by candidates being assessed, and was administered by qualified clinical psychologists and military professionals.

Data Analysis

The analysis used consisted of three phases of coding as advanced by Strauss and Corbin consisting of open, axial, and selective (Strauss & Corbin, 1998). The data was already assembled in an understandable format within each Special Forces' study.

After reading each of the three studies the first step in open coding involved an examination of the text describing each study's process. Descriptive coding was used to identify the themes of attribute development, psychological and skills assessing and testing. During this phase the researcher grouped these like categories by specific words in order to identify any smaller set of themes thereby reducing the data base categorizing the process of selection. Next, the researcher created a series of themed word trees that visually aided in the grouping process so that each could be looked at independently and also as a dependent variable linked by process and utility.

The next step involved the identification of a central phenomenon from these smaller sets of categories. Axial coding provided a deeper understanding along with greater insights into the phenomenon of selection. During this step the researcher applied the identified themes from the open coding to RQ1 and also related the more detailed word trees to the literature review comparing some of the gaps that were identified with specific like themes. Each grouping was then analyzed to determine its relevance in

relation to its contribution to a potential new model that describes the SF phenomenon of selection.

This was then organized into a figure, or coding paradigm, representing the theoretical model that depicts the SFAS process and methodology. The final step in the analysis, selective coding, concluded with the researcher developing two analytical diagrams or matrixes to explain the central theme (namely the development of attributes) involved in this selection process.

The first study, conducted immediately following World War II, considered ground breaking at the time since no previous process of its kind existed, was conducted by the Office of Strategic Services (OSS) assessment staff (Mackinnon, 1974; Banks, 1995; Banks, 2006; Handler, 2010). This staff was charged with developing the first assessment and selection program that would eventually serve as the model for future SF programs consisting of a series of psychological assessments, skills evaluations, and physical testing. The two subsequent studies were conducted by the Army Research Institute (ARI), an outside research group, chartered by Special Forces Headquarters with providing an academic and statistically grounded analysis of their assessment and selection process. The purpose of each study was to make sure SF was “getting it right” (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988; Beal, 2010)

The second study was conducted in 1986 - 1988 during the rebuilding and growth of Special Forces when the U.S. military transitioned from the Selective Service Act (the Draft) to an “all-volunteer” force. The most recent study conducted, in 2010, was a review of SF’s A&S program, after 20 plus years of use, to revalidate the overall process and to look at addressing resiliency in candidates as a result of SOF’s continuous state of war.

Access to these studies while not classified is challenging because none are widely published or currently in circulation. The original 1948 OSS study entitled in the book “The Assessment of Men” has long been out of print and is generally unavailable. However, recent electronic versions are being posted on line because of the re-emergence of its value, as an academic work, in describing the methodology in the development of the first formal assessment program (Banks, 1995; Handler, 2010; Lenzenweger, 2015). The Army Research Institute studies were obtained from the United States Army Special Operations History Office whose access was provided by being assigned to Special Forces for the last 22 years.

The rich data gleaned from these studies, general discussions with assessment cadre, and personal observation attained over many years of personal involvement all contributed to a greater understanding of the assessment and selection process. This also assisted in aiding in the analysis of each program and the comparison in order to identify and code common themes. This understanding provided the impetus in

developing a theory as a result of documenting commonalities in each Special Forces assessment and selection study over the 70 year timeframe.

The data from these three separate studies was analyzed for common themes. The nodes that emerged were labeled as nodes consistent with my RQ1. Those common themes were grouped by the identification of attributes in each study and the assessment and selection methodology itself. The data in each case study differed slightly, but the process generally remained constant consisting first of identifying traits or attributes followed by a methodical process of psychological assessments, skills evaluations, and physical testing. This process remained consistent, with the original 1948 OSS Assessment of Men study, but with some modification because of the development of more effective evaluation tools and methodology

CHAPTER FOUR: RESULTS

The purpose of this chapter will be to look at existing data and conduct the analysis on several sets of previously established data as a baseline to the history, process, and methodology for the Special Force's Assessment and Selection program.

Historical Significance: The Office of Strategic Services (OSS) Assessment of Men – The Beginning

Current United States Special Forces traces its lineage from the Office of Strategic Services (OSS) – the precursor to the Central Intelligence Agency (CIA).

The OSS in order to resolve the issues resulting in catastrophic failure behind enemy lines developed the first formal process for assessing and selecting operatives to perform clandestine and special missions. Initial reports back from the field regarding poor performance due to incompetence or psychological dysfunction in high-threat/stress situations suggested the need for a more thorough and detailed assessment of OSS candidates to improve the selection process before deployment (Banks, 1995).

In doing so, the OSS leadership realized they were in need of assistance from outside the organization. In response to the need for professional assistance in developing a more thorough psychological and behavioral assessment adjunct to selection, the OSS

reached out to a number of prominent clinical psychologists and psychiatrists in the academic community within the United States (MacKinnon, 1974).

A select group of psychologists were assembled to form the OSS's first assessment board consisting of six psychologists and 50 other clinical and staff professionals.

Before the war would end well over 5,000 candidates would be assessed using the methodologies developed by the assessment board and similar assessment centers established around the world to meet the war's aims.

The concept of selecting leaders before battle was not new. Thomas Jefferson's very concept for establishing the United States Military Academy at West Point was to ensure the country had a cadre of well selected and trained officers. However, selection processes prior to the advent of the OSS's Assessment of Men study were not systematically practiced or even documented. The U.S. military realized very quickly the importance of matching a soldier's personnel qualifications to the correct job activity.

The expansion of the U.S. Army during World War I from a little over two-hundred thousand to almost four million required that personal civilian skills be matched in some way in order to increase efficiency and a more effective employment of manpower. Rudimentary mental health screening resulted in the development of the Personal Data Sheet, which was developed to late in the war to be effective, as an effort to assess and match skills to the right job. Neuropsychiatric Screening saw minimal application during

World War II and was not viewed favorably as a screening or assessing tool (Banks, 1995).

With little organized or structured assessment process in which to leverage, as a starting point, the OSS would be breaking new ground beginning with a clean slate in the area of behavioral predictive analysis. Nowhere previously was there a comparable instance in the fields of clinical psychology, personal psychology, or clinical psychiatry fields where intensive study of individuals was carried out for the stated purpose of selection for likely suitability of intelligence or special operations personnel (Lenzenweger, 2015).

While this was true, we have to remember there was a World War going on and the British had already been fighting it for three years before the United States became heavily involved.

As such, the British while conducting their own clandestine operations with their own spies, had already developed some methodology for selecting these individuals. Their process involved the conduct of skills assessments in an attempt to determine predictability in future assignments. This factor would emerge as a continued theme during my application of grounded theory methodology. The OSS staff conducted numerous visits and had established a liaison office with this British counterpart the Special Operations Executive. The OSS was able to bring back best practices in assessing and selecting personnel. The backdrop of World War II and the urgency and

necessity to fill positions in the OSS gave this select group of psychologists' unprecedented access to candidates' data and information and also allowed them the freedom to develop an assessment program uninhibited by military bureaucracy.

The goal of the assessment board was twofold. First the OSS had to determine the relative usefulness and effectiveness of men and women who had already been selected because of a particular skill required by the organization. Secondly, personnel had to be assessed with respect to a selection of pre-determined attributes and personality qualifications that benefited the overall mission of the OSS (OSS Assessment Staff, 1948).

To accomplish all this, it was considered necessary to set up a program of assessment according to organismic (gestalt) principles. Gestalt psychology and Organismic theory were prevalent in both the academic and clinical fields during the first half of the 20th Century. Organismic Theory tends to stress the organization and integration of human beings expressed through each individual's inherent growth or development tendency. Gestalt Psychology's central principle is that the mind forms a global whole with self-organizing tendencies (Fitts, 1946). Specifically, it became important to design a variety of tasks-in-situations which would test a man's effectiveness in performing functions of the same level, and under somewhat similar conditions, as those he would be required to perform in the field (Murray & MacKinnon 1947). With respect to both concepts the OSS board utilized both psychological principles to stress the organization and integrate those being assessed through each operative's inherent growth and development.

The major problem that faced the selection board was a general lack of information on the ultimate jobs that an assessed candidate would be performing. The secret nature of the type of work and location that a candidate would be employed was unknown. There were few adequate job descriptions and no OSS staff member had any real knowledge of more than a small fraction of the OSS activities or of the various cultural settings in which these people would find themselves assigned (Handler, 2010).

For this reason the OSS staff determined that a general set of qualifications common to all candidates would be developed and used as the baseline for assessment. The staff recognized that the success or failure of a stressful secret mission would probably depend in large part on the candidate's ability to cooperate and get along with others and to lead others in a harmonious and productive manner (Handler, 2010). Thus, the task of assessment as an intellectual proceeding was more of a diagnosis (inferring general tendencies and traits and their interrelations from a number of specific signs) and prognosis (on the basis of what is known about these tendencies, traits and relations, to predict future patterns of behavior) to decide on the suitability of each candidate (Murray & MacKinnon, 1947).

The OSS Assessment Staff developed the following ten variables of personality (OSS Assessment Staff, 1948):

- 1) Motivation for Assignment: the degree to which a man felt impelled to contribute to the war effort; his interest in the proposed assignment.
- 2) Energy and Zest: average level of purposive activity and initiative.

- 3) Practical Intelligence: skill in dealing with things, with people and ideas.
- 4) Emotional Stability: governance of emotions under stress; absence of anxiety, anger and depression; absence of neurotic symptoms.
- 5) Social Relations: ability to get along with all kinds of people; cooperativeness; absence of annoying traits.
- 6) Leadership Ability: ability to organize groups and evoke cooperation and respect.
- 7) Security: ability to keep secrets and maintain cover.
- 8) Physical Ability: agility, daring, ruggedness.
- 9) Observation and Reporting: ability to observe and remember significant facts; to evaluate information; to report accurately and concisely.
- 10) Propaganda Skills: ability to devise and execute subversive measures for disintegrating the morale of the enemy.

Observation and evaluation of these 10 traits took place over a three and half day period in a secluded area, 15 miles outside of Washington DC, where a group of 18 candidates were observed by a staff of 7 psychologists, psychiatrists, and sociologists along with a group of about 8 graduate students of psychology. When the candidates arrived they were told they would be given tests and to be asked questions by psychologists and psychiatrists. Since there were, in all, 35 procedures, and since each procedure provided an opportunity to rate 1 to 4 variables, there were anywhere from 2 to 10 scores for every candidate on each of the 10 traits by the end of the three and half days of assessment (Murray & MacKinnon, 1947).

The assessment of each candidate concluded with a staff conference, or review board, in which to integrate and synthesize all that had been learned on about the totality of a candidates' personality and to render a prediction regarding the possible future performance of the candidate in an OSS role (Lenzenweger, 2015).

When the war ended most of the information collected by the assessment board was destroyed, for security reasons, but some of the rich data gleaned from this effort survived as appendices and is contained in the book written after the war by staff members of the assessment board titled "The Assessment of Men" (OSS Assessment Staff, 1948).

The value of this book is still significant 70 years later in the underlying fact of placing the majority of responsibility for assessment on the trained assessor and not on the test instrument alone (Handler, 2010). This book also reemphasizes the importance of having a clear an established criterion in which an assessment must predict something that while known is often overlooked today. The traits established by the OSS assessment board were carefully crafted to establish the personality and "whole person" baseline of the type of individual they were seeking to hire for the organization. Special Forces adopted both tenets as they developed their modern approach to assessment and selection which would be grounded in process and outcome. The insights gleaned from the OSS program are still deemed important, not only from a historical perspective, but because they continue to inform operational personnel selection today (Banks, 2006).

Even with the destruction of most of the 5,000 candidate records some valuable information remained. The data available is contained in a correlation matrix relating the variables generated by the staff conference results for the candidates as published in the Assessment of Men (OSS Assessment Staff, 1948). They used this data to conduct a limited multivariate analysis using exploratory factor analysis (EFA). At the time confirmatory factor analysis (CFA) did not exist. More recently Mark Lenzenweger conducted a study titled Factors Underlying the Psychological and Behavioral Characteristics of Office of Strategic Services Candidates: The Assessment of Men Data Revisited. Utilizing modern statistical analysis tools /techniques and methodologies he reanalyzed the OSS's assessment staff data. The results of Lenzenweger's analysis provided a fresh statistical look at the original OSS data. This researcher then applied this re-analysis to his own grounded theory study in which to compare and contrast the long standing assessment and selection practices used by Special Forces.

The data analyzed was grounded on the 10 personality traits, plus and overall rating, devised by the OSS assessment board as measured against 133 subjects presented in the form of a published correlation matrix in the Appendix (OSS Assessment Staff, 1948). These are contained in the correlation matrix in Table 1. For the purposes of analyzing the data using modern statistical methods the original overall rating was eliminated, deemed redundant, because it was statistically infused with the ratings of the other 10 variables under consideration (Lenzenweger, 2015).

Table 1: Inter-correlations among the final assessment variables: OSS Assessment Program at Station S

This is the original data collected by the OSS Assessment Staff minus the overall rating (OSS Assessment Staff, 1948).

	Motivation (1)	Energy & Initiative (2)	Effective Intelligence (3)	Emotional Stability (4)	Social Relations (5)	Leadership (6)	Physical Ability (7)	Security (8)	Observing & Reporting (9)	Propaganda Skills (10)
1	–									
2	0.47	–								
3	0.31	0.56	–							
4	0.43	0.53	0.23	–						
5	0.39	0.38	0.27	0.62	–					
6	0.44	0.72	0.65	0.48	0.44	–				
7	0.26	0.41	0.06	0.34	0.38	0.21	–			
8	0.27	0.21	0.11	0.37	0.33	0.16	0.13	–		
9	0.23	0.31	0.63	0.22	0.32	0.32	0.07	0.18	–	
10	0.37	0.36	0.7	0.21	0.28	0.51	-0.07	0.21	0.53	–

The updated study of the OSS data in Table 1 was reanalyzed using both EFA and CFA in a stepwise manner in which nested models were systematically evaluated for their fit to the data and their relative fit with respect to each other, taken in succession (Lenzenweger, 2015). The data was used in four models (null, one-factor, two-factor and three-factor) and its significance identified. The null value achieved its purpose to determine whether or not the model could be rejected. The significance of the one-factor model yielded a holistic approach, in relation to all 10 traits, and its usefulness to the assessment staff would be consistent with their “whole person” approach methodology. This researcher utilized this reanalyzed EFA and CFA during the grounded theory coding process which identified the theme of attribute development when compared and contrasted with the two other studies used in my research.

The two-factor model would link emotional stability with interpersonal traits while grouping cognitive traits with those associated with intelligence:

- 1) Interpersonal /Social/Emotional Variables: (social relations, emotional stability, motivation, energy and initiative, leadership, physical ability, and security)
- 2) Intelligence Processing: (effective IQ, propaganda skills, observing and reporting)

The three-factor model grouped the following variables:

- 1) Emotional and Interpersonal Factors: (social relations, emotional stability, and security)
- 2) Intelligence Processing: (effective IQ, propaganda skills, and observing and reporting)
- 3) Agency/Surgency: (motivation, energy and initiative, leadership, and physical ability)

The addition of this third factor under the definition of surgency (a trait of emotional reactivity in which a person tends towards high levels of positive effect) has both emotional and physical aspects as identified by the sub-categorized traits above.

Table 2 shows a modern view of the results of EFA using principal axis factoring and shows similar results, (although not identical) in comparison to Table 3 (which is the original EFA conducted by the OSS assessment board and is contained within The Assessment of Men appendix). The order of the variables in both Table 2 and 3 is the

same to facilitate comparison and future analysis. This comparison provides the statistical significance to the value of using a three-factor model as an effective way in which to conduct the assessment of the candidates that the OSS was looking for. This also provided the OSS team with the additional information that validated the use of the attributes that they called personality factors at the time. The assessment staff understood the importance of establishing these personality factors in order to develop the appropriate assessment and evaluation tools to predict which candidates would display these traits.

Table 2: Results of the exploratory factor analysis (EFA) using principal axis factoring (Lenzenweger, 2015)

OSS Variable	Factors		
	Factor 1	Factor 2	Factor 3
Effective IQ	0.876		
Propaganda Skills	0.808		
Observing and reporting	0.624		
Social relations		0.728	
Emotional stability		0.701	0.378
Security		0.455	
Motivation for assignment		0.413	
Energy & initiative			0.86
Leadership	0.495		0.588
Physical ability		0.355	0.394

Table 3 is included in these results because it displays the original factor analysis conducted by the OSS staff and shows the inter-correlations on the variables themselves by bringing recognized and unrecognized central factors running through them (OSS Assessment Staff, 1948). Factor A (labeled Adjustment) embraces

Emotional Stability and Social Relations both of which are dependent on each other. Security is significant, within this factor, because the OSS staff deemed it essential in the ability for one to control one's behavior sufficiently to protect information. Factor B (labeled Effective Intelligence) consists of Effective IQ, Propaganda Skills, and Observing and Reporting all of which are significant as they related to a candidates ability. Factor C is labeled Physical Energy because of the significance of the factors Physical Ability and Energy and Initiative. The OSS staff labeled a fourth Factor (4) as Authoritative because the factor loading consisted of Leadership but it also had significance in Factor 3 Physical Energy. This was explained and determined principally by both factors because of the foundations of leadership and its relationship with the authority over others and seems to also be based the energy necessary to maintain leadership, especially in the leaderless situations of assessment (OSS Assessment Staff, 1948).

In both Table 2 (the modern re-analysis of the data) and Table 3 (the original factor analysis) the emergence of the three factor approach emerges as significant.

Table 3: Results of the original Exploratory Factor Analysis (EFA) as reported in the OSS Assessment of Men (OSS Assessment Staff, 1948)

OSS Variable	Factor 1 Adjustment	Factor 2 Effective Intelligence	Factor 3 Physical Energy	Factor 4 Authoritative Assertion
Effective IQ	-0.18	0.55	0.14	0.24
Propaganda Skills	0.09	0.42	-0.13	0.21
Observing and reporting	0.02	0.52	-0.08	-0.07

Table 3 continued

Social relations	0.40	0.14	0.02	-0.15
Emotional stability	0.46	-0.09	0.11	0.04
Security	0.42	-0.02	-0.15	-0.06
Motivation	0.26	-0.03	0.16	0.2
Energy & initiative	0.00	0	0.53	0.42
Leadership	0.03	0.14	0.35	0.39
Physical ability	0.05	-0.1	0.42	-0.04
Overall	0.14	0.43	0.06	0.05

Table 4 supports the original OSS findings developed for the assessment program resulting in the three-factor model as statistically relevant. This three factor approach is consistent with Intelligence, Emotional Stability and a combination of motivation, leadership and physical ability. This three factor approach will continue to have significant statistical relevance for Special Forces well in the future.

Table 4: Factor loadings for competing models obtained using confirmatory factor analysis (Lenzenweger, 2015)

OSS Variable	Competing Models					
	One Factor	Two Factor		Three Factor		
	1	1	2	1	2	3
	Unifactorial	Emotional/Interpersonal	Intelligence Processing	Intelligence Processing	Emotional/Interpersonal	Agency/Surgency
Effective IQ	0.73	-	0.94	0.99	-	-
Propoganda Skills	0.62	-	0.75	0.71	-	-
Observing and reporting	0.51	-	0.67	0.64	-	-
Social relations	0.56	0.58	-	-	0.71	-
Emotional stability	0.59	0.65	-	-	0.89	-
Security	0.29	0.3	-	-	0.42	-
Motivation for assignment	0.56	0.58	-	-	-	0.55
Energy & initiative	0.79	0.84	-	-	-	0.84
Leadership	0.84	0.83	-	-	-	0.85
Physical ability	0.31	0.39	-	-	-	0.35

A Reassessment of Special Forces Assessment and Selection Processes, 1986.

Special Forces traces its lineage back to the organization and exploits of the OSS and other specialized units in World War II. However, today's Special Forces identify their birth to the stand-up of the Psywar Center (the forerunner of today's U.S. Army John F. Kennedy Special Warfare Center and School) and the 10th Special Forces Group at Fort Bragg, North Carolina in 1952. For the first 30 years of its existence SF followed a regular regimented Army process for selecting and training its personnel. This consisted of standard Army screening procedures involving a perspective SF soldier to take the Army Physical Fitness Test (APFT) (consisting of sit-ups, push-ups, two-mile run test, swim test, to have a medical check-up, to possess a GT score of at least 110 (defined as the General Technical (GT) Word Knowledge, Paragraph Comprehension, Arithmetic Reasoning, and Mechanical Comprehension test as part of the Armed Services Vocational Battery (ASVAB used to determine qualification for enlistment in the U.S. Armed Forces), and be capable of attaining a secret security clearance. Even though the standards SF established for these tests were higher than those for average Army soldiers an unusually high degree of failures was occurring in the Special Forces Qualification Course (here after referred to as SFQC).

This was the three phased course that trained and certified perspective SF candidates to be assigned to a Special Forces operational unit to conduct unique sensitive missions. Dissatisfaction with the existing screening process was evident in recent (August – October, 1986) discussions with SF detachment personnel who expressed concerns over what they considered excessively high attrition rates, approximately 40-

50%, during the last 6 years (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988). But was the attrition rate truly a problem if SF standards were more rigorous than within the regular Army? If Special Forces could lower the attrition rate without reducing standards then that solution had merit in the reduction of cost in dollars and training time.

Throughout the Cold War and Vietnam War little in terms of attributes of the Special Forces soldier existed in any formal sense that could be used to evaluate against. SF had grown accustomed to the success they experienced in the 1950s and 1960s fighting this Nation's Unconventional Wars. However, with the end of the Vietnam War the 1970s saw a decline in the quality of soldier available to join the Special Forces (Congressional Budget Office, 2007). Even with this reduction the primary task to Special Forces remained the same: Be prepared to conduct the U.S. Army's most critical missions. This was the situation that existed up until the 1986-1988 time period (the Army Research Institute Study was conducted during this time) when it was decided that something had to change.

In 1988, the use of psychological assessments in Special Forces was reborn with the development of a formalized assessment program that would eventually screen 20,000 soldiers for assignment in the next 10 years (Banks, 2002). The program was designed to serve two purposes: provide the operational force with the appropriate soldier and prevent the Army from wasting resources on candidates that are not compatible with Special Forces training.

The program's starting point was the Army Regulation 611-201 (Enlisted Career Management Fields and Military Occupational Specialties) which outlined the requirements for a Special Forces soldier. An AF soldier must possess above average mental and physical abilities in addition to being proficient across a wide range of military skills – the soldier must possess effective oral communication skills, analytical ability, ability to recall detailed instructions, and a high degree of emotional stability to facilitate quick thought and action in rapidly changing situations involving personal hazard. Physically the SF soldier must have stamina, agility, and endurance for the performance of strenuous tasks for prolonged period (Department of the Army, 1987).

These documented Army requirements were used as the building block to establish, for SF, the eventual attributes that a formal assessment program would be built around. Once the decision was made to develop an assessment and selection program to prescreen potential SF soldiers for the qualification course the rich history and work completed by the OSS assessment board was used as its foundation. The profiles of the special missions and the types of individuals Special Forces was looking for mapped well to the processes used by the OSS to select their personnel in World War II.

Leveraging the success of the OSS program SF modeled their program along the same methodology. The task-skill breakdown provided by AR 611-201 suggested three general classes of predictors for initial evaluation: Intelligence, Personality, and Physical Fitness. These three dimensions were also supported by the staff psychologist from the

Special Warfare Center and which could also be mapped back to the factor model in Table 4 above.

Since Armed Service Vocational Aptitude Battery (ASVAB) composite scores were available for many of SF candidates, this data was collected and served as a fourth class (aptitude) of predictor variables (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988). The two-year study conducted by the Army Research Institute analyzing successful soldier traits, in relation to the SF missions, and with the following command guidance “find candidates that are reasonably fit, reasonably motivated, and reasonably intelligent” developed the following 13 attributes that were deemed necessary for the Special Forces Soldier:

- 1) Physical Fitness: Displays acceptable levels of muscular strength and endurance, stamina, and motor coordination according to the course requirements.
- 2) Motivation: Persist at accomplishing the task. Takes the initiative to participate in or complete a task without hesitation.
- 3) Teamwork: Has the ability to work effectively in a small group environment. Encourage others.
- 4) Stability: The ability to control emotions (e.g. fear, anger, happiness, frustration) in order to remain effective and efficient in attainment of the objective. Calmness under stress. Does not become unnecessarily excited under pressure.
- 5) Trustworthiness: Demonstrates integrity and honesty in all actions and words.

- 6) Accountability: The ability to follow direct instructions and keep track of equipment and self. Shows awareness of and concern for safety and rules and restrictions.
- 7) Intelligence: The ability to comprehend and apply concepts. Can recognize and analyze the components of a problem and develop courses of action to solve the problem. Displays common sense.
- 8) Maturity: The ability to recognize and demonstrate appropriate behavior for a given situation.
- 9) Communication: The ability to express essential information in a clear and logical manner in order to accomplish the mission.
- 10) Judgement: The ability to take all known facts into consideration and make logical decisions when choosing among alternative solutions.
- 11) Influence: The ability to persuade team members to accomplish their common goal. Demonstrate effective use of authority.
- 12) Decisiveness: The ability to implement a course of action in a firm, prompt, and positive manner. Will not change his decisions without good cause.
- 13) Responsibility: Accomplishes leadership tasks, including the development and implementation of plans and supervision of others. Ensures the health and welfare of the team members. Completes tasks in accordance with established course constraints, including time constraints for mission accomplishment.

Before the first official 3 week assessment and selection course Special Forces conducted a pilot course using OSS methodologies as an initial proof of concept. The

subjects used (339 soldiers) from the September 1986 – January 1987 Special Forces Qualification Course. Utilizing the four factors of Intelligence, Personality, Physical Fitness and Aptitude a selected team of SF training officers and organizational psychologists collected the following data.

Intelligence: After consultation with Auburn University Department of Psychology faculty members, the Wonderlic Personnel Test (WPT) was selected as the primary instrument to assess general intellectual capacity. Analysis for the Wonderlic scores yielded no significant differences. According to Wonderlic, 1983 individuals who score between the 26-30 Range are able to both analyze and make decisions from limited choices, have the ability to learn on their own and synthesize information easily. Since these qualities seemed to underlie the basic requirements listed in AR 611-201 (1987), quick thought and action in rapidly changing situations, an initial WPT cutoff range of 26-28 correct for all SF candidates was established (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988). The overall success rate of those who scored 26 or higher was 67% compared to a success rate of 58% for those who scored below 26. The overall correlation obtained for the pilot obtained between the full range of WPT correct scores was .13 ($P < .10$).

Personality: SF department personnel and Fort Bragg clinical psychologists indicated that a number of individuals graduating from the SFQC while technically competent simply did not possess the temperament

to operate effectively on a small operational detachment. The two tests used were the Jackson Personality Inventory and the Meyers Briggs Type Indicator. The means were calculated for both tests but showed no real statistical significance. However, the richness of the data identified would inform the future development of SF's assessment and selection program.

Physical Fitness: Candidates who were successful scored higher on all three fitness measures than those who were unsuccessful in SFQC. The differences were not statistically significant. But in accordance with the requirements to accomplish the arduous missions assigned to Special Forces physical fitness will remain paramount in the future to every assessment and selection program regardless of how they will be organized.

Aptitude: The ASVAB data identified a higher score by active duty soldiers as compared to reserve soldiers. A minimum score could be established to further discriminate in order to ensure the highest quality SF soldier is assessed and selected.

The empirical evidence gathered during this pilot study was impacted by time constraints and limited the available experimental designs that could be used (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988). This researcher identified through a revalidation of this new data resulting in a confirmation that the

original OSS methodology of the three factor analysis of Intelligence, Personality, and Physical Fitness is still significant and may contribute to a new emergent theory. The Special Forces Warfare Training Center also validated the need to ensure that a team of psychologists was present throughout the assessment in order to assist the selection board in determining a candidate's suitability to attend SFQC and subsequent Special Forces duty.

The personality predictors consisting of the MBTI and JPI did not show any systematic relationship but the team reinforced the necessity to find some test method to provide personality feedback. The MBTI, while initially promising from a construct perspective, is highly complex and was proven to be difficult to relate to specific training variables or performance on an SF team. After further consultation with the Auburn University faculty it was decided that the MBTI would be dropped as one of the personality measures for future validation research (Pleban, Thompson, Valentine, Dewey, Allentoff, & Wesolowski, 1988).

The Roles Cognitive Ability, Physical Fitness and Now Perseverance in the U.S. Army Special Forces Assessment and Selection the 2010 Study

From its early development with the Office of Strategic Services (OSS) the Special Forces has modeled, transformed, and memorialized the process of assessing and selecting personnel. The process derived from the original 1948 Assessment of Men study continues to evolve and improve. The development of the Assessment Center concept, in the business world during the 1960s, found its roots in the methodologies

and rich work compiled by the OSS assessment staff. From this very beginning the basis for success of the SF assessment and selection program has been the identification of suitable attributes in which to evaluate and measure the predictability of potential Special Forces candidates.

The process for selecting these attributes has always been conducted through careful analysis and by a panel of United States Army Special Operations Command (USASOC) leaders. Attributes, as in the first OSS study, are attained by dissecting the requirements for each SF mission and the tasks that are to be performed by each soldier in order for that particular mission to be successful. The unique, often high risk, and strategic nature of SF missions requires that soldiers and especially officers be carefully selected...as the only commissioned officer on the team, he is not only the commander, but the leader/ manager/ soldier at the first line of supervision – responsible for all that the unit does or fails to do (Baratto, 1998).

The process and methodology for attribute development has changed little in the 70 years since the development of the original 10 OSS attributes (called psychological variables during World War II) that they used to measure a perspective candidate against. Just as the original OSS team, then again with the 1988 SFAS team, and now with the 2010 Command team each developed, in conjunction with a mission analysis, a sizable array of attribute requirements. Then through the process of a discussion board each of these moments in time abbreviated without much distortion, by resolving the

terminology differences and by combining related factors a single term attribute term emerged.

Special Forces Attributes 2010 (Developed from the United States Special Operations Command ARSOF Next: A Return to First Principles, 2015):

Professionalism: Standard bearer; mature; exercises sound judgement; confidence tempered by humility; forms candid opinions and makes independent decisions; accountable and characterized by honorable service; a steward of the Army profession.

Adaptable: Adjusts thinking and actions to fit a changing environment; creates innovative solutions to complex problems; navigates different interpersonal and intercultural environments; applies what they know in unfamiliar situations.

Integrity: Trustworthy and honest; acts with honor; ethical; upholds moral and legal standards.

Perseverance: Committed; possesses physical and mental resolve; motivated self-starter; resilient and emotionally balanced; optimistic; internalizes goals and seeks to achieve them without external influence; never quits; confident; balances control with aggression.

Team Player: Reliable; loyal; respects others; values diversity; selfless; contributes to a larger cause or purpose; tireless work ethic; dependable in all situations with all tasks.

Operational Aptitude: Physically fit; strong and agile; technical and tactical expert; effective communicator; expert planner; charismatic; understands operational environment.

Intelligent: Thinks and solves problems in unconventional and creative ways; quickly grasps new concepts, ideas and tasks; rational and logical – not emotional; willing, enthusiastic, lifelong learner.

Courageous: Understands calculated risk; able to overcome fear and failure; sacrifices for a larger cause or purpose; stands up for beliefs; is not intimidated.

In July 2010, the U.S Army Research Institute for the Behavioral and Social Sciences concluded a 10 month study to build on and update the previous 1988 data and analysis on the Special Forces Assessment and Selection (SFAS) process (Beal, 2010).

Changes associated with the events of 9/11 and the near continuous combat environment SF soldiers were being asked to perform necessitated a reevaluation of the 20 year process of assessing and selecting these soldiers.

Continuous combat rotations was placing a new strain on an already over deployed SF force. As such, the John F. Kennedy Special Warfare Center (SWCS), responsible for administering and conducting SFAS recognized the new requirement for assessing perseverance as an individual Soldier characteristic that contributed to selection. In addition to the traditional evaluation of a soldier's cognitive ability, personality, and physical fitness understanding the role perseverance plays when a high level of

performance is sustained over time and under increasingly difficult conditions (as in back to back combat deployments) is an important predictor for the future SF force.

Once again SF turned to the Army Research Institute (ARI) to assist with a study that would identify measures of effectiveness and testing methodologies that might provide a reliable prediction model during SFAS to answer the new question of perseverance. The study took place during the period December 2008 to October 2009 and involved a sample size of 824 candidates who completed a battery of cognitive ability, physical fitness, and perseverance tests prior to attempting to complete a series of SFAS performance events.

As in the past candidates who voluntarily withdrew from the selection process (for personal or physical reasons) had their data removed to eliminate their impact on the overall results. The final results showed that almost all of the current tests and measures used to assess SFAS Candidates were significant predictors of selection training following the SFAS performance events, although the strength of their contributions varied (Beal, 2010). In addition, the findings also suggested that a test for perseverance adds incremental strength to predict SFAS success when combined with existing cognitive ability tests, physical fitness tests, and SFAS performance event scores.

ARI leveraged the work of Angela Duckworth, Department of Psychology, from the University of Pennsylvania and her work contained in her book GRIT: The Power of

Passion and Perseverance whose work developed the Grit Scale as a means of measuring perseverance in adults. She defines Grit as “perseverance and passion for long term goals. Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress. The gritty individual approaches achievement as a marathon; his or her advantage is stamina...Disappointment or boredom signals to others that it is time to change trajectory and cut losses, but the gritty individual stay the course (Duckworth, Peterson, Mathews, and Kelly, 2007).

This concept is exactly in line with the foundational mindset of Special Forces and just the type of individual that SFAS attempts to identify for selection and future training and employment. An SF soldier who possesses this ability would be able to withstand the multiple combat deployments that are now being asked of this force. The Grit Scale consisted of a series of paper-and-pencil tests that were administered to four SFAS classes (N = 824) and were broken down into five subscales. The subscales (and the number of questions that comprised them) are as follows: Grit Score (12 items), Consistency of Interest (six items), Perseverance of Effort (six items), Brief Grit (eight items), and Ambition (five items).

SF has relied on cognitive ability indicators and intelligence (ASVB and GT scores) from the very early days of the OSS as a means to inform selection decisions and job assignments. Duckworth's findings showed the SF research team that grit was greater than IQ in predictive validity and magnitude when measuring achievement and as such

developed these three conclusions: (a) that it is a measurable predictor of accomplishment, (b) that it can account for more variance than IQ, and (c) that it can account for variance independent of IQ (ARI Research Report 1927). Continuous combat operations and stress on the force were significant enough that the decision was made to add the Grit Scale of perseverance to SFAS.

The final sample of candidates from the 4 SFAS classes was N = 758 of which 46% (350) completed SFAS and were selected by the board for SF training and 54% (408) who were not selected (298 voluntarily withdrew and 110 completed the performance events but were not selected by the board).

The following tables provide data that the Special Forces Warfare Center used to inform this decision.

Scale Reliability shows reliability estimates for the Grit Scale subscales. The results show that the subscales have sufficient reliability for this candidate sample.

Table 5: Grit scale subscale reliabilities (Beal, 2010)

Subscale	Reliability (Cronbach's α)
Grit	0.81
Consistency Of Interest	0.81
Perseverance of Effort	0.7
Brief Grit	0.78
Ambition	0.69

Predictive Strength of Grit Subscales. To examine the effects of the individual Grit subscales on SFAS selection, the scores were standardized for ease of interpretation. The results from binary logistic regression analysis, one analysis for each of the Grit subscales are as follows:

Table 6: Binary logistic regression analyses using individual grit subscales (Beal, 2010)

Grit Subscale	N	B (beta)	ρ	Nagelkerke (R)	Odds Ratio
Grit Score	75	0.198	0.00	0.013	1.22
Consistency of	75	0.115	0.11	0.004	1.12
Perseverance of Effort	75	0.189	0.01	0.012	1.21
Brief Grit	75	0.194	0.00	0.012	1.21
Ambition	75	0.219	0.00	0.016	1.25

Analysis of the results of this data indicated that the Consistency of Interest subscale was not a significant predictor (p value was greater than 0.05) of SFAS selection and the research team removed it from further analysis. The four Grit subscales retained for further analysis were included in a single binary logistic regression to determine the effect of a Perseverance model for predicting selection. The results showed that this model's effect on SFAS selection was significant but the amount of variance was relatively small and therefore should not be interpreted in isolation from the additional tests for cognitive ability and physical fitness.

The Army Research Institute team also reevaluated the cognitive tests that had been used for the past 20 years in SFAS. The results in the table below show that all five cognitive tests were significant predictors (p value less than 0.05) of SFAS selection

and were included in a single binary logistic regression to determine the effect of a Cognitive Ability model for predicting SFAS selection. The results showed that this model's effect on SFAS selection was significant and accounted for approximately 19% of the variance, which suggested that the predictive power of this model continues to be relatively robust.

Table 7: Binary logistic regression analyses using cognitive ability (Beal, 2010)

Binary Logistic Regression Analyses Using Cognitive Ability

Cognitive Ability Test	N	B(beta)	p value	Nagelkerke (R)	Odds Ratio
Entry GT	721	0.62	<.001	0.11	1.86
Wonderlic	758	0.574	<.001	0.097	1.78
GAMA	758	0.455	<.001	0.062	1.58
D-Lab	732	0.631	<.001	0.113	1.88
TABE	756	0.872	<.001	0.139	2.39
Years of school completed	754	0.513	<.001	0.076	1.67

The very nature of the Special Forces mission requires each soldier to possess a degree of physical fitness higher than that of regular soldiers in the US Army. As such, SFAS is physically demanding by design and consists of several test in which to gage the physical strength and endurance of a soldiers. These tests consist of the Army Physical Fitness Test (APFT – 2 mile run test, push-up and sit-ups), Pull-ups, two separate Ruck Marchs (carrying a 45 pound back pack over hilly terrain for 12 miles), and the completion of an obstacle course. The 1988 and now the 2010 research study included a single binary logistic regression model that was significant and fairly robust accounting for 22% of the variance.

The results in the Beal, 2010 Study provided the John F. Kennedy Special Warfare Center with several statistical models that could be used to provide a higher degree of predictability in selecting the correct candidate for future SF training. The one purpose of the research was to determine, statistically, the most efficient combination of variables with the greatest magnitude of predictive strength, as indicated by the amount of variance accounted for (Beal, 2010).

Using the 17 variables from the Perseverance, Cognitive Ability, and Physical Fitness Models a model with just 5 variables was found to be statistically significant. The five included 1st Ruck March, TABE, Ambition subscale, Years of School, and APFT. From a purely statistical point of view, using the more efficient five-variable model to screen out candidates who are less likely to be selected following SFAS seems reasonable however SWCS leadership determined that the selecting board should have the rich data from all 17 variables in order to make an informed decision.

The addition of the Grit Scale to SFAS, as a selection tool, provides SF leadership and cadre an empirically valid measure of perseverance that is independent of all other measures (but must be used in conjunction with other cognitive ability tests in order to achieve a holistic psychological profile). Administering the Grit Scale to the entire SF force, not only those attending SFAS, can also serve as a means to counter the challenges associated with multiple combat deployments by developing an SF soldier's individual perseverance has great merit enhancing his professional development.

The results of my revalidation points to the continued value of the original OSS data and process that established a benchmark for the methodology in assessing and selecting personnel. Even with subtle changes in terminology and definition over time what clearly stands out in each of the three studies is that the original process of combining psychological and skills assessments still has statistical significance and value for use by Special Forces. The application of grounded theory methodology to this data in comparison with the other two studies validated the theme of confirming the continued importance of the following factors for selection: IQ and Intelligence related skills, emotional and personal stability, and physical stamina.

The Analysis of Special Forces Attributes as the Criterion that the Assessment and Selection will Measure.

As identified at the outset of the Special Forces Assessment and Selection program, beginning originally with the OSS in World War II, the importance of developing a set of attributes to evaluate against is paramount for the success of any assessment. While not codified in any specific scientific analysis or method Special Forces did leverage some of the original work conducted by the OSS and previously identified above in Table 3. In each of the three studies clinical psychologist's assisted military leaders in developing the attributes in a Special Forces soldier that they were looking for. Military leaders who were familiar with the missions to be conducted worked in conjunction with these psychologists to determine the attributes required in an individual in order to perform the tasks required to complete these missions.

Table 8 provides a historical look at the attributes that were used in each of the studies at three different times of SFAS. While some of the words used to describe the attribute differ slightly, their meaning has a similar connotation. For instance motivation in the 1948 study was defined as: the degree to which a man felt impelled to contribute to the war effort; his interest in the proposed assignment. The 1988 study defined motivation as the persistence at accomplishing the task and takes the initiative to participate in or complete a task without hesitation. This table emerged during coding. The word trees that this researcher developed, from these three studies, identified relationships between each of the nodes and thereby allowed me to figure out the underlying idea and meaning of each and how they were related to each other.

Finally in 2010, motivation is no longer used independently to identify this attribute. Instead, motivation is an essential part of professionalism. Professionalism refers to standard bearer; mature; exercises sound judgement; confidence tempered by humility; forms candid opinions and makes independent decisions; accountable and characterized by honorable service; a steward of the Army profession. All of these traits are internalized by a soldier's desire and motivation to be a professional and uphold the standards of the military.

As SFAS progressed over time the attribute debate continued. With each changing leader in Special Forces their influence impacted the structure and the future of the force. Defining and re-defining the type of soldier that would be selected to meet the SF mission wasn't only impacted by changing leaders. As stated in each study the political

and national security situation also effected the missions of the Special Forces and therefore the type of soldiers and attributes he should possess.

Recently, the command position has emphasized less attributes to define the SF soldier. This is depicted in Table 8. This table also aligns common like attributes between each of the three studies.

Throughout these three studies the main theme that remained consistent was grounded in the original OSS study and the three factors of Intelligence, Emotional Stability and what they termed at the time as Surgency - the combination of motivation, leadership and physical ability. Table 9 regroups the attributes from Table 8 in order to better visualize each according to grouping in the three factor model. Special Forces has over time maintained a consistent baseline for assessing their personnel – the three factors remained constant and was back by the data assembled in each of these studies.

Table 8: Special Forces Attributes:

OFFICE OF STRATEGIC SERVICE ATTRIBUTES 1947	SPECIAL FORCES ATTRIBUTES 1986	SPECIAL FORCES ATTRIBUTES 2010
Motivation for the Assignment	Motivation	Professionalism
Energy and Initiative	Decisiveness	Perseverance
Practical (Effective) Intelligence	Intelligence	Intelligent
Emotional Stability	Stability	Adaptability Courageous
Social Relations	Teamwork, Trustworthiness	Team Player

Table 8 continued

Leadership	Accountability, Judgment, Maturity	Operational Aptitude
Security	Responsibility	
Physical Ability	Physical Fitness	
Observing and Reporting	Communication	
Propaganda Skills	Influence	

Within each of the three factors the individual attributes (or sub-attributes) were modified based on leader and or environmental influences. Attributes for each study were developed in conjunction with clinical psychologists but validated by SF command leadership as a requirement for executing the tasks and missions assigned to Special Forces. In some cases terminology changed but as stated in each of the studies the definition of the attribute remained relatively the same as a characteristic that was desired in a Special Forces soldier.

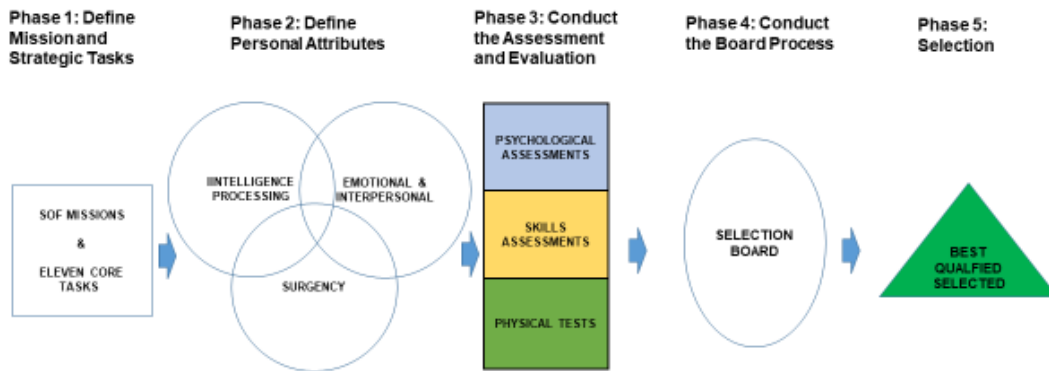
Table 9: Special Forces attributes grouped in the Three Factor Method

	1947 SF ATTRIBUTES	1986 SF ATTRIBUTES	2010 SF ATTRIBUTES
INTELLIGENCE PROCESSING	Effective IQ / Propaganda Skills/ Observing and Reporting	Intelligence/ Influence/ Communication	Intelligent
EMOTIONAL & INTERPERSONAL	Social Relations/ Emotional Stability/ Security	Team Work/ Trustworthiness/ Stability/ Responsibility	Adaptability/ Courageous/ Team Player
SURGENCY	Motivation for Assignment/ Energy & Initiative/ Leadership/ Physical Ability	Motivation/ Decisiveness/ Accountability/ Judgement/ Maturity/ Physical Fitness	Perseverance/ Professionalism/ Operational

Attribute Assessment and Selection Model (AASM)

The following model is this researcher’s graphic depiction of the last 70 years of SF testing and analysis in the conduct of assessment and selection. The literature review

identified and substantiated the challenges that business face with regard to selecting the right senior executives. The purpose of this model is to provide business with a graphical portrayal of the phenomenon of SF leader assessment and selection.



SPECIAL FORCES ASSESSMENT AND SELECTION PROCESS MODEL

Figure 1: Special Forces assessment and selection process model

CHAPTER FIVE: CONCLUSIONS

Summary:

This research began with a question concerning the alarming failure rates of senior executives in business and the inadequacies of corporate succession planning. This was followed by the application of Grounded Theory Methodology to research and document the SF program of succession planning to see if a model would emerge. A new model did emerge as a result of that process in the form of The Assessment & Selection Model (referred to hereafter as The A & S Model).

The A & S Model below begins with a Phase I that involves the development of sub-factors that are composed within the three factors identified through Grounded Theory consisting of Intelligence Processing, Emotional and Personal, and Surgency. The resulting documentation from SFAS provides the start point for additional analysis and identification of these sub-tasks by business. Phase II provides the basis for future development of assessment tool in which to evaluate the attributes. These consist of the combination of Psychological, Skills and Physical evaluations. Phase III then culminates with a formalized board process in which rule sets provide the impetus to reduce bias. The final phase ends with the selection of the best qualified candidate based on a predictive method of success in the position and requirements that this model was applied against.

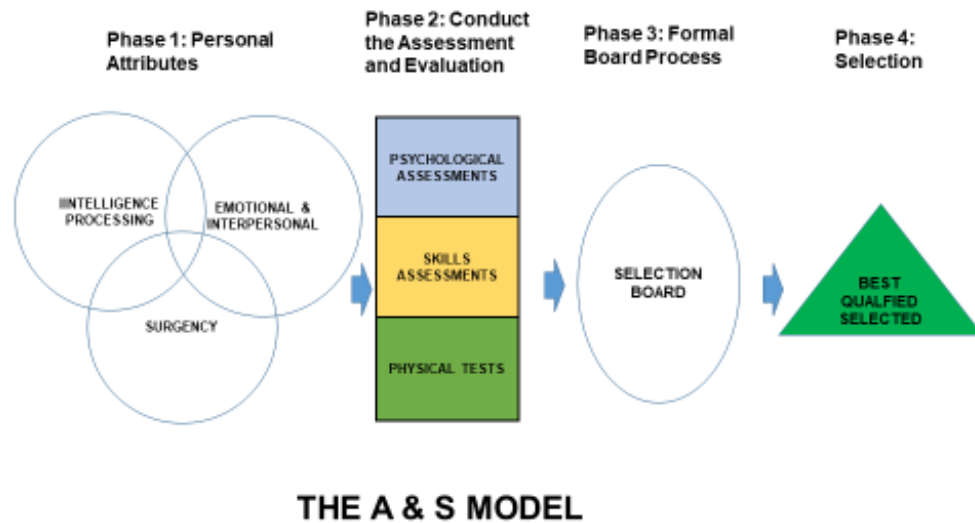


Figure 2: The Assessment & Selection Model

The information this researcher re-analyzed and re-validated by documenting the three SF assessment and selection studies answered RQ1: Can Grounded Theory be used to document and identify any new emergent factors through a process of re-analysis and revalidation of three Special Forces' Assessment and Selection studies? By documenting the Special Forces Assessment and Selection process several themes emerged during coding and analysis. The first prominent theme that emerged involved the importance of clearly establishing and defining the attributes necessary for the selection of a Special Forces soldier. Across all three studies the factors of Intelligence Processing, Emotional and Personal factors, and Surgency (the combination of motivation, leadership and physical ability) were observed to be statistically relevant and significant. While SF matured and modified the

subcategories associated with each of the three factors they remained constant throughout the 70 years of the process. Albeit, the sub-categories changed as a result of re-defining of terms. The resulting A & S model developed by this researcher answered RQ 2: What assessment and selection model is suggested by the emerging factors?

The next category that emerged, as a result of documenting this process, was SF's use of assessments as a means of providing a degree of predictability in a candidate's ability to complete the Special Forces Qualification Course. The theme that developed across all three studies was the continued use of Psychological, Skills, and Physical tests /evaluations. With advances in assessment methodology Special Forces transformed and modified their own procedures thus ensuring the latest tools were available to the assessment committees. The continued use of these processes was documented in the tables of rich data presented in the OSS Assessment of Men and Army Research Institute studies. They were the impetus, once analyzed using Grounded Theory; that emerged during the coding paradigm and supported the development of Figure 1 which graphically depicted SFAS from the analysis of the three documented studies.

The A & S Theory model depicts the observation that emerged, as a theme, from the three SF studies placing a reliance on an unbiased approach to final selection. Written processes and the establishment of a formal selection board assisted in limiting candidate selection biases. In each study the use of psychologists as outside

the U.S. military chain of command aided Commanders to ensure the best possible predictive selection process existed.

Limitations:

The limitations to this qualitative research reside with restrictions imposed by the military, for security purposes, in acquiring final completion statistical data.

Discussions with the U.S. Army John F. Kennedy Special Warfare Center and School restricted final results of the complete assessment and selection process. The release of the two most recent Army Research Institute studies (the 1988 and 2010 studies) by the History Office are readily available as part of the Freedom of Information Act.

However, the protection of final successful completion of Special Forces training (the follow to SFAS) is restricted. For further understanding and clarification this research bounded the assessment and selection methodology (SFAS) as a predictor to be selected to advance with the greatest likelihood of then completed the Special Forces Training Program, better known as the Q Course or Qualification Course. What this research did not investigate was the question of a successful Special Forces soldier which might span a 20 year professional career.

Future Research:

My research documented the Special Forces Assessment and Selection process through a re-analysis of previous data, both qualitative and quantitative, in three studies spanning a 70 year period. This had not previously been done. Through my own analysis three major themes merged that resulted in the development of a model.

The model developed (Figure 2) provides a graphic representation of three quantitative studies that were used to validate and, as time progressed, enhance the program methodology of selecting Special Forces soldiers. Future research can be conducted on testing this model for application in business. The purpose and end state of this written work answered the research question by documenting the Special Forces selection process while providing statistical validity to its methodology and the justification for generally keeping its original format even after 70 years. Follow on research, with regard to RQ2, can apply this model to business in the development of their own assessment and selection process. Using the methodology of attribute identification Special Forces provides the impetus to identify and determine which attributes are required for senior executives. The literature review provided a starting point, however, with no definitive defined list. This research provides the literature base with 70 years of Special Forces history in which to study and learn from with respect to the development of leader attributes. The model also provides an evaluation methodology once the attributes have been defined. With this A & S Model of Succession planning, derived from a Grounded Theory Study of Special Forces, future research should explore the effect this model could have on advancing a theory on corporate succession planning.

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