

THE RELATIONSHIP BETWEEN THE INTROVERT AND EXTRAVERT DICHOTOMY  
AND SMALL UNIT RECRUITING VOLUME PRODUCTION WITHIN THE  
WATERTOWN RECRUITING COMPANY

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

MASTER OF MILITARY ART AND SCIENCE  
General Studies

by

JOHN W. CASARES, MAJOR, US ARMY  
B.S., John Jay College, New York, New York, 1998

WHINSEC  
2016

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<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
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<b>1. REPORT DATE (DD-MM-YYYY)</b> 22-05-2016		<b>2. REPORT TYPE</b> Master's Thesis		<b>3. DATES COVERED (From - To)</b> AUG 2013 – MAY 2016	
<b>4. TITLE AND SUBTITLE</b>  The Relationship Between The Introvert And Extravert Dichotomy And Small Unit Recruiting Volume Production Within The Watertown Recruiting Company			<b>5a. CONTRACT NUMBER</b>		
			<b>5b. GRANT NUMBER</b>		
			<b>5c. PROGRAM ELEMENT NUMBER</b>		
<b>6. AUTHOR(S)</b>  John W. Casares, Major			<b>5d. PROJECT NUMBER</b>		
			<b>5e. TASK NUMBER</b>		
			<b>5f. WORK UNIT NUMBER</b>		
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301			<b>8. PERFORMING ORG REPORT NUMBER</b>		
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>			<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>		
			<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>		
<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for Public Release; Distribution is Unlimited					
<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b> US Army Recruiters are challenged to work in a fiscally constrained environment and moving forward to 2017 there will be a significant reduction in force that will affect every command. The financial and personnel reductions will have a direct impact on the recruiters who will be required to do more with less. This study presents an analytical view of recruiting within the Watertown Recruiting Company in New York. The study addresses the relationship of the introvert/extravert dichotomy on recruiter production. Fifteen recruiters from the Watertown Recruiting Company were administered the MBTI® by a Licensed Mental Health Counselor from Family Counseling Services of North New York (NNY) to identify their preference. This was used in conjunction with Fiscal Year 2013 recruiter production data for the Watertown Recruiting Company to develop a regression analysis. The analysis resulted in a model revealing that clarity had a higher correlation in predicting volume production than introversion or extraversion. It was also found that those in the moderate preference range of the Clarity Preference Indicator (CPI) produced more contracts that those at the higher or lower CPI ranges.					
<b>15. SUBJECT TERMS</b> Introvert, Extravert, MBTI®, USAREC, Recruiting, Sales					
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b>
<b>a. REPORT</b> (U)	<b>b. ABSTRACT</b> (U)	<b>c. THIS PAGE</b> (U)			(U)

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major John W. Casares

Thesis Title: The Relationship between the Introvert and Extravert Dichotomy and Small Unit Recruiting Volume Production within the Watertown Recruiting Company

Approved by:

\_\_\_\_\_, Thesis Committee Chair  
Santiago M. Rodriguez, M.S.

\_\_\_\_\_, Member  
Prisco R. Hernandez, Ph.D.

\_\_\_\_\_, Member  
Carlos Rodriguez, M.A.

Accepted this 26th day of May 2016 by:

\_\_\_\_\_, Director, Graduate Degree Programs  
Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

THE RELATIONSHIP BETWEEN THE INTROVERT AND EXTRAVERT DICHOTOMY AND SMALL UNIT RECRUITING VOLUME PRODUCTION WITHIN THE WATERTOWN RECRUITING COMPANY, by Major John W. Casares, 62 pages.

US Army Recruiters are challenged to work in a fiscally constrained environment and moving forward to 2017 there will be a significant reduction in force that will affect every command. The financial and personnel reductions will have a direct impact on the recruiters who will be required to do more with less. This study presents an analytical view of recruiting within the Watertown Recruiting Company in New York. The study addresses the relationship of the introvert/extravert dichotomy on recruiter production. Fifteen recruiters from the Watertown Recruiting Company were administered the MBTI® by a Licensed Mental Health Counselor from Family Counseling Services of North New York (NNY) to identify their preference. This was used in conjunction with Fiscal Year 2013 recruiter production data for the Watertown Recruiting Company to develop a regression analysis. The analysis resulted in a model revealing that clarity had a higher correlation in predicting volume production than introversion or extraversion. It was also found that those in the moderate preference range of the Clarity Preference Indicator (CPI) produced more contracts than those at the higher or lower CPI ranges.

## ACKNOWLEDGMENTS

I would like to thank my family, friends, recruiters, and professors at WHINSEC, and Command and General Staff College for inspiring me to complete this thesis. I was fortunate to write on a topic that is the first of its kind that looks at recruiter personality and volume production which can be used to expand the U.S. Army's recruiting efforts under a fiscally constrained environment.

My lead small group professor Mr. Santiago Rodriguez was instrumental in assisting me complete this project. As a certified MBTI® administrator he shared his expertise and fueled my quest for more knowledge on the subject. His assistance in gathering data for the study and willingness to travel to conduct the MBTI® for the study is greatly appreciated.

Mr. Carlos Rodriguez continually challenged me with new ways of looking at things. His emphasis on ensuring that the end result would yield something that could be used by the field commanders shaped the resulting end product.

Dr. Prisco Hernandez was instrumental in my completion of this thesis. He not only served as my Thesis Committee Chair, but also as my instructor for research methodology class in ILE. He consistently provided me with salient learning points and pointed me in the right direction.

I would like to thank Amber a Licensed Mental Health Counselor from Counseling Services of North New York (NNY) in Watertown, New York for volunteering your personal time to assist me by administering the MBTI® to the Watertown recruiting company. Without your assistance I would have been unable to gather the needed data to complete the study.

I would like to thank the recruiters of the Watertown Recruiting Company who willingly participated in this study. Without them the study would otherwise not been completed. Their efforts will benefit the expansion in knowledge for the greater recruiting force.

Finally, I would like to acknowledge the support from my family and friends. The completion of this thesis has been a long journey and a sacrifice for all involved directly and indirectly. Thank you for all your support and for believing in me.

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## ACRONYMS

APFT	Army Physical Fitness Test
ARC	Army Recruiter Course
ATP	Advanced Training Program
BCT	Brigade Combat Team
CSAT	Critical Skills Assessment Test
FSR2	Future Soldier Remote Reservation System
HRC	Human Resources Command
LCEX	Live Call Exercise
MBTI®	Myers-Briggs Type Indicator
MOS	Military Occupational Specialty
MRB	Medical Recruiting Brigade
PT	Physical Training
RDP	Recruiting Development Program
RECEX	Capstone Recruiting Exercise
SORB	Special Operations Recruiting Battalion
SUR	Small Unit Recruiting Operations
TRADOC	Training and Doctrine Command
USAAC	United States Army Accessions Command
USAAMSB	United States Army Accessions Mission Support Battalion
USAASB	United States Accessions Support Brigade
USAMU	United States Army Marksmanship Unit
USAR	United States Army Reserve
USAREC	United States Army Recruiting Command

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CHAPTER 1  
INTRODUCTION

Thesis Statement

This study will examine the relationship between the Introvert and Extravert dichotomy and Small Unit Recruiting volume production within the Watertown Recruiting Company. In order to address the thesis statement mentioned above, the following sub-questions will assist in broadening the sphere of this research:

1. Do extraverts produce more contracts?
  - a. Null hypothesis “extravert recruiters have more contracts than non-extravert recruiters.”
  - b. Alternate hypothesis “extravert recruiters do not have more contracts than non-extravert recruiters.”
2. Does clarity significantly contribute to Recruiter contract production?
  - a. Null hypothesis “clarity is not significantly correlated to higher contract production.”
  - b. Alternate hypothesis “clarity is significantly correlated to higher contract production.”
3. Does rank significantly contribute to Recruiter contract production?
  - a. Null hypothesis “rank is not significantly correlated to higher contract production.”
  - b. Alternate hypothesis “rank is significantly correlated to higher contract production.”

4. Does number of months in recruiting significantly contribute to Recruiter contract production?
  - a. Null hypothesis “number of months in recruiting is not significantly correlated to higher contract production.”
  - b. Alternate hypothesis “number of months in recruiting is significantly correlated to higher contract production.”
5. Does age significantly contribute to Recruiter contract production?
  - a. Null hypothesis “age is significantly correlated to contract production.”
  - b. Alternate hypothesis “age is not significantly correlated to higher contract production.”

#### Problem Statement

U.S. Army Recruiting Command (USAREC) has undergone significant changes over the past number of years. Pinnacle Recruiting Operations focuses on teamwork as opposed to the legacy recruiting practices that focused on individual achievement. The changes are in organization, training methodology, and the introduction of Small Unit Recruiting Operations (SUR). Furthermore in recent years the Army has been downsizing from a peak of 570,000 Soldiers in 2008 to 490,000 Soldiers today. This number is expected to bottom out in 2017 at 450,000 Soldiers.<sup>1</sup> However these cuts could lower the end strength to 420,000 in 2019 if sequestration continues in 2016. The cuts would equal

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<sup>1</sup> Tom Vanden Brook, “Army Plans to Cut 40,000 Troops,” *USA Today*, July 8, 2015, accessed July 8, 2015, <http://www.usatoday.com/story/news/nation/2015/07/07/army-plans-to-cut-40000-troops/29826423/>.

a 26 percent reduction in force in a seven year period.<sup>2</sup> Although it is unknown how the reduction will directly affect USAREC, it is unlikely that the reduction will have zero effect on the recruiting budget and recruiting force.

In 2006 the Congressional Budget Office (CBO) conducted a study on “Recruiting, Retention, and Future Levels of Military Personnel.” Part of the study was an elasticity test on the effectiveness of recruiting tools for the Active Army. Table one below shows that Recruiters are highly elastic in percentage change in enlistments when compared to other options to increase recruiting numbers. Furthermore, recruiters’ costs are second to any of the other options available. An increase in one unit of Recruiters will result in a four to six percent increase in enlistments at a cost of \$15,000 - \$22,000. Table 1 shows that increasing Recruiters is more effective at affecting change in percentage of enlistments when compared to advertisements, enlistment bonuses, or educational benefits.

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<sup>2</sup>Michelle Tan, “Army Lays Out Plan to Cut 40,000 Soldiers,” *Army Times*, July 10, 2015, accessed July 25, 2015, <http://www.armytimes.com/story/military/pentagon/2015/07/09/army-outlines-40000-cuts/29923339/>.

Table 1. The Effectiveness of Recruiting Tools for the Active Army

	Elasticity <sup>a</sup> (Percentage change in enlistments)	Marginal Costs <sup>b</sup> (Dollars)
Recruiters	4.0–6.0	15,000–22,000 <sup>c</sup>
Advertising	0.7–1.0	21,000–30,000
Enlistment Bonuses	0.3–0.8	24,000–65,000
Educational Benefits	0.7–1.0	8,000–11,000

Source: Congressional Budget Office, *Recruiting, Retention, and Future Levels of Military Personnel* (Washington, DC: Government Printing Office, 2006), 18.

The CBO’s study also analyzed the cost of obtaining an additional 6,600 enlistments with increases in Recruiters, Advertising, and Enlistments Bonuses including combinations of the categories. Table 2 shows that increasing Recruiters only has the lowest total cost in obtaining additional enlistments. The CBO’s report shows that increase in Recruiters not only have the greatest impact on percentage change in enlistments but it is also the cheapest option.

In anticipation of a potential near term problem of having to continue operations with a smaller recruiting force and budget, this study will address that problem from a human capital perspective focusing on the actual Recruiters.

Table 2. Costs for the Active Army to Obtain an Additional 6,600 Enlistments Using Various Recruiting Tools

(Millions of 2007 dollars)					
Scenario	Recruiters		Advertising	Enlistment Bonuses	Total Cost
	Number	Cost			
Increase in Recruiters Only	800–1,100	98–147	n.a.	n.a.	98–147
Increase in Advertising Only	n.a.	n.a.	137–195	n.a.	137–195
20 Percent Increase in Advertising, with the Remainder Achieved Through Additional Recruiters	600–900	76–113	40	n.a.	115–153
Increase in Enlistment Bonuses Only	n.a.	n.a.	n.a.	161–429	161–429
20 Percent Increase in Enlistment Bonuses, with the Remainder Achieved Through Additional Recruiters	700–1,000	85–127	n.a.	33	118–160
20 Percent Increase in Advertising and Enlistment Bonuses, with the Remainder Achieved Through Additional Recruiters	500–700	62–93	40	33	135–166
Increase in Advertising and Enlistment Bonuses	n.a.	n.a.	68–98	81–215	149–313

*Source:* Congressional Budget Office, *Recruiting, Retention, and Future Levels of Military Personnel* (Washington, DC: Government Printing Office, 2006), 20.

### Purpose

The purpose of this study is to identify whether the introvert or extravert preference have statistical significance in the production of contracts within the Watertown Recruiting Company. In addition to the preferences, other variables will be applied to statistical models to determine their significance in recruiting. The findings will inform U.S. Army recruiting leaders on the role that the introvert/extravert dichotomy plays in unit production.



### Significance

An analysis conducted by the Accessions Command G2/9, Center for Accessions Research revealed that less than 1 in 4 Americans are eligible to join the military. Out of a total target population of 33.1 million 17-24 year olds only 7.7 million are qualified to join the military.<sup>3</sup> There are a multitude of reasons that contribute to such a high number of unqualified Americans, which are detailed in figure 1. The biggest disqualifiers are medical, conduct and dependent issues accounting for 41.6 percent of the target population. 20.2 percent of the target population are disqualified due to lack of education or low scores on the Armed Services Vocational Aptitude Battery (ASBAV). Overweight Americans account for 14.8 percent of the disqualified population.<sup>4</sup>

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<sup>3</sup> United States Army Recruiting Command, "Monthly Talking Points," January 31, 2012, accessed August 24, 2012, <http://www.usarec.army.mil/support/downloads/Januarypercent202012percent20talkingpercent20points.pdf>, 29.

<sup>4</sup> Ibid.

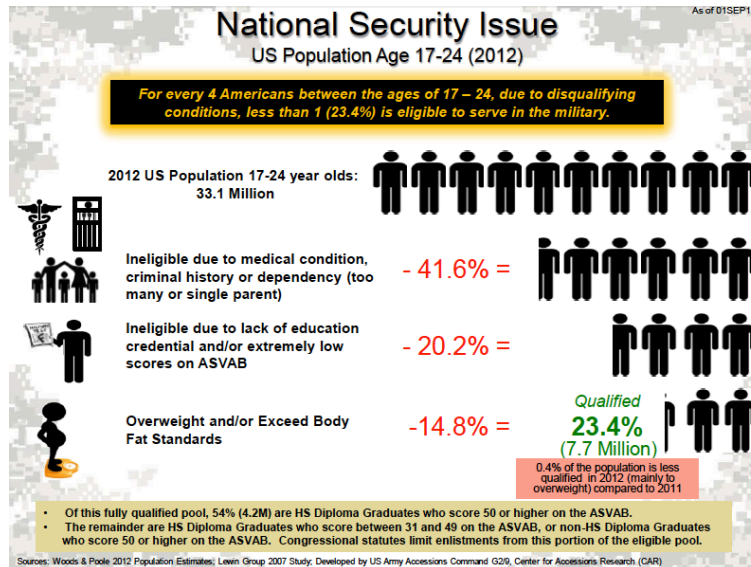


Figure 1. American Population ages 17-24 eligibility breakdowns as of September 2011

Source: United States Army Recruiting Command, “Monthly Talking Points,” January 31, 2012, accessed August 24, 2012, <http://www.usarec.army.mil/support/downloads/Januarypercent202012percent20talkingpercent20points.pdf>, 29.

The number of unqualified Americans has a direct impact with the ability to man the force and national security implications. “Manning the force is an integral part of the United States’ national security plan.”<sup>5</sup> Reductions in force are not new for the military and happen periodically. As an example, Major Koucheravy’s monograph stated that the Army had an authorization of 800,000 soldiers authorized during the post-Gulf War period and later was reduced to less than 490,000. He argued that even with the reduction

<sup>5</sup> James A. Knowles et al., “Reinventing Army Recruiting,” *Research and the Management Sciences* (January-February 2002): 78-92.

in force, the military had difficulty in meeting recruiting goals.<sup>6</sup> The current drawdown planned for the Army will reduce active duty soldiers from 570,000 to 450,000 by the year 2017.

Sequestration cuts have profoundly affected the Department of Defense and USAREC's recruiting budget was reduced by 37.5 million to \$338 million for fiscal year 2013.<sup>7</sup> Incidentally Major Koucheravy also noted the rising cost of recruiting from "70 million in 1993 to over 265 million in FY2000."<sup>8</sup> It is important to note that in the Army today, recruiters will have to do more with less. Although USAREC has implemented the team-recruiting concept to streamline the recruiting process, the cuts will have an impact across the command in the civilian workforce that provide support to recruiters such as computer administrators, advertising, and educational specialists. The cuts may also affect training conferences, incentive bonuses and temporary duty travel.

Cuts in military budget and personnel will require recruiters to use alternate recruiting and prospecting methods. They will have to use alternate prospecting of methods that may be more cost-efficient versus face-to-face prospecting that requires significant manpower and money based on cost of vehicles leasing, maintenance and gas for vehicles. Some of the replacement recruiting methods may be more likely preferred

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<sup>6</sup> Richard J. Koucheravy, Major, USA, "Recruiting and Training for the Objective Force" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2001), 50.

<sup>7</sup> Adeshina Emmanuel, "Like the Army Itself, Recruiters Prepare to Make Do With Less," *New York Times*, September 5, 2012, accessed February 3, 2013, [http://www.nytimes.com/2012/09/06/us/like-the-army-itself-recruiters-prepare-to-make-do-with-less.html?\\_r=0](http://www.nytimes.com/2012/09/06/us/like-the-army-itself-recruiters-prepare-to-make-do-with-less.html?_r=0).

<sup>8</sup> *Ibid.*, 4.

by introverts. Extraverts prefer face-to-face prospecting while the introverted methods include telephone prospecting, email, web-based database searches of resumes, USPS mail outs. These prospecting methods will enable recruiters to make more contacts without leaving the office. Pinnacle recruiting has enabled the recruiter to work at the team level and use both the strengths and weaknesses within the teams to complement each other. Based on the budget constraints commanders will be looking at how to be efficient at prospecting and recruiting.

The MBTI® has been used to improve team performance by many fortune 500 companies. According to Consulting Psychologists Press (CPP), over 1.5 million assessments are administered annually to individuals and employees of most Fortune 500 Companies.<sup>9</sup> The MBTI® can assist teams by helping them identify blind spots, identify potential areas for growth, improve team communication, and reduce conflict. Recruiting teams can use this information to become more efficient, improve effectiveness and do more with less.

This research will give future leaders a snapshot of current recruiting practices at the company level and the usefulness of the MBTI® as a tool to identify blind spots, improve team performance and effectiveness. The results of this study will provide data that will assist the Watertown Recruiting Company and the Army understand the relationship between the introvert/extrovert dichotomy and unit production. The MBTI® tool is not used to identify selection to a team but rather it can inform leaders of

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<sup>9</sup> CPP, "History, Reliability and Validity of the Myers-Briggs Type Indicator® (MBTI®) Instrument," accessed December 6, 2013, [https://www.cpp.com/products/mbti/mbti\\_info.aspx](https://www.cpp.com/products/mbti/mbti_info.aspx).

the personality types that are available within their teams and those that are absent. By identifying what types the teams have and what they lack, leaders can develop a plan to include other perspectives and improve communication within their teams.

## CHAPTER 2

### LITERATURE REVIEW

#### Overview

While conducting the literature review there was very limited information about current recruiting practices. The information that was available on recruiting was based on legacy recruiting practices. None of the studies available used the MBTI® or any other psychometric tool to explore recruiter personalities.

In contrast, there was a lot of information available about the use of the MBTI® in the corporate world. It has been used by many Fortune 500 Companies to strengthen team performance and in other areas such as education, psychological applications, and career counseling. Companies such as Apple, AT&T, Citicorp, Exxon and GE have used the MBTI® to improve team performance.<sup>10</sup>

There was no literature published about use of the MBTI® tool within U.S. Army Recruiting. This research is the first of its kind and some of the information used within the research is about subjects where similarities existed between the use of the MBTI® and its use with teams, and sales.

#### Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI®) was developed by Katharine C. Briggs and Isabel Briggs Myers. The MBTI® has its roots in Carl G. Jung's book *Psychological Types*. In his book Jung, a Swiss psychiatrist, theorized that everyone uses

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<sup>10</sup> Barbara Valenti, "MBTI in Companies," accessed January 3, 2014, <http://barbara-valenti.de/en/practical-skills-2/mbti-in-companies/>.

three basic mental functions. The functions are composed of opposites that determine an individual's preference. Myers and Briggs used Jung's model and refined it by adding the Judging-Perceiving dichotomy in addition to a questionnaire that would identify personal preferences based on their answers.<sup>11</sup> The Myers-Briggs Type Indicator identifies preferences among four pairs of opposites called dichotomies. The dichotomies are Introvert-Extravert, Sensing-Intuitive, Thinking-Feeling and Judging-Perceiving.

A person's type is identified in one of sixteen possibilities after taking the MBTI® as shown in table 3. The MBTI® is administered by individuals who are certified by a licensed MBTI® Certification Program. The certified MBTI® tool administrators will have in-depth knowledge of the personality types, dichotomies and can facilitate understanding. One point that is important when using the MBTI® is that the results should not be used to select an individual for a specific job or group. The instrument is meant to facilitate understanding of individuals' personality type. Another important point to note is that all personality types are equal and there is no hierarchy among them.

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<sup>11</sup> Isabel Briggs Myers et al., *MBTI® Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator Instrument*, 3rd ed. (Mountain View, CA: CPP, 2009).

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

*Source:* Isabel Briggs Myers, Mary H. McCaulley, Naomi L. Quenk, and Allen L. Hammer, *MBTI® Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator Instrument*, 3rd ed. (Mountain View, CA: CPP, 2009), 36.

The Introvert-Extravert dichotomy focuses on an individual's energy and attitude. An extravert has an outward perspective where their energy flows outwardly towards those around them. They are aware to their surroundings and look for stimulation from external sources. Some identifiable traits among extraverts are talkative, approachable and feel comfortable around others. Introverts on the other hand draw their energy from within. They draw their energy from their inner thoughts and ideas. Introverts prefer to think about what they are going to say before speaking, enjoy peace and quiet, may be identified as shy, prefer small gatherings than a big get together.

The Sensing-Intuition dichotomy focuses on perception. Sensing types prefer to use their five senses. Some identifiable traits among sensing types are clear focus on the task at hand, prefer jobs with a tangible result, and prefer to work with facts rather than theories and ideas. Intuitive types tend to look at the big picture and find interrelation behind things. They frequently think about multiple things at once and try to find a link. They are also more forward thinkers and find the future more interesting than the present.



The Thinking-Feeling dichotomy focuses on decision making. Thinking types prefer to make decisions based on facts without regard to how it will be received by others. Some identifiable traits among thinking types are that they make decisions that are fair rather than what others want, prefer being right than liked, can more easily remember data and facts than faces and names. Feeling types take others into consideration when making decisions. They tend to put themselves in others shoes when making decisions, try not to offend others, and try to avoid conflict.

The Judging-Perceiving dichotomy focuses on the interaction with the outside world and how others see you. Judging types tend to be more organized and like to plan things in advance. Some identifiable traits among judging types are that they do not like to be surprised, take shopping lists to supermarkets, everything in the closet has a place, and they like to finish anything they started. Perceiving types tend to be more spontaneous and live for the moment. Perceiving types are easily distracted, don't plan ahead, frequently change topic of conversations and likes to keep options open.

### MBTI® in Teams

Kroeger and Thuesen believe that personality types can be observed and identified by individuals.<sup>12</sup> They argue that individuals can learn to identify types by a method called Typewatching. The authors argue that everyone has name-called at some point in their lives. Name-calling is a method of cataloging people in to a group. They state that “Typewatching [is] an organized, scientific validated approach to name-calling

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<sup>12</sup> Otto Kroeger and Janet M. Thuesen, *Type Talk: The 16 Personality Types That Determine How We live, Love, and Work* (New York: Dell Publishing, 1989).

that has been used for more than forty years.” In order to be a Typewatcher, individuals will need to understand the four dichotomies that make up a person’s type. Once they understand the dichotomies, they can observe persons and make an educated guess as to their personality types. This approach is very different from the Myers-Briggs type identification method in that in Typewatching the subject does not have to participate in the process. Typewatching depends more on an external observer to identify dominant dichotomies within a person. One of the ethical considerations with the MBTI® is that disclosure of an individual’s type is voluntary. This means that an employer or supervisor may not know all of his subordinate’s type after the administration of the MBTI®. Typewatching can be used by recruiting leaders at the company and station level where the leaders can actively observe the recruiters. This will enable the Typewatchers to fill in gaps within their teams when voluntary disclosure is denied or a test is not available.

In contrast Lawrence and Martin believe that although it may be fun to typewatch, it should not be done.<sup>13</sup> They argue that if one guesses a person’s type, it may be counterproductive if the guess is wrong thus increasing the communication gap. They explain that MBTI® practitioners are continually learning and that it is a life-long learning process. They state that one can hypothesize about an individual’s type and continually adjust it based on observations.

The MBTI® can be used in counseling, psychotherapy, education, career counseling, organizations, and multicultural settings. In the book *Work It Out*, the authors

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<sup>13</sup> Gordon Lawrence and Charles Martin, *Building People, Building Programs: A Practitioners Guide for Introducing the MBTI to Individuals and Organizations* (Palo Alto, CA: Center for Applications of Psychological Type, 2001).

use the MBTI® to improve team performance. They explain that by understanding a person's type, productivity can be improved and conflicts avoided.<sup>14</sup> The understanding of personality types within a team can enable others to see how individuals would approach a problem given to the team.

There are 16 different MBTI® types; this means that within a team there can be 16 different ways of looking at the same problem. The authors explain that these differences will guide an individual's approach to a problem based on their individual preferences. An interesting example they gave was to use your dominant hand to write your name on a paper, then, try doing the same thing using the opposite hand. Although you were able to write it with both hands, writing with the non-dominant hand probably took longer and was not as neat as when it was written with your dominant hand. This psychological preference is what the MBTI® is trying to highlight. An individual can take the MBTI® and find that their type is ISTJ. What the MBTI® is identifying is the individual's dominant dichotomies. This does not mean that the individual cannot function as an ENFP, which is an exact opposite of their dominant type, however it may take them more work to perform in a manner that is out of their comfort zone. The authors explain that doing this can build frustration and become tiring for an individual, while someone who would be performing the same task using his or her preferred type to execute the task will probably have more energy and can perform with ease. As frustrations and inefficiencies are multiplied within a group, their performance can suffer and in-group conflicts increase.

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<sup>14</sup> Sandra Hirsh Krebs and Jane A. G. Kise, *Work It Out: Using Personality Type to Improve Team Performance* (Mountain View, CA: Davies-Black Publishing, 2001).

Krebs Hirsh and Kise found that understanding types is just as important as having a diverse mix of types within a group. In their example they note that employees of Commerce Bank were grouped together for a project. The group consisted of an ESTP Team Leader, Systems Design Group with six Introverts and one Extravert, and a Marketing Group with six Extraverts and one Introvert. Their findings consisted of the lack of understanding of how the Introverts and Extraverts work added to the stress of the group to meet deadlines and complete the project. The Extraverts believed that the Introverts were working in a vacuum and had no idea of the progress they were making on the overall project. The Introverts believed that the Extraverts were unfocused and lacked depth of thought of their ideas which made it difficult for the Systems Design Group to focus. When looking at the complaints from both groups the authors looked at the same issues through the MBTI® lens and to put it simply Introverts and Extraverts tackle problems differently. The Introverts Think-Act-Think while the Extraverts Act-Think-Act.<sup>15</sup> Revealing this to the group and the differences between types can alleviate some problems within the group and assist the leader in identifying how to best bring his team together.

According to Lynch and Lynch conflicts occur in every organization and in their book *The Police Manager* they used the MBTI® to study personality types among law enforcement leadership.<sup>16</sup> The study took 1,164 law enforcement officers and found that 51 percent of those tested were introverts. When comparing the results against the general

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<sup>15</sup> Ibid., 21-41.

<sup>16</sup> Ronald G. Lynch and R. Scott Lynch, *The Police Manager*, 6th ed. (Cincinnati, OH: Anderson Publishing, 2005).

population they found a big difference where 70 percent are extraverted and only 30 percent were introverted.<sup>17</sup> This result could be used not only to identify shortcomings of type within the organization but also on how these introvert police officers are dealing with the population who have significantly different types. Conflict resolution from within the organization and the population they are servicing can be reduced based on their understanding of types. Just like police officers, recruiters have frequent contact with the population. During prospecting they encounter a variety of people with different personality types in the streets in an effort to find one who will stop, listen and make a follow up appointment. There was contradictory evidence of that noted by Lynch in that according to the estimated frequency table on table 4 Extraverts make up 49.3 percent of the population and Introverts make up 50.7 percent.<sup>18</sup>

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<sup>17</sup> Ibid., 146.

<sup>18</sup> The Myers and Briggs Foundation, "How Frequent Is My Type?," accessed February 3, 2013, <http://www.myersbriggs.org/my-MBTI®-personality-type/my-MBTI®-results/how-frequent-is-my-type.asp>.

Table 4. Estimated frequency table MBTI®					
<b>Total</b>		<b>ISTJ</b>	<b>ISFJ</b>	<b>INFJ</b>	<b>INTJ</b>
<b>E</b>	49.30%	11.60%	13.80%	1.50%	2.10%
<b>I</b>	50.70%				
<b>S</b>	73.30%	<b>ISTP</b>	<b>ESFP</b>	<b>INFP</b>	<b>INTP</b>
<b>N</b>	26.70%	5.40%	8.80%	4.40%	3.30%
<b>T</b>	40.20%				
<b>F</b>	59.80%	<b>ESTP</b>	<b>ESFP</b>	<b>ENFP</b>	<b>ENTP</b>
<b>J</b>	54.10%	4.30%	8.50%	8.10%	3.20%
<b>P</b>	45.90%				
		<b>ESTJ</b>	<b>ESFJ</b>	<b>ENFJ</b>	<b>ENTJ</b>
		8.70%	12.30%	2.50%	1.80%

*Source:* The Myers and Briggs Foundation, “How Frequent Is My Type?” accessed February 3, 2013, <http://www.myersbriggs.org/my-MBTI®-personality-type/my-MBTI®-results/how-frequent-is-my-type.asp>.

One of the challenges facing recruiting leaders is achieving synergy. How can you motivate recruiters to achieve a common goal? Doctors Isachsen and Beren believe that motivation comes from within an individual not from their managers desires.<sup>19</sup> They call it Organizational Climate. Recruiters work independently the majority of the time and are geographically separated from the company leadership. The company commander and station commander rely heavily on their published guidance and analytical recruiting tools such as the Mission Accomplishment Plan (MAP) to determine if the recruiters are on glide path to achieve their mission. The MAP provide indicators to the leadership as to whether a recruiting station is meeting their prospective goals and is used as a predictor

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<sup>19</sup> Olaf P Isachsen and Linda V. Berens, *Working Together: A Personality-Centered Approach to Management* (Irvine: Institute for Management Development, 1988).

to determine if they will achieve their monthly mission. The MAP can provide the company leadership early warning of not being able to achieve their mission and will allow the company commander to focus his efforts and resources on the struggling recruiting team.

In the book *Working Together* the authors explain that leaders must work with their teams and subordinates from the inside out instead of the outside in. “Empowering individuals to become star performers where they shine as opposed to wasting time and negative energy on ‘corrective action’”<sup>20</sup> The authors argue that under a positive environment, the employees will feel more satisfied and seek self-improvement. The task of the leader is to create a positive environment where employees will want to work together and improve their performance. The company commander can use analytical recruiting tools in conjunction with the MBTI® personality types and team types to develop a training program that will motivate the individuals from within to achieve a positive Organizational Climate. The commander can analyze the lead source analysis, MAP, Recruiter Function Assessments, Recruiting Operation Plan, Leads Prospecting Analysis, historical contract analysis, and MBTI® team type to develop an action plan that will focus on that individual teams short falls.

#### MBTI® and Sales

In the spring of 2007, Ashridge Business School and Silent Edge completed a study on Sales and personality which answered the question “Success at Sales: does

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<sup>20</sup> Ibid.

personality matter?”<sup>21</sup> They used the two psychometric tools for the study. The MBTI® to identify the personality type, the FIRO-B that measures how a person typically behaves towards others while looking at Inclusion, Control, and Affection. The psychometric results were compared using Silent Edge’s Critical Hour Observation tool which scores individuals on five competencies that are identified as critical for sales: Pre-meeting, Behavior, Listening, Presenting, and Selling.<sup>22</sup> The findings of the study revealed that there was a correlation between personality type and sales effectiveness. However this study also highlighted that “the way sales professionals make decisions, plan and organize their work appears to have no effect on their sales effectiveness.”<sup>23</sup> This study also found that popular stereotypes about sales such as systematic planning or rational decision-making showed no correlation with sales effectiveness. This finding is important because within the US Army Recruiter training, a lot of attention is paid to recruiter planning and the use of analytical tools such as the MAP.

The Ashridge Silent Edge study demonstrated some key information when studying the MBTI® personality types. When looking at the MBTI® types for sales directors in the UK using a sample of 79, it was found that 61 were extraverts and 18 were introverts. There was also an over-representation of the NT combination and under-representation of the SF combination.<sup>24</sup> The same statistical test was used with the data

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<sup>21</sup> Ashridge Silent Edge, “Success at Sales: Does Personality Matter?” (Research Project, Ashridge Business School, Hertfordshire, 2007).

<sup>22</sup> Ibid., 11.

<sup>23</sup> Ibid., 5.

<sup>24</sup> Ibid., 15.



from the study and found that 32 out of 38 were extraverts and only 6 in the whole study were introverts. Although they conclude the sample was too small to be representative of the population, they found that sales professionals were over represented in INTJ, ENTJ, ESTP, and ESTJ.

Although not representative this study suggests that extraverts are more likely to work in sales. However within the US Army recruiting, recruiters receive leads from a variety of sources. Some leads I would associate with extraverted personalities based on how they are obtained such as recruiter generated (face to face), future Soldier referral, and center of influence referral. These leads require the recruiter to physically interact with another person in any location out of the office. Recruiters use technology enabling introverts to also generate leads such as cyber recruiters, email, High School list, College list, and SASBAV list. Introverts can overcome their short falls with lists because they can use the telephone to prospect from an area they feel comfortable without any physical interaction with the prospects.

### Type Development

In the book *Work It Out*, the author wrote about type development.<sup>25</sup> They explain that type preferences are developed throughout a person's life and as they are developing a preference becomes a dominant function. The dominant function is what an individual feels comfortable with and does not have to think about using. Below each dominant function there are auxiliary functions, tertiary functions and inferior functions. Each MBTI® type will have four functions associated with it. The author explains that the

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<sup>25</sup> Krebs and Kise, 15.

auxiliary function balances the dominant function and the tertiary function is the opposite of the auxiliary function. An individual would not consciously use their tertiary function or the inferior function. The inferior function is the one that an individual would rarely use and it is not within their comfort zone. An individual performing activities using their inferior function may make more mistakes.<sup>26</sup> Throughout a person's life the non-dominant functions are developed. The auxiliary function is developed in pre-adulthood, while the tertiary function is developed in adulthood and the inferior function is developed during a person's middle years and beyond.<sup>27</sup> As a leader, understanding a subordinates' four functions will facilitate how to maximize a person's performance and reduce the number of mistakes in the organization.

#### Introvert and Extravert Dichotomy

Greg Stewart a professor at The University of Iowa conducted a study of one-hundred fifty-two sales representatives. His study found that extraversion did not show statistical significance as a contributor to new sales or customer retention.<sup>28</sup> The study did find that conscientiousness was a significant contributor to sales performance. His results were similar to the findings in Peter Warr's study *Personality and Sales Performance: Situational Variation and Interactions between Traits* where he studied one-hundred and nineteen sales executives at a car retailer and seventy-eight retail sales employees of an

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<sup>26</sup> Ibid., 16.

<sup>27</sup> Ibid., 17.

<sup>28</sup> Greg L. Stewart, "Reward Structure as a Moderator of the Relationship Between Extraversion and Sales Performance," *Journal of Applied Psychology* 81, no. 6 (1996): 619-627.

electric goods company.<sup>29</sup> Although there were differences in the studies, both found that extraversion was not did not have a strong correlation to sales. In a similar study conducted at the University College London, Furnham and Fudge found that there was no “relationship between extraversion and objective sales performance.” More importantly the authors explained this finding by saying “it may be possible for a sales person to have ‘too much’ Extraversion.<sup>30</sup> Furthermore they speculated that there is a curvilinear relationship between extraversion and sales leading to suboptimal performance at the higher degrees of extraversion.

Sharon Peters’ dissertation highlights some of the stereotypes associated with introverts such as their need to seek out jobs that provide solitary space which limit personal interaction such as computer programmer or researcher. Peters also states these needs are driven by their desire to seek “privacy and reflection.”<sup>31</sup> Her study found that the stereotype was not true and that introverts are very capable in working in extraverted roles. In the study she used the MBTI® to identify individuals as introverts or extraverts. The study found that when given the option introverts chose activities that reduced face to face interaction such as “choosing telephone conversations and email over in-person

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<sup>29</sup> Peter Warr, “Personality and Sales Performance: Situational Variation and Interactions between Traits,” *International Journal of Selection and Assessment* 13, no. 1 (March 2005): 63-92.

<sup>30</sup> Adrian Furnham and Carl Fudge, “The Five Factor Model of Personality and Sales Performance,” *Journal of Individual Differences* 29, no. 1 (2008): 11-16.

<sup>31</sup> Sharon L. Peters, *Introverts in Extroverted Roles: How Introverted Reporters Cope With the Interpersonal-Contact Stress of Their Jobs* (Ann Arbor, MI: UMI, 1995).

communication ( $p < .0001$ ).”<sup>32</sup> However the study also found that when introverts worked in extraverted roles they used coping mechanisms to deal with the increased stress. Some activities included actions like modifying the extraverted activity to make it more acceptable or withdrawing temporarily from the uncomfortable position to re-energize.

In the book *Quiet: The Power of Introverts in a World That Can't Stop Talking* Susan Cain details how introverts prefer environments with low stimulation which is where they feel most energized.<sup>33</sup> Conversely extraverts value stimulating situations and interpersonal interaction. The author counters introvert myths by finding that many successful leaders are introverts and highlights Warren Buffet CEO at Berkshire Hathaway and Larry Page current CEO at Google. Furthermore, she highlights research conducted by Wharton Professor Adam Grant about introverts and extraverts at work. Grant explains that a common myth is that extraverts are better networkers than introverts. He challenges the myth by finding that although extraverts had a high volume of networking connections, introverts had more quality networks based on their ability to create better relationships.<sup>34</sup> Furthermore Grant found that when looking at evidence to prove or disprove that extraverts are better salespeople than introverts there was a correlation of zero. He goes on to discuss that “most people are ambiverts rather than

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<sup>32</sup> Ibid., 6.

<sup>33</sup> Susan Cain, *Quiet: The Power of Introverts in a World That Can't Stop Talking* (New York: Crown Publishers, 2012).

<sup>34</sup> Adam Grant, “5 Myths About Introverts and Extraverts at Work,” *Huffington Post*, February 19, 2014, accessed July 21, 2014, [http://www.huffingtonpost.com/adam-grant/5-myths-about-introverts\\_b\\_4814390.html](http://www.huffingtonpost.com/adam-grant/5-myths-about-introverts_b_4814390.html).

introverted or extraverted.”<sup>35</sup> His study found that ambiverts produced more sales than salespeople at the introvert or extravert side of the dichotomy.

Daniel H. Pink a tenured professor at Wharton wrote a book *To Sell is Human*. The book quoted research conducted by Adam Grant *Rethinking the Extraverted Sales Ideal: The Ambivert Advantage*. Within the study salespeople were ranked within an introversion/extraversion scale that went from one through seven; Seven meaning you were highly extraverted and one meaning you were highly introverted. Figure 2 below shows the results of a three month study of revenue generated and ranking within the scale.

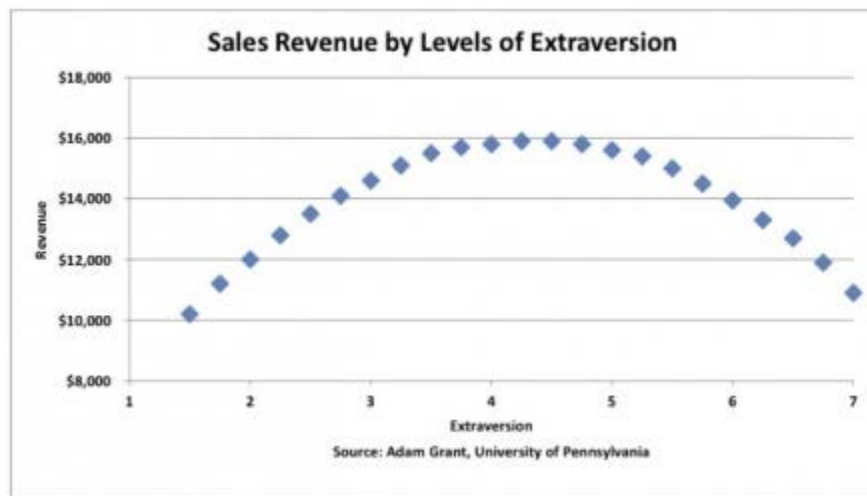


Figure 2. Sales Revenue by Levels of Extraversion

Source: Daniel H. Pink, *To Sell is Human* (New York: Riverhead Books, 2012), 24.

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<sup>35</sup> Ibid., 1.

Grant found that neither introverts nor extraverts were better at producing sales revenue. As shown in figure 2, his study found that ambiverts were better at producing sales revenue.<sup>36</sup> By definition an ambivert is one who is balanced between the introvert and extravert preference.

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<sup>36</sup> Adam Grant, "Rethinking the Extraverted Sales Ideal: The Ambivert Advantage," *Association For Psychological Science* (2013): 1024-1030.

CHAPTER 3  
METHODOLOGY

Research Design

This study will conduct a descriptive quantitative research of recruiter introvert/extravert preference after the administration of the MBTI® Form M. The MBTI® will be used to identify the introvert/extravert dichotomy preference of the recruiting station production numbers for FY13.

The study will use purposive sampling of Recruiting Teams within the Watertown Recruiting Company. “In purposive sampling, people or other units are chosen, as the name implies for a particular purpose. For instance, we might choose people who we have decided are “typical” of a group or those who represent diverse perspectives on an issue.”<sup>37</sup>

The data gathered from the Watertown Recruiting Company was used to build a regression model. The data set variables are: “Survey #” not used for the model but used to identify individual records. “Station” a categorical which relates to the Recruiting Station the recruiter belongs to. “Type” a categorical variable which indicated whether the person is an extravert or introvert. “Clarity” an indicator from the MBTI® Form F which shows tendency towards your type. A value of 26-30 indicates a very clear tendency while a value of 0-5 indicates slight tendency. There is also a tie-breaker if you score a 15. For the extravert/introvert dichotomy if there is a tie you select introvert.

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<sup>37</sup> Paul D. Leedy and Jeanne E. Ormrod, *Practical Research: Planning and Design*, 8th ed. (Upper Saddle River, NJ: Pearson Education, 2005).

“Position” is a categorical variable that indicates your position or team within a Recruiting Station. “MOS” indicates the Recruiters Military Occupational Specialty. “Rank” indicates Recruiter rank. “Age” indicates Recruiter age. “MO RCTG” identifies the number of months the Recruiter has been recruiting. “YRS SCHOOL” identifies the level of education for the recruiter.

The fiscal year 2013 recruiting data was used for this study. Pinnacle Recruiting is based on team work and members of a recruiting station interact with all of the applicants and future soldiers, therefore when tabulating the data, contracts were awarded to recruiters based on the length of time they were recruiting in the station. For example if a recruiter indicated he had been recruiting for twelve months, they would be awarded the contracts for their station for the whole fiscal year 2013. If a recruiter stated that they were working in recruiting for three months, they would be awarded the contracts for their Recruiting Station for 4th Quarter fiscal year 2013. “GA” referring to Graduate Alpha which is a High School graduate who scores 50 or higher on the ASBAV. “SA” meaning Senior Alpha is a High School student who scores 50 or higher on the ASBAV. “RA OTH” which is anyone who doesn’t fit in to the other 2 categories. “USAR GA” is an individual who joins the US Army Reserves and is a High School graduate who scores a 50 or higher on the ASBAV. “USAR CA” are those who don’t fit in to the above categories who score 50 or above on the ASBAV. “PS” means prior service and covers any former service member regardless of service who enlists for the US Army. “USAR OTH” are those who score 49 or below on the ASBAV. “TOTAL” refers to the total number of persons recruited.



The data will be used in the creation of a regression model that will test the null hypothesis 1a “extravert recruiters have more contracts than non-extravert recruiters.” 2a “clarity is not significantly correlated to higher contract production.” 3a “rank is not significantly correlated to higher contract production.” 4a “number of months in recruiting is not significantly correlated to higher contract production.” and 6a “age is significantly correlated to contract production.” The use of Microsoft Excel and the StatTools add-in will be used to create models, descriptive graphs, and calculations. A Stepwise regression using backward elimination will be conducted to determine the best model that the Watertown Recruiting Company Commander can use to forecast production based on the variables stated above. Backward elimination involves building a model with all variables, then performing a t-test value approach with an  $\alpha < x$ , and eliminating the variables that don’t meet the criteria one at a time until and repeating the process of modeling and elimination until you end with the best model for the data. The data will be tested with an  $\alpha < 0.05$ , with confidence interval of 95 percent. In an attempt to find the best fitting model the data will also use interactions between variables to determine if we can achieve a higher R<sup>2</sup>. The models will also be inspected for assumption violations. For example using individual recruiting categories and the total number recruited will result in an exact autocorrelation. Outliers will be identified and a choice will be made whether they should be included or excluded from the model.

The model will use both numerical and categorical values, therefore the use of dummy variables will be used in the regression. For the categorical variable “Station” a 1 will be used for 1N3S and a 0 will be used if otherwise. For the categorical variable “Type” a 1 will be used for extravert and 0 for otherwise. The categorical values of

Position and MOS will not be used in the regression models but will be used in descriptive statistical analysis.

#### Study Population

This study will focus on the Watertown Recruiting Company. The sampling size of the company is small, therefore 100 percent of the company participated in the study. The study included fifteen members from the Watertown Recruiting Station, Postdam Recruiting Station, and New Hartford Recruiting Station. The Company Commander and First Sargent were excluded from the study because they don't directly prospect or process applicants.

#### MBTI® Validity

The validity of the MBTI® Team Report was studied by Jennifer R. Sedlock. The MBTI® Team Report seeks to identify team type, identify team problem solving style, individual team member type feedback, and includes a personalized action plan for the individuals and teams. The author studied a sample of fifty-one participants from several different organizations. She augmented the questionnaire with nineteen specific questions that were unique to her study. Her study found that the MBTI® Team Report was accurate and useful for their teams. Most of the participants agreed that the information on the report was accurate and valuable to their team. Sedlock believed that if the teams identify their weaknesses as a group, it would enable them to create a stronger team by

implementing an action plan.<sup>38</sup> Recruiting commanders at the company and station level can benefit by identifying their team weaknesses and integrating their analytical recruiting tools to develop action plans.

### Limitations

Limitations of this study will include the variables that are unavoidable in U.S. Army Recruiting. This study will not take into account population, ethnicity, socioeconomic conditions, historical graduation rates, and world events. They all have an effect on recruiting production but, for the purpose of this study, they will not be explored.

### Data Collection

The MBTI® Form M tool was obtained through requisition of the Western Hemisphere Institute for Security Cooperation (WHINSEC). The administration of the MBTI® was coordinated with the Watertown Recruiting Company Commander. Recruiters were administered the MBTI® by a Licensed Mental Health Counselor during their monthly Company training session at Fort Drum, New York. The results of the MBTI® was then collected for analysis. The surveys were numbered generically and the recruiter was given a consent form informing them of their voluntary participation in the study.

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<sup>38</sup> Jenniefer R. Sedlock, “An Exploratory Study of the Validity of the Myers Briggs Type Indicator Team Report” (Masters Thesis, University of San Francisco, San Francisco, 2000).

CHAPTER 4  
ANALYSIS

Descriptive Statistics

An analysis of the data revealed that there are very minimal differences between the introverts and extraverts with respect to volume of contracts produced during Fiscal Year 2013. Figure 3 shows that the average net volume for extraverts during the period was 104.1 while introverts ended the fiscal year with 108.1. Descriptive statistics of the data shows that introverts recruited 4 more than extraverts for Fiscal Year 2013.

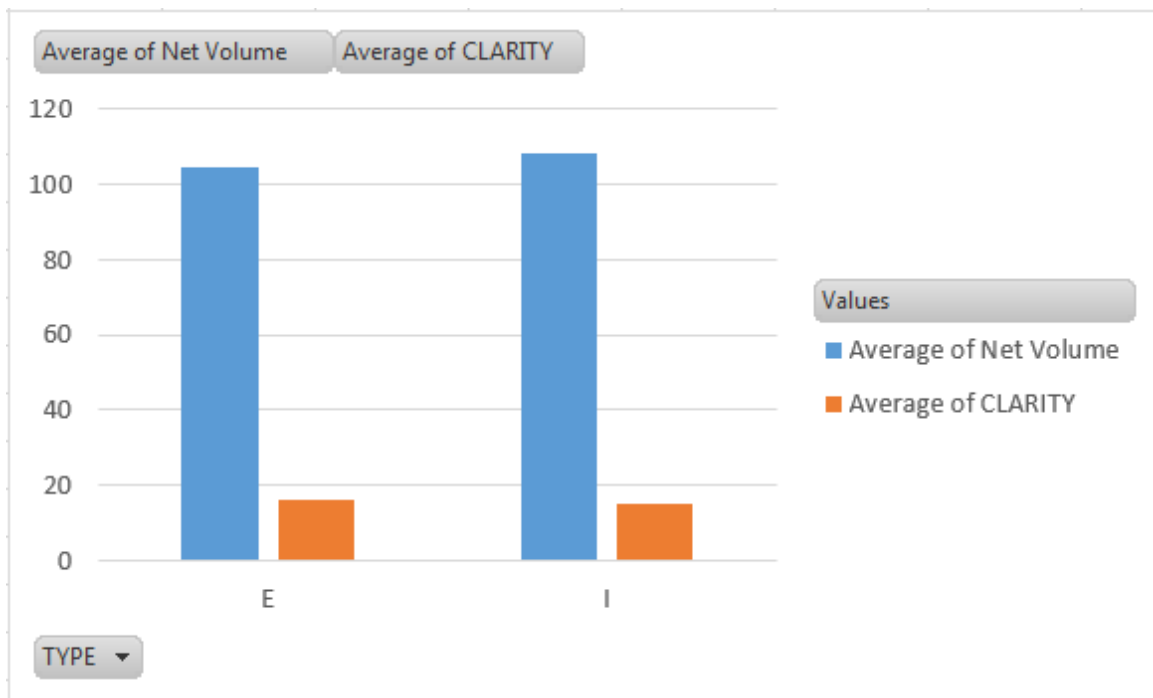


Figure 3. Summary Statistics of Extravert and Introvert Average Volume and Clarity for Watertown Recruiting Company Fiscal Year 2013

Source: Created by author.

The data also showed that extraverts had an average Preference Clarity Index (PCI) of 16.3 while the introverts had an average PCI of 15.3. The PCI of the MBTI® measures an individual's clarity of a specific dichotomy. The scale starts at zero and ranges up to 30 for either dichotomy. A rating of 1-5 indicates that someone has a slight tendency towards a specific dichotomy. A rating of 6-15 indicates that they have a moderate tendency towards a specific dichotomy. A rating of 16-25 indicates that an individual has a clear tendency towards a specific dichotomy while a rating of 26-30 indicate that there is a very clear tendency towards that dichotomy.<sup>39</sup> According to Myers and McCaulley the cpi indicates "how sure the respondent is that she or he prefers one pole of the dichotomy over its opposite."<sup>40</sup> In contrast to Daniel Pink's study which used levels of extraversion, a higher preference does not indicate that a respondent excels at that preference but rather when forced to choose they would have a very clear preference over the alternate choice. Figure 3 above shows that the clarity index for is 16.3 for extraverts and 15.3 for introverts. The PCI for extraverts puts them in the clear tendency while the CPI for extraverts puts them in the moderate category.

### Inferential Statistics

Using a forward stepwise regression for Net Volume resulted in a regression table that excluded personality type. A multiple regression was then processed to include personality type as a variable and resulted in very high p-Values which were larger than  $\alpha$  (0.05). This means that based on the data used for this research, personality type is not a

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<sup>39</sup> Isabel Briggs Myers et al., *MBTI Manual*.

<sup>40</sup> *Ibid.*, 121.

significant contributor of volume production for the Watertown Recruiting Company. Furthermore the optimum model also excluded the categories months in recruiting, and age. This means that the excluded categories failed to have an  $\alpha < (0.05)$ . Additionally this initial regression model quantifies the rejection of null hypothesis'  $H_{o1a}$ . "extravert recruiters have more contracts than non-extravert recruiters"  $H_{o4a}$  "number of months in recruiting is not significantly correlated to higher contract production" and  $H_{o6a}$  "age is significantly correlated to contract production." Therefore accepting the alternate hypothesis'  $H_{11b}$  "extravert recruiters don't have more contracts than non-extravert recruiters."  $H_{12b}$  "clarity is significantly correlated to higher contract production."  $H_{13b}$  "rank is significantly correlated to higher contract production."  $H_{14b}$  "number of months in recruiting is significantly correlated to higher contract production." and  $H_{15b}$  "age is not significantly correlated to higher contract production." The forward stepwise regression for net volume indicated that the optimum model will have clarity and rank as variables. The other variables of data collected were excluded from the model because they were not statistically significant contributors to the forecasting of net volume. The straight line model shows that there is an 88 percent correlation between the variables and net volume. The model selected had the highest  $R^2$  from all other possible variable combinations at 78.5 percent. The variables that are statistically significant contributors to the forecasting of net volume are PCI and Rank. Table 5 shows the statistical data for the model.

Table 5. Forward Stepwise Regression for Net Volume (Linear Model)

<i>Forward Stepwise Regression for Net Volume Summary</i>						
	Multiple R	R-Square	Adjusted R-Square	StErr of Estimate		
	0.8865	0.7859	0.7503	17.51370022		
<i>ANOVA Table</i>						
	Degrees of Freedom	Sum of Squares	Mean of Squares	F-Ratio	p-Value	
Explained	2	13514.17699	6757.088495	22.0295	< 0.0001	
Unexplained	12	3680.756343	306.7296952			
<i>Regression Table</i>						
	Coefficient	Standard Error	t-Value	p-Value	Confidence Interval 99%	
Constant	-24.99617042	65.61311773	-0.3810	0.7099	-225.4140361	175.4216953
CLARITY	-6.852561034	1.433747618	-4.7795	0.0004	-11.23199989	-2.473122173
RANK	37.10004787	9.116264286	4.0697	0.0016	9.254057701	64.94603804

Source: Created by author.

### Quadratic Model

When looking at the scatterplot of the data it shows that the correlation between clarity and volume production is not linear. The analysis of the months recruiting data also showed a nonlinear relationship. This led to the creation of quadratic model for the data. Figure 4 shows that there is a negative 0.70 correlation between clarity and net volume production. This means that the higher clarity an individual has the less overall net volume production achieved.

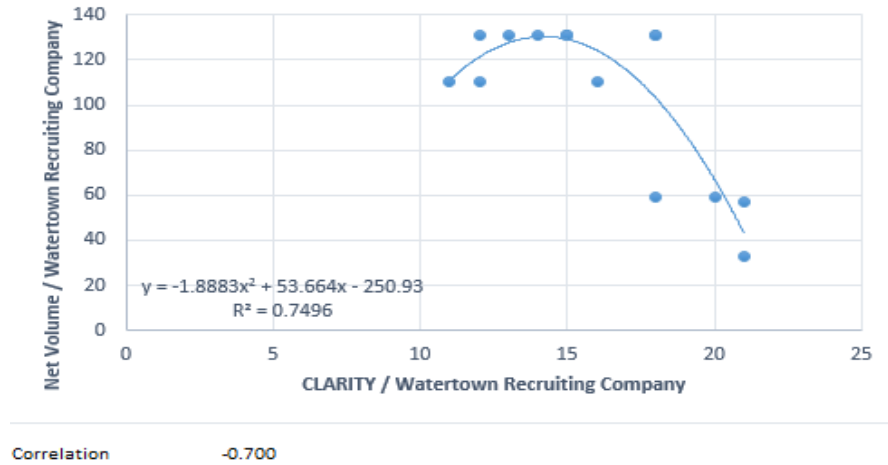


Figure 4. Scatterplot of Net Volume vs Clarity

Source: Created by author.

Similarly a scatterplot of net volume vs number of months recruiting in Figure 5 shows a curvilinear relationship. The data shows a positive 0.61 correlation between the variables which indicate that the higher the number of months recruiting the higher the net volume production. The data shows a dip between months 60-100. This can be explained by the limitations of the study in that there were no participants within that range of time in the Watertown Recruiting Company.



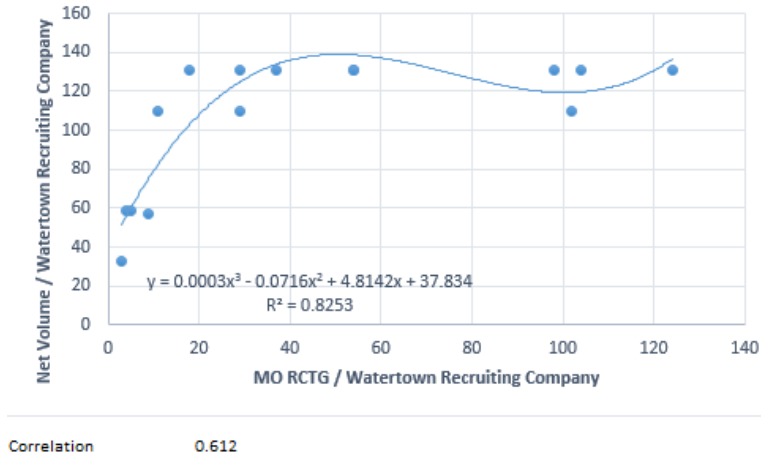


Figure 5. Scatterplot of Net Volume vs Number of Months Recruiting

Source: Created by author.

A quadratic stepwise regression for net volume yielded an improved  $R^2$  of 93 percent. Overall this model is a better fit to the data over the linear model due to the data's curvilinear relationship. This model also shows an improved standard error of estimate and a higher F-Ratio. Under this model  $\text{Net Volume} = -1.08819488(\text{Clarity})^2 + 3.367878094(\text{Months Recruiting}) - 0.0541745(\text{Months Recruiting})^2 + 0.000254949(\text{Months Recruiting})^3 + 31.2370556(\text{Clarity})$ .

Table 6. Stepwise Regression for Net Volume (Quadratic Model)

<i>Stepwise Regression for Net Volume</i>	Multiple	R-Square	Adjusted	StErr of		
<i>Summary</i>	R		R-Square	Estimate		
	0.9693	0.9395	0.9059	10.74803413		
	Degrees of	Sum of	Mean of	F-Ratio	p-Value	
<i>ANOVA Table</i>	Freedom	Squares	Squares			
Explained	5	16155.25119	3231.050239	27.9696	< 0.0001	
Unexplained	9	1039.68214	115.5202378			
	Coefficient	Standard	t-Value	p-Value	Confidence Interval 95%	
<i>Regression Table</i>		Error			Lower	Upper
Constant	-149.387462	95.06311659	-1.5715	0.1505	-364.435172	65.66024809
CLARITY^2	-1.08819488	0.387135808	-2.8109	0.0203	-1.96395692	-0.21243284
MO RCTG	3.367878094	0.736907154	4.5703	0.0013	1.700878298	5.03487789
MO RCTG ^2	-0.0541745	0.013959469	-3.8808	0.0037	-0.08575302	-0.02259599
MO RCTG^3	0.000254949	7.43648E-05	3.4284	0.0075	8.67243E-05	0.000423174
CLARITY	31.2370556	12.41230916	2.5166	0.0330	3.158461516	59.31564968

Source: Created by author.

### Hypothesis Testing and Analysis

Based on the finding that the data is curvilinear and not straight line, the Quadratic Model will be used to conduct the testing of hypothesis. Table 6 shows that clarity and months recruiting were the only variables which met the  $\alpha < (0.05)$  requirement. Therefore all other variables were not significant contributors to volume production. Thus rejecting  $H_{01a}$  “extravert recruiters have more contracts than non-extravert recruiters”  $H_{03a}$  “rank is not significantly correlated to higher contract production.”  $H_{04a}$  “number of months in recruiting is not significantly correlated to higher contract production” and  $H_{06a}$  “age is significantly correlated to contract production.” The model then supports accepting alternate hypothesis’  $H_{11b}$  “extravert recruiters don’t have more contracts than non-extravert recruiters.”  $H_{12b}$  “clarity is significantly correlated to higher contract production.”  $H_{14b}$  “number of months in

recruiting is significantly correlated to higher contract production.” and H<sub>15b</sub> “age is not significantly correlated to higher contract production.” Furthermore the quadratic model increased the R<sup>2</sup> from a .78 for the linear model to a .93 which indicates that the model fits the data better.

The descriptive statistics showed that introverts had four more net volume contracts for FY 13, however when the data was run through a regression it showed that the number was not statistically significant. What the data is trying to tell is that it is not important whether an individual is an introvert or an extravert but rather the respondents clarity of preference. By looking at the linear regression model formula:

$Y = -24.99617042 - 6.852561034(\text{Clarity}) + 37.100004787(\text{Rank})$  we can see that the PCI is -6.852561034. Now if we take the average PCI from the summary statistics in Figure 7 for extraverts (16.3) and introverts (15.3) and add it by the PCI formula in the model we can see how the PCI relates to net volume. Applying the formula for PCI to extraverts yielded a value of 10.13 and for introverts a value of 8.62 putting them in the moderate preference category. Although the adjusted PCI values shows that if falls in the moderate preference category, it is inappropriate to categorize them as ambiverts since the PCI scale is not a extraversion scale like in Pink’s study. What the study shows is that Recruiters who fall in the moderate preference have higher production than those at the slight, clear, and very clear preferences.

The Watertown Recruiting Company’s distribution of personality types showed that the Engagement Teams (ET) had more extraverts than introverts. The Engagement Teams had four extraverts and one introvert. The Recruiting Support Team had two introverts and two extraverts. The Future Soldier Leaders were two extraverts. Both

Recruiting Centers had an introvert and an extravert as Center Commanders and Assistant Station Commanders. According to USAREC Manual 3-01 "Recruiter Handbook," the Engagement Team duties are conduct of face to face prospecting, conduct of area canvassing activities, execute school recruiting program, develop centers of influence and VIP's, and conduct Army Interviews. Nearly all of the activities that a member of the ET conducts are associated with the extravert preference. Therefore it is appropriate to think that when the Commander was making the decision on which team to place an individual, they subconsciously chose primarily extraverts to work within the Engagement Team. The Recruiting support team (RST) duties are to conduct prospecting by telephone and email, manage leads, conduct processing, and maintain center administration. Within the Watertown Recruiting Company there is a balance of introverts and extraverts within the RST. Based on the duties assigned to them we can see that there are those that an introvert will be comfortable conducting such as the prospecting by telephone and email. There are also those activities that an extravert will feel comfortable conducting such as conduct processing which require face to face interaction with applicants. The Future Soldier leader's duties are management of the Future Soldier Training Program, conduct follow up activities with Future Soldiers, manage Future Soldier referral leads and prospecting, and initiate future Soldier shipping. The duties associated with this function primarily require face to face interaction with Future Soldiers who are awaiting to ship, contacting leads provided to the recruiter by the Future Soldiers which are tasks in which an extravert will be more comfortable conducting.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### Conclusion

The Watertown Recruiting Company's distribution of introverts and extraverts within the command are not by design. Nor should they attempt to assign personnel to teams based on their personality using the MBTI® as it is not designed for that purpose. However the command can learn from this data and apply it to future training plans. The Company Commander and First Sargent can develop recruiter training plans that can address some weaknesses or voids within the company. Myers and McCaulley state that individuals who fall in the moderate preference category agree with their dichotomy preference. However when questioned further, they may show frequent use of aspects associated with the opposite pole.<sup>41</sup> Although this is not enough evidence to categorize them as ambiverts, it may explain why the regression model shows that those at the moderate preference category have higher production numbers.

Recruiting commanders operating under a fiscally constrained environment will have to be more efficient with their budget. Based on these limitations it may no longer be possible for commanders to have the large training conference but rather have to choose from within the ranks to determine who will attend training. The study tells us that individuals falling in the CPI moderate preference category are more productive recruiters therefore it will be beneficial to the company to focus on training recruiters who are at the highest and lowest ranges of the CPI. The training should be focused on

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<sup>41</sup> Ibid., 122.

improving team performance and focusing on blind spots. The newly trained recruiters will return to the company with an improved ability to work because of their self-awareness and exercises conducted during training. The company will therefore be rewarded with improved recruiting production numbers.

The research available on USAREC and U.S. Army Recruiters has previously focused on legacy recruiting practices that are no longer in use. These factors have created a void in academic research pertaining to U.S. Army recruiting as it operates today. This study serves as a way to fill the void within USAREC and U.S. Army Recruiting.

#### Recommendation

This study is a step in the right direction of researching U.S. Army Recruiting. Further studies are needed to investigate other aspects of USAREC. Future studies could explore levels of extraversion and their relationship to recruiting. Additionally, a study similar to this one with expanded participation at the Battalion or Brigade level which can be compared to this study and confirm findings or find that on a wider scale the findings are different would be beneficial to the recruiting force.

## APPENDIX A

### INFORMED CONSENT FORM

My name is Major John W Casares and I am currently pursuing a Masters of Military Arts and Sciences through Command and General Staff College in Fort Leavenworth, Kansas while attending Intermediate Level Education at the Western Hemisphere Institute for Security Cooperation in Fort Benning, Georgia.

I am a former Recruiting Company Commander and I wanted to personally thank you for participating in my study. If you have any questions feel free to contact me at 646-298-2006 or john.casares@us.army.mil

#### **Purposes of Research Study:**

The purpose of this study is to administer the MBTI® to Engagement Team members within the Watertown Recruiting Company. The study will not analyze individual results but rather will use the collective data of the participants to find correlations.

Recruiters will self score their MBTI® and keep the Introduction to TYPE book which is helpful in understanding the sixteen different personality types and will have more information on your individual type. The Recruiter TYPE will be filled out on the attachment to the folder provided. The Recruiter personality Types will not be individually shared with anyone. The study will not use names or any other data that can personally identify a participant.

#### **Benefits:**

Individual results can be used for personal development and knowledge of type differences can be used for the understanding of others. Understanding of type can also be used to improve small group performance and interactions.

#### **Confidentiality and Records:**

I understand that individual Recruiter questionnaire results will be kept confidential and that I will not be personally identified within any results of the study. MBTI® questionnaire results will be archived for future analysis and individual MBTI® results for individuals will always be kept confidential. All reporting of the data will be done in aggregate.

#### **Agreement:**

I agree to volunteer for this research study and submitting my questionnaire; I am providing my consent to be part of the research study.

APPENDIX B

WATERTOWN RECRUITING COMPANY DATA

SURVEY	STATION	TYPE	CLARITY	GA	GB	SA	SB	RA	USAR	USAR	USAR	PS	USAR	Net	POSITION	MOS	RANK	AGE	MO	YRS	TYPE = E	STATION =	
31	1N3S	I		16	36	0	13	0	33	10	7	1	2	8	110	CTR CDR	79R	7	36	102	13	0	0
32	1N3V	I		18	55	0	12	0	32	13	3	1	4	11	131	CTR CDR	79R	7	48	124	13	0	1
33	1N3V	E		18	55	0	12	0	32	13	3	1	4	11	131	A CTR CDR	79R	7	38	54	14	1	1
34	1N3S	E		21	11	0	4	0	7	3	3	-1	0	6	33	ET	12N	6	31	3	14	1	0
35	1N3S	E		20	19	0	4	0	19	4	7	0	0	6	59	ET	91P	6	32	4	12	1	0
36	1N3S	E		18	19	0	4	0	19	4	7	0	0	6	59	ET	11B	6	30	5	12	1	0
37	1N3S	I		11	36	0	13	0	33	10	7	1	2	8	110	RST	25U	6	31	29	16	0	0
38	1N3V	E		15	55	0	12	0	32	13	3	1	4	11	131	RST	79R	7	39	104	14	1	1
39	1N3V	I		21	28	0	3	0	14	6	-2	0	0	8	57	RST	42A	6	28	9	14	0	1
40	1N3V	E		15	55	0	12	0	32	13	3	1	4	11	131	ET	68T	7	37	37	16	1	1
41	1N3V	I		14	55	0	12	0	32	13	3	1	4	11	131	ET	11C	6	29	18	15	0	1
43	1N3V	E		13	55	0	12	0	32	13	3	1	4	11	131	RST	13B	6	33	29	13	1	1
44	1N3S	I		12	36	0	13	0	33	10	7	1	2	8	110	ET	14T	6	28	11	13	0	0
45	1N3V	E		12	55	0	12	0	32	13	3	1	4	11	131	A CTR CDR	79R	7	32	54	12	1	1
46	1N3V	E		15	55	0	12	0	32	13	3	1	4	11	131	FSL	79R	7	46	98	12	1	1

Source: Created by author.



## APPENDIX C

### WATERTOWN RECRUITING COMPANY QUADRATIC DATA

SURVEY	TYPE	CLARITY	GA	GB	SA	SB	RA	USAR	USAR	USAR	PS	USAR	Net	AGE	MO	TYPE = E	CLARITY^2	MO RCTG ^2	MO RCTG^3
31	I	16	36	0	13	0	33	10	7	1	2	8	110	36	102	0	256	10404	1061208
32	I	18	55	0	12	0	32	13	3	1	4	11	131	48	124	0	324	15376	1906624
33	E	18	55	0	12	0	32	13	3	1	4	11	131	38	54	1	324	2916	157464
34	E	21	11	0	4	0	7	3	3	-1	0	6	33	31	3	1	441	9	27
35	E	20	19	0	4	0	19	4	7	0	0	6	59	32	4	1	400	16	64
36	E	18	19	0	4	0	19	4	7	0	0	6	59	30	5	1	324	25	125
37	I	11	36	0	13	0	33	10	7	1	2	8	110	31	29	0	121	841	24389
38	E	15	55	0	12	0	32	13	3	1	4	11	131	39	104	1	225	10816	1124864
39	I	21	28	0	3	0	14	6	-2	0	0	8	57	28	9	0	441	81	729
40	E	15	55	0	12	0	32	13	3	1	4	11	131	37	37	1	225	1369	50653
41	I	14	55	0	12	0	32	13	3	1	4	11	131	29	18	0	196	324	5832
43	E	13	55	0	12	0	32	13	3	1	4	11	131	33	29	1	169	841	24389
44	I	12	36	0	13	0	33	10	7	1	2	8	110	28	11	0	144	121	1331
45	E	12	55	0	12	0	32	13	3	1	4	11	131	32	54	1	144	2916	157464
46	E	15	55	0	12	0	32	13	3	1	4	11	131	46	98	1	225	9604	941192

Source: Created by author.

APPENDIX D

WATERTOWN RECRUITING COMPANY FY13 PRODUCTION

PERIOD	MISSION	GA	GB	SA	SB	RA OTH	RA	USAR GA	USAR SA	USAR CA	PS	USAR	USAR	TOTAL
1	MISSION	10	0	10	0	10	30	2	3	0	2	1	8	38
1	GROSS	18	0	4	0	14	36	2	3	0	3	2	10	46
1	DEP LOSSES	-2	0	0	0	0	-2	0	0	0	0	0	0	-2
1	DTP LOSSES	0	0	0	0	0	0	-1	0	0	0	0	-1	-1
1	NET	16	0	4	0	14	34	1	3	0	3	2	9	43
2	MISSION	10	0	9	0	7	26	3	2	0	1	4	10	36
2	GROSS	15	0	5	0	7	27	6	2	1	1	2	12	39
2	DEP LOSSES	-4	0	0	0	-3	-7	0	0	0	0	0	0	-7
2	DTP LOSSES	0	0	0	0	0	0	0	0	0	0	-1	-1	-1
2	NET	11	0	5	0	4	20	6	2	1	1	1	11	31
3	MISSION	11	0	10	0	8	29	3	3	0	2	2	10	39
3	GROSS	16	0	3	0	9	28	3	1	0	0	4	8	36
3	DEP LOSSES	-1	0	0	0	-1	-2	0	0	0	0	0	0	-2
3	DTP LOSSES	0	0	0	0	0	0	0	0	0	0	-1	-1	-1
3	NET	15	0	3	0	8	26	3	1	0	0	3	7	33
4	MISSION	12	0	5	0	11	28	3	1	4	2	4	10	38
4	GROSS	16	0	2	0	9	27	5	0	0	0	5	10	37
4	DEP LOSSES	-3	0	-2	0	-3	-8	0	0	0	0	0	0	-8
4	DTP LOSSES	0	0	0	0	0	0	-2	-3	0	0	0	-5	-5
4	NET	13	0	0	0	6	19	3	-3	0	0	5	5	24
1	MISSION	8	0	8	0	7	23	3	1	0	2	3	9	32
1	GROSS	11	0	6	0	5	22	3	0	1	2	3	9	31
1	DEP LOSSES	-2	0	-1	0	0	-3	0	0	0	0	0	0	-3
1	DTP LOSSES	0	0	0	0	0	0	0	-1	0	0	-1	-2	-2
1	NET	9	0	5	0	5	19	3	-1	1	2	2	7	26
2	MISSION	9	0	8	0	7	24	3	2	0	2	3	10	34
2	GROSS	10	0	5	0	9	24	3	2	0	0	1	6	30
2	DEP LOSSES	-2	0	-1	0	0	-3	0	0	0	0	0	0	-3
2	DTP LOSSES	0	0	0	0	0	0	0	-1	0	0	-1	-2	-2
2	NET	8	0	4	0	9	21	3	1	0	0	0	4	25
3	MISSION	8	0	8	0	8	24	1	4	0	0	3	8	32
3	GROSS	8	0	2	0	12	22	1	4	1	0	0	6	28
3	DEP LOSSES	0	0	-2	0	0	-2	0	0	0	0	0	0	-2
3	DTP LOSSES	0	0	0	0	0	0	0	0	0	0	0	0	0
3	NET	8	0	0	0	12	20	1	4	1	0	0	6	26
4	MISSION	11	0	4	0	11	26	3	2	0	0	4	9	35
4	GROSS	12	0	4	0	7	23	3	3	0	0	6	12	35
4	DEP LOSSES	-1	0	0	0	0	-1	0	0	0	0	0	0	-1
4	DTP LOSSES	0	0	0	0	0	0	0	0	-1	0	0	-1	-1
4	NET	11	0	4	0	7	22	3	3	-1	0	6	11	33

Source: Created by author.

## BIBLIOGRAPHY

### Unpublished Materials

- Brook, Tom Vanden. "Army Plans to Cut 40,000 Troops." *USA Today*, July 8, 2015. Accessed July 8, 2015. <http://www.usatoday.com/story/news/nation/2015/07/07/army-plans-to-cut-40000-troops/29826423/>.
- Bobick, Julia. "Recruiting Command Takes Holistic Approach to Recruiter Development and Training." Homepage United States Army, July 8, 2010. Accessed August 28, 2012. <http://www.army.mil/article/41995/recruiting-command-takes-holistic-approach-to-recruiter-development-and-training/>.
- CPP. "The People Development People." Accessed September 9, 2012. <https://www.cpp.com/en/index.aspx>
- . "History, Reliability and Validity of the Myers-Briggs Type Indicator® (MBTI®) Instrument." Accessed December 6, 2013. [https://www.cpp.com/products/mbti/mbti\\_info.aspx](https://www.cpp.com/products/mbti/mbti_info.aspx)
- Evans, Nancy J. "Test-Retest of the Myers-Briggs Type Indicator: An Examination of Dominant Functioning." *Educational and Psychological Measurement* (August 1997): 590-593.
- Furnham, Adrian, and Carl Fudge. "The Five Factor Model of Personality and Sales Performance." *Journal of Individual Differences* 29, no. 1 (2008): 11-16. doi:10.1027/1614-0001.29.1.11
- Grant, Adam. "5 Myths About Introverts and Extraverts at Work." *Huffington Post*, February 19, 2014. Accessed July 21, 2014. [http://www.huffingtonpost.com/adam-grant/5-myths-about-introverts\\_b\\_4814390.html](http://www.huffingtonpost.com/adam-grant/5-myths-about-introverts_b_4814390.html).
- . "Rethinking the Extraverted Sales Ideal: The Ambivert Advantage." *Association For Psychological Science* (2013): 1024-1030.
- Hammer, Allen L. *MBTI Team Report Sample*. October 2009. Accessed March 14, 2013. [http://www.opp.eu.com/sitecollectiondocuments/pdfs/reports/mbti\\_team\\_report\\_sample.pdf](http://www.opp.eu.com/sitecollectiondocuments/pdfs/reports/mbti_team_report_sample.pdf).
- Recruiting and Retention School. "Recruiter Training." Accessed September 11, 2012. <http://www.rrs.army.mil>.
- Stewart, Greg L. "Reward Structure as a Moderator of the Relationship Between Extraversion and Sales Performance." *Journal of Applied Psychology* 81, no. 6 (1996): 619-627.

- Tan, Michelle. "Army Lays Out Plan to Cut 40,000 Soldiers." *Army Times*, July 10, 2015. Accessed July 25, 2015. <http://www.armytimes.com/story/military/pentagon/2015/07/09/army-outlines-40000-cuts/29923339/>.
- The Myers and Briggs Foundation. "How Frequent Is My Type?" Accessed February 3, 2013. <http://www.myersbriggs.org/my-mbti-personality-type/my-mbti-results/how-frequent-is-my-type.asp>.
- U.S. Army Recruiting Battalion. September 27, 2012. Accessed November 5, 2012. <http://www.sorbrecruiting.com>.
- U.S. Army Soldier Support Institute. "ARC Course Description." Accessed August 26, 2012. <http://www.rrs.army.mil/CourseDescriptions/ARC1.pdf>.
- United States Army Accessions Support Brigade (USAASB). July 23, 2012. Accessed November 1, 2012. <http://www.usarec.army.mil/asb/>
- United States Army Recruiting Command. "Monthly Talking Points." January 31, 2012. Accessed August 12, 2012. <http://www.usarec.army.mil/support/downloads/Januarypercent202012percent20talkingpercent20points.pdf>.
- United States Army Recruiting Command (USAREC)-Brigades and Battalions. September 28, 2012. Accessed November 1, 2012. <http://www.usarec.army.mil/bdemap.html>.
- USAREC. "Recruit The Recruiter." Accessed September 9, 2012. [www.usarec.army.mil/hq/recruiter/overview.aspx](http://www.usarec.army.mil/hq/recruiter/overview.aspx).
- Valenti, Barbara. "MBTI in Companies." Accessed January 3, 2014. <http://barbara-valenti.de/en/practical-skills-2/mbti-in-companies/>.
- Warr, Peter. "Personality and Sales Performance: Situational Variation and Interactions between Traits." *International Journal of Selection and Assessment* 13, no. 1 (March 2005): 63-92.

#### Studies and Manuscripts

- Ashridge Silent Edge. "Success at Sales: Does Personality Matter?" Research Project, Ashridge Business School, Hertfordshire, 2007.
- Congressional Budget Office. *Recruiting, Retention, and Future Levels of Military Personnel*. Washington, DC: Government Printing Office, 2006.
- Koucheravy, Richard J., Major, USA. "Recruiting and Training for the Objective Force." Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2001.

Sedlock, Jennifer R. "An Exploratory Study of the Validity of the Myers Briggs Type Indicator Team Report." Masters Thesis, University of San Francisco, San Francisco, 2000.

### Published Sources

Briggs Myers, Isabel, Mary H. McCaulley, Naomi L. Quenk, and Allen L. Hammer. *MBTI® Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator Instrument*. 3rd ed. Mountain View, CA: CPP, 2009.

Cain, Susan. *Quiet: The Power of Introverts in a World That Can't Stop Talking*. New York: Crown Publishers, 2012.

Emmanuel, Adeshina. "Like the Army Itself, Recruiters Prepare to Make Do With Less." *New York Times*, September 5, 2012. Accessed February 3, 2013.  
[http://www.nytimes.com/2012/09/06/us/like-the-army-itself-recruiters-prepare-to-make-do-with-less.html?\\_r=0](http://www.nytimes.com/2012/09/06/us/like-the-army-itself-recruiters-prepare-to-make-do-with-less.html?_r=0).

Evans, Nancy J., Deanna S. Forney, and Daniel W. Salter. "Test-retest of the Myers-Briggs Type Indicator: An Examination of Dominant Functioning." *Educational and Psychological Measurement* (August 1997): 590-593.

Hirsh Krebs, Sandra, and Jane A. G. Kise. *Work It Out: Using Personality Type to Improve Team Performance*. Mountain View, CA: Davies-Black Publishing, 2011.

Isachsen, Olaf P., and Linda V. Berens, *Working Together: A Personality-Centered Approach to Management*. Irvine: Institute for Management Development, 1988.

Knowles, James A., Greg H. Parlier, Gregory C. Hoscheit, Rick Ayer, Kevin Lyman, and Robert Fancher. "Reinventing Army Recruiting." *Research and the Management Sciences* (January-February 2002): 78-92.

Kohli, Amarpreet S., Dinesh K.Sharma, LTC Jon Gerold, USA, and Frank Pastorino. "Theory of Constraints: An Application in U.S. Army's Recruiting Process." *Journal of Academy of Business and Economics* 9, no. 3 (2009): 164-174.

Kroeger, Otto, and Janet M. Thuesen. *Type Talk: The 16 Personality Types That Determine How We live, Love, and Work*. New York: Dell Publishing, 1989.

Lawrence, Gordon, and Charles Martin. *Building People, Building Programs: A Practitioners Guide for Introducing the MBTI to Individuals and Organizations*. Palo Alto: Center for Applications of Psychological Type, 2001.

Leedy, Paul D., and Jeanne E. Ormrod. *Practical Research: Planning and Design*, 8th ed.. Upper Saddle River, NJ: Pearson Education, 2005.

- Lynch, Ronald G., and R. Scott Lynch. *The Police Manager*. 6th ed. Cincinnati, OH: Anderson Publishing, 2005.
- Milian, Hector, SFC, USA. "Small Unit Recruiting." *Recruiter Journal* (April 2012): 22-23.
- Peters, Sharon L. *Introverts in Extroverted Roles: How Introverted Reporters Cope With the Interpersonal-Contact Stress of Their Jobs*. Ann Arbor, MI: UMI, 1995.
- Pink, Daniel H. *To Sell is Human*. New York: Riverhead Books, 2012.
- United States Army Recruiting Command. USAREC Pamphlet 350-13, *School Recruiting Handbook*. Fort Knox, KY: United States Army, 2004.
- Zeisset, Ray M. *Statistics and Measurement: An Introduction for MBTI Users*. Gainesville: Center For Applications of Psychological Type, 2000.