

RIGHT PEOPLE RIGHT PLAN: A CORRELATION STUDY OF COMMUNICATION  
AMONG NATIONAL SECURITY PARTNERS

by

Melanie Y. Duncan

Copyright 2019

A Dissertation Presented in Partial Fulfillment of the Requirements  
for the Degree Doctor of Management in Organizational  
Leadership with a Specialization in Information Systems  
Technology

University of Phoenix

ProQuest Number:27671075

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 27671075

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346

The Dissertation Committee for Melanie Duncan certifies approval of the following  
dissertation:

RIGHT PEOPLE RIGHT PLAN: A CORRELATION STUDY OF COMMUNICATION  
AMONG NATIONAL SECURITY PARTNERS

Committee:

James C. Rice, DM/IST, Chair

Chris Roberts, PhD, Committee Member

Donald Munday, EdD, Committee Member



---

James C. Rice



---

Chris Roberts



---

Donald Munday



---

Hinrich Eylers, PhD  
Vice Provost, Doctoral Studies  
University of Phoenix

Date Approved: 11/24/2019

## ABSTRACT

This study used correlation to determine the relationship of information sharing among the community of national security partners (CNSP). Measurement included an assessment of the strength of relationship using four predictor variables for a reduction in terrorist funding and terrorist attacks in the United States. This correlation study does not infer causation. A quantitative design tested the relationship strength among the four predictor variables, communication, culture, leadership, and technology. Members of the personal, professional network of the principal investigator received personal, individual invitations to participate in this study via an individualized electronic invitation. The null hypothesis was that a linear relationship for communication, information sharing, technology preparedness, and willingness to share information existed. The value of these results to the CNSP members is that information sharing does exist. However, the degree of measurement suggests that the primary CNSP member supported determined the quality of communication, and relationship strength is higher when the CNSP is military or intelligence information. The survey results indicated that internal communication was of higher quality than intra-agency communication. However, when the external organization was the military or intelligence, the quality of intra-agency communication improved. The quality of communication provided improved based on the CNSP member receiving it.

## DEDICATION

Thanks be to God, who leads “me” in his power and provided victory over the cross through his son Jesus Christ. In Philippians 4:19 of the Holy Bible, it says that God will take care of everything “you” need. In Philippians 4:19 (GNB), “And with all his abundant wealth through Christ Jesus, my God will supply all your needs.” The completion of this dissertation dedication is to Jonathan, and Maya, for their love, support, and understanding. Jonathan and Maya are proof that children are full of encouragement and breathe life into all who are willing to listen. When Jonathan turned 2-years old, I enrolled in college to finish a bachelor’s degree in Business Management. Jonathan is now a member of the Armed Forces. Jonathan and Maya both took on additional household duties as I pursued advanced education. Hopeful that this journey has fueled both children with a quest for knowledge and high expectations for the future. This dissertation dedication is to Ida Beckett (deceased). Ida’s selfless and steadfast love nurtured me all the days of her life. Ida always believed that I would achieve more than one could ever imagine. It is not often that someone takes on the role of mother to someone else’s child, but Ida fulfilled the role remarkably. Her memory will never fade. Finishing this doctoral journey was a challenge. I managed motherhood, working full-time, and being a full-time student, with the tragic loss of Ida, and all the joys of a divorce and job transfer. The value of setting priorities, time management, and perseverance through adversity were lessons learned on this journey.

## ACKNOWLEDGMENTS

The help and support from my committee chair, Dr. James C. Rice, who is by far the best Chair, a doctoral student, could have. Even when life commanded a shift in the dissertation momentum, Dr. Rice stepped in and became the dissertation anchor. To committee members, Dr. Chris Roberts, and Dr. Donald Munday, without whom this dissertation would not have been possible, sincere appreciations and admiration extended! Dr. Munday, thank you for the willingness to take on an additional student. Dr. Roberts, thank you for the QRM review and saying yes! I extend a warm thank you to my family and friends that believed in me and encouraged me to stay the course. Fellow University Alum Dr. Claude Tanoë and Dr. Belinda Robinson, the encouragement was everything! The wisdom of Dr. Charles G. Eberly, who worked with me through the loss of our beloved Columbus Johnson, was unparalleled. Dr. Edward Coufal stood by me from the beginning and pointed out manuscript gaps. To my dissertation coach, Dr. Guillermo Ciudad-Longa (Dr. G), for paying it forward. I promise to pay it forward, Dr. G! Finally, to all those who assisted on this journey, including my social media dissertation support group, to your kindness and foresight, I am indebted. Together we achieve better success, and this journey included a village of positivity that kept the momentum going.

## DISCLAIMER

The views expressed in this dissertation are those of the author, or the research participants and do not reflect the official policy or position of the Department of Justice, or any of its components, including the Federal Bureau of Investigation, or any U.S. government department or agency.

## TABLE OF CONTENTS

Contents	Page
List of Tables .....	xii
List of Figures .....	xiv
Chapter 1: Introduction .....	17
Background of the Problem .....	17
Problem Statement .....	20
Purpose of the Study .....	20
Population and Sample .....	21
Significance of the Study .....	23
Significance to Leadership of National Security Partners .....	24
Nature of the Study .....	25
Overview of Research Methodology .....	27
Overview of Research Design .....	27
Research Questions/Hypotheses .....	28
Research Questions .....	28
Hypotheses .....	28
Conceptual Framework .....	30
Definitions and Acronyms .....	31
Assumptions, Limitations, and Delimitations .....	35
Chapter Summary .....	38
Chapter 2: Literature Review .....	40



Title Searches, Articles, Research Documents, and Journals .....	42
Historical Content .....	43
Current Content.....	45
Methodology Literature .....	46
Cooperation.....	46
Collaboration.....	47
Terrorist Financing.....	48
Money Laundering.....	49
Influence of Terrorism and Technology .....	51
Leadership.....	52
Policing .....	52
Research Design Literature.....	53
Organizational Culture.....	55
History of Police Culture .....	56
Organization Design .....	59
Current Theories on Organizational Culture.....	59
Organizational Culture and Knowledge Management.....	61
Organizational Culture and Information Technology.....	61
Information Sharing .....	62
Electronic Information and the Federal Government .....	63
The Community of National Security Partner Barriers to Information Sharing .....	64

Electronic Information Resources.....	65
Information Sharing and the Federal Government .....	67
Information Sharing Databases and Tracking Systems .....	68
Gaps in the Body of Knowledge.....	69
Conclusions.....	70
Summary .....	70
Chapter 3: Methodology .....	72
Research Method and Design Appropriateness .....	73
Research Questions/Hypotheses .....	74
Population and Sample .....	76
Sample Frame and Unit of Analysis .....	77
Informed Consent and Confidentiality.....	78
Instrumentation .....	78
Pilot Test.....	79
Validity and Reliability.....	80
Internal Validity .....	82
External Validity.....	82
Operationalization and Definition of Variables .....	83
Variables .....	83
Data Collection .....	84
Data Analysis .....	85
Data Cleaning and Preparation .....	87

Inferential Statistics .....	87
Ethics.....	87
Additional Approvals.....	88
Summary .....	88
Chapter 4: Analysis and Results .....	90
Research Questions/Hypotheses .....	91
Research Hypothesis One .....	92
Research Hypothesis Two.....	92
Research Hypothesis Three.....	92
Research Hypothesis Four .....	92
Research Hypothesis Five.....	92
Research Hypothesis Six.....	93
Data Collection .....	93
Demographics .....	95
Pilot Study.....	96
Pre-Analysis Data Screen .....	97
Data Analysis .....	97
Results.....	97
Research Question 1 .....	98
Communication.....	98
Culture.....	103
Research Question 2 .....	105

Demographic Variable Findings .....	122
Summary .....	122
Chapter 5 .....	125
Research Questions and Hypotheses .....	125
Discussion of Findings.....	126
Limitations .....	128
Recommendations for Community of National Security Partners .....	129
Researcher Reflection .....	132
Summary .....	133
References.....	135
Appendix A: Permissions .....	157
Appendix B: Invitation for Survey Participation .....	171
Appendix C: Invitation for Participation Reminder.....	172
Appendix D: Survey Instrument .....	173
Appendix E: Electronic Informed Consent:.....	191
Appendix F: Confidentiality Statement .....	196
Appendix G: Legislation, Acronyms, Additional Tables .....	197
Appendix H: Statistical Analysis of Sharing .....	203
Author Biography .....	285

## LIST OF TABLES

Table 1: <i>Acronyms:</i> .....	35
Table 2: <i>Frequency table for Status</i> .....	95
Table 3: <i>Frequency Table for Primary/Other Primary</i> .....	96
Table 4: <i>Cross-tabulation between Status and Primary Mission and Primary Function.</i>	96
Table 5: <i>Summary of Statistics Table for Scales</i> .....	100
Table 6: <i>Nonparametric Correlations for Communication</i> .....	101
Table 7: <i>Crosstabulation net agree with responses for CNSP Communication</i> .....	101
Table 8: <i>Nonparametric Correlation for Culture</i> .....	103
Table 9: <i>Crosstabulation net agree with responses for CNSP Culture</i> .....	104
Table 10: <i>Nonparametric Correlations for Information Technology</i> .....	110
Table 11: <i>Crosstabulation net agree with responses for Information Technology</i> .....	111
Table 12: <i>Nonparametric Correlations for Time and Mission Needs</i> .....	115
Table 13: <i>Nonparametric Correlations for Leader and Colleague Encouraging Information Sharing</i> .....	117
Table 14: <i>Nonparametric Correlations for Trust</i> .....	119
Table 15: <i>Acronym List</i> .....	199
Table 16: <i>Culture Comparison</i> .....	200
Table 17: <i>Knowledge management</i> .....	201
Table 18: <i>Independent Samples T-test for Questions 9 – 24</i> .....	203
Table 19: <i>Cronbach Alpha Results for Communication (Q9 and Q10)</i> .....	224
Table 20: <i>Item Total Statistics for Culture (Q11, Q12, Q20, Q21, and Q22)</i> .....	226

Table 21: <i>Item-Total Statistics for Information Technology (Q13, Q14, Q15, and Q16)</i>	229
Table 22: <i>Item-Total Statistics for Trust (Q21, Q22, Q23, and Q24)</i>	232
Table 23: <i>Item-Total Statistics for Policy (Q17 and Q20)</i>	234
Table 24: <i>Item-Total Statistics for Information Sharing (Q18 and Q19)</i>	236
Table 25 Tests of Normality results for survey items	236

## LIST OF FIGURES

Figure 1. <i>Organizational and operational integration</i> .....	53
Figure 2. <i>Mentality/culture change</i> .....	58
Figure 3. <i>Customer relationship model</i> .....	65
Figure 4. <i>Internal Communication Governing Information Sharing (UICGIS). Perception- Internal Communication Organization Information Sharing (PICOIS)</i> .....	102
Figure 5. <i>Good Understanding of Information Sharing Culture (GUISC). Perception- Organizational Culture Promotes Information Sharing (POCPIS)</i> .....	105
Figure 6. <i>Perception- Good Understanding of Information Technology (PGUIT)</i> .....	112
Figure 7. <i>Perception of Information Technology Hardware (POITH)</i> .....	112
Figure 8. <i>Perception of Information Technology Software (POITS)</i> .....	113
Figure 9. <i>Perception Security Classification IT Systems Compatibility (PSCITSC)</i> .....	113
Figure 10. <i>Perception - Receipt of Information (PORIPCNSP)</i> .....	114
Figure 11. <i>Perception - Leadership Encouraging Information Sharing (PLEIS)</i> .....	116
Figure 12. <i>Perception - Colleagues Encouraging Information Sharing (PCEIS)</i> .....	116
Figure 13. <i>Perception - Mission Needs CNSP (PMNCNSP)</i> .....	118
Figure 14. <i>Perception - Information Safeguard CNSP (PISGCNSP)</i> .....	120
Figure 15. <i>Perception - Information Shared Analyzed Appropriately – CNSP (PISAACNSP)</i> .....	120
Figure 16. <i>Perception - Information Shared Interpreted Appropriately (PISIACNSP)</i> .....	121
Figure 17. <i>Perception of Information Shared Used Appropriately (PISUACNSP)</i> .....	121

Figure 18. <i>FIT Wheel, Duncan 2019</i> .....	131
Figure 19. <i>Item Statistics for Communication (Q9 and Q10)</i> .....	223
Figure 20. <i>Item Statistics for Culture (Q11, Q12, Q20, Q21, and Q22)</i> .....	225
Figure 21. <i>Item Statistics for Information Technology (Q13, Q14, Q15, Q16)</i> .....	228
Figure 22. <i>Item Statistics for Trust (Q21, Q22, Q23, and Q24)</i> .....	231
Figure 23. <i>Item Statistics for Policy (Q17 and Q20)</i> .....	234
Figure 24. <i>Item Statistics for Information Sharing (Q18 and Q19)</i> .....	235
Figure 26: Descriptives for Survey Instrument for CNSP .....	284



## Preface

Right People Right Plan: Correlation Study of Communication Among National Security Partners is an original intellectual work of the author Melanie Y. Duncan. This study was a follow-up of a research work performed by Sandoval, (2013), that examined the degree of correlation among a community of interest.

The principal investigator received approval for adaptation and use of the survey used in the Sandoval study from Dr. Sandoval (Sandoval, 2013). For research consistency with the Sandoval study, the community of national security partners (CNSP) paralleled the community of interest used in the previous study. However, the CNSP study included the addition of finance and examined the relationship strength of communication, culture, leadership, and technology using correlation.

These research findings added to current academic knowledge by enhancing the understanding of the perception of CNSP partners regarding how communication and culture affect their information sharing and the ability for interagency collaboration. The Government Accountability Office (GAO) that oversees the activity of 10 of the agencies included in the CNSP listed 6 of those agencies as having information sharing as a high-risk item. The results of this dissertation should interest GAO, and senior and middle-level managers within the community of national security partners. The study should interest scholars involved in studies on government communication and information sharing and practitioners in homeland security.

## Chapter 1

### Introduction

Terrorists are continuing to adopt new strategies for their activities and funding terrorism (Kane, 2018; Spink, 2017). Almost a decade after the attacks of 9/11, the quality of information sharing among the Community of National Security Partners (CNSP) remains a strong influence on community practices that support national security (Thompson, 2010). While information sharing may have increased among national security partners, the macro aspect of information sharing nationally appears overlooked. The lack of knowledge sharing between government entities, and the public and private sector banking industry contradicts the USA Patriot Act on Financial Action Task Force (FATF) practices. The contradictions extended to regulation to curtail prohibited practices of foreign banks to finance terrorism (USA Patriot Act). In March of 2018, the Financial Action Task Force clarified requirements on information sharing related to suspicious transactions in financial groups (Financial Action Task Force, 2018).

This study sought to measure the relationship between the variables for a possible overlap of information sharing practices of the community of national security partners between 2010 and 2018. The purpose, significance, significance to leadership, method, research, and framework follow the background information.

### **Background of the Problem**

In 2018, and seventeen years after the attacks of 9/11, the Financial Action Task Force (FATF) announced plenary results on recommendations to improve compatibility of anti-money laundering (AML) and counter-terrorist finance (CFT). The improved compatibility could aid in facilitating public and private sector information exchange based on data protection and privacy rules (DPP), and an amendment to the national cooperation and coordination initiative (Financial

Action Task Force, 2018). For this study, the Community of National Security Partners (CNSP) was comprised of 10 federal departments overseen by the Government Accountability Office including the Commerce Department, Defense Department, Department of Energy, Federal Deposit Insurance Corporation, Homeland Security Department, Justice Department, Office of the Director of National Intelligence, State Department, Transportation Department, and Treasury Department of Defense], public and private sector financial partners and the law enforcement community. The study included a random sample of Community of National Security Partners (96) and a random sample of Non-CNSP partners (100) for a confidence level of 90% at an error rate of 10% (SurveyMonkey, 2018). The null and directional hypotheses sought to measure the relationship level between variables, and test for  $H_{10}$ : No positive correlation exists between information sharing organizational culture. There was an assumption to generalize the CNSP population through increased information about the agencies and their personnel. The generalized population could provide insight into the mainstream U.S. population since CNSP partners reside throughout the United States, which adds to the demographic similarity with the rest of the country.

Since September 11, 2001, the lack of internal communication, organizational culture, and cooperation of organizational leadership, and information sharing between government entities (Government Accountability Office, 2017) may have permitted terrorists to organize and adopt new strategies for funding terrorist attacks. Six of the federal departments identified as CNSP partners listed terrorism-related information sharing as a high-risk issue for their departments, according to reporting by the U.S. Government Accountability Office [GAO] (n.d. accessed June 16, 2017). This GAO reporting identified a gap in the internal and external communication between CNSP partners required to minimize the risk issue associated with

terrorism-related information sharing. A lack of interagency communication between sworn law enforcement officers and agencies responsible for enforcement of laws without the ability to perform arrests is subject to high-risk based on the GAO reporting.

The national scope of this study might support the need for additional methods of information sharing. The concept of a digital response network (DRN) might provide an additional avenue for cooperation should a crisis occur. A DRN is a citizen-driven network used during a crisis to support first responders by aiding decision making on the type of assistance needed and for whom (Phillips, J., 2018).

Chapter 1 addressed the need for the study and included its theoretical base, a statement of the problem, and the purpose of the study. Included in this research were the significance of the problem and the significance of the study to organizational leadership. Presented in this study were the research question, hypotheses, and conceptual framework. Provided in this study were a definition of terms used, an acronym list, assumptions, the scope, limitations and delimitations, and a summary. Further understanding of this study addressed a literature review, the methodology of the study, finding results, and conclusions.

The study examined the role of internal communication, organizational culture, and organizational leadership played in the use of information sharing to possibly reduce terrorist activity within the United States. With studies involving national security matters, the concern of divulging classified information exists. No discussions of National Security classified information are in this dissertation. The survey kept the information centered on the data focus and precluded participants from answering open-ended questions that could have led to a possible leak of classified information.

## **Problem Statement**

The general problem addressed was if the relationship between internal and external communication among the Community of National Security Partners (CNSP) was not adequately combating terrorist finance activity (Saccone, 2009, Munshani, 2010, Financial Action Task Force, 2018). The specific problem was that the quality of the relationship between internal and external communication among federal agencies and organizational leadership among CNSP members was different for combating terrorist finance activity (Financial Action Task Force, 2018; Government Accountability Office, 2017). Does the government currently measure the quality of inter-department communication? A proposed measure was to compare intra-department vs. inter-department communication as a viable measure of the opportunity for improvement of inter-department communication. A change process needs to measure communication effectively to decide on a need for enhancement. How effective communication is among CNSP is related to the mission of the Community, which is reducing terrorist financing. What are the differences in the internal communication practices of CNSP members, and was there a gap? If there was no gap, then was their optimization in the internal and interagency exchange of information? Using the split-half sample with survey items improved Likert Scale raw scores for communication. Score preservation took place for the determination of a gap when evaluating the scales (Michalopoulou & Symeonaki, 2017).

## **Purpose of the Study**

The study examined the relationship of information sharing among national security partners. The predictor variables were internal communication, organizational culture, leadership/trust, and technology as areas of inquiry. Interagency communication was the criterion variable. The study attempted to answer if better interagency communication among

national security partners increased the possibility of reducing terrorist's capability to adapt new strategies for funding terrorist activity. A reduction was one possibility that may have occurred as interagency communication increased, so that terrorist ability to adapt new strategies decreased. The perception of this reviewer on terrorist finance activity as a member of the CNSP community was the base for the control variable used in the analysis design of this research. Approved for study use were a Likert scale, in conjunction with pilot testing the survey instrument and permission for survey adaptation from previously published research. The survey design kept the information centered on the data focus. Participants did not provide answers to open-ended questions to avoid possible leak of classified information and to protect the anonymity of the participants.

### **Population and Sample**

The population surveyed was members of the personal, professional network of the researcher on the social media site LinkedIn. The organizational areas of interest for this survey included *internal communication, organizational culture, organizational leadership, and technology preparedness*. Members of the personal, professional network of the researcher surveyed included civilian government employees, an employee of the military, contractors of the government, state employees, and a recent retiree.

The sample size calculator located on SurveyMonkey™ (2018) calculated the required minimum size sample needed to support the analyses of this study. Members of the personal, professional network of the researcher on LinkedIn were ideal candidates for the study based on the criteria identified for survey participation.

Members of the researcher's professional network received an invite to participate voluntarily, and the invitation contained a link to the survey. Participants included an

investigator, senior decision-makers, middle-level management, IT systems engineers, and other professional and administrative staff.

Delivery of the survey participants' invitations took place via electronic messaging on LinkedIn. Potential participants identified as a member of the personal, professional network of the researcher received an invitation for participation. Some participants elected not to answer all survey questions and instead exited the survey.

There was a three-step process for study participation. First, voluntary participants received an invitation for survey participation via an individual private message from the researcher on LinkedIn, which included a link to the SurveyMonkey™ site, which housed the survey. Second, when the participant opened the link, the main page appeared, which included the letter of informed consent. Potential participants that did not give consent did not participate in this study; instead automatic routing to the exit page occurred and the survey concluded without participation. Third, if the participant accepted the consent, the survey information appeared for participation. All steps of the research involving human subjects followed ethical guidelines and principles.

Five hundred members of the personal, professional network of the principal investigator received invitations for survey participation. After two weeks, fewer than the target of 60 participants had participated in the research. After the study continued an additional two weeks, invited participants received a reminder invitation on LinkedIn. It took 11 weeks to reach the ideal target of 60 participants for this study. In total, 67 participants took part in the research study. Of the 67 participants, only 35 completed the entire survey.

## Significance of the Study

A U.S. Government Accountability Office (n.d., accessed June 16, 2017) report showed that 6 of the federal departments listed as members of the community of national security partners, listed terrorism-related information sharing as a high-risk issue for their departments in 2018, 17 years after the attacks of 9/11. The purpose of the Department of Homeland Security is to assist with terrorism prevention post-9/11, yet more than a decade later, the joining of inter-agencies was not apparent (McCormack, 2009).

The 9/11 Commission Report identified six problems as apparent before and after 9/11. The first was structural barriers to performing joint intelligence work. The intelligence community included a composite of more than fourteen government offices. The 9/11 Commission Report explained that no one office in the intelligence community could connect the information dots apart from information sharing with other component agencies. This study was important because it sought to add to the body of knowledge in national security matters regarding the linkage between money laundering and terrorist activities. The findings of this study might assist leaders concerned with systematic failures in properly sharing critical security information and for mandating process improvement identification by Homeland Security Chairman Bennie Thompson (2010).

Although arrest authority is a crucial component for enforcing laws, not all agencies and establishments tasked with enforcement have sworn law enforcement officers. The need exists for consideration of law enforcement as a significant stakeholder in the execution of operations (Ridley, 2009) within the public and private sector banking industry to assist FinCEN with its mission, and to collaborate with federal government agencies accountable to the Government Accountability Office.



## **Significance to Leadership of National Security Partners**

This study is critical to leadership development because the experiences of law enforcement, national security partners, and the financial industry personnel are necessary to measure the perception of current real-time intelligence information sharing and the use of technology for making improvements (ODNI, 2017; Saccone, 2009). The results of a recent combined reporting from the Office of Inspector General (OIG) of the intelligence community, Department of Homeland Security and Department of Justice on the domestic sharing of counterterrorism information showed the need for an improved common operating strategy of multi-agency information sharing in complex investigations (ODNI, 2017, accessed August 19, 2018). Systematic failures in properly sharing critical security information may diminish while also adhering to OIG process improvement mandates using an integrated interagency communication tool. National security partners might gain a deeper understanding of the culture and leadership differences outlined in the OIG process improvement mandates for effective information sharing.

An integrated interagency communication tool may aid in correcting the communication deficiency while also making strides toward improved technology preparedness. Shortcomings in information technology hindered the FBI's ability to share information. More than sixteen years after the September 11th attacks, similar struggles to find potential threats and prevent terrorist attacks remain apparent (Cordesman, 2018; Adams, 2011).

Four additional problems identified by the 9/11 Commission Report (2004) included a lack of common standards and practices across the foreign-domestic divide, weak capacity to set priorities and move resources, divided management of national intelligence capabilities, and possible overlap in authority based on job saturation. The typical standard problem, according to

the report, could benefit from a common set of personnel standards for an intelligence exchange apart from the individual, organizational culture.

The divided management problem led to decreased influence on the part of the Director of Central Intelligence (DCI) to allocate technical resources and technical use of said resources. Weak capacity to set priorities existed because of limited power by the DCI to reach across agencies in the intelligence community, according to the 9/11 Commission. Finally, the DCI expected to run the Central Intelligence Agency, be the analyst chief for the government, and manage the intelligence community. The 9/11 Commission faulted this overwhelming set of responsibilities for ineffectiveness by the DCI in managing all three jobs. The final problem indicated by the report centered around secrecy and complexity. The 9/11 Commission Report cited long study and expertise as needed skills to understand information communicated by agencies within the intelligence community. The 9/11 Commission implies that the most basic information about money allocation cloaked from the public.

### **Nature of the Study**

The correlational design was the most appropriate for measuring the extent to which interagency communication affected members of the Community of National Security Partners (CNSP) (Black, 2005). CNSP member targeting occurred without regard to their position title to learn the wide-ranging comporment that may deter interagency communication. The goal was to determine if gaps exist within interagency communication to disrupt terrorist's ability to adapt new strategies for terrorist funding activities. Internal communication, organizational culture, organizational leadership, and technology preparedness were areas sought for gaps. At the time of this study, no research was available for the measurement of federal agency communication. This research also evaluated scores for internal communication and scores for interagency

communication for information on the efficiency of internal and external communication. The presence of a gap of score between internal and external communication might reveal a statistical inefficiency within the CNSP and impede the ability to disrupt terrorist's ability to fund terrorist activities. One assumption addressed was that lack of information sharing might negatively impact the ability of private sector banking practices to curtail prohibited practices of foreign banks to finance terrorism (USA Patriot Act).

Locating gaps within the four areas mentioned above as they pertained to interagency communication could reveal links between drug traffickers and organized crime (Mushtaq, Murtaza, Kamal Shah (2011). Mushtaq (et al., 2011) revealed in their study the relationship between organized crime and terrorism by sharing tactics and methods through short and long-run transaction-based services (Mullins, 2009). The U.S. Senate in 2012 considered revoking the charter of the U.S. Bank HSBC (Hong Kong and Shanghai Banking Corporation) due to illicit money funneling in support of HSBC affiliates worldwide (Tree, 2012). In conjunction with money laundering and terrorist-financing, ten elements from the FATF recommendations regarding money laundering and terrorism-financing are included and used as the criteria for shaping this research (FATF, 2018).

Describing the investigative degree of variation using cultural behavior as a relationship variable was a goal of this study. Skinner (1953) posits scientific theory as a means for determining ways to control and predict human behavior. An anticipated outcome was the development of a model for successful information sharing procedures based on a prediction of practices. Specific information pertained to the individual culture of each organization, such as differences in the socialization systems between the target culture and the mainstream culture (Fetterman, 2010). National security partners may follow the model as a method to improve

communication for the prevention and deterrence of terrorist funding and terrorist attacks within the United States of America. There was an assumption presented through observations associated with this research that the participants believed that a communication problem existed, but responses to that effect might be inconsistent. The participants were appropriate for the study because they all had a role in preventing counter-terrorist funding and money laundering. These roles make the participants' viewpoint critical to the outcome of this study. For this study, describing the differences in organizational culture was crucial for understanding views on information sharing and interagency communication post-9/11.

### **Overview of Research Methodology**

Determining to what extent internal communication, organizational culture, organizational leadership, and technology preparedness were interrelated to interagency communication was the goal of this study. Qualitative phenomenology and ethnography (Creswell, 2005) did not meet the criteria for this study based on their ability to provide a lived experience and observation of the participants in their natural surroundings, but such designs would have also opened participants to inappropriate exposure based on their self-reported activities. A mixed-method study was not appropriate for this study for similar reasons.

### **Overview of Research Design**

A quantitative design showed the strength of the relationship between the variables as well as their directionality. Employing a quantitative design avoided the likelihood of exposing research subjects due to inadvertent self-reports in written responses.

An existing quantitative survey administered to executive branch agencies in 2013 (Sandoval, 2013) was adapted to measure and capture the perspective of participants to understand organizational culture shifts relevant to the study. Participants engaged in their

organization's information sharing process, and participants employed since September 11, 2001, were ideal for this survey and might have helped detect organizational culture shifts relevant to the study.

### **Research Questions/Hypotheses**

The research question and hypotheses associated with this research measured how communication and culture affect information sharing and interagency collaboration. Measured as the second and final research question was intra-agency communication of multi-organizational information sharing between the community of national security partners.

#### **Research Questions**

The two research questions in this study where are as follows:

**R1.** Is internal CNSP agency communication of greater quality than intra-agency communication?

**R2.** What is the quality of communication between members of the Community of National Security Partners?

#### **Hypotheses**

Six hypotheses measured possible relationships between the criterion variable (interagency communication) and the four predictor variables (internal communication, organizational culture, leadership/trust, and technology preparedness) used to address the research questions.

The following six hypotheses tested in support of this Community of National Security Partners study were:

**H<sub>1</sub>**. A linear relationship exists between internal communication and interagency communication.

**H<sub>01</sub>**. No linear relationship exists between internal communication and interagency communication.

**H<sub>2</sub>**. A linear relationship exists between organizational leadership and internal communication.

**H<sub>02</sub>**. No linear relationship exists between organizational leadership and internal communication.

**H<sub>3</sub>**. A linear relationship exists between organizational leadership and technology preparedness.

**H<sub>03</sub>**. No linear relationship exists between organizational leadership and technology preparedness.

**H<sub>4</sub>**. A linear relationship exists between technology preparedness and internal communication.

**H<sub>04</sub>**. No linear relationship exists between technology preparedness and internal communication.

**H<sub>5</sub>**. A linear relationship exists between internal policy and cultural willingness to share information.

**H<sub>05</sub>**. No linear relationship exists between internal policy and cultural willingness to share information.

**H<sub>6</sub>**. A linear relationship exists between internal policy and interagency communication.

**H<sub>06</sub>**. No linear relationship exists between internal policy and interagency communication.

## Conceptual Framework

The conceptual framework enabled examining to what extent internal communication, organizational culture, leadership, and technology preparedness affected interagency communication and the ability to share information within the Community of National Security Partners (CNSP). The framework built around the attempt to determine if better interagency communication among national security partners increased the possibility of disrupting terrorist's capability to adapt new strategies for funding terrorist activity. The relationship determination for predicting disruption of funding terrorist activity was a collaborative aspect not intending to infer absolute reduction in terrorist financing, but a preliminary possibility that as interagency communication increased, terrorist ability to adapt new strategies might decrease. This study derived from three primary areas: Kitchener's rendition of Russell's epistemology for synthesizing leadership principles pertaining to trust, culture, and image (Kitchener, 2004); Brake's (2008) six C's of collaboration pertaining to trust and leadership in conjunction with Goleman's (1995) emotional intelligence competencies of relationship management. These competencies provided value for developing others, change catalyst, influence, conflict management, and teamwork and collaboration.

The synthesis of Russell's work formed a further base for synthesis with the theory of knowledge about an external world relating to problems and the role the mind and knowledge play in creating that perception (Kitchener, 2004).

Russell's naturalistic epistemology of the role of the mind, knowledge, and the world might contribute to understanding the role of organization image in preserving control internally. Organization image or branding may have played a role in understanding what prompted "need-to-know" before the attacks of 9/11 and the continued evolution of "need-to-share" so many

years after the attacks of 9/11. Because knowledge-sharing and network formulation were ideal for network creation, the development of interagency trust might lead to enhanced information sharing using technology. Applying Russell's method of analysis-synthesis (Kitchener, 2004), to the concept of leveraging technology may build high-performance teams for counterterrorism prevention (Hackney, Desouza, and Irani, 2008), so real-time intelligence development might occur.

### **Definitions and Acronyms**

This section includes definitions and acronyms found in this study. The definitions of terms, concepts, and phrases used in this study appear below for the reader's understanding.

*Collaboration.* The collaboration focuses on codifiable knowledge, un-centralized decision-making requiring a shared commitment (Wilson, 2011).

*Communication.* Communication is a process through which an organization sends a message across a channel to another part of the organization (Kapucu, 2006).

*Culture.* Culture is the sense of refinement or training of taste or the mind. This definition expanded includes belief and knowledge acquired while a member of any society (Jahoda, 2012).

*Cyber-terrorism.* Cyber-terrorism involves the use of high technology to bring about religious, political, or ideological aims for the intimidation of civilian enterprise that results in disabling or deleting critical infrastructure information or data (Tafoya, 2011).

*Department of Homeland Security (DHS).* The Homeland Security Act of 2002 established the Department of Homeland Security as an executive department of the United States for the prevention of terrorist attacks, assist in the recovery from terrorists' attacks occurring within the United States, minimize damage from terrorist attacks occurring in the United States and reduce vulnerability of the United States to terrorism (U.S. Congress, 2002).



*Emotional intelligence competencies.* For this study, emotional intelligence competencies about leadership are self-assurance, self-management, cognitive and emotional empathy, and relationship skills. (Goleman, D. 2014).

*Financial Action Task Force (FATF).* The Financial Action Task Force (FATF) is comprised of 30 countries and is an inter-governmental policy-making body mandated to establish the international standards used to combat money laundering and terrorist financing (FATF, 2018).

*Financial industry.* The financial industry comprised of firms that are members of the National Association of Security Dealers, Inc. (NASD). This definition of the financial industry excludes banks, credit unions, savings and loans, insurance companies, 23 investment advisory organizations, and other non-NASD and non-NYSE member Organizations (NASD, 2005a).

*Identity theft.* Collins (2008) defined identity theft as a crime in which an imposter obtains key pieces of personally identifiable information [i.e., driver's license number, and social security card number].

*Informal value transfer system.* Informal value transfer systems (IVTS) are an avenue for transmitting money where the paper trail may not have documentation following government regulations (Takats, 2011).

*Information asymmetry.* Information asymmetry exists when one or more parties possess informational awareness relevant to the effective participation of a given situation relative to other participating parties (Clarkson, Jacobsen, and Batcheller, 2007).

*Information sharing.* Information sharing exists when all parties of informational awareness relevant to the effective participation of a given situation are the same relative to all participating parties (Clarkson, Jacobsen, and Batcheller, 2007).

*Interagency.* One or more organizations in a network, two or more agencies joining together (Kapucu, 2006).

*Interagency communication.* Interagency communication is a process through which an organization sends a message across a channel to another organization in the network (Kapucu, 2006).

*Interagency cooperation.* Interagency cooperation occurs when more than one agency with a related mission works together for a better-coordinated system (Weiss, 1987; Frazier, 2014).

*Knowledge management.* Knowledge management is the ability of an organization to manage information during periods of uncertainty. (Davenport, 2005).

*Money laundering.* Money laundering refers to the process of turning illegally obtained earnings into legal businesses so that the money use is legitimate without a trace to the illegal means from which the earnings originated (Schneider and Windischbauer, 2008).

*Regulatory compliance.* For this study, regulatory compliance refers to statistical systems and assessments for determining data quality of reports run by the banking industry following the International Monetary Fund (IMF) and Financial Crimes Enforcement Network (FinCEN) (Bonollo and Neri, 2012).

*Socio-Technical Systems (STS).* Socio-technical Systems (STS) relates to an exchange of relationship between people, products, processes, and projects (Tung and Yuan, 2010).

*Spamming.* Unwanted and unsolicited electronic e-mails (Tillman, 2002).

*Suspicious activity reports.* The purpose of suspicious activity reports is to report known or suspected violations of law, observed by financial institutions subject to regulations by the Bank Secrecy Act (U.S. Congress, 1970).

*Society for Worldwide Interbank Financial Telecommunication (SWIFT)*. SWIFT operates a worldwide messaging system to transmit financial transaction information useful to the U.S. Government for specific terrorism investigations on suspected international terrorists or their networks (U.S. Department of Treasury, n.d.)

*Terrorist financing suspicious activity reports*. Terrorist financing suspicious activity reports are suspicious activity reports related to terrorist financing, as identified by the Financial Crimes Enforcement Network (FinCEN), (U.S.C. 31 Chap 53 §5311).

*Terrorism*. According to the National Counterterrorism Center, terrorism occurs when deliberate political motivation drives the actions of groups or individuals to attack civilians/noncombatants or their property recklessly. These actions are terrorism when the acts of attack do not fall into other categories of political violence such as rioting, tribal violence, or crime.

*Terrorist attack cycle*. Fussey (2011), and McCormack (2003) define the terrorist attack cycle as a pattern of activities terrorists follow in stages that include elements such as target selection, planning, deployment, attack, escape, and media exploitation.

*Terrorist Finance Tracking Program (TFTP)*. Initiated after 9/11 for identifying, tracking, and pursuing terrorists and terrorists' networks (U.S. Department of Treasury, n.d.).

*Transactive memory system*. TMS is knowledge organized, stored, and contained in the individual systems of group members, and transactive encoding, and storage that is knowledge for retrieval processes that occur among group members (Jarvenpaa, and Majchrzak, 2008).

*White-collar crime*. Defined by Edelhertz (Wheeler and Kahan, 2005) as an illegal act or series of acts committed to obtain money or property, obtain business or personal advantage, or

to avoid loss of money or property, or avoid payment by concealment and nonphysical means (Wheeler and Kahan, 2005).

## Acronyms

Table 1

### *Acronyms*

AML/CFT	Anti-money laundering/ Counter-Terrorist Financing
BSA	Bank Secrecy Act
CNSP	The Community of National Security Partners
CTF	Counter-terrorist Finance
FATF	Financial Action Task Force
FINCEN	Financial Crime Enforcement Network
PI	Principal Investigator
SAR	Suspicious Activity Report
START	Study of Terrorism and Responses to Terrorism

Note. *Acronyms used in this research study. See Appendix G for the full acronym list.*

## **Assumptions, Limitations, and Delimitations**

Based on the accuracy of data about internal communication, organizational culture, organizational leadership, and technology preparedness there are six assumptions. The first assumption is that a problem existed with information sharing among the community of national security partners. The second assumption was that using an online survey as the data collection instrument was a useful technique for conducting the study. The third assumption was that the survey participants would answer questions truthfully. The fourth assumption is that the number of responses from the survey size of the sample may pose a limitation that generalizes the results towards a national security partner instead of a common operating picture. The fifth assumption is that no two independent variables were highly correlated and caused multicollinearity (Cohen, Cohen, West, and Aiken, 2003). The sixth assumption, though a controlled survey, there was the possibility that participants forwarded the survey link to request the participation of others who did not receive a survey invitation from the principal investigator of this research.

The number of participants who participated and completed all survey questions represented a limitation in analyzing the data and interpretation of results. Using private electronic messaging on LinkedIn as the avenue for survey invitation helped to control this. While this was a significant effort on the part of the principal investigator to control access to the survey, the possibility remains that the members of the principal investigator's personal, professional network forwarded the survey link to their colleagues who did not receive a survey invitation.

Determining if better interagency communication increased the possibility of disrupting the terrorist's ability to adapt new strategies for funding terrorist activity was the study limit. The scope was the community of national security partners from 10 federal agencies, the law enforcement community, and private and public sector financial industry employees. The relationship determination for predicting a reduction in terrorist financing was a collaborative aspect not to infer absolute disruption in terrorist financing but a preliminary possibility that as the level of interagency communication among CNSP partners increased, a reduction in terrorist financing might exist. Internal communication, organizational culture, organizational leadership, and technology preparedness were the predictive variables.

The limit to study participants was a social media group that included banking and finance professionals interested in discussions of technology and innovation related industry issues of networking and information sharing. Research continues, and studies evolve because of limitations (Rubin, 2007). Limitations imposed on the study participant diversity stemmed from a lack of control by the PI in determining if potential participants were part of a vulnerable group. This research did not target members of protected groups for this research; however, there is the possibility that some members of the population might have been pregnant women or

members of ethnic and racial minority groups due to the potential diversity of members within the social media group used for this study. The identification and attributes of a vulnerable group were not relevant to the data collection for this study. Should data discovery reveal these attributes, the PI would have the opportunity to control the discovery.

The nature of classified information precluded this research from including FinCEN activity reports submitted by law enforcement. Any FinCEN information related to law enforcement suspicious activity reports (SAR) was public information retrieved from FinCEN SAR Activity Review information published under the auspices of the Bank Secrecy Act Advisory Group.

Non-experimental research may have posed the limitation of an inadequate ability to adequately measure variables in the study. Another limitation might have been the potential loss or lack of participants due to availability. A problem with data collection or analysis problems might have resulted from the loss or lack of participants. Possible limitations of the research design might have been no identifiable relationship presented by correlation. A lack of understanding of the relevance of the subject matter presented to participants via survey might have posed a limitation to the relevance of the information for their organization and CNSP partners.

Piloting of the adapted survey instrument was associated with this research. A limitation resulting from pilot instrument testing might have been an inaccurate interpretation based on pilot data. The main study results did not include survey results from the pilot participants to minimize the occurrence of inaccurate interpretation (Teijlingen & Hundley, 2002). Another researcher in a previous study used an adaptation of the survey. An additional limitation and risk of using a pilot study was the collection of numerical data from pilot participants, once for

piloting and second for inclusion in the main study. Hypothesis testing did not include data from pilot participants nor did the survey result report to minimize this risk.

The number of members currently linked to the personal, professional network of the researcher on the LinkedIn social media site was the limit for study participants. The personal, professional network of the researcher had 805 members. The researcher's network likely included survey participants who worked for private and public financial institutions interested in using innovation and technology for feedback and insight into a potential information-sharing gap with other agencies and companies that comprise the community of national security partners. A convenience sample was the basis for the selection of participants. All members of the personal, professional network of the researcher on LinkedIn social media group had the option to participate in the survey; however, participants engaged in their organization's information sharing process, and participants engaged in employment with their organization since September 11, 2001, were ideal for the prediction portion of this study and might help with determining organizational culture shifts relevant to the study.

While other groups of the intelligence community and law enforcement communities might have been appropriate for this study, the ability to curtail bias and present publicly valid data might have diminished because of the time constraints imposed by the research.

### **Chapter Summary**

Chapter 1 introduced the need for the study and included its theoretical base, a statement of the problem, and the purpose of the study. Presented beside the research questions and hypotheses were the nature and significance of the study. Provided were a definition of terms used within this study, and assumptions, and limitations. Further understanding of this study

contained a literature review and addressed in sequent, the methodology of the study, finding results, and conclusions.

Chapter 2 provided a literature review and evolution of information sharing across the government since the September 11<sup>th</sup> attacks.



## Chapter 2

### Literature Review

The purpose of this study was to determine if interagency communication among CNSP increased the possibility of disrupting terrorist's capability to adapt new strategies for funding terrorist activity. Since 9/11, information sharing to prevent terrorism is the responsibility of all citizens, not just law enforcement and the federal government. With the increase of money laundering offenses crossing national boundaries, the need for interstate cooperation continues to increase, and eventually, national law enforcement might need internal cooperation to assist with domestic criminal laws (Amrani, 2017). The relationship determination for predicting stoppage of funding terrorist activity was a collaborative aspect not intending to infer absolute disruption in terrorist financing, but a preliminary possibility that as interagency communication increases, terrorist ability to adapt new strategies may decrease. In the United States the responsibility of policing lies primarily with local government (Patterson, 2007); however, contributions beyond the local government were apparent from a 2016 al-Qaeda publication called *Inspire* that called for an increase in lone-wolf attacks (Worth, 2016) amid the results of the Orlando Pulse Nightclub and Dallas attacks of 2016 (Fox News U.S., 2018).

Before attempting external collaborations, learning how the internal image of an organization reflects upon their staff is crucial and requires thought. Business partners exchange knowledge for objective achievement, and innovation within their organizations (Hackney and Desouza, and Irani, 2008). Price and Gioia (2008) discuss self-monitoring as a method that organizations can apply to monitor their image. Mixed-motives and levels of distrust may formulate from ego-centered networks and lead to perceived distrust when considering knowledge network sharing. Implementation of a strategy for free-flowing knowledge and

information sharing warrants an inherent need to understand epistemology as it pertains to knowledge in organizations for locating barriers (Gil-Garcia, J., Soon Ae, C., and Janssen, M., 2009).

Literature within this review examined research documents, scholarly books, journal articles, archived publicly available publications, photos, recordings, and limited law enforcement publications. Keywords used for this literature review included agency theory; interagency communication, information sharing between local and state governments; prediction; epistemology; financial industry; private banking; electronic information resources; Department of Homeland Security; Federal Bureau of Investigation; Government Accountability Office; Financial Action Task Force; anti-money laundering; counter-terrorist funding; information networks; security management; national security; public safety; intelligence-led policing; electronic surveillance of terrorism; law enforcement intelligence; police culture; information sharing and government; knowledge management; terrorist financing; finance regulations; financial intelligence unit, and government and information technology. Analyzing the problem of a lack of interagency communication among the study group of this research, the incorporation of paradigm shifts in information technology post 9/11 was necessary to capture changes implemented in business practices since the attacks of 9/11.

Related to the research questions were police culture, organization culture, knowledge creation, and information networks. Conducted to understand factors contributing to terrorist activity was an examination of the concept of internal communication, organizational culture, leadership, and level of preparedness as they pertain to interagency communication. Chapter 2 included a review of relevant literature about the research question. Also provided was the historical overview of the need for interagency communication among national security partners

and government collaboration. The research discussed paradigms and agency theory, organizational trust, government collaboration, and information sharing expansion with the private sector.

### **Title Searches, Articles, Research Documents, and Journals**

A comprehensive review of peer-reviewed journal articles, doctoral dissertation work, search engines from the University of Phoenix Library used were EBSCOhost, ProQuest, ProQuest Dissertations and Theses, Dissertations and Theses at the University of Phoenix. Keywords used in searches involved several topical components of terrorist finance, collaboration, culture, information sharing, internal communication, leadership, organizational culture, team processes, interagency communication, and organizational topics linked to national security partners. The published information attained derived from government Websites that included the National Archives Records Administration (NARA), from the National Criminal Justice Reference Service, and research libraries that specialize in internal communication, information sharing, organizational culture, and leadership, and terrorist finance. The literature review provided a historical overview of intelligence and federal agencies, and a history of leadership, culture, information sharing, and theoretical foundations that included information sharing among CNSP partners. Housed within the National Archives and Records Administration (NARA) is a sizeable collection of textual records called Team 4 files compiled between the years of 2003 and 2004. The Team 4 files document terrorist finance measures for the period 1994 -2004 and most remain closed under the provisions of a letter from Commission Chair, Thomas H. Kean, and Vice-Chair, Lee H. Hamilton, addressed to the Archivist of the United States, John W. Carlin, to barring the records from public disclosure (pertaining to information sharing between government agencies since the attacks of September 11, 2001

(9/11), covering the dates of 1994 through 2004. When the 9/11 Commission closed in August of 2004, legal custody of all their records transferred to the National Archives and Records Administration. The file compiling took place in 2003 and 2004 by Team Four of the 9/11 Commission to document the period of 1994 to 2004. The 9/11 Commission wanted the transferred records released to the public by January 2009. Unfortunately, as of July 30, 2018, about sixty percent of the archived 9/11 Commission files remain closed under the provisions of a letter dated August 20, 2004, to the Archivist of the United States, John W. Carlin. The letter is from the Commission Chair, Thomas H. Kean, and Vice-Chair, Lee H. Hamilton, and governs that records containing information considered classified and barred from public disclosure. Various stipulations and limited resources were available that specifically addressed information-sharing between the groups identified as national security partners in this study, relative to the collective effort to thwart changing terrorist strategy for funding terrorist activity. As a result, the literature review focused on topic studies surrounding the research area.

### **Historical Content**

A review of historical data generated a significant amount of foundational information about internal communication, organizational culture, leadership, and level of preparedness. Provided was a synopsis of facts about intelligence and federal agencies, money laundering, and law enforcement. Government entities, historians, and politicians have employed numerous approaches to address the issue of what led to the attacks of 9/11. In 2010 Government Accountability Reports cited a need for increased information sharing within the federal government (Government Accountability Office, 2010), and in 2004 financial institutions came under scrutiny for over-reporting suspicious activity (Simpson, 2004). A description of under-reporting by establishments like Western Union appeared within the same article. This reporting

discrepancy identifies a gap between private and public sector finance practices that may boost money laundering activity.

Finding gaps that may exist in interagency communication could purposefully lead to cause identification of a possible communication break-down among national security partners. An additional objective of this study is to examine if the better interagency communication, the better the possibility of disrupting terrorist's ability to adapt new strategies for funding terrorist activity. A breakdown in communication may impede the ability of law enforcement to exercise arrest authority to prevent terrorism and counterterrorism activity within the United States. Looking toward the future, the continued shifts in terrorist schemes to fund plots may require similar shifts for interagency communication between the government, law enforcement agencies, the private sector, and the banking industry. A potential hindrance is the inability of the banking sector to recognize terrorist-financing because of their unfamiliarity with techniques used by law enforcement agents or experts (Ridley, 2009). Data collected for the present study ascertained the perception of participants on information sharing improvements between the banking industry and federal government to assist law enforcement personnel and identified existing gaps in information sharing that existed more than a decade past the 9/11 attacks. Because the law enforcement and arrest authority are crucial to enforcing laws, any information sharing process among the national security partners should consider law enforcement as a significant stakeholder for assistance in the execution of their operations (Ridley, 2009).

After the attacks of 9/11, a shift in methods for eliciting funds led to increased education on trade-based money laundering (TBML) practices. In testimony given before the United States Senate Committee on the Judiciary on March 18, 2003, former FBI Director Robert S. Mueller described the use of TBML by Khalid Shaikh Mohammed (KSM), known as a terrorist

mastermind whose plots included the 1993 World Trade Center bomb, the USS Cole bomb, and the September 11th terrorist attacks delivered by air (The Federal Bureau of Investigation, 2003). Director Mueller faulted shortcomings in information technology for hindering the FBI's ability to develop enough capacity to share information. The deaths resulting from these terrorist plots included thousands of innocent people (108th Congress, 2003). The FATF in 2003 revised the 40 recommendations for anti-money laundering and incorporated nine recommendations for combating the financing of terrorism (Delston and Walls, 2009).

More than a decade since the attacks of September 11, 2001, an increased threat of cyber-related terrorist activity is apparent (Albanesius, 2012). In March 2012, Former FBI Director Mueller alluded to the possibility of Internet use by terrorists to launch a full-scale cyber-attack (Albanesius, 2012). Information sharing, and cooperative strategies by state, local, and federal law enforcement personnel aided in preventing a bomb plot of the D.C. metro system (Hsu, 2010).

### **Current Content**

On October 26, 2001, the United States Patriot Act became law. Its purpose was to deter terrorist acts in the United States and around the world. More than a decade after enactment of the law acts of terrorism as recent as the 2018 House of Parliament Attack outside London, England (de Freytas-Tamura, 2018), and the 2017 Mandalay Bay attack in Las Vegas, Nevada (Bui, Zapotosky, Barrett and Berman, 2017) continue to occur. Results of a recent study of local Texas law enforcement cited the role of organizational culture as a hindrance to interagency collaboration and leadership behavior as a further barrier (Cohen, 2018). In 2015, an emergency management journal article by Kahan posited that the United States continued to face risk from terrorist attacks and discussed the vast differences or gaps in the scope and skill of the sharing of

emergency management responsibilities (Kahan, 2015). Kahan that same year discussed additional dissent in a business continuity journal regarding the lack of preparation by private U. S. companies against terrorist disruptions to company finances as a risk reduction strategy.

In February 2015, Former FBI Director James B. Comey voiced a call to action between government agencies and local law enforcement for information sharing based on the likelihood that suspected supporters of the Islamic State in Iraq and Syria (ISIS) were residing in every state across the United States (Byrnes, 2015). As mentioned in the background of this study, terrorists' attacks continue to span the globe. Additional guidance from Al Qaeda, encouraging lone-wolf attacks in the United States targeting specific ethnic groups, adds immediacy to the call to action for information sharing (Parry, 2016). In October 2018, FBI Director Christopher A. Wray provided testimony on homeland security threats and encouraged information sharing through partnerships to stay ahead of the homeland threats (www.fbi.gov, 2018).

### **Methodology Literature**

The methodology literature section includes content associated with information sharing, communication leadership, and technology. Policing literature provides an understanding of law enforcement culture. Also provided is the historical overview of money laundering and current literature on terrorist financing and the relation of terrorism and technology.

### **Cooperation**

In 2014, many analysts believed al-Qaeda would lose its dominance to the Islamic State; however, reporting by Gartenstein-Ross and Barr (2017) provided a timeline and strategy on how and why al-Qaeda's strength ability to diversify their strategy continues despite efforts by the United States of America to cut-off funding from international charity networks supporting the mission of al-Qaeda. The lack of commonality of actions, performance, and coordination among

federal agencies on the one hand and the alliances of terrorist organizations such as the Islamic State and al Qaeda on the other could signify that attacks and money laundering are likely to increase in the United States (Turak, 2017), (Bacon, 2018). The creation and expansion of suspicious activity reports (SARS) beyond the scope of law enforcement may be a solution to the problem of reporting potential criminal activity between national security partners. The SARS would act as a line of defense for alerting the law enforcement and public and private sector banking community of potential money laundering and terrorist-financing activity (Simpson, 2004). Working together may lead to improved success in detecting and obstructing AML/CFT (Cooper and Stack, 2018).

### **Collaboration**

The collaboration focuses on codifiable knowledge, un-centralized decision-making, requires low trust, a shared commitment, and the development of new resources (Wilson, 2011). Characteristics of successful collaboration start with mutual respect, trust, and understanding (Mattessich and Monsey, 1992). Open and frequent communication and enough funds are additional characteristics for successful collaboration (Mattessich and Monsey, 1992). When working with inter-organizational knowledge, the ability to break organizational theory in parts is beneficial in determining similarities to assist with measuring potential performance through collaboration. The transactive memory systems (TMS) prove beneficial according to Jarvenpaa and Majchrzak (2008), for collaboration, and goal setting. According to Tasoluk, B., Yaprak, A., and Calantone, R. J. (2007), this tenet is concerned with the explanation of problems with party engagement in agency relationships.



## **Terrorist Financing**

By locating terrorist operatives and supporters, disruption of terrorist plots can occur (Roth, Greenburg, Wille, 2004; Bacon, 2018). This thought process led the path to the beginning of the shift in the United States terrorist financing strategy beyond the initial post-9/11 aftermath. The organizers of the 9/11 attacks were not skilled in the use of the international financial system but managed to have more than \$400,000 deposited into the United States accounts without any detection of criminal intent by the financial system (Roth, Greenburg, Wille, 2004). The financial transactions for the 9/11 attacks were routine since they had no connection to drug trafficking or a substantial amount of financial fraud (Roth, Greenburg, Wille, 2004). Following attacks of 9/11, the FATF made typologies available to assist financial institutions with detecting transactions possibly related to terrorist financing. As late as 2012, no published comprehensive study of terrorist financing typologies existed (Gordon, 2012). In 2012, a study of publicly available prosecutions by the United States of 266 prosecutions involving either material support of terrorism, charges of terrorism, or other terrorism-related material took place. Of these 266 prosecutions, thirty involved financial institutions, and twenty-four of these contained useful information for comparison or typologies related to terrorist financing (Gordon, 2012). Sixteen of the prosecutions had indicators associated with typologies of money laundering three involved criminal proceeds. Only one had a correct typology of terrorist financing, leading to a conclusion that terrorists disguise the origins of funds and payment traces by using money laundering techniques (Gordon, 2012). The Terrorist Finance Tracking Program (TFTP) is a U.S. Treasury Department enacted after 9/11 as an initiative to track terrorist money flows and help the U.S. Government with uncovering terrorist cells in the United States and abroad. TFTP provides leads to U.S. Government agencies and other governments by issuing subpoenas to the Society for

Worldwide Interbank Financial Telecommunication (SWIFT). SWIFT operates a worldwide messaging system to transmit useful financial information to the United States government that is useful in terrorist investigations (U.S. Department of the Treasury, n.d.).

### **Money Laundering**

The Currency and Foreign Transactions Reporting Act of 1970 (Declaration of Purpose), referred to as the Bank Secrecy Act (BSA) established by the 91st Congress, was the first money laundering law enacted in the United States (U.S. Congress, 1970) (see Appendix G). The BSA was the first Act to require financial institutions to maintain appropriate records, file reports involving currency transactions and customer relationships of the financial institution when those records have usefulness in criminal, tax, and regulatory investigations. Currency transaction reports (CTR) and suspicious activity reports fulfill these report requirements.

The Money Laundering Control Act of 1986 (see Appendix G) established money laundering as a federal crime and introduced civil and criminal forfeiture for Bank Secrecy Act violations and prohibited structuring transactions for evading CTR filings (U.S. Congress, 1986). The Money Laundering and Financial Crimes Strategy Act of 1998 required banking agencies to develop anti-money laundering training for examiners and created the High-Intensity Money Laundering and Related Financial Crime Area (HIFCA) Task Forces to concentrate law enforcement efforts at the federal, state, and local levels in areas where money laundering is prevalent. The Act required the Department of Treasury and other agencies to develop a national money laundering strategy (U.S. Congress, 1998).

The Annunzio-Wylie Money Laundering Act 1992 (known as the Money Laundering Enforcement Amendments of 1991) authorizes the appointment of a conservator for a depository institution convicted of money laundering offenses. This Act amends the Federal Credit Union

Act, The Bank Conservation Act, The Homeowners' Loan Act, and The Federal Deposit Insurance Act [Known as the Bank Secrecy Act of 1970] (U.S. Congress, 1992). The Money Laundering Suppression Act 1994 streamlined CTR exemption processes and required registration by an owner or controlling person for Money Services Business (MSB) and recommended states adopt uniform MSB laws (U.S. Congress, 1994) see Appendix G.

According to FinCEN SAR bulletins, filing of more than 4,800 terrorist-financing-related suspicious activity reports since October 2001, occurred (The United States Department of the Treasury Financial Crimes Enforcement Network, 2002). The Securities and Futures Industry reported 19 institutions in 11 states filing 31 SARS related to terrorist financing with 45% of the reports filed by New York and Florida-based broker-dealers. The Money Services Business Industry reported that more than 300 money services businesses located in 42 states, Puerto Rico, and the Dominican Republic filed 1,116 SARS that identified the suspicious activity as terrorist financing in 2005 alone. Morris-Cotterill (2011) described money laundering as not solely a compliance matter, but also an issue of risk management.

Winer (2008) discussed continued gaps in regulation and enforcement surrounding terrorist finance despite stronger counterterrorist finance regimes implemented by the United States since the 9/11 attacks. Winer (2008) encouraged seven items for implementation by the new United States presidential administration to address terrorist finance. The first was global cooperation with state sponsors; second was replacing social services of terrorist-affiliated charities; third was making the United States law enforcement a global entity; next was regulation of all domestic financial sectors; followed by addressing smuggling of high-value commodities and bulk currency; the sixth suggestion involved stimulating the United Nations' support for counterterrorist finance regimes, and seventh involved communication with the

American public and the world as it related to United States domestic enforcement. In 2008 the same year, Winer discussed gaps for terrorist finance, the Casino industry Casinos, and Clubs reported 14 terrorist-financing-related SARS. Of those reported filings, 11 stemmed from the same casino and involved an individual from the Middle East involved in a series of fraudulent checks.

### **Influence of Terrorism and Technology**

Lessons learned from the September 11, 2001 (9/11) attacks include an influx of data privacy concerns and talks of using the Internet for cyber-attacks in 2012 (Albanesius, 2012). Garfinkel (2009) cited poor security practices as the precursor to privacy problems. For knowledge worker information systems, it is essential to consider security as a priority instead of an option. In December 2009, an Al-Qaida double agent, Jordanian doctor [Humam Khalil Abu Mulal al- Balawi], infiltrated a US base in the southeastern province of Khost and used a suicide bomb to kill seven CIA officers in Afghanistan (Nasaw, 2009). Security guarantees and strong privacy built into information systems are an excellent way to address risks and assure a good outcome for decision-making and company best practices.

Linked to over 517 attempts to use chemical, biological, radiological, and nuclear weapons to perform acts of terrorism (Ackerman and Jacome, 2018) were violent non-state actors (VNSAs). The use of aircraft controlled with a remote pilot in command in the war of terror increased after the attack of 9/11 to carry out strikes against known terrorist operatives (Coyne and Hall, 2018).

In April of 2013, bombings at the Boston Marathon killed three and wounded almost two hundred people (Saad, 2013). Johnson (2011) discussed why domestically inspired terrorist activity caused changes to traditional intelligence gathering measures and lauded the need for the

federal government to partner with state, local, tribal, and territorial law enforcement, and homeland security officials. Terrorist groups such as the Islamic State of Iraq and the Levant (ISIL) continue the use of online publications and social media to purport their weaponry capabilities and encourage lone-wolf attacks (Ackerman and Jacome, 2018).

### **Leadership**

Organizations hire leaders primarily to improve their businesses, using hermeneutics to obtain cultural buy-in to which team functions may increase team performance and service. Empathy and compassion are two leadership traits considered vital to strengthening relationships in teams where there are different experiences and acting in the interest of others (Spigel, 2018). Hermeneutics is an alternative practice for use when trust is an issue (Hassan, 2010). Hermeneutics assumes that the interpretation and understanding of something are parallel. The leadership section examines these concepts in policing, Concepts of transformational leadership and the use of inverted approach to decision-making instead of a top-down approach and organizational learning are examples of changes to the organizational culture necessary for root changes (Sanger, 2008).

### **Policing**

Included below is an illustration of how leadership can play a role in information sharing (Figure 1) that reflects on the organizational and operational integration of policing. Figure 1 (Jiao, 2007, p.395) depicts organizational and operational integration post 9/11. The change areas surveyed included training, co-operative programs, information sharing, and organizational structure. Of the officers surveyed in these areas, the highest percentage totals noted were for training and co-operative programs. Post 9/11, more emphasis on training and co-operative programs occurred. Information sharing and organizational structure had the lowest totals. One

can conclude from these totals that post 9/11 incorporating changes to information sharing, and organizational structure was a lower priority, and as such, not visibly incorporated into the post 9/11 organizational and operational integration.

Organizational and operational integration after 9/11			
Change areas	Yes	Somewhat	No
Training	16 (76.2%)*	2 (9.5%)	3 (14.3%)
Co-operative program	14 (66.7%)	2 (9.5%)	5 (23.8%)
Work	13 (65%)	1 (5%)	6 (30%)
Daily activities	12 (60%)	1 (5%)	7 (35%)
Program/position	12 (57.1%)	1 (4.8%)	8 (38.1%)
Officer involvement	9 (42.9%)	3 (14.3%)	9 (42.9%)
Joint operations	9 (42.9%)	1 (4.8%)	11 (52.4%)
Information sharing	8 (38.1%)	8 (38.1%)	5 (23.8%)
Organizational structure	6 (30%)	1 (5%)	13 (65%)

\*Percentage is based on number of officers who provided answers. Due to missing answers, number of officers listed may not add up to 21, the total number of participating officers.

Figure 1. *Organizational and operational integration*

Figure 1 Adapted from a journal article titled, “Integration of Police in the United States: Changes and development after 9/11” by A. Y. Jiao and H. M. Rhea, 2007, *Policing and Society: An International Journal*, (17) 4, p. 395. Copyright 2007 by Taylor and Francis. Reprinted with permission (see Appendix A).

### Research Design Literature

The groups identified as the community of national security partners for this dissertation study included both public and private sector organizations. Some elements that affect a public sector organization are different from those affecting a private sector organization. More specifically, many public sector organizations have a bureaucratic style of leadership (Rosca and Moldoveanu, 2010), and many private sectors have a more natural and organic style of leadership (Scott and Davis, 2007).

The natural and organic allow for the conversion of systems to increase the rate of production and changes to the internal structure and job characteristics. The lack of performance

measurement systems used for managing operations and daily accountability are attributing factors to failure for change initiatives (Cherniss, Grimm, and Liautaud, 2010; Warrick, 2009) involving public employees with a long history of resistance to change (Sanger, 2008). At least 70% of organization change fails at the intended purpose (Warrick, 2009). This constraint consideration derived from a bureaucratic paradigm that hindered public organizations from becoming performance-driven organizations.

Weimann, Hinz, Scott, and Pollock (2010) described the need for common ground and shared meaning as necessary for communication in distributed teams. As a result, the use of hermeneutics as a motivational approach in leadership for distributed teams was advantageous for combating insecurity inside and external to an organization (Hassan, 2010). In a cyber-security survey reported by PR Newswire (2012), of the twenty-four agencies that participated, less than 65% were compliant with the Federal Information Security Management Act (FISMA). Compliance areas measured included risk management, security training, and configuration management.

Both the government and private sector bear the burden to meet information-sharing expectations critical to the prevention of infrastructure attacks (Montalbano, 2010). The private sector cited a lack of information sharing by the government regarding alerts proper cyber-threat guidance deemed necessary for critical infrastructure owners to react timely. The natural and organic allow for the conversion of systems to increase the rate of production and changes to the internal structure and job characteristics. If one assumed in the planning or preparation stage that the public sector organization would want to use internal controls for decision-making (McKeen and Smith, 2009), the outcome could increase cyber-readiness. Unfortunately, in this instance,

the government considered the private sector reluctant in the willingness to share proprietary information because of public disclosure concerns based on public sector regulations.

### **Organizational Culture**

Culture includes the concepts of thought, actions, and speech in addition to integrated patterns of human behavior (Wren, 1995). Personal value systems define individual responses in feeling and moral judgment (Alho, 2009). There are two primary conflating value systems to consider when collaborating. The first one is the discrete behavior stemming from the personal value systems of individuals on a team. This culture includes the life experiences that shaped individuals' beliefs, values, and work ethic of all members on the team. The second is the culture of an organization, which includes the organization's vision, mission, and objectives. Weimann, Hinz, Scott, and Pollock (2010) describe the need for common ground and shared meaning as essential for team communication.

Brake (2008) described cooperation as one of the six Cs of global collaboration significantly influenced by culture. Brake's six Cs are cooperation, convergence, coordination, capability, communication, and cultural intelligence. In an initial definition, culture is the sense of refinement or training of taste or the mind. This definition expanded to include belief and knowledge acquired while a member of any society, by Edward Tylor, an anthropologist from the 19th century (Jahoda, 2012). For an accurate depiction of this relationship, Brake (2008) considers culture, race, and ethnicity as detractors for team communication within distributed teams. Just as culture can increase the success of distributed teams, when cultural differences are not considered and respected, the team may become impeded because of cultural differences.

As teams become more distributed, the role of managers is crucial for inspiring workers (Frauenheim, 2010). Information and retrieval assist technology and knowledge management



simultaneously by providing a platform for knowledge workers to distribute knowledge. Alho (2009) suggests that personal value systems define our response in feeling and moral judgment. These are examples of the personal baggage brought into organizations by their employees. When considering organizational culture, considering diversity within the culture of the organization in question is a good starting point. For example, each ethnic group, South Asian, East Asian, Hispanic, African American, White males, et al., brings a certain amount of differences into the organizational culture.

### **History of Police Culture**

Post 9/11, several changes in police organizational structure, operations, culture, and mindset of individual officers in the United States had become more cooperative to avoid a repeat of 9/11 (Jiao and Rhea (2007). One such improvement was the use of mobile digital computers mounted inside police vehicles for ease in accessing criminal databases for information such as warrants, persons flagged in the system as armed and dangerous, and law enforcement data networks using real-time technology (Gazzar, 2014). The historical context of community policing dates to principles created by Sir Robert Peel in the 1820s (Patterson, 2007). From Sir Robert Peel, combining recruitment, selection, and training builds a police force along with the establishment of regular patrol areas, and a paramilitary command structure. In 1893, The International Association of Chiefs of Police (IACP) centralizes operational and technical practices among police and fosters an exchange of information between police administrators globally. IACP achieves these goals by conducting ground-breaking research and the use of breakthrough technology toward the goal of law enforcement (International Association of Chiefs of Police, n.d., accessed August 16, 2018).

With the emergence of patrol cars in the 1970s, team policing surfaced to combat the growing isolation of police to the communities they were serving (Patterson, 2007). With team policing, assignment of officers by team to specific geographic location permitted the opportunity for immersion into the culture of that neighborhood. The concept of team policing failed primarily because of the overlap caused by the chain of command of other law enforcement (Patterson, 2007). The three detractors to police fulfilling their mission of service and protection: lack of planning - based on the absence of a strategic management plan; mission ambiguity- brought on by uncertainty in how to best serve the community; and lack of efficiency - brought on by a shortage of officers (Patterson, 2007; Pinkerton, 2014; Andrade, 2016).

From a leadership point of view, before 9/11, the police culture mirrored a more rational system of thinking. The rational system thinking (Jones, 2010) is a modern form evolved from scientific management and gives organizations the ability to include resource dependency theory to increase competitive advantage. Rational system thinking accomplishment occurs within an intra-organizational structure by decreasing dependency on external resources (Jones, 2010). Jiao and Rhea (2007) suggested that this substantial shift in the local and traditional police structure demonstrated a willingness to collaborate with law enforcement partners outside their respective agencies. Studies in favor of centralizing policing structure and highlighting the change in thinking among police may offer a model for increased interagency communication with other government agencies, the banking industry, and the private sector, against AML/CTF practices. Centralizing policing structure comprises the inefficiencies post-9/11, and background of the traditional local policing methods. The role of culture provided insight into not only changes in policing but also the level of preventive measures that law enforcement personnel is beginning to take to avoid more terrorist attacks on United States soil.

Figure 2 by Jiao (2007, p.400) that posits a change in the mentality and culture post 9/11 based on length of service for law enforcement officers. The variables in the figure are the length of service, rank structure, and unit of service. Senge (1990) describes mental models in the form of lenses used to paint a reality that one believes to be correct. As a strategy, mental models are beneficial for guiding organizations. This internal image provides limitations to the way people act or think without a cognizant realization of what they are doing or saying. Over a career of 30 years or more, police officers are exposure to extreme stress and hundreds of traumatic incidents (Papazoglu and Tuttle, 2018). The data in the figure suggested a significant change in the mentality and culture of officers the longer they serve — the percentage drops by more than 40 percent with the length of service. As the officer obtained rank above sergeant, that number dropped by 50 percent. As the officer’s unit of service changed from a basic unit to a higher unit, that number also changed by more than 40 percent. One can conclude from this table that the longer an officer served, the least likely they were to have a change in the organizational structure and information sharing. Based on this assumption, a need to incorporate information sharing outside the confines of law enforcement began to materialize in support of this study.

Mentality/culture change by length of service, rank structure, and unit of service		
Variable	Category	Number (%)
Length of service	8 or fewer	9 (100%)
	10–20	5 (83.3%)
	21 and above	3 (50%)
Rank structure	Officer/sergeant	13 (100%)
	Above sergeant	4 (50%)
Unit of service	Basic unit	12 (100%)
	Higher unit	5 (55.6%)

Figure 2. *Mentality/culture change*

Figure 2 Adapted From “Integration of Police in the United States: Changes and development after 9/11” by A. Y. Jiao and H. M. Rhea, 2007, *Policing and Society: An International Journal*, (17) 4, p. 400. Copyright 2007 by Taylor and Francis. Reprinted with permission (see Appendix A).

### **Organization Design**

Systems-thinking is a method for delivering content information to an organization useful in determining the best course of action(s) for sustained operational ability (Hämäläinen and Saarinen, 2008). According to Scott and Davis (2007), exploring the roles of natural, rational, and open systems characteristics for integration and implementation was crucial to organizational design methods for industry-driven organizations and increasing the rate of product innovation. Likewise, incorporating paradigm systems with metaphors enhances the ability of organization personnel to examine internal factors used as change catalysts (Johnston, 2009; Morgan, 2007). Organizations that require rigid adherence to rules benefit from the rational systems approach because of pre-determined goals. This structure system aligned with the mechanistic image of strict adherence to rules and guidelines (Scott and Davis, 2007). In contrast, the organic image was more of an open system and allows self-maintenance, preservation, and adaptation to industry needs for survival. The organic style allows room for change and adaptability to deal with uncertainty (Morgan, 2007).

### **Current Theories on Organizational Culture**

The six C’s of global collaboration mentioned by Brake (2008) states that cooperation is influenced by culture. For teams to build trusting relationships, personal leadership styles, and personal culture needs consideration. The concepts are highlighted and compiled in the Knowledge Management, (see appendix G) and created by the PI of this study. The knowledge

management table describes knowledge management, technology, and leadership for team performance. The table includes five areas, category, characteristics, technology, advantage, and disadvantage. The first category described is knowledge management (KM). A brief overview of the characteristics of KM, such as the origin, then the technology use of KM, and the advantages and disadvantages of using KM are in subsequent columns. The same order is followed for the characteristics of Socio-technical systems (STS), Leadership Theories (LT), Postmodern Philosophies (PM), and finally, Justification.

Information and retrieval assist technology and knowledge management simultaneously by providing a platform for knowledge workers to distribute knowledge. For an accurate depiction of this relationship, Brake (2009) considers culture, race, and ethnicity as detractors for team communication within distributed teams. Just as culture can increase the success of distributed teams, not considering or respecting cultural differences can impede the team because of cultural differences. Socio-technical system (STS) relates to an exchange of relationships between people, products, processes, and projects (Tung and Yuan, 2010). A gateway to quality and innovation is the communication and interpretation of STS. According to Mach, Dolan, and Tzafrir (2010), team members trust in foci indirectly and directly affect team performance. One cannot truly consider organizational culture without examining the cultural diversity within the organization. Concerning police culture and information sharing, the individual capacity to transmit knowledge and learn from one generation to the next generation (Wren, 1995) will affect most cultures, including exclusive cultures like law enforcement.

Kochman and Mavrelis (2009) suggest crucial elements to consider and serve as a tool for minimizing conflict bred by misunderstandings of ethnic, cultural norms. The Culture Comparison table located in Appendix G provides elements of the following nine groups:

African American, Hispanic, South Asian, Arab/Middle Eastern, Russian, Asian Pacific Islander, American Indian, Gender and U.S. White Males. The nine group comparisons are based on five criteria: influence of mainstream, the influence of the group, value and conflict, disadvantage to teams, and collaborative advantage to teams.

### **Organizational Culture and Knowledge Management**

Knowledge management served as a repository for storing information obtained through technology during the beginning stages of early technology for development (Davenport, 2005). For this reason, the base of the taxonomy for technology and distributed teams had knowledge management as the foundation for technology. A field study by Choi, Lee, and Yoo (2010) concluded that the use of transactive memory systems (TMS) for teams increases using information technology and knowledge management support. The ability for continual retrieval and application increases with knowledge distribution using such virtual sites as SharePoint (Steele, 2018). The advantage of distributed teams is ease of knowledge sharing and accessibility. However, disadvantages occur when the information readily available is not accurate. Thus, knowledge management relies on communication and collaboration to maximize the benefits of use.

### **Organizational Culture and Information Technology**

The events of 9/11 caused strategic changes in law enforcement and government practices. Specifically, the birth of the stand-alone Department of Homeland Security from the Homeland Security Act of 2002 and numerous Government Accountability Office reports (2010) on the progress of information sharing post 9/11. Alho (2009) describes how the personal value systems define individual response in feeling and moral judgment. Marchand, Haines, and Dextras-Gauthier (2013) conducted a study on organizational culture and concluded that culture

types vary by workplaces. When working with teams, there are two primary conflating value systems to consider when collaborating. The first one is the discrete behavior stemming from the personal value systems of individuals on a team. This culture includes the life experiences that shaped individuals' beliefs, values, and work ethic of members on the team. The second is the culture of an organization, which includes the organization's vision, mission, and objectives. However, within the law enforcement culture, Weimann, Hinz, Scott, and Pollock (2010) described the need for common-ground and shared meaning.

McKeen and Smith (2009) discussed the importance of knowing one's products and how they affect the business process. The authors addressed elements relating to the role impersonal culture played in the inability to achieve goals when communication is role driven vice people driven. An inability to connect people through communication contributes to low activity feedback and an environment that does not drive when change and predictability are great (Rosca and Moldoveanu, 2010).

The Tandem culture sought to improve the bureaucracy by improving culture components through the creation of a network of strategies supporting organizational value coupled with network value (Rosca and Moldoveanu, 2010). Next was the use of force triangles to infuse rational thinking to align organizational components with a network culture of top-down, bottom-up, sideways communication so that all components of organizational culture were aware of the environment activity and the goals. The model is designed to promote a successful culture within any bureaucratic public sector agency.

### **Information Sharing**

Information sharing exists when all parties of informational awareness relevant to the active participation of a given situation are the same relative to all participating parties

(Clarkson, Jacobsen, and Batcheller, 2007). Current research suggests that the use of big data as a method of data science can assist with the digitization of information between the public administration, the public sector, and the private sector (Maciejewski, 2016). In contrast, information asymmetry exists when one or more parties possess more informational awareness relevant to the active participation of a given situation relative to other participating parties. Power interest is another example of this disparity. Power interest is the result of one party's ability to access the information of another party by which sheer access to that information provides the accessor with a position of power over the party whose information they accessed (Taylor, 2017). Yoon ah Shin, Jungwon, and Jun (2018) discussed the use of policy tools to improve the effectiveness of response time during a health epidemic by focusing on infrastructures, supplies, education, and training to achieve close to real-time response in the wake of a medical crisis. The commonalities in both instances of a crisis are communication, preparation, crisis, and education. Successful information sharing systems begin with an understanding of the requirements and intended purpose of the system toward meeting operational goals (Kroenke, 2011).

### **Electronic Information and the Federal Government**

Before the attacks of September 11, 2001, law enforcement agencies retained their source information and investigative findings for the use of their respective agencies. An accurate perception of electronic communication use could enhance government collaboration efforts in recognizing terrorist-centered activity and increase response preparedness (Smith, 2011). Themes and interdependencies from a multi-agency perspective for understanding disaster response on a large-scale, and a crisis management behavioral readiness model (Figure 3) was included to address leadership responsibilities during a crisis for decision making. Elements of



the crisis management behavioral readiness model include leadership responsibilities of setting objectives, visibility during the crisis, after-action lessons learned, followed by an awareness of external influence to affect a plan of action.

### **The Community of National Security Partner Barriers to Information Sharing**

Tensions between intelligence and criminal investigations are a precursor to 9/11 dating back to World War II (Grewe, 2004). Ozeren (2005) described a lack of global consensus on responding to cyber-terrorism and cybercrime as quickly exploitable technical, legal, political, and cultural vulnerabilities. A discussion regarding the trusted partnerships among federal, state, and local agencies post 9/11 led to a strong argument in support of improving information-sharing systems to enhance homeland security preparation (Bean, 2009). The study incorporated methods of information-sharing between intelligence, law enforcement, and emergency management agencies.

Dawes, Cresswell, and Pardo (2009) described the need for public sector knowledge networks that can transcend the traditional agency practice of need-to-know. The purpose of shifting current practice was to transcend disclosing information to one of the need-to-share, where information and knowledge sharing transcend organizational boundaries to assess public need as a priority above authority and single organization mentality. One potential roadblock of “need to share” could potentially stem from privacy risks and ethical concerns regarding the sharing of administrative data between the public and private sector (Goroff, Polonetsky, and Tene, 2017). These concerns regarding “need to share” potentially stem from safeguards per laws and mandates centered around privacy protection.

## Electronic Information Resources

During the 20th century, business challenges stemmed from supply and demand (Sohrabi, Haghighi, and Khanlari (2010). In 2018, Disrupted Ledger Technology (DLT) met demands for speed in providing products and services in the financial services industry (Rosenoer, April 2018). Synnott (1978) provided insight into customer relationship management as a management information system database called total customer relationship (TCR) to control the rapid growth in the international banking unit. Selden and MacMillan (2006), the design and purpose of customer-centric Innovation (CCI), is to meet and often exceed market expectations. This innovation transcended business industries to achieve optimum results by using customer feedback to assist with growth strategies. The assessment, maturity stage, and critical success factor (CSF) dimension was a three-dimensional model used for customer relationship management (CRM) implementation.

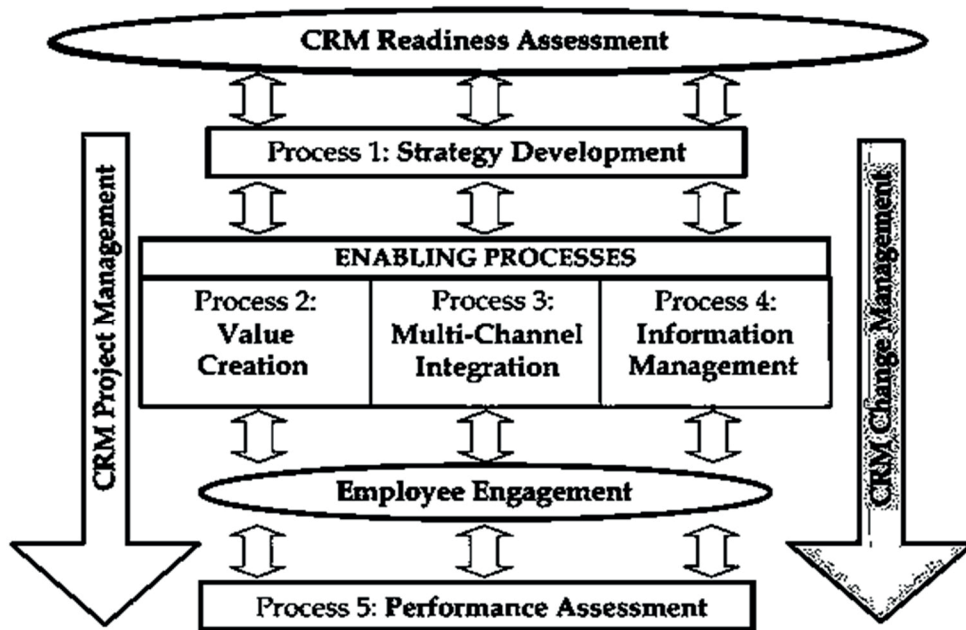


Figure 3. *Customer relationship model*

Figure 3 derived from “Customer relationship management: From strategy to implementation” by A. Payne and P. Frow, 2007, *Journal of Marketing Management* (22) 1-2, p. 135-168. Copyright 2006 by Taylor and Francis. Reprinted with permission (see Appendix A).

Poor-quality data, isolated efforts not used for decision-making, and analytic aspirations not integrated and inaccessible represent the five stages of the analytic competition, according to Davenport (2009).

The CRM model focused on concepts first suggested by Rapoport (1970) regarding concerns in challenging situations and mutually acceptable collaboration. Part of this research focused on structural functions. This information was beneficial for revealing structural changes among the target population post 9/11.

The strategy development phase of CRM focused on the business strategy as it pertained to customers and strategies for dealing with customer concerns. In the instance of this research, the customer was the Financial Action Task Force. Hence using tactics identified in process one for the alignment and integration of law enforcement and national security partners could improve information sharing to assist the FATF (Payne and Frow, 2006). In the instance of law enforcement and national security partners, this could include knowledge sharing of the different processes among the organizations and how incorporation can combat the broader scope of terrorism evolution to include money laundering and terrorist financing measures.

A multi-integration process compounded on the strategy development phase and value creation to provide a uniformed depiction of the customer by combining the known customer needs with an integrated approach manageable by the company in question is the goal. The companies for this study are law enforcement and the remaining components of the community of national security partners, and the customer is the Financial Action Task Force. A multi-

integration process might assist in the development of a model for an improved cross-cultural relationship effective in fulfilling the needs of the FATF (Payne and Frow, 2006). The World Bank used a three-panel inspection panel made of non-World Bank employees to ensure compliance with safeguards created by the World Bank were adhered to by the World Bank (Van Waeyenberge, 2012). Perhaps a similar collaboration may benefit the financial partners' cross-culture and cross organizations.

The information management process focuses on a data repository that includes analytic tools and knowledge of customer needs and how to collect and collate the information (Payne and Frow, 2006). For this research, this process may prove beneficial in using information systems technology to streamline data sharing and accessibility for determining breaches to FATF guidelines as they pertain to money laundering and terrorist financing. The purpose of the performance assessment process phase is to ensure the use of metrics and standards foster continual improvement. Some of these identified metrics for measurement include building value among shareholders, customers, and employees. For this research, the shareholders are the research population, customers are the FATF and society, and the employees are organizational employees whose knowledge-sharing and training are essential for enhancing the performance strategy.

### **Information Sharing and the Federal Government**

Leaders and managers use paradigms to help understand, shape, and better leverage science to improve business conduct perspective (Kuhn, 1962). The influence of government counter-terrorist measures and leadership perceptions for global business align with Samuels' (2008) account of risk management onset by terrorism. The comparative analysis of Landes (2011) described the USA Patriot Act and Terrorism Act of 2000 as anti-terror laws that not

necessarily reduced terror attacks but provided an avenue for increased secrecy regarding government operations.

Systems-thinking is a method for delivering content information to an organization that is beneficial in determining the best course of action(s) for sustaining the ability to operate (Hämäläinen and Saarinen, 2008). For example, systems-thinking challenges managers to review the effects a principle level of learning has on other areas of learning and sharing information (Jones, 2010). Because the events of 9/11 caused agencies to increase information sharing, a catalyst shift occurred within the normative structure of agencies and the potential for organizational survival, which in this case is preventing another 9/11 style attack.

### **Information Sharing Databases and Tracking Systems**

The Socio-technical system (STS) relates to an exchange of relationships between people, products, processes, and projects (Tung and Yuan, 2010). The communication and interpretation of STS is a gateway to quality and innovation. One can consider STS as a service machine with the purpose of the ability enhancement of people and processes (Tung and Yuan, 2010). Communication across distance is an example of a global team. Global teams use technology to share information from multiple locations that may span the globe. According to Nemiro, Beyerlein, Bradley, and Beyerlein (2008), lack of consistent training and the right skills is a complication experienced by global teams. Selim (2011) analyzes the ethical implications surrounding terrorist centered vocabulary and communication in the collection of intelligence. The concern was marginalizing ethnic and religious groups while using the national security framework to track terrorist activity, while also maintaining public trust.

## **Gaps in the Body of Knowledge**

Each of the author's viewpoints discussed below-identified aspects that may affect information sharing in general, more specifically, the lack of information sharing can affect the ability of financial institutions to detect activity linked to terrorist finance. Cohen (2018) provided insight on barriers to law enforcement information sharing. Goroff, Polonetsky, and Tene (2017) discussed the need to share. Marchand, Haines, and Dextras-Gauthier (2013) discussed the differences in organizational culture. Choi, Lee, and Yoo (2010) provided insight into the use of a transactive memory system to improve the meta-knowledge process by citing the encoding, retrieval, and knowledge storage. Brake (2008) believed in the capability for communication across distance, but cultural intelligence was proving difficult for implementation. A dissertation by Nold (2011) identified quantifiable relationships between the trust of organizational culture and firm performance. Homan, Hollenbeck, Humphrey, Van Knippenberg, Ilgen, and Van Kleef (2008) discussed the effect of openness by team members concerning diversity and team performance. Davenport (2005) provided insight into the use of analytical tools to develop diverse information systems with a varied range of functions. Cooperation with federal, state, and local government efforts by American businesses could be a prime loophole overlooked in the war against terror, and the evolving terrorist strategies for funding terrorist activity (Cheney, 2005).

Public sector organizations for this study may want to exercise internal controls for decision-making and to increase their competitive advantage for initiating strategies that may combat terrorist financing. A streamlined method for data sharing that incorporated tools that the research group was already familiar with could ease the process of adaptation across both public

and private sector organizations associated with this study (Pearlson and Saunders, 2010; McKeen and Smith, 2009).

### **Conclusions**

The study examined the relationship between the organizational culture of private and public sector national security partners. Included was information on how affected multi-organizational information sharing occurs and the effect from a leadership perspective. The inability of government offices to use joint information technology among local, state, and federal government systems may pose a problem in a post 911 society. Hackney, Desouza, and Irani (2008) provide information on competitive knowledge and empirical analysis relevant to the expansion of resources necessary for knowledge transfer interdisciplinary teams and outside initial domains to induce cooperation. According to Kane and Borgatti (2011), end-user proficiency was critical for determining an organization's ability to leverage information systems when strategizing to enhance organization performance.

### **Summary**

A summary of chapter 2 occurred. Information sharing is one of the highest priorities of decision-makers among government agencies (Akbulut-Bailey, 2011). Although the role of local government in nationwide efforts to share information between local and state governments is vital, the literature reveals limited academic research among government agencies. In 2010, the Government Accountability Office (GAO) was requested to perform an assessment report to determine the extent to which tribal and local officials in border communities received vital information from federal partners, support to state fusion centers from federal agencies, and to examine the awareness level of local and tribal agencies to report suspicious activities.

The study and the hypotheses might support the conclusion that higher levels of trust within organizations increased knowledge sharing within a corporation and results in the corporation outshining competitors. The information was relevant to the relationship between culture and knowledge sharing for increased innovation, adaptability, and effective use of knowledge processes. The knowledge creation theory preceded organizational trust and was used to close a gap in organizational performance by using organizational culture as the compass (Nold, 2011). The premise of the knowledge chain model centered on the theory that organization success hinged on the ability of the organization to learn quickly efficiently and effectively (Nold, 2011), Pfeffer and Sutton (1999) explored the ability of knowing-doing gaps to affect organization implementation of knowledge. Guidelines for turning knowledge into action to address knowledge problems included addressing tacit knowledge and the intangible aspect of knowledge. This information provides practical significance of the study into communication breakdowns within the federal government. Chapter 2 focused on the literature review. Chapter 3 included the study method.



## Chapter 3

### Methodology

The purpose of this study was to test the relationship of information sharing among national security partners using internal communication, organizational culture, leadership, and technology as areas of inquiry and interagency communication as the dependent variable. The goal was to determine if better interagency communication among national security partners increases the possibility of disrupting terrorist's ability to adapt new strategies for funding terrorist activity. The relationship determination for predicting stoppage of funding terrorist activity was a collaborative aspect not intending to infer absolute disruption in terrorist financing, but a preliminary possibility that as interagency communication increases, terrorist ability to adapt new strategies may decrease.

Two principal reasons for this research were the continued terrorist attacks since September 11, 2001, and the continued call to action by federal agencies to increase information sharing among national security partners concerning terrorist funding post-9/11 (McCormack, 2009; Financial Action Task Force, 2018). The events triggering this study were the role of information sharing post-9/11 in preventing terrorist attacks, and the ability of terrorists to organize and adopt money laundering and counter-terrorist financing measures to fund terrorist activity.

Chapter 3 includes a section of the research method and design appropriateness, re-statement of the research question, the research approach, the population, sampling, data collection, and procedures needed to gather research data. A section on reliability and construct validity of the instruments used for measuring the four scales of internal communication, organizational culture, leadership, and technology preparedness communication are

psychological constructs and the measurement of these constructs tested during the pilot instrument testing of the survey tool using a factor analysis to ensure the scales have construct validity necessary to continue with the measurement intentions of this study.

### **Research Method and Design Appropriateness**

A quantitative method measured the relationship between interagency communication (Creswell and Plano Clark, 2006). Assessment of organizational culture shifts relevant to the study occurred using a 152-item survey consisting of 143 content questions and nine demographic questions (Appendix D). The survey assisted with understanding the perceptions of participants from the personal, professional network of the researcher on the LinkedIn social media site. Qualitative designs were not appropriate for this study because the qualitative nature of data collection (personal interviews or focus groups) could have divulged classified information based on responses provided by the research respondents.

The goal was to determine if better interagency communication among national security partners increases the possibility of disrupting terrorist's capability to adapt new strategies for funding terrorist activity. With studies involving national security matters, the concern of divulging classified information exists. A procedure for controlling this concern is to use a survey using an ordinal scale. Using an ordinal Likert scale method of answering questions with choices ranging from strongly disagree to agree strongly is an appropriate design for controlling the concern of respondents divulging classified information (Gob, McCollin, and Ramalhoto, 2007). No National Security classified information discussions are associated with this dissertation.

The ultimate objective was to measure the strength of relationship of interagency communication, by assessing the variables of internal communication, organizational culture,

leadership, and technology preparedness. The objective of the study was to examine the role of internal communication and organizational culture play on information sharing between the organizations encompassing the CNSP.

### **Research Questions/Hypotheses**

The focus of the research question was an assessment of the technology preparedness in reducing terrorist finance activity by testing the strength of interagency communication, the dependent variable, and the independent variables of internal communication, organizational culture, leadership, and technology preparedness. The two research questions in this study were as follows:

**R<sub>1</sub>** Is internal CNSP agency communication of greater quality than intra-agency communication?

**R<sub>2</sub>** What is the quality of communication between members of the Community of National Security Partners?

Six hypotheses measured possible relationships between the criterion variable (interagency communication) and the four predictor variables (internal communication, organizational culture, leadership/trust, and technology preparedness) used to address the research questions. The null and directional hypotheses sought to study the quality of information sharing based on technology preparedness concerning policy and organizational culture. Hypotheses one and two tested the quality of communication. Hypothesis one tested for the quality of internal and interagency communication. Hypothesis two tested for the relationship of leadership within the various CNSP organizations as a possible determining factor in internal communications and if leadership is a determining factor on who and how an agency will communicate with CNSP members outside their agencies. Hypotheses three and four tested

whether leadership views on technology and the use of compatible technology among various CNSP organizations is a determining factor for not sharing information. Hypotheses five and six tested whether policies and culture are determining factors in interagency communication among CNSP members.

**H1.** A linear relationship exists between internal communication and interagency communication.

**H01.** No linear relationship exists between internal communication and interagency communication.

**H2.** A linear relationship exists between organizational leadership and internal communication.

**H02.** No linear relationship exists between organizational leadership and internal communication.

**H3.** A linear relationship exists between organizational leadership and technology preparedness.

**H03.** No linear relationship exists between organizational leadership and technology preparedness.

**H4.** A linear relationship exists between technology preparedness and internal communication.

**H04.** No linear relationship exists between technology preparedness and internal communication.

**H5.** A linear relationship exists between internal policy and cultural willingness to share information.

**H<sub>05</sub>**. No linear relationship exists between internal policy and cultural willingness to share information.

**H<sub>6</sub>**. A linear relationship exists between internal policy and interagency communication.

**H<sub>06</sub>**. No linear relationship exists between internal policy and interagency communication.

The hypotheses tested at the 90% level of confidence to determine if there was a statistically significant relationship between information sharing and terrorist activity prevention. Confirmation of statistically significant relationships occurred at 90% (1-error) and a level of  $\geq$  80% power (Cooper & Schindler, 2008).

There were four independent variables in this study, internal communication, organizational culture, leadership/trust, and technology preparedness. A set of items included in the survey instrument comprised of a proxy scale for each named variable used for the measurement of variables (Appendix D).

The null and directional hypothesis sought to measure the relationship level between variables (Cooper and Schindler, 2008). The study examined if a difference in views on information sharing attributed to the survey respondent was dependent upon which CNSP organization the respondent represented. Microsoft Excel and IBM SPSS Statistics 21 software provided the tools to conduct analysis. Used in the hypothesis testing were correlations between independent and dependent variables from the survey.

### **Population and Sample**

The research population in this study included participants of both genders between the ages of 21 and 65. The 805-members of the personal, professional network of the researcher located on the LinkedIn Social Media site (<https://www.linkedin.com>) represented the

population. Members of the personal, professional network of the researcher were part of the overall Community of National Security Partners from the federal government and private sector. The research population received a personal invitation from the researcher to participate in the study. The anticipation was that members of this group work for varying sizes of bank and financial institutions, public and private sectors, and would result in a normal distribution for performing data analysis on the survey results from this population.

This study occurred in Alexandria, Virginia, part of the greater Washington, DC metro area. Designed for this study to collect data from a non-probability purposive sample was a 152-item web-based survey (Andini and Rao, 2018; Churchill, 1979; McNeill and Chapman, 2005). A purposive sample targeted a specific group as needed for a study while also allowing participants to participate voluntarily. Participants engaged in their organization's information sharing process, and participants engaged in employment with their organization since September 11, 2001, were ideal for the analysis portion of this study and may help detect organizational culture shifts relevant to the study.

### **Sample Frame and Unit of Analysis**

The sample size for this research study is 60, calculated using the sample size calculator located on SurveyMonkey™ (2018), while also considering the number of independent variables for this study. The appropriate sample size for a study using four independent variables with power=.80, alpha=.10, and medium effect size are 60 participants (Delice, 2010). Using an adequate sample size reduces sampling error; this also supports higher statistical power (Vogt, 2007). Currently, there are 805 members in the personal, professional network of the researcher, according to the LinkedIn site ([www.linkedin.com](http://www.linkedin.com)).

## **Informed Consent and Confidentiality**

Once network members clicked on the survey link, redirection outside of the LinkedIn environment occurred to the SurveyMonkey website to the survey introduction page that explained the voluntary survey participation. The informed consent information appeared on this page, and potential participants accepted consent on this page. Participants that chose to accept consent did so with the understanding that survey responses are for research purposes and publishing. Participants acknowledged that they fell with the age range described in the survey invitation when they accepted the terms to participate in the survey.

The informed consent form outlined the purpose of the survey, and that participation was strictly voluntary. None of the survey items pertained to health status, marital status, or parental status. No collection of personally identifiable information of participants took place with this study. Provided to participants were details on the safeguarding of information and the destruction timeframe, which is three years and the method of disposal. Participants received the principal investigator's (PI) contact information for answering any questions of participants. Participants could notify the PI via telephone or email before submitting the survey if they no longer wished to participate in the study.

## **Instrumentation**

The data collection survey used for this study consisted of a 152-item survey created using Survey Monkey™ (www.surveymonkey.com) consisting of 143 content questions and nine demographic questions (see Appendix D; Sandoval, 2013). Information collected included how information sharing affects multi-organizational communication and that effect from a leadership perspective. The quantitative instrument had three sections. The first section collected demographics: gender, organization, status, and tenure. The second section pertained to the

ordinal variables, internal communication, organizational culture, leadership/trust, and technology preparedness. For questions measuring perception on information technology and information sharing, the Likert-scale included don't know as a choice to avoid potential skewing of the data that could allude to more information sharing challenges by mistake. Omitting don't know responses in statistical analysis ensured no skewing of the data.

The principal investigator (PI) used an established instrument adapted for this study by the PI with permission. WB&A Market Research Firm validated the Federal Interagency Intelligence Information Sharing in 2011 for use in the research conducted by Sandoval (2013). The principal investigator of this study made minimal changes to the existing study and received permission from Sandoval to use the existing survey. Using a validated survey permitted the principal investigator the opportunity to conduct further research begun on interagency information sharing. The approval letter from Sandoval (2013) appears in Appendix A.

The survey items design captured perceptions about information sharing practices and openness to expanding information using electronic programs like the Uniform Crime Report. The instrument was appropriate for answering the specific questions of interest in this study (Cone and Foster, 2006) without divulging classified information.

### **Pilot Test**

Once granted permission from the Institutional Review Board of the University of Phoenix, a pilot study of the survey instrument took place. Pilot testing confirmed the amount of time needed to complete the survey. The survey should take 30 minutes to complete. No data from pretest participants appeared in the main study to avoid contamination (Cone and Foster, 2006; Teijlingen and Hundley, 2002).



## Validity and Reliability

Cronbach's Alpha and the Kuder-Richardson split-half tests aided in determining the reliability of the survey responses. Collected survey data was imported in SPSS v. 23.0 software for descriptive and inferential statistics, the use of the reliability test began. The scales for degree of sharing and the independent variables of communication measured the perception of internal communication, culture (including CNSP perceptions of organizational culture) information sharing, and the understanding of technology concerning one's organization. Computing the four levels of trust, and policy relating to CNSP took place by taking the mean of the corresponding items that comprised each scale.

The goal of the study was to test for any relationship among the four variables by using the Spearman Product-Moment Correlation Coefficient to test relationship strength (Creswell, 2005). The summed responses of the participants provided the measure of the criterion variables for this study. Validity in social research ensures that the intended outcome for measurement happened. In other words, the research is not only consistent but also accurate (Viswanathan, 2005). The pretest participants acted as a panel of experts to assess the efficiency of the survey for future respondents. In deterrence against contamination, no additional data collection occurred from pretest participants for inclusion in the main study (Cone and Foster, 2006; Teijlingen and Hundley, 2002). Pre-testing ensured the instructions for survey completion were easy to follow, ensure adequate time-allotment for survey completion, and ensure the survey functioned properly even for individuals with no knowledge of the study.

For purposes of validity, a measurement tool must yield the same results each time the same information measured with that tool takes place. The specific types of validity used for the present study were content validity, predictive validity, and construct validity. Survey question

adaptation took place to obtain face validity and ensure the nature of the items looked reasonable to participants. Face validity ensures the measure and what's measured look alike (Lewis-Beck, & Bryman & Liao, 2004). The research question and hypotheses tested for content validity to match to the survey questions. Finally, to obtain construct validity correlation occurred of the results based on the positions of the participants answering the survey questions. IBM SPSS 23.0 software measured the results and assisted in obtaining a measure of construct validity.

Operational definitions of keywords used in this study improved the construct validity.

The survey items used a scale that ranged from 1 (strongly disagree) to 5 (strongly agree), and the summed responses to each set of selected items comprised the measure of each of the four variables in the study. An electronic survey opened the study to participants in multiple organizations within the same LinkedIn network, which was the personal and professional network of the principal investigator.

Internal communication scale included statutes, executive orders, and technology, including the hardware, software, data standards, and security classification of systems used to exchange data. The scale of trust among CNSPs included the expectation that members will act justly, with self-discipline, wisdom, and perseverance. The scale of culture included written and unwritten rules and guidelines for the respondent's organization within used to achieve successful mission accomplishment.

The role of the PI in quantitative research was to recognize threats to the external validity of the design study and to ensure the scientific merit of the study. Researchers seeking to repeat this study in their state would need to use a criterion based on their local practices for sharing information post-9/11 within the public and private sector financial industries.

## **Internal Validity**

The perspectives and opinions of the participants provided the criterion variables for this study. The sample size needed for this study was 60. The pilot participants used were the first three participants for this study. Data collected from the pilot participants associated with the research did not appear in the main study to minimize the possibility of contamination of the statistical data collected. In a further effort of deterrence against contamination, the use of additional data from pilot participants for inclusion in the main study did not occur (Cone & Foster, 2006; Teijlingen & Hundley, 2002).

## **External Validity**

The role of the researcher in quantitative research is to recognize threats to the external validity of the design study and to ensure the scientific merit of the study. Researchers seeking to repeat this study in their state would need to use criteria based on their locale practices for sharing information post-9/11 within the public and private sector financial industries. The results for this study depend on the number of financial institutions that show internal communication and the level of preparedness measured in training.

Two questions answered to determine the reliability and validity of this survey research are, is this the intended measurement, and will the results remain the same when measured multiple times? When the scores derived from the surveys and interviews were measurable for meaningful interpretation, quantitative research is valid. For validating theory tested and repeat testing for verification and acceptability of a theory to achieve meaning in this quantitative research, empirical objectivity (Black, 1999). High reliability resulted in exhibited test-retest reliability and interobserver reliability. Achieving the same results over time showed the reliability and consistency to produce the same results. For this research testing, a web-based

survey captured participant results for the sample population using the same questions for each participant.

### **Operationalization and Definition of Variables**

Operationalization presented the variables for possible solutions to integrate data between law enforcement and national security partners better. Demographic variable features are the composition of a population (Steinberg, 2008). Gender and race were demographic variables. In this study, demographic information also included position function and length of time with the organization.

### **Variables**

The Likert-type survey tested the measurement level of the ordinal data on a scale that ranged from 1 (strongly disagree) to 5 (strongly agree), this also constitutes the measured construct for Likert-scale variables including the dependent variable testing for degree of sharing and the independent variables of communication (survey items 9-22), the perception of information sharing (survey items 72-85), culture (survey items 23- 36, CNSP perceptions of organizational culture in relation to information sharing within CNSP), technology (the understanding of technology in relation to one's organization in survey items 37-64), trust (four levels of trust a in survey items 93-120) and policy (in relation to CNSP in survey items 65-71 and 86-92). The results of the Likert-type survey for each domain may provide a clear indication of what boundaries surround information sharing between the community of national security partners. Emphasis occurred on a limited number of events or conditions for contextual analysis (Yin, 2013).

The independent variables in this study were internal communication, organizational culture, leadership/trust, and technology preparedness. Assumptions of regression that must

happen are that measurement of the predictor variables occurs without error, there is a co-linear relationship between the predictor and criterion variables, the predictor variables are fixed, 0 is the mean of the residuals for each observation on the criterion variable, any errors on the criterion variable are independent, no errors correlated with the predictor variables, variance across values of the predictor variables is constant, and finally that errors are normally distributed (Cohen, Cohen, West and Aiken, 2003).

### **Data Collection**

Responses for this study derived from voluntary participants from the personal, professional network of the principal investigator on LinkedIn redirected via survey link to the SurveyMonkey™ website to complete the survey created in the secure SurveyMonkey environment. SurveyMonkey™ is a nationally recognized leader for creating and dissemination surveys confidentially. The selection of a web-based survey as the instrument tool simplified survey distribution, collection, and processing of data.

Participants acknowledged consent using an active form of acceptance. All terms and questions required acceptance before survey presentation. The University of Phoenix School of Advanced Studies approved the use of the active online form of acceptance. The survey located on SurveyMonkey™, and the uniform resource locator (URL) found the web address for this study. The data collection technique provided access to the URL for the survey, powered by SurveyMonkey™.

WB&A Market Research Firm validated The Federal Interagency Intelligence Information Sharing survey instrument in 2001 for use in the research conducted by Dr. Christine Sandoval (Sandoval, 2013). Using a survey instrument previously validated with minimal revisions was an ideal instrument for this study on the community of national security

partners (CNSP) because the CNSP is part of the community of interest (COI), which is what the validated instrument was created to test. The approval letter from Sandoval (2013) appears in Appendix A.

### **Data Analysis**

Internal communication, organizational culture, leadership/trust, and technology preparedness are the independent variables for this research, and interagency communication is the criterion variable. Analyzed data measured the relationship between the independent variables and the dependent variables that may affect potential to reduce terrorist's ability to adapt new strategies for funding terrorist activity through better interagency communication among the community of national security partners.

Multicollinearity is a concern with multiple predictor variables as no two predictor variables should be highly correlated (Cohen, Cohen, West, and Aiken, 2003). Once collected, data assessment ensured that multicollinearity did not pose a problem for data analysis. The regression analysis used a stepwise multiple regression method for variable entry. Stepwise multiple regression is appropriate for use with multiple predictor variables to determine the variables contributing to the regression model (Cohen, Cohen, West, and Aiken, 2003). If a variable entered while using stepwise multiple regression measured the same construct as another, the variable did not appear in the analysis as it may not make a substantial contribution to the regression model.

Qualitative designs were not appropriate for this study, and a mixed-method study was not appropriate for this study because the qualitative nature would not have provided information on the strength of the relationship between the variables, nor their directionality. The foundation for this research was that interagency communication and information sharing (I2) are a function

of the independent variables: internal communication, organizational culture, leadership/trust, and technology preparedness  $I2 = f [IC+OC+LT+T]$ . There is no assumption of normal distribution regarding this population. Spearman Rank Order correlation measured if a correlation existed between the degree of information sharing and the independent variables and make sure data type and correlation coefficient match (Astivia and Zumbo, 2017).

The standard rate or error testing occurred using Spearman, with an analysis of variance (ANOVA) for the independent variables. Regression analysis addressed each hypothesis (Cohen, Cohen, West, and Aiken (2003). This quantitative study employed one form of data analysis. There was no need for permissions to access the data. Use of the split-half sample and Spearman Rho eliminated the need for the use of more than one instrument to scale and odd and even items for data analysis for measuring the quality of communication.

The researcher used the Statistical Package of Social Sciences (SPSS v 23.0) software program for inferential statistics and descriptive statistics. The aim of the study is an explanation of the relationship among the independent and dependent variables by using the multiple regression for the directionality of the predictor variables to the criterion variable. Regression analysis provided analysis for determining if, by the implementation of one or more variables, a change in outcome may result in confirming hypotheses (Corner, 2002). A statistically significant relationship occurred at 90% (1-error) and a level of  $\geq 80\%$  power. Regression analysis addressed each hypothesis.

Assumptions of regression to meet are include measuring independent variables without error, a co-linear relationship between the independent and criterion variables, fixed independent variables, 0 is the mean of the residuals for each observation on the criterion variable, any errors on the criterion variable are independent, no errors correlated with the independent variables,

variance across values of the independent variables is constant, and finally that errors are normally distributed.

Simple linear regression uses one criterion variable and one predictor variable. Creating a linear equation to predict the value of the criterion variable when there is a predictor variable is the point of simple linear regression. The value of a predictor variable at which simple regression lines cross can be determined algebraically for any predictor variable within a regression equation using  $X_{\text{cross}} = -B_2/B_3$  (Cohen, Cohen, West, and Aiken).

### **Data Cleaning and Preparation**

A conducted review occurred on the collected data to locate errors or missing data. There were 67 respondents to the survey, and the completion rate was 52 percent. The analysis did not include incomplete survey questions; instead, only fully completed surveys were in the data analysis. Accuracy on the integrity of data in SurveyMonkey™ reporting was used for descriptive reporting and a resolution data integrity.

### **Inferential Statistics**

The dependent variable for this research was testing for the degree of sharing, and the primary independent variables are communication, culture, and trust. Inferential statistics are to measure the degree of sharing and relationship between the community of national security partners. Cronbach alpha use occurred in this study for scale reliability of the data collection instrument, the measure of relationship amongst items grouped and consistency testing, and degree of correlation.

### **Ethics**

The Belmont Report identifies three basic ethical principles when dealing with human subjects as respect for persons, beneficence, and justice (Gabriele, 2003). This study will govern



participants based on these principles as follows. The survey solicitation is for members of the personal, professional network of the researcher and will take place via a private invitation to avoid personally identifiable information discovery by other participants and will follow policies and procedures of IRB and CITI guidelines for conducting research using human subjects. The survey will be housed online using SurveyMonkey™. Respect for persons, no data collection for survey participants was collected before approval for this study by an institutional review board (Fawcett and Garity, 2009).

All study participants were required to give consent before entering this voluntary research. The purpose of the informed consent associated with this study was to provide potential participants with as much information as possible about the study to provide enough information to choose between participating in the survey. To protect the identity of research participants, and adhere to beneficence, no personally identifiable information was collected for participating in this study. The third principle is justice, and participants are not being solicited based on their rank, age, position, or merit. Instead, participants for this study are solicited based on the criteria identified in the purpose of the research.

### **Additional Approvals**

This research required additional permission and approval before the collection of data. A pre-publication review by the Federal Bureau of Investigation was required. The pre-publication review began before committee review and data collection. Formal approval is in Appendix A.

### **Summary**

Chapter 3 discussed the research question, population, sample, and instrument associated with this study. Additional information relating to the proposed data collection and data analysis was discussed. The reliability of the information and the validity were included to provide

insight into how the information is considered reliable and valid. Norman (2011) discusses business ethics as self-regulation and thinking beyond compliance obligations [considered regulation].

The use of the Likert Scale survey as an instrument provided participants with the opportunity to express their thoughts. The collected data may ascertain the perception of participants on any information sharing improvements between the banking industry and federal government to assist law enforcement personnel and detect any existing gaps in information sharing that may exist more than a decade past the 9/11 attacks.

Privatization and deregulation provided an avenue for businesses to operate free from government regulation, but there is the question of ethics. In the case of combating terrorist financing and information sharing between the public and private sectors, the regulations may be held to different standards as apparent post 9/11. With changes in terrorist strategies to use money laundering techniques, and expansion of regulations could potentially save an exponential amount of lives of United States citizens. Self-regulation as a business practice allows for rewriting governance about stakeholders, which may prove beneficial when considering partnerships for competitive advantage. The competitive advantage, in this case, stems from national security partners proceeding ethically in business practices for the good of the United States.

## Chapter 4

### Analysis and Results

The purpose of this study was to test the relationship of information sharing among national security partners. Internal communication, organizational culture, leadership, and technology were the areas of inquiry, and interagency communication was the dependent variable. Determining if better interagency communication among national security partners would increase the possibility of disrupting terrorist's ability to adapt new strategies for funding terrorist activity was the goal.

The quantitative correlational design determined if there was a relationship of information sharing among the community of national security partners using communication, culture, leadership, and technology as the four independent variables and interagency communication as the criterion variable for measurement.

The present study took place in Alexandria, Virginia, located in the Washington, D.C., metropolitan area. 540 members of the personal, professional network of the researcher received individual invitations for their voluntary participation in a 152-item web-based. A total of 67 members of the personal, professional network of the researcher completed the survey for an initial response rate of 67/540, which is 12.4 percent. Of the 67 members, 35 completed the entire survey for an actual response rate of 35/540, which is 6.48 percent. Members of the researcher's personal, professional network received a private, individual invitation inviting them to contribute to the study.

There were three sections in the quantitative instrument used for the survey. The first section collected demographic information; followed by a six-point Likert Scale in the second section with a range from strongly disagree to strongly agree, used to measure the perception of

the participant in relation to each variable; lastly, the third section enabled participants to rank the importance of the variables using a ten-point sliding scale. The third section worked in conjunction with the first two sections by providing data for use in measuring instrument reliability based on a comparison of the last two sections. The Kudar-Richardson split-half test and the coefficient alpha test measured reliability.

Cronbach's alpha determined the scales of variables using reliability analysis. These variables measured the relationship among the criterion and predictor variables and the directionality of the predictor variables to the criterion variables. The level of significance for statistical analysis was a p-value of 0.05. Correlational analysis and multiple regression determined the relationship of the scaled variables. The study used the SPSS software version 23.0 for the Spearman Rank-Order correlation to determine if there was a correlation between the degree of information sharing and the independent variables and make sure data type and correlation coefficient match.

The predictor variables used were internal communication, organizational culture, leadership/trust, and technology preparedness. These variables measured the relationship between the predictor and criterion variables and determine the directionality of the predictor variables to the criterion variables.

### **Research Questions/Hypotheses**

The null hypotheses and corresponding alternative hypotheses defined the design and results of the study. The predictor variables included internal communication, organizational culture, leadership/trust, and technology preparedness. Interagency communication was the criterion variable.

### **Research Hypothesis One**

**H1.** A linear relationship exists between internal communication and interagency communication.

**H01.** No linear relationship exists between internal communication and interagency communication.

### **Research Hypothesis Two**

**H2.** A linear relationship exists between organizational leadership and internal communication.

**H02.** No linear relationship exists between organizational leadership and internal communication.

### **Research Hypothesis Three**

**H3.** A linear relationship exists between organizational leadership and technology preparedness.

**H03.** No linear relationship exists between organizational leadership and technology preparedness.

### **Research Hypothesis Four**

**H4.** A linear relationship exists between technology preparedness and internal communication.

**H04.** No linear relationship exists between technology preparedness and internal communication.

### **Research Hypothesis Five**

**H5.** A linear relationship exists between internal policy and cultural willingness to share information.

**H<sub>05</sub>.** No linear relationship exists between internal policy and cultural willingness to share information.

### **Research Hypothesis Six**

**H<sub>6</sub>.** A linear relationship exists between internal policy and interagency communication.

**H<sub>06</sub>.** No linear relationship exists between internal policy and interagency communication.

### **Data Collection**

The population for this research consisted of members of the personal, professional network of the researcher. This population consisted of public and private sector professionals that had an information-sharing relationship with diplomacy, the military, the federal government intelligence community, the finance community, homeland security, and law enforcement. The principal investigator chose a random representative sample (60 participants) of the personal, professional network of the researcher to provide the needed statistical, power sample size based on the sample size calculator located on the SurveyMonkey™ website.

The ideal number of responses from the LinkedIn professional network of the researcher was 60. After eleven weeks, there were 67 participants, and the initial response rate of the 540 participants invited to participate in the survey was  $67/540$ , which is 12.4 percent. Of the 67 participants, 35 completed all survey questions, and 32 participants partially completed the survey for a total completion rate of 52 percent. The actual response rate was  $35/540$ , which is 6.48 percent. The participants received an invitation for survey participation via a private LinkedIn message from the researcher to members of the researcher's personal, professional network. All members of the researchers' personal, professional network had the opportunity to respond to the survey.

The process for survey participation was as follows: (1) Potential participants received a personal invitation through LinkedIn messaging from the researcher to participate in this study. (2) Potential participants then clicked the link provided in the personal invitation and were directed to the SurveyMonkey™ website where the electronic survey was housed (3) Once opened, the study overview and informed consent were revealed on page one, at the bottom of page one participants had the option of giving consent to participate in the survey or selecting not to consent at which time they were redirected to the survey exit screen. (4) Once the participant clicked the option to give consent, the survey appeared. All steps of this research followed the guidelines and ethical principles for research involving human subjects. After four weeks an additional time allotment permitted more of the invited participants to complete the survey. The total survey completion was eleven weeks. The survey website allowed the researcher to set up notifications of survey respondents and monitor the rate of survey responses.

A section in the survey permitted participants to select the primary and secondary organizations they supported, their primary role within their organization, and their primary function within their organization. These questions permitted further breakdown of survey participants and the organizations the participants represented. The status of the participants included civilian government employees, one employee of the military, contractors of the government, state employees, and a recent retiree.

The primary purpose of this study was to determine if better interagency communication among national security partners increased the possibility of reducing terrorist's capability to adapt new strategies for funding terrorist activity. The study also sought to add to the body of knowledge in national security matters regarding the linkage between money laundering and terrorist activities. Finally, national security partners might, through interagency communication,

gain a deeper understanding of the culture and leadership differences outlined in reporting that the OIG believes it is necessary for effective information sharing.

### **Demographics**

Demographics included in the research were gender, years of employment with the organization, and position held by the employee. The total analysis for the survey included the completed responses by a total of 35 survey participants from the personal, professional network of the researcher on LinkedIn. Fourteen of the participants were civilian government employees, one participant identified themselves as affiliated with the military, twelve participants were contractors, eight participants identified themselves as something else, and four participants identified themselves as others. In Table 2, the highest frequency status of the participants corresponded to government civilian (n=16) and contractor (n=12). In Table 3, the highest frequency for primary CNSP supported corresponded to military (n=10), intelligence information (n=7), and finance (n=5) and law enforcement (n=5) tied for third.

Table 2  
*Frequency table for Status*

<b>Variable</b>	<b>n</b>
Government Civilian	16
Contractor	12
Something Else	2
Military	1
Ecclesiastical Endorser	1
Library technician	1
Recently separated	1
Retired	1
<b>Total</b>	<b>35</b>



Table 3  
*Frequency Table for Primary/Other Primary*

<b>Variable</b>	<b>n</b>
Military	10
Intelligence Information	7
Finance	5
Law Enforcement	5
Homeland Security	3
Diplomacy	1
Aviation	1
Department of Defense	1
DOD*	1
GSA	1
<b>Total</b>	<b>35</b>

\*DOD is the acronym of Department of Defense written in the comment section by a survey participant.

Table 4  
*Cross-tabulation between Status and Primary Mission and Primary Function*

<b>Status</b>	<b>Government Civilian</b>	<b>Contractor</b>	<b>Primary Function</b>	<b>#</b>
<b>Primary Mission</b>				
<b>Intelligence Information</b>	3	3	Analysis	3
<b>Military</b>	4	3	Analysis	2
<b>Law Enforcement</b>	4	0	Analysis	3
<b>Homeland Security</b>	2	1	IT Systems	1
<b>Finance</b>	1	2	Operations Senior Decision Maker	2/2

### Pilot Study

A panel of experts assessed the efficiency of the survey for future respondents. Omitting pilot data from the main study minimized risk associated with piloting and contamination (Cone and Foster, 2006; Teijlingen and Hundley, 2002). The panel of experts inspected the design of the instrument, the types of questions, and ease of selecting responses and navigating through the survey. The pilot study ensured the instructions for survey completion were easy to follow, and ensure adequate time allotment for survey completion, and ensure the survey functioned properly even for individuals with no knowledge of the study.

## **Pre-Analysis Data Screen**

A total of 67 respondents participated in the survey representing the researcher's personal, professional network on LinkedIn. Five-hundred and forty members of the personal, professional network of the researcher received the survey invitation. Sixty-seven respondents participated in the survey. Among the 67 respondents, 32 completed part of the survey, and 35 participants completed the entire survey. The final sample size consisted of the fully completed surveys by the 35 participants. SPSS software 23.0 analyzed the data within this study.

## **Data Analysis**

The location for gathering data associated with this research was a secure, web-based survey hosted on SurveyMonkey with a unique link dedicated solely for this study to determine if better interagency communication among national security partners increases the possibility of disrupting terrorist's capability to adapt new strategies for funding terrorist activity. Only participants who provided consent responded to the survey. The survey had a 52 percent rate of completion. Descriptive statistics, reliability, and correlation use took place in this research. A correlation analysis measured variables to determine a statistically significant relationship. Reliability analysis confirmed the replication of variables measured. The degree of the statistical relationship between two sets of ranked observations occurred using Spearman's rank-order coefficient.

## **Results**

The null hypotheses and corresponding alternative hypotheses define the results of the study. The analysis performed became the base for answers to the research questions. A scales of measurement overview for scales used with the variables follows.

## Research Question 1

**R<sub>1</sub>** Is internal CNSP agency communication of greater quality than intra-agency communication?

For research question one descriptive statistics, and cross-tabulations measured the understanding and perception of the governing and promoting of internal communications for information sharing. The highest frequency mission CNSP were the military and intelligence information, and the highest frequency primary functions were analysis production, senior decision-maker, and operations, as recorded in Table 4. The top two mission frequencies, military, and intelligence information appear throughout chapters 4 and 5 for statistical analysis. The results for communication in Table 8 reflect the highest agreement with communication where the mission CNSP was the military (n=119) followed by intelligence information (n =81). Figure 4 displays the communication results with a combined net agree score for items in question #9 (I have a good understanding of the internal communications that govern information sharing) and a combined net agree score for items in question #10 (My perception is that internal communications of my organization promote information sharing).

### Communication

Combining the participant responses for *agree*, *somewhat agree* and *strongly agree* revealed that 91 percent or 32 of 35, said they had a good understanding of internal communication that governed information sharing within their organization (Question 9) and 89 percent or 31 of 35, said their perceived internal communication promotes information sharing (Question 10). The combined internal communication scores for the CNSP revealed much lower percentages ranging from 69 – 74 percent as follows: 53 participants or 69% for diplomacy, 53

participants or 71% for intelligence information, 54 participants or 74% for military, 57 participants or 74% for finance, 51 participants or 69 % for homeland security, and 54 participants or 77% for law enforcement.

To measure the degree of the statistical relationship between the two sets of ranked observations UICGIS and PICOIS nonparametric correlations using Spearman Rank Order for the predictor variables internal communication and information produced significant correlations at the 0.01 level indicated by two \*\*and at the 0.05 level indicated by one \*(results in Table 8).

The descriptive statistics presented in Table 4 identified the status of the survey participants based on the communities of national security partners that they may represent. Table 3 identified the primary communities of national security partners supported by the study participants. Table 4 shows the cross-tabulation between status, primary mission, and the primary function of the highest frequency status of government civilians and contractors. Government civilian employees whose primary mission was to support the military or law enforcement yielded the highest frequency. The highest primary function by government or contract employees was analysis. The next highest primary function/mission/status was intelligence information with a tied score of three for government and contractors.

Scales measured the six variables of communication, culture, information sharing, information technology, leadership/trust, and policy. The possible scores for each scale ranged from 1.00 to 6.00. Using Cronbach Alpha yielded the threshold of acceptance ( $\alpha > .70$ ) for each scale. The perception of internal communication scores ranged from 3.74 to 4.85, with  $M = 4.25$  and  $SD = 1.24$ . Culture scores ranged from 3.80 to 5.31 with  $M = 4.52$  and  $SD = 1.11$ . Information sharing scores ranged from 3.82 to 4.68, with  $M = 4.25$  and  $SD = 1.20$ . The understanding of technology scores ranged from 3.57 to 5.62, with  $M = 4.72$  and  $SD = 1.53$ . The

four levels of trust scores ranged from 4.48 to 5.31, with  $M = 4.81$  and  $SD = 0.89$ . Policy concerning CNSP scores ranged from 4.17 to 5.62 with  $M = 4.81$  and  $SD = 1.43$ .

Table 5 displays the descriptive statistics calculations to include the mean and standard deviation for the variable mentioned above. The range for Cronbach Alpha's Reliability Coefficient ranged from  $\alpha = .836$  to  $\alpha = .955$  with a median alpha of  $\alpha = .895$ .

Table 5  
*Summary of Statistics Table for Scales*

Variable	Min	Max	M	SD	# of items	$\alpha$
Communication	3.74	4.85	4.25	1.24	14	.884
Culture	3.80	5.31	4.52	1.11	35	.941
Information sharing	3.82	4.68	4.25	1.20	14	.952
Information technology	3.57	5.62	4.72	1.53	28	.953
Leadership/Trust	4.48	5.31	4.81	0.89	28	.955
Policy	4.17	5.62	4.81	1.43	14	.836

Table 6 displays the Spearman rank-order results using a 2-tailed test for correlations of communication. One \* indicates significance at 0.5 (two-tailed test), and two \*\* indicate significance at the 0.01 level. Significant correlations existed between the primary mission and an understanding of internal communication that governed information sharing (UICGIS) and perception of internal communication organization information sharing (PICOIS). Significant correlations existed between the primary mission and perception that internal communication of one's organization promoted information sharing.

Table 7 displays the crosstabulation of net agree responses for communication. The crosstabulation results for communication identified strong communication promotion when the CNSP partners were military and intelligence information. When the CNSP partner was diplomacy or Homeland Security, the communication support did not appear as strong.

Table 6

*Nonparametric Correlations for Communication*

Correlations for Communication																
Spearman primary	Correlation Coefficient	1	0.186	0.135	0.09	0.096	0.311	0.036	0.152	0.094	-0.192	0.047	-0.121	0.056	0.144	0.175
	Sig. (2-tailed)		0.315	0.468	0.631	0.608	0.089	0.846	0.415	0.614	0.301	0.804	0.518	0.763	0.439	0.346
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
UICGIS1	Correlation Coefficient	0.186	1	.413*	.492**	.526**	0.154	.482**	.588**	0.295	0.103	0.171	.367*	0.246	0.333	.366*
	Sig. (2-tailed)	0.315		0.014	0.003	0.001	0.376	0.003	0	0.086	0.555	0.325	0.03	0.155	0.051	0.031
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS2	Correlation Coefficient	0.135	.413*	1	.697**	.630**	.427*	.615**	.516**	-0.077	.361*	0.32	.418*	0.102	.367*	0.266
	Sig. (2-tailed)	0.468	0.014		0	0	0.01	0	0.002	0.661	0.033	0.061	0.013	0.559	0.03	0.122
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS3	Correlation Coefficient	0.09	.492**	.697**	1	.452**	.423*	.798**	.675**	-0.077	.528**	.535**	.530**	0.298	.531**	0.33
	Sig. (2-tailed)	0.631	0.003	0		0.006	0.011	0	0	0.66	0.001	0.001	0.001	0.082	0.001	0.053
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS4	Correlation Coefficient	0.096	.526**	.630**	.452**	1	.396*	.491**	.481**	-0.047	0.031	0.263	.365*	0.096	0.189	0.215
	Sig. (2-tailed)	0.608	0.001	0	0.006		0.019	0.003	0.003	0.789	0.861	0.127	0.031	0.585	0.278	0.214
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS5	Correlation Coefficient	0.311	0.154	.427*	.423*	.396*	1	0.286	.443**	-0.045	0.124	0.201	0.205	.430**	0.175	0.118
	Sig. (2-tailed)	0.089	0.376	0.01	0.011	0.019		0.096	0.008	0.8	0.479	0.246	0.237	0.01	0.314	0.501
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS6	Correlation Coefficient	0.036	.482**	.615**	.798**	.491**	0.286	1	.714**	-0.162	.409*	.576**	.526**	0.166	.680**	.417*
	Sig. (2-tailed)	0.846	0.003	0	0	0.003	0.096		0	0.352	0.015	0	0.001	0.339	0	0.013
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
UICGIS7	Correlation Coefficient	0.152	.588**	.516**	.675**	.481**	.443**	.714**	1	0.056	.355*	.496**	.506**	.367*	.564**	.575**
	Sig. (2-tailed)	0.415	0	0.002	0	0.003	0.008	0		0.748	0.037	0.002	0.002	0.03	0	0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS1	Correlation Coefficient	0.094	0.295	-0.077	-0.077	-0.047	-0.045	-0.162	0.056	1	.439**	0.31	.414*	.579**	0.239	.446**
	Sig. (2-tailed)	0.614	0.086	0.661	0.66	0.789	0.8	0.352	0.748		0.008	0.07	0.013	0	0.166	0.007
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS2	Correlation Coefficient	-0.192	0.103	.361*	.528**	0.031	0.124	.409*	.355*	.439**	1	.749**	.654**	.553**	.706**	.558**
	Sig. (2-tailed)	0.301	0.555	0.033	0.001	0.861	0.479	0.015	0.037	0.008		0	0	0.001	0	0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS3	Correlation Coefficient	0.047	0.171	0.32	.535**	0.263	0.201	.576**	.496**	0.31	.749**	1	.733**	.460**	.807**	.769**
	Sig. (2-tailed)	0.804	0.325	0.061	0.001	0.127	0.246	0	0.002	0.07	0		0	0.005	0	0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS4	Correlation Coefficient	-0.121	.367*	.418*	.530**	.365*	0.205	.526**	.506**	.414*	.654**	.733**	1	.541**	.642**	.563**
	Sig. (2-tailed)	0.518	0.03	0.013	0.001	0.031	0.237	0.001	0.002	0.013	0	0		0.001	0	0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS5	Correlation Coefficient	0.056	0.246	0.102	0.298	0.096	.430**	0.166	.367*	.579**	.553**	.460**	.541**	1	.460**	.417*
	Sig. (2-tailed)	0.763	0.155	0.559	0.082	0.585	0.01	0.339	0.03	0	0.001	0.005	0.001		0.005	0.013
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS6	Correlation Coefficient	0.144	0.333	.367*	.531**	0.189	0.175	.680**	.564**	0.239	.706**	.807**	.642**	.460**	1	.760**
	Sig. (2-tailed)	0.439	0.051	0.03	0.001	0.278	0.314	0	0	0.166	0	0	0	0.005		0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35
PICOIS7	Correlation Coefficient	0.175	.366*	0.266	0.33	0.215	0.118	.417*	.575**	.446**	.558**	.769**	.563**	.417*	1	.760**
	Sig. (2-tailed)	0.346	0.031	0.122	0.053	0.214	0.501	0.013	0	0.007	0	0	0	0.013		0
	N	31	35	35	35	35	35	35	35	35	35	35	35	35	35	35

\* Correlation is significant at the 0.05 level (2-tailed).  
 \*\* Correlation is significant at the 0.01 level (2-tailed).

Table 7

*Crosstabulation net agree with responses for CNSP Communication*

Statistics Name/Count	Diplomacy	Intelligence Information	Military	Finance	Homeland Security	Law Enforcement	Total
UICGIS1	1	7	8	5	3	4	28
UICGIS2	1	5	7	1	3	4	21
UICGIS3	1	5	8	1	3	4	22
UICGIS4	0	5	9	2	3	4	23
UICGIS5	1	3	8	5	2	4	23
UICGIS6	0	6	7	2	3	4	22
UICGIS7	0	6	8	4	3	4	25
PICOIS1	1	6	9	5	1	5	27
PICOIS2	1	7	9	3	1	5	26
PICOIS3	0	7	9	3	2	5	26
PICOIS4	0	6	10	2	2	5	25
PICOIS5	1	6	9	5	2	5	28
PICOIS6	0	6	9	3	2	5	25
PICOIS7	0	6	9	4	2	5	26
Total	7	81	119	45	32	63	347

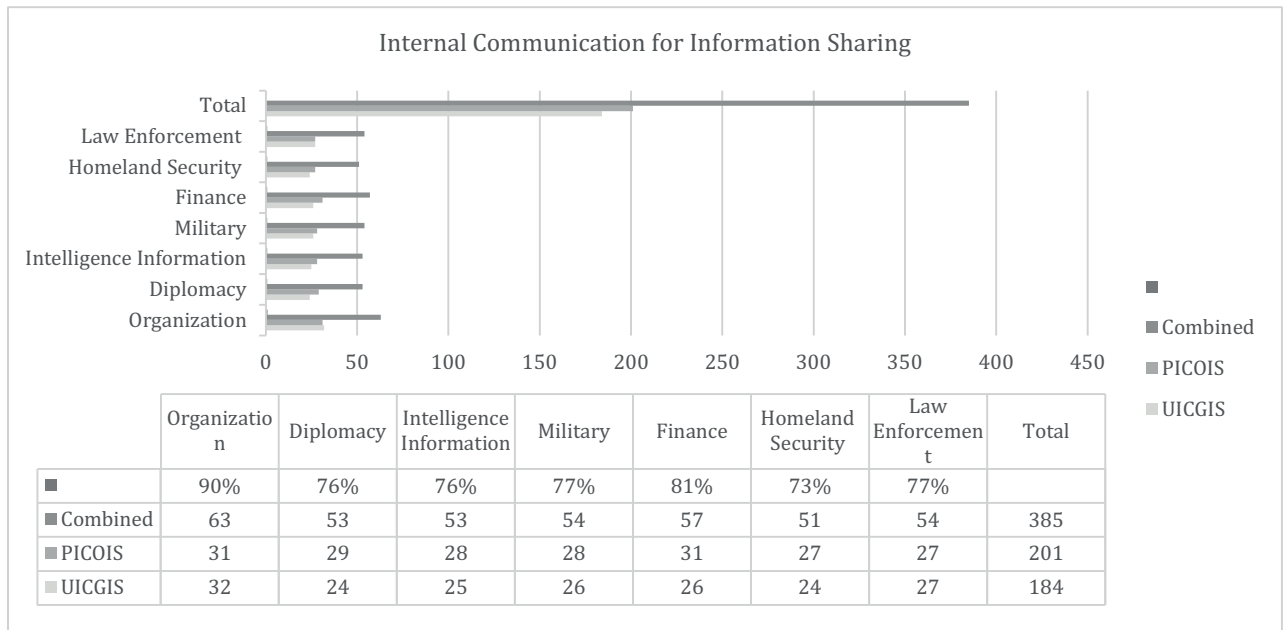


Figure 4. *Internal Communication Governing Information Sharing (UICGIS). Perception-Internal Communication Organization Information Sharing (PICOIS).*

Figure 4 shows the net agree with responses from 35 participants to questions #9 and #10, which represent survey items 9-22. Net agree responses included agree, somewhat agree, and strongly agree.

To further address Research Question One, descriptive statistics and cross-tabulations measured the understanding of information sharing culture and perception of organizational culture for promoting information sharing. Additional item statistics and reliability appear in Appendix H. The results for culture in Table 8 reflect the highest agreement with the culture where the mission CNSP was the military (n = 108) followed by intelligence information (n = 90). Figure 5 displays the culture results with a combined net agree score for items in question #11 (I have a good understanding of information sharing culture) and a combined net agree score for items in question #12 (My perception is that my organization's culture promotes information sharing).

## Culture

Combining the participant responses for agree, somewhat agree, and strongly agree revealed that 91 percent or 32 of 35, said they had a good understanding of information sharing culture within their organization (Question 11) and 91 percent or 32 of 35, said their perceived organizational culture promotes information sharing (Question 12). The combined culture scores for the CNSP revealed much lower percentages ranging from 66 – 76 percent as follows: 46 participants or 66% for diplomacy, 47 participants or 67% for intelligence information, 52 participants or 74% for military, 53 participants or 76% for finance, 50 participants or 71 % for homeland security, and 49 participants or 70% for law enforcement.

Table 8  
*Nonparametric Correlation for Culture*

Nonparametric Correlation for Culture																
Spearman primary	Correlatio	1	.774**	.762**	.782**	.773**	.803**	.772**	.784**	.758**	.755**	.794**	.755**	.788**	.802**	.826**
	Sig. (2-tail)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUISC1	Correlatio	.774**	1	.904**	.902**	.924**	.926**	.922**	.944**	.924**	.892**	.895**	.924**	.928**	.916**	.923**
	Sig. (2-tail)	0		0	0	0	0	0	0	0	0	0	0	0	0	0
GUISC2	Correlatio	.762**	.904**	1	.982**	.954**	.955**	.945**	.938**	.897**	.963**	.946**	.918**	.920**	.941**	.920**
	Sig. (2-tail)	0	0		0	0	0	0	0	0	0	0	0	0	0	0
GUISC3	Correlatio	.782**	.902**	.982**	1	.955**	.939**	.950**	.950**	.907**	.963**	.964**	.918**	.915**	.958**	.946**
	Sig. (2-tail)	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GUISC4	Correlatio	.773**	.924**	.954**	.955**	1	.939**	.938**	.926**	.896**	.912**	.920**	.957**	.903**	.934**	.910**
	Sig. (2-tail)	0	0	0	0		0	0	0	0	0	0	0	0	0	0
GUISC5	Correlatio	.803**	.926**	.955**	.939**	.939**	1	.907**	.921**	.911**	.920**	.901**	.916**	.960**	.911**	.914**
	Sig. (2-tail)	0	0	0	0	0		0	0	0	0	0	0	0	0	0
GUISC6	Correlatio	.772**	.922**	.945**	.950**	.938**	.907**	1	.975**	.888**	.952**	.948**	.938**	.907**	.986**	.947**
	Sig. (2-tail)	0	0	0	0	0	0		0	0	0	0	0	0	0	0
GUISC7	Correlatio	.784**	.944**	.938**	.950**	.926**	.921**	.975**	1	.894**	.940**	.939**	.929**	.926**	.968**	.966**
	Sig. (2-tail)	0	0	0	0	0	0	0		0	0	0	0	0	0	0
POCPIS1	Correlatio	.758**	.924**	.897**	.907**	.896**	.911**	.888**	.894**	1	.908**	.912**	.915**	.938**	.905**	.923**
	Sig. (2-tail)	0	0	0	0	0	0	0	0		0	0	0	0	0	0
POCPIS2	Correlatio	.755**	.892**	.963**	.963**	.912**	.920**	.952**	.940**	.908**	1	.964**	.908**	.923**	.954**	.930**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0		0	0	0	0	0
POCPIS3	Correlatio	.794**	.895**	.946**	.964**	.920**	.901**	.948**	.939**	.912**	.964**	1	.936**	.909**	.964**	.959**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0		0	0	0	0
POCPIS4	Correlatio	.755**	.924**	.918**	.918**	.957**	.916**	.938**	.929**	.915**	.908**	.936**	1	.935**	.941**	.927**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0		0	0	0
POCPIS5	Correlatio	.788**	.928**	.920**	.915**	.903**	.960**	.907**	.926**	.938**	.923**	.909**	.935**	1	.910**	.924**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0		0	0
POCPIS6	Correlatio	.802**	.916**	.941**	.958**	.934**	.911**	.986**	.968**	.905**	.954**	.964**	.941**	.910**	1	.968**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0	0		0
POCPIS7	Correlatio	.826**	.923**	.920**	.946**	.910**	.914**	.947**	.966**	.923**	.930**	.959**	.927**	.924**	.968**	1
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

\*\* Correlation is significant at the 0.01 level (2-tailed).



Table 8 displays the Spearman rank-order results using a 2-tailed test for correlations of culture. Two \*\*indicates significance at the 0.01 level. Significant correlations existed between the primary mission and an understanding of the internal culture that governed information sharing (GUISC) and perception of organization culture promoting information sharing (POCPIS). Significant correlations existed between the primary mission and perception that the internal culture of one's organization promoted information sharing.

Table 9

*Crosstabulation net agree with responses for CNSP Culture*

Statistics Name/Count	Diplomacy	Intelligence Information	Military	Finance	Homeland Security	Law Enforcement	Total
GUISC1	1	6	10	4	3	5	29
GUISC2	1	6	7	1	1	4	20
GUISC3	0	6	7	1	2	5	21
GUISC4	0	6	9	2	2	4	23
GUISC5	1	5	7	4	2	4	23
GUISC6	0	7	8	1	2	4	22
GUISC7	0	6	8	3	2	4	23
POCPIS1	1	7	8	5	2	5	28
POCPIS2	1	7	7	2	1	5	23
POCPIS3	0	7	7	2	2	5	23
POCPIS4	0	7	8	2	2	5	24
POCPIS5	1	6	7	5	2	5	26
POCPIS6	0	7	8	3	2	5	25
POCPIS7	0	7	7	3	2	5	24
Total	6	90	108	38	27	65	334

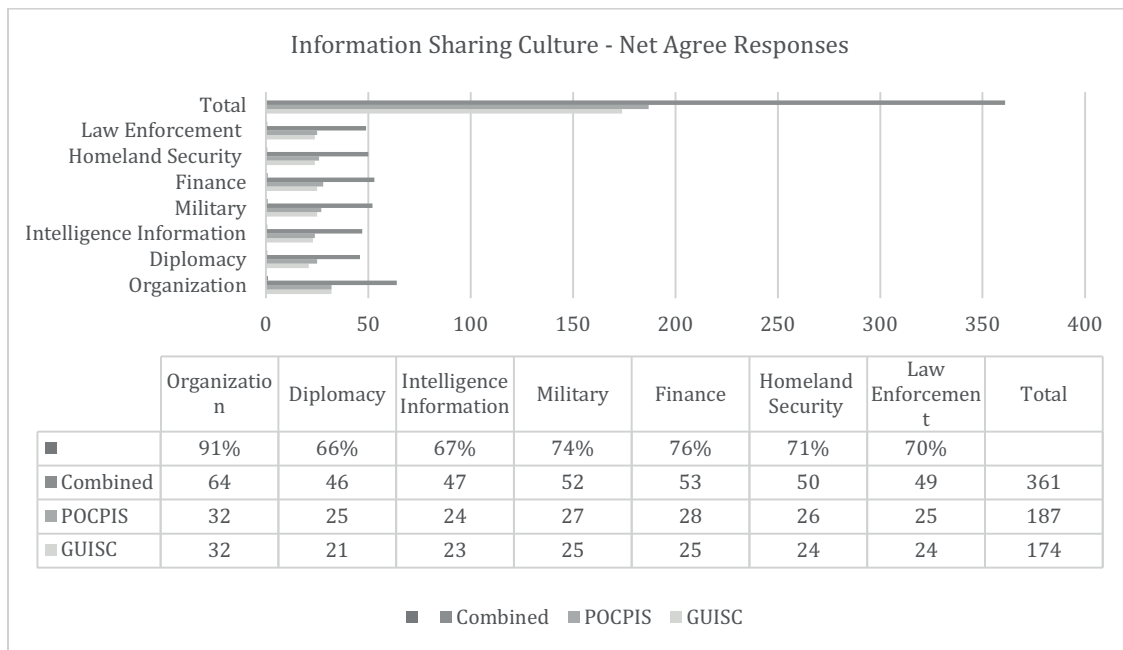


Figure 5. *Good Understanding of Information Sharing Culture (GUISC). Perception-Organizational Culture Promotes Information Sharing (POCPIS).*

Figure 5 shows the net agree with responses on information sharing culture from 35 participants to questions #11 (I have a good understanding of Information Sharing Culture) and #12 (My perception is that my organization’s culture promotes information sharing) which represent survey items 23-36. The highest score generated for GUISC was from GUISC 1 (n=32), which was my organization. The highest score generated for POCPIS was from POCPIS 1 (n=32), which was my organization.

The crosstabulation results for culture identified strong culture promotion when the CNSP partners were military and intelligence information. When the CNSP partner was diplomacy or Homeland Security, the culture while supported, did not appear as strong.

## Research Question 2

**R<sub>2</sub>** What is the quality of communication between members of the Community of National Security Partners?

Descriptive statistics and cross-tabulations measured the understanding and perception of information technology (IT) compatibility of IT toward the quality of communication between CNSP. The perception of how often the participant's organizations received information produced by CNSPs was measured as a standalone figure and then again for correlation. The results for information technology in Table 11 reflected the highest agreement with information technology where the mission CNSP was the military (n =210) followed by intelligence information (n =131).

Figure 6 displays the results for the perception of a good understanding of information technology (PGUIT) results with a combined net agree with the score for items in question #13 (I have a good understanding of the information technology). The highest scores generated for PGUIT were from PGUIT 1 (n= 28), which was within my organization and PGUIT 4 (n=26), which was with the military CNSP.

Figure 7 displays the perception of information technology hardware (POITH) results with a combined net agree with the score for items in question #14 (My perception is that my organization's Information Technology (IT) hardware is compatible). The highest scores generated for POITH were from POITH 1 (n= 29), which was within my organization and POITH 5 (n=24), which was with the finance CNSP.

Figure 8 displays the perception of information technology software (POITS) results with a combined net agree with the score for items in question #15 (My perception is that my organization's Information Technology (IT) software is compatible). The highest scores generated for POITS were from POITS 1 (n= 33), which was within my organization and POITS 3 (Intelligence Information), POITS 4 (Military), and POITS 7 (Law Enforcement) tied for second place (n=23).

Figure 9 displays the perception of the security classification of information technology systems compatibility (PSCITSC) results with a combined net agree with the score for items in question #16 (My perception is that the security classification of my organization's IT systems is compatible). The highest scores generated for PSCITSC were from PSCITSC 1 (n= 32), which was within my organization and PSCITSC 4 (n=24), which was with the military CNSP.

Figure 10 displays the perception of the time the organization of the participants receives information produced by CNSPs (PORIPCNSP) with a combined score on the net concurrence of time for receipt of information for items in question #17 (My perception is that my organization receives information produced by the following CNSPs all of the time, most of the time, some of the time, rarely, only on request or never?). The highest scores generated for PORIPCNSP were from PORIPCNSP 1 (n =28) for within my organization and PORIPCNSP 4 (n =20) for with the military CNSP.

Figure 11 displays the perception of leadership encouraging information sharing (PLEIS) with a combined net agree with the score for items in question #18 (My perception is that the leadership of my organization encourages information sharing). The highest scores generated for PLEIS were from PLEIS 1 (organization) and PLEIS 7 (law enforcement) which tied at (n =28) and a three-way tie for second between PLEIS 2 (diplomacy), PLEIS 4 (military) and PLEIS 5 (finance) for (n =27).

Figure 12 displays the perception of colleagues encouraging information sharing (PCEIS) with a combined net agree with the score for items in question #19 (My perception is that my colleagues in my organization encourage information sharing). The highest scores generated for PCEIS were from PCEIS 1 (n =31) for within my organization and PCEIS 4 (n =28) for the military.

Figure 13 displays the perception of mission needs (PMNCNSP) with a combined net agree with the score for items in question #20 (My perception is that my organization understands the mission needs of organizations in the following CNSPs (Communities of National Security Partners). The highest scores generated for PMNCNSP were from PMNCNSP 1 (n =32) for organization and a three-way tied for second between PMNCNSP 4 (military), PMNCNSP 6 (homeland security) and PMNCNSP 7 (law enforcement) for (n =29).

Figure 14 displays the perception of information safeguard (PISGCNSP) with a combined net agree with the score for items in question #21 (My perception is that information my organization shares is safeguarded/protected properly in the following CNSPs (Communities of National Security Partners). The highest scores generated for PISGCNSP were a tie between PISGCNSP 1 and PISGCNSP 5 for (n =35) and a five-way tie between PISGCNSP 2 (diplomacy), PISGCNSP 3 ( intelligence information), PISGCNSP 4 (military), PISGCNSP 6 (homeland security) and PISGCNSP 7 (law enforcement for (n = 33).

Figure 15 displays the perception of information shared, analyzed appropriately (PISAACNSP) with a combined net agree with the score for items in question #22 (My perception is that information my organization shares is analyzed appropriately by members in the following CNSPs (Communities of National Security Partners). The highest scores generated for PISAACNSP were from PISAACNSP 1 (organization) for (n =34) and PISAACNSP 5 (finance) for (n =32).

Figure 16 displays the perception of information shared interpreted appropriately (PISIACNSP) with a combined net agree with the score for items in question #23 (My perception is that information my organization shares is interpreted appropriately by members in the following CNSPs (Communities of National Security Partners). The highest scores generated

for PISIACNSP were from PISIACNSP 1 (organization) for (n =35) and PISIACNSP 5 (finance) for (n =32).

Figure 17 displays the perception of information shared used appropriately (PISUACNSP) with a combined net agree with the score for items in question #24 (My perception is that information my organization shares is used appropriately by members in the following CNSPs (Communities of National Security Partners). The highest scores generated for PISUACNSP were from PISUACNSP 1 (organization) for (n =35) and PISUACNSP 5 (finance) for (n =34).



primary mission and an understanding of (IT) (PGUIT), perception of organization's IT hardware (POITH), perception of organization's IT software (POITS), and perception of security classification IT system compatibility (PSCITSC). Significant correlations existed between the primary mission and perception that internal culture promoted information sharing.

Table 11  
*Crosstabulation net agree with responses for Information Technology*

Statistics Name/Count	Diplomacy	Intelligence Information	Military	Finance	Homeland Security	Law Enforcement	Total
PGUIT1	1	7	8	4	3	5	28
PGUIT2	1	6	5	1	3	3	19
PGUIT3	0	7	5	2	3	4	21
PGUIT4	0	7	9	3	3	4	26
PGUIT5	1	5	5	4	3	3	21
PGUIT6	0	5	7	2	3	4	21
PGUIT7	0	5	8	2	3	4	22
POITH1	1	6	10	5	3	4	29
POITH2	1	3	7	1	2	3	17
POITH3	0	5	7	2	2	4	20
POITH4	0	5	9	1	3	4	22
POITH5	1	4	8	4	3	4	24
POITH6	0	3	7	1	3	4	18
POITH7	0	5	8	3	3	4	23
POITS1	1	6	10	5	3	5	30
POITS2	1	3	6	2	2	3	17
POITS3	1	6	7	2	2	4	22
POITS4	0	3	9	1	3	4	20
POITS5	1	4	6	2	3	2	18
POITS6	0	6	6	1	3	4	20
POITS7	0	4	6	3	3	5	21
PSCITSC1	0	6	10	5	3	5	29
PSCITSC2	1	2	7	0	1	5	16
PSCITSC3	0	5	7	0	3	5	20
PSCITSC4	0	4	10	2	2	4	22
PSCITSC5	1	3	8	4	1	4	21
PSCITSC6	0	3	8	1	2	5	19
PSCITSC7	0	3	7	2	3	5	20
Total	12	131	210	65	74	114	334



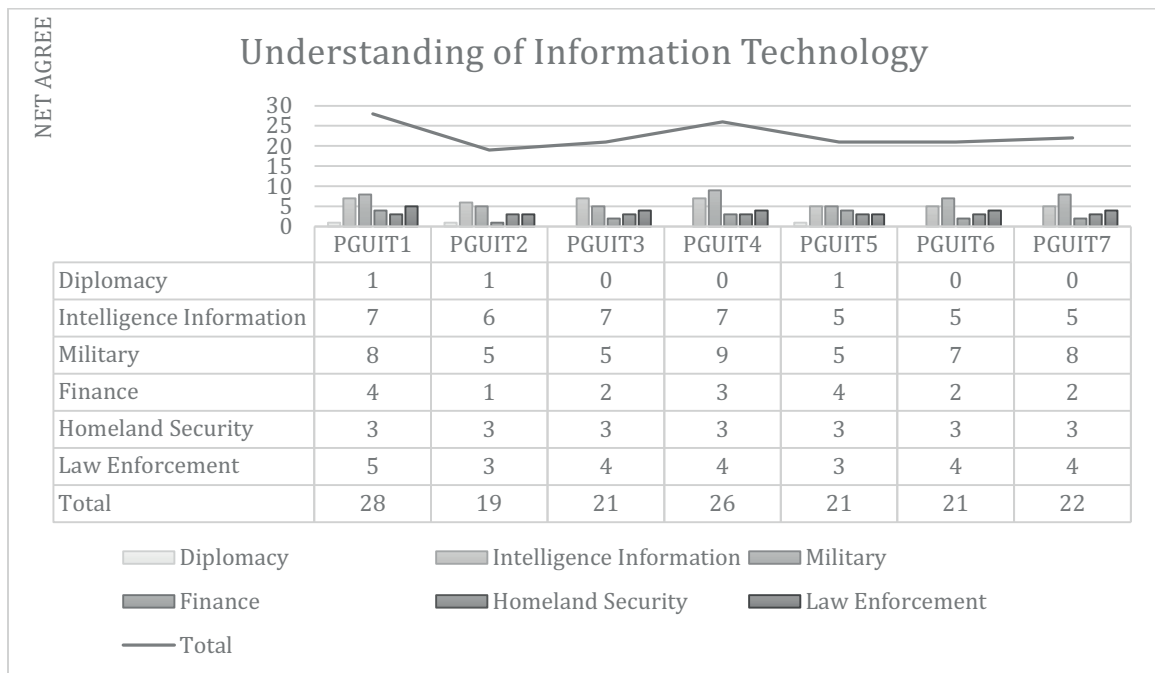


Figure 6. Perception- Good Understanding of Information Technology (PGUIT).

Figure 6 shows the net agree with responses from 35 participants to questions #13, which represent survey items 37-43. Net agree responses included agree, somewhat agree, and strongly agree.

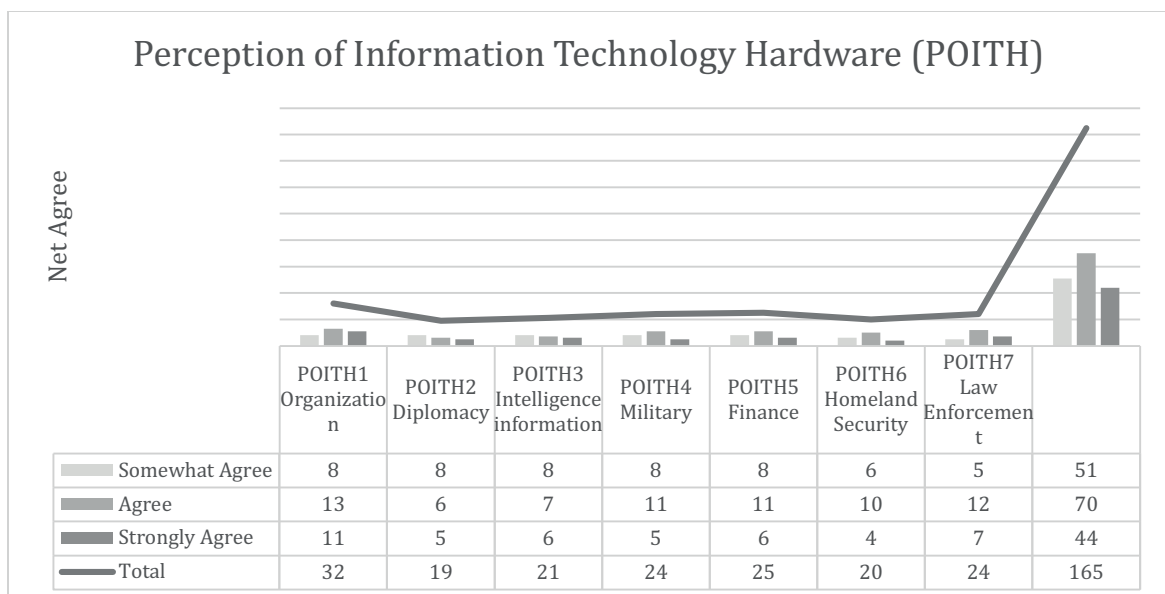


Figure 7. Perception of Information Technology Hardware (POITH).

Perception- Information Technology Hardware. Figure 7 shows the net agree with responses from 35 participants to questions #14, which represent survey items 44-50. Net agree with responses included *agree, somewhat agree, and strongly agree*.

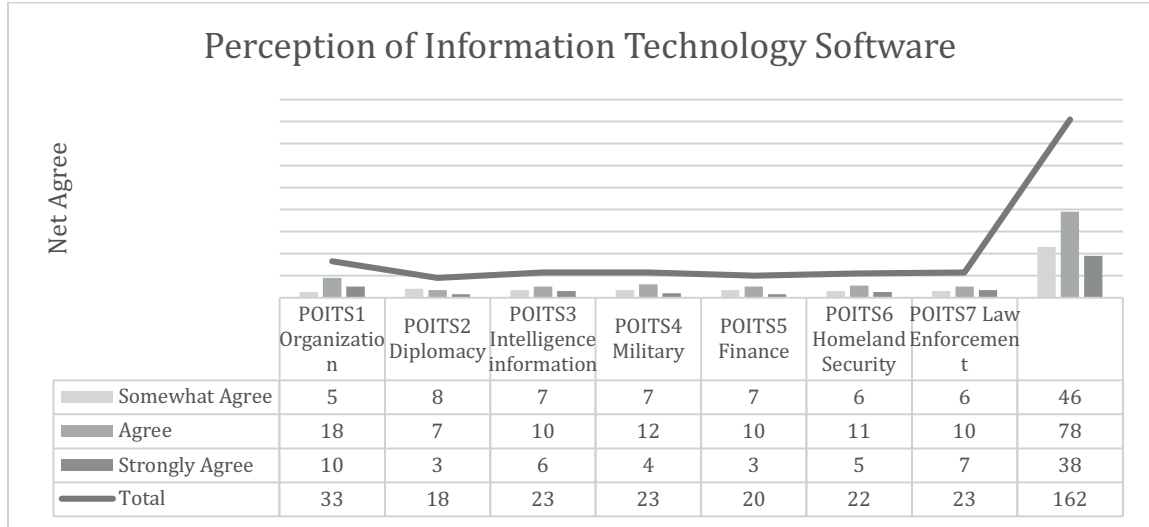


Figure 8. *Perception of Information Technology Software (POITS)*.

Perception- Information Technology Software. This figure shows the net agree with responses from 35 participants to questions #15, which represent survey items 51-57. Net agree with responses included *agree, somewhat agree, and strongly agree*.

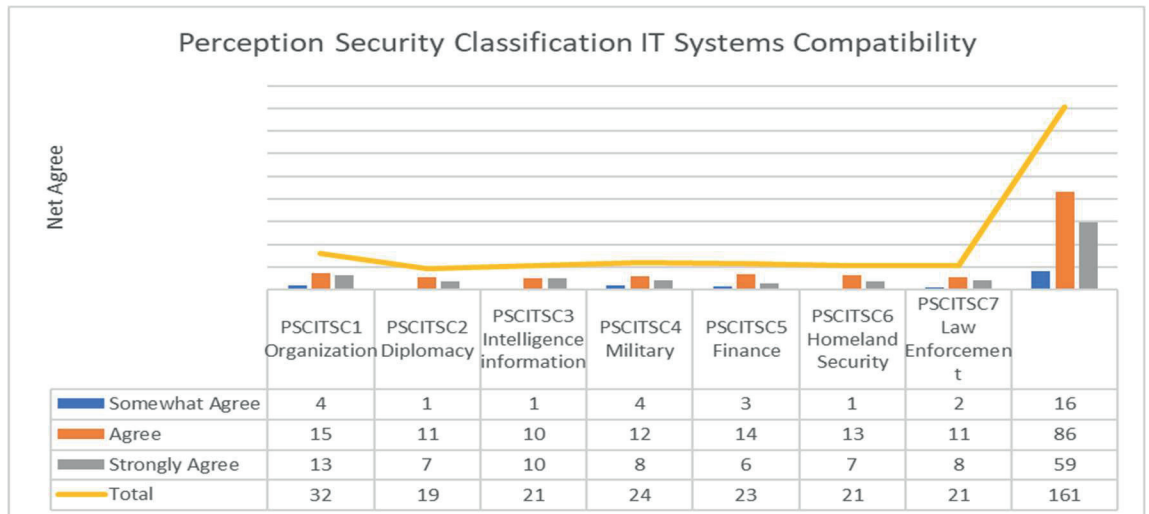


Figure 9. *Perception Security Classification IT Systems Compatibility (PSCITSC)*.

Figure 9 shows the net agree with responses from 35 participants to questions #16, which represent survey items 58-64. Net agree with responses included *agree*, *somewhat agree*, and *strongly agree*.

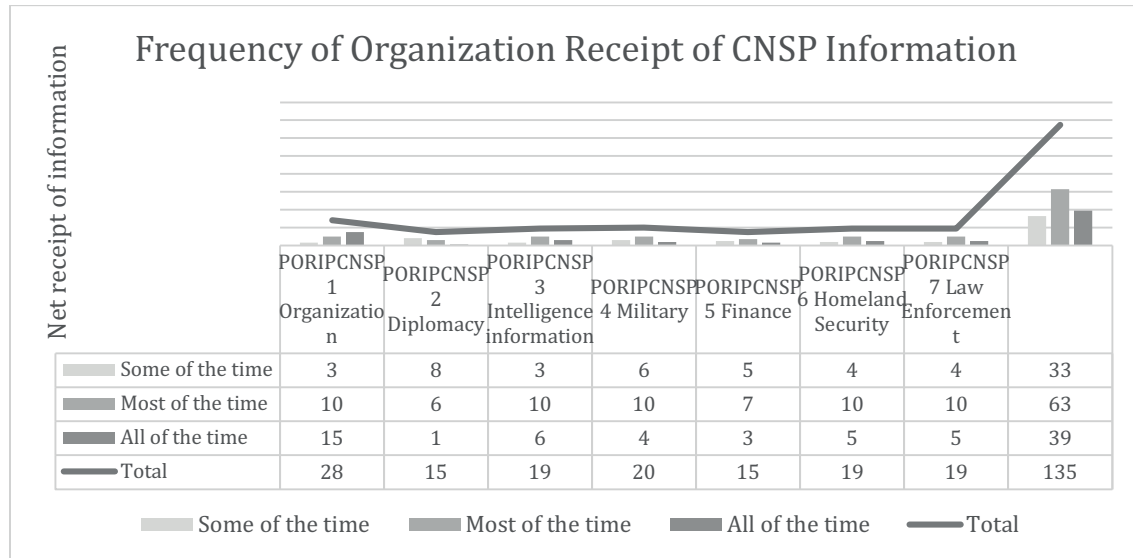


Figure 10. *Perception - Receipt of Information (PORIP CNSP)*.

This figure shows the net concurrence of receipt of CNSP information. Responses from 35 participants to question #17, which represents survey items 65-71. Net agree with responses included *some of the time*, *most of the time*, and *all of the time*.

Table 12

*Nonparametric Correlations for Time and Mission Needs*

Correlations for Time and Mission Needs																
Spearman primary	Correlatio	1	.730**	.786**	.767**	.754**	.780**	.764**	.785**	.794**	.765**	.782**	.793**	.761**	.801**	.815**
	Sig. (2-tail)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.730**	1	.887**	.927**	.928**	.899**	.913**	.912**	.858**	.868**	.860**	.877**	.833**	.858**	.839**
	Sig. (2-tail)	0		0	0	0	0	0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.786**	.887**	1	.960**	.945**	.957**	.972**	.961**	.828**	.858**	.829**	.814**	.839**	.834**	.842**
	Sig. (2-tail)	0	0		0	0	0	0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.767**	.927**	.960**	1	.972**	.934**	.977**	.958**	.832**	.862**	.856**	.839**	.845**	.849**	.860**
	Sig. (2-tail)	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.754**	.928**	.945**	.972**	1	.922**	.957**	.955**	.855**	.857**	.861**	.867**	.838**	.867**	.872**
	Sig. (2-tail)	0	0	0	0		0	0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.780**	.899**	.957**	.934**	.922**	1	.937**	.937**	.869**	.888**	.857**	.856**	.858**	.856**	.843**
	Sig. (2-tail)	0	0	0	0	0		0	0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.764**	.913**	.972**	.977**	.957**	.937**	1	.982**	.830**	.838**	.828**	.817**	.823**	.837**	.848**
	Sig. (2-tail)	0	0	0	0	0	0		0	0	0	0	0	0	0	0
PORIPCNS	Correlatio	.785**	.912**	.961**	.958**	.955**	.937**	.982**	1	.840**	.820**	.824**	.820**	.814**	.831**	.844**
	Sig. (2-tail)	0	0	0	0	0	0	0		0	0	0	0	0	0	0
PMNCNSP	Correlatio	.794**	.858**	.828**	.832**	.855**	.869**	.830**	.840**	1	.906**	.911**	.928**	.850**	.906**	.889**
	Sig. (2-tail)	0	0	0	0	0	0	0	0		0	0	0	0	0	0
PMNCNSP	Correlatio	.765**	.868**	.858**	.862**	.857**	.888**	.838**	.820**	.906**	1	.967**	.949**	.946**	.965**	.947**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0		0	0	0	0	0
PMNCNSP	Correlatio	.782**	.860**	.829**	.856**	.861**	.857**	.828**	.824**	.911**	.967**	1	.968**	.947**	.964**	.954**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0		0	0	0	0
PMNCNSP	Correlatio	.793**	.877**	.814**	.839**	.867**	.856**	.817**	.820**	.928**	.949**	.968**	1	.915**	.966**	.936**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0		0	0	0
PMNCNSP	Correlatio	.761**	.833**	.839**	.845**	.838**	.858**	.823**	.814**	.850**	.946**	.947**	.915**	1	.922**	.920**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0		0	0
PMNCNSP	Correlatio	.801**	.858**	.834**	.849**	.867**	.856**	.837**	.831**	.906**	.965**	.964**	.966**	.922**	1	.985**
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0	0		0
PMNCNSP	Correlatio	.815**	.839**	.842**	.860**	.872**	.843**	.848**	.844**	.889**	.947**	.954**	.936**	.920**	.985**	1
	Sig. (2-tail)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 12 Spearman rank order results using a 2-tailed test for time and mission needs.

Two \*\* indicates significance at the 0.01 level. Significant correlations existed between the perception of receipt of information [time] (PORIPCNSP) and the primary mission needs of CNSP (PMNCNSP). Significant correlations existed between the perception of receipt of

information and primary mission needs. Responses of time appear in Figure 10.

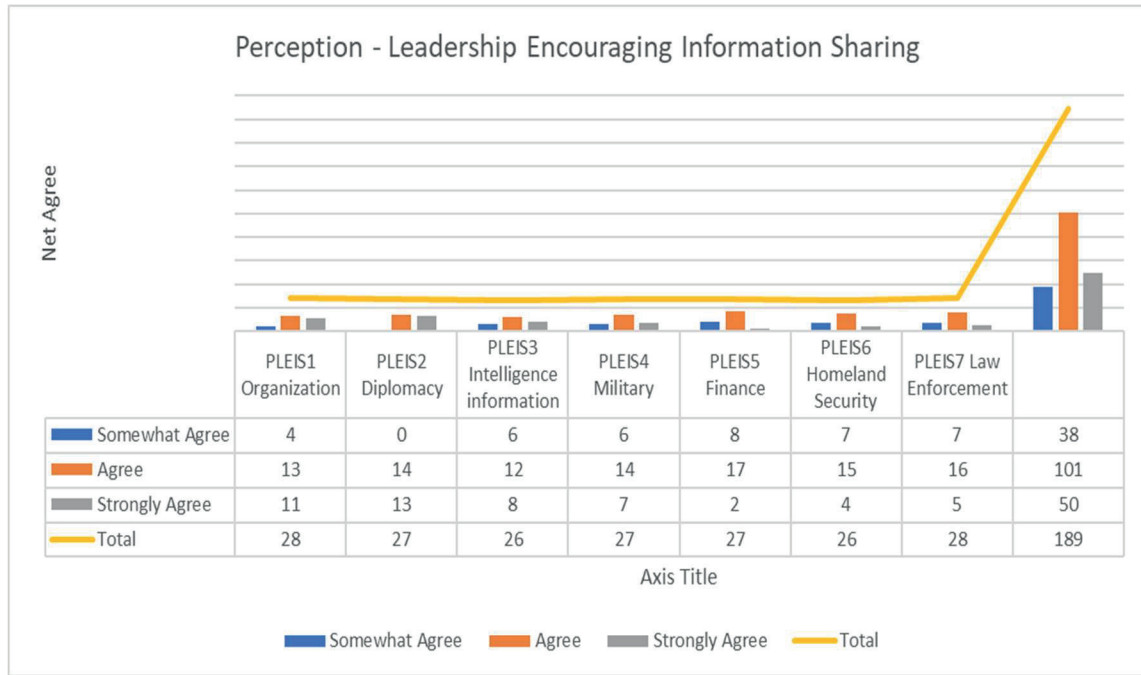


Figure 11. *Perception - Leadership Encouraging Information Sharing (PLEIS).*

Figure 11 shows the net agree with responses from 35 participants to questions #18, which represent survey items 72-78. Net agree with responses include *agree, somewhat agree, and strongly agree.*

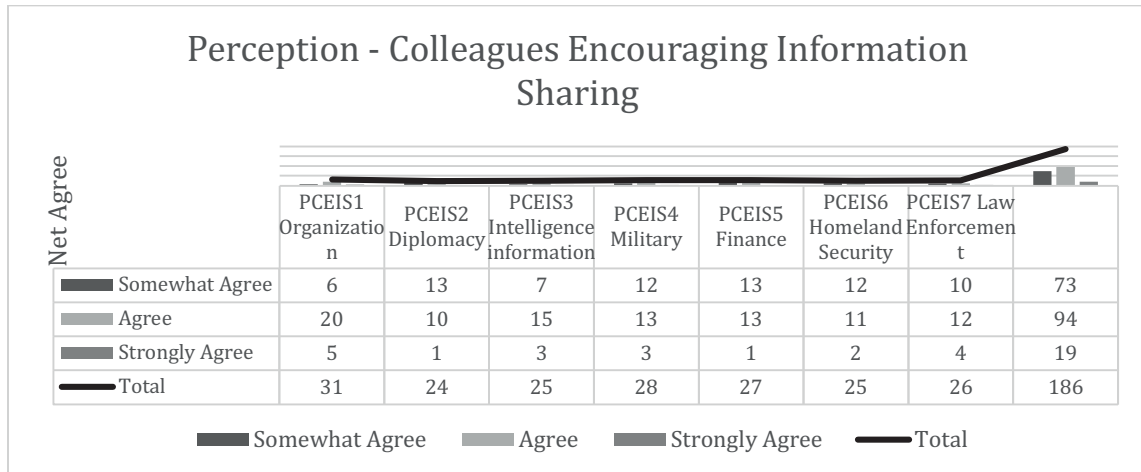


Figure 12. *Perception - Colleagues Encouraging Information Sharing (PCEIS).*

Figure 12 shows the net agree with responses from 35 participants to questions #19, which represent survey items 79-85. Net agree with responses include *agree, somewhat agree, and strongly agree*.

**Table 13**  
*Nonparametric Correlations for Leader and Colleague Encouraging Information Sharing*

Correlations for Leader and Colleague Encouraging Information Sharing																
Spearman primary	Correlatio	1	.818**	.764**	.822**	.806**	.805**	.825**	.858**	.797**	.784**	.825**	.758**	.799**	.828**	.850**
	Sig. (2-tail		0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLEIS1	Correlatio	.818**	1	.922**	.943**	.946**	.901**	.950**	.956**	.962**	.898**	.909**	.895**	.879**	.913**	.921**
	Sig. (2-tail	0		0	0	0	0	0	0	0	0	0	0	0	0	0
PLEIS2	Correlatio	.764**	.922**	1	.949**	.951**	.944**	.948**	.942**	.924**	.960**	.951**	.937**	.901**	.936**	.935**
	Sig. (2-tail	0	0		0	0	0	0	0	0	0	0	0	0	0	0
PLEIS3	Correlatio	.822**	.943**	.949**	1	.981**	.941**	.951**	.964**	.925**	.913**	.967**	.925**	.887**	.918**	.936**
	Sig. (2-tail	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PLEIS4	Correlatio	.806**	.946**	.951**	.981**	1	.931**	.965**	.963**	.941**	.909**	.948**	.943**	.873**	.918**	.917**
	Sig. (2-tail	0	0	0	0		0	0	0	0	0	0	0	0	0	0
PLEIS5	Correlatio	.805**	.901**	.944**	.941**	.931**	1	.930**	.925**	.899**	.930**	.923**	.892**	.957**	.900**	.906**
	Sig. (2-tail	0	0	0	0	0		0	0	0	0	0	0	0	0	0
PLEIS6	Correlatio	.825**	.950**	.948**	.951**	.965**	.930**	1	.987**	.940**	.925**	.935**	.904**	.902**	.941**	.952**
	Sig. (2-tail	0	0	0	0	0	0		0	0	0	0	0	0	0	0
PLEIS7	Correlatio	.858**	.956**	.942**	.964**	.963**	.925**	.987**	1	.945**	.917**	.941**	.906**	.891**	.947**	.961**
	Sig. (2-tail	0	0	0	0	0	0	0		0	0	0	0	0	0	0
PCEIS1	Correlatio	.797**	.962**	.924**	.925**	.941**	.899**	.940**	.945**	1	.915**	.910**	.935**	.892**	.931**	.914**
	Sig. (2-tail	0	0	0	0	0	0	0	0		0	0	0	0	0	0
PCEIS2	Correlatio	.784**	.898**	.960**	.913**	.909**	.930**	.925**	.917**	.915**	1	.944**	.929**	.943**	.958**	.948**
	Sig. (2-tail	0	0	0	0	0	0	0	0	0		0	0	0	0	0
PCEIS3	Correlatio	.825**	.909**	.951**	.967**	.948**	.923**	.935**	.941**	.910**	.944**	1	.954**	.905**	.954**	.970**
	Sig. (2-tail	0	0	0	0	0	0	0	0	0	0		0	0	0	0
PCEIS4	Correlatio	.758**	.895**	.937**	.925**	.943**	.892**	.904**	.906**	.935**	.929**	.954**	1	.893**	.940**	.924**
	Sig. (2-tail	0	0	0	0	0	0	0	0	0	0	0		0	0	0
PCEIS5	Correlatio	.799**	.879**	.901**	.887**	.873**	.957**	.902**	.891**	.892**	.943**	.905**	.893**	1	.913**	.918**
	Sig. (2-tail	0	0	0	0	0	0	0	0	0	0	0	0		0	0
PCEIS6	Correlatio	.828**	.913**	.936**	.918**	.918**	.900**	.941**	.947**	.931**	.958**	.954**	.940**	.913**	1	.978**
	Sig. (2-tail	0	0	0	0	0	0	0	0	0	0	0	0	0		0
PCEIS7	Correlatio	.850**	.921**	.935**	.936**	.917**	.906**	.952**	.961**	.914**	.948**	.970**	.924**	.918**	.978**	1
	Sig. (2-tail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 13 displays the Spearman rank-order results using a 2-tailed test for leader and colleague encouraging information sharing. Two \*\* indicates significance at the 0.01 level. Significant correlations existed between the perception of leader encouraging information sharing (PLEIS) and perception of colleagues encouraging information sharing (PCEIS).

Significant correlations existed between the perception of leader and colleague, encouraging information sharing perception. Figure 11 list net agree with responses for leaders. Figure 12 lists net agree with responses for colleagues.

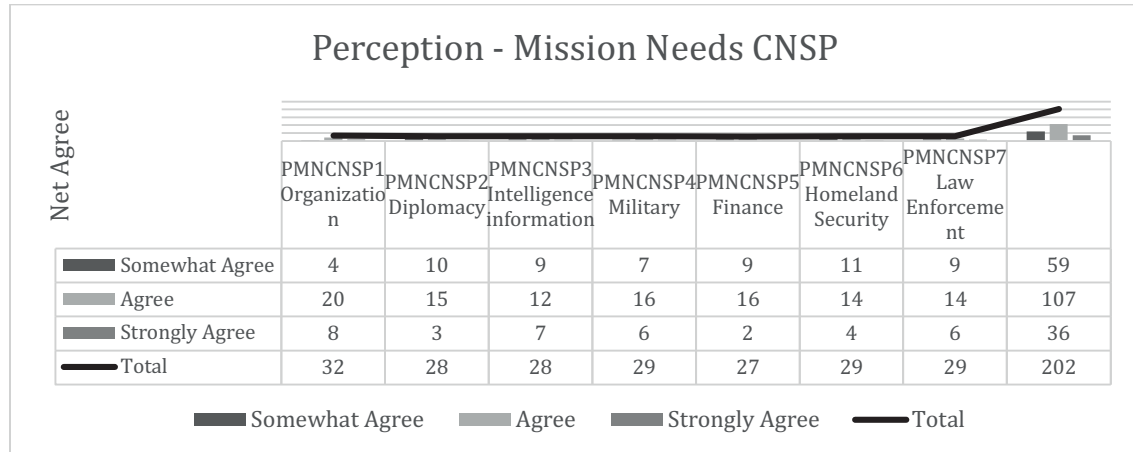


Figure 13. *Perception - Mission Needs CNSP (PMNCNSP)*.

Figure 13 shows the net agree with responses from 35 participants to questions #20, which represent survey items 86-92. Net agree with responses included agree, somewhat agree, and strongly agree.





between all four perceptions related to trust. Figures 14 through 17 display net agree with responses for each of the four perceptions measured.

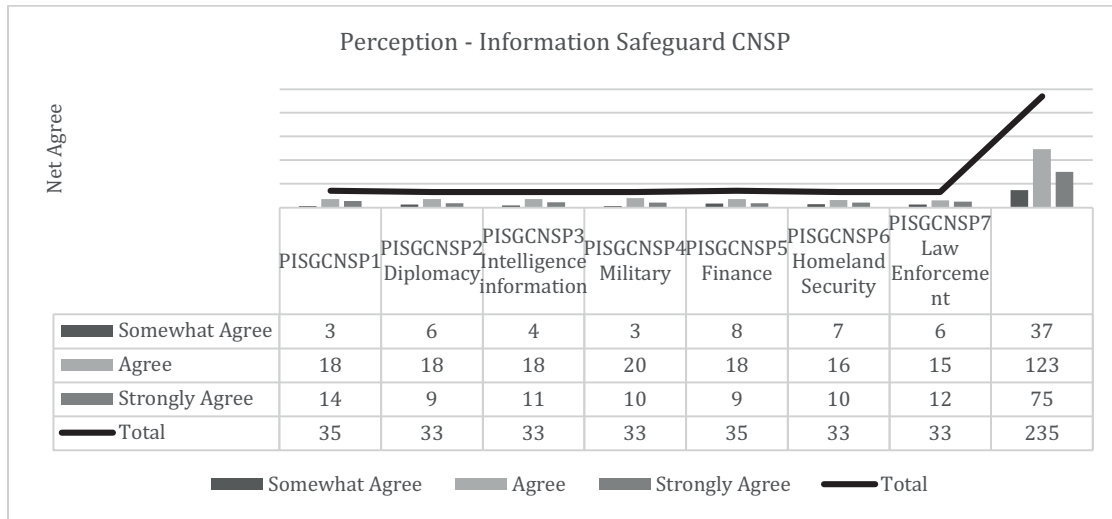


Figure 14. Perception - Information Safeguard CNSP (PISGCNSP).

Figure 14 shows the responses from 35 participants to questions #21, which represent survey items 93-99. Net agree with responses included agree, somewhat agree, and strongly agree.

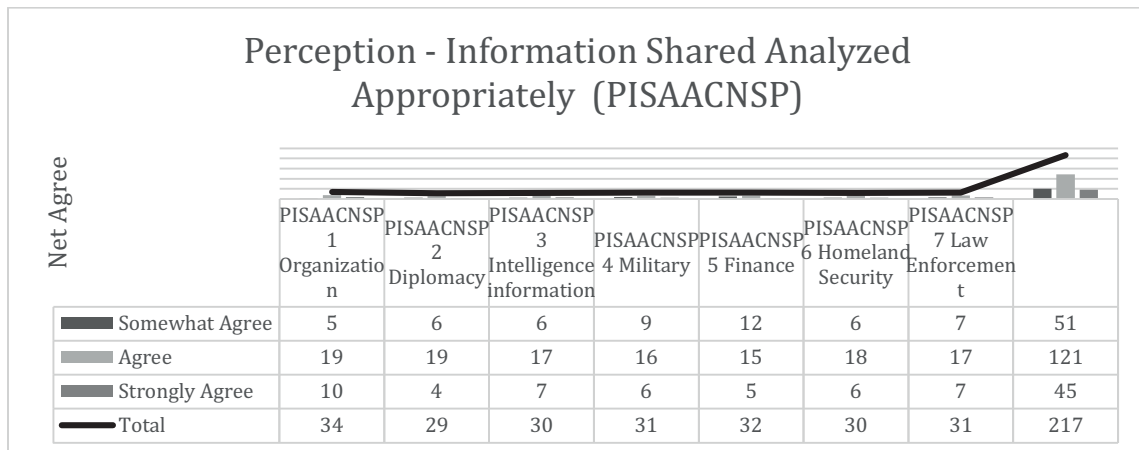


Figure 15. Perception - Information Shared Analyzed Appropriately – CNSP (PISAACNSP).

Figure 15 shows the net agree with responses from 35 participants to questions #22, which represent survey items 100-106. Net agree with responses include agree, somewhat agree, and strongly agree.

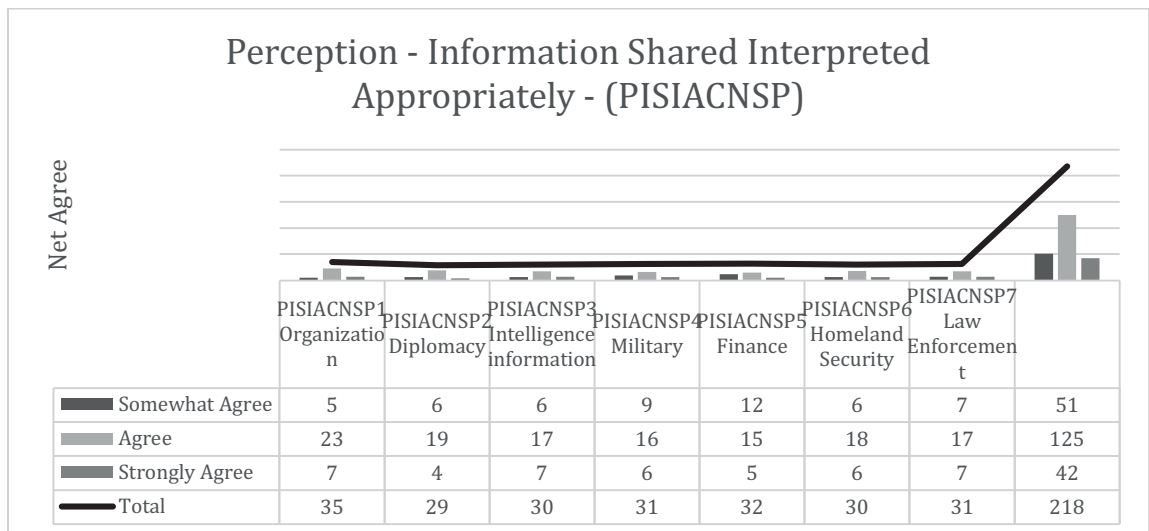


Figure 16. *Perception - Information Shared Interpreted Appropriately (PISIACNSP).*

Figure 16 shows the net agree with responses from 35 participants to questions #23, which represent survey items 107-113. Net agree with responses include *agree, somewhat agree, and strongly agree.*

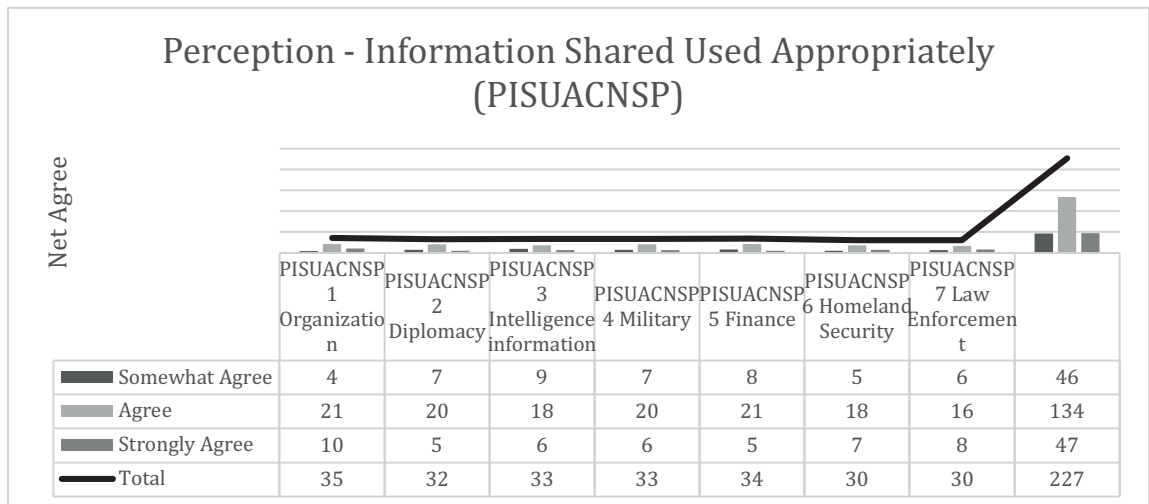


Figure 17. *Perception of Information Shared Used Appropriately (PISUACNSP).*

Figure 17 shows the net agree with responses from 35 participants to questions #24, which represent survey items 114-120. Net agree with responses include *agree, somewhat agree, and strongly agree.*

## Demographic Variable Findings

Male participants out-numbered female participants by one survey respondent. 540 members of the personal, professional network of the researcher received an invitation for their voluntary participation in this web-based survey. A total of 67 participants in this network completed the survey. No female participants listed diplomacy as their primary mission. Both men and women had military as the primary mission for their organization, and intelligence information was the next highest scoring mission. The highest total for function for men tied for analysis production and senior decision-maker. The highest total for function for women was analysis production. No women listed senior decision-makers as a function. Men and women tied for IT systems engineers and operations. The highest combined totals for men and women (20 participants) for years in their support to the federal government ranged from 11 – 30 years, and a total of 22 participants (men and women combined) were in their profession. The totals suggest that more than 50 percent of the 35 survey participants used for the analysis were supporting the federal government during the 9/11 attack.

## Summary

Chapter 4 presented the responses obtained by 35 participants of the personal, professional network of the principal investigator's LinkedIn network. These responses measured if the predictor variables (internal communication, organizational culture, leadership/trust, and technology preparedness) had a degree of relationship with the criterion variable (interagency communication). Hypothesis one showed a linear relationship between internal communication with positive correlations at the  $\alpha = .01$  level. Hypothesis two showed a linear relationship between organizational leadership and internal communication with positive correlations at the  $\alpha = .01$  level. Hypothesis 3 (A linear relationship exists between organizational

leadership and technology preparedness) support occurred generally accepted alpha level,  $\alpha = .01$  (table 12).

Hypotheses 4 (A linear relationship exists between technology preparedness and internal communication) support came from Spearman rank-order results using a 2-tailed test for information technology (IT). Correlations were determined significant at the  $\alpha = .01$  (table 10). Significant correlations existed between primary mission and an understanding of (IT) (PGUIT), perception of organization's IT hardware (POITH), perception of organization's IT software (POITS), and perception of security classification IT system compatibility (PSCITSC). Significant correlations existed between the primary mission and perception that the internal culture of one's organization promoted information sharing.

Support with crosstabulation appears in table 10 as the response for hypotheses 5. Net agree with scores in figure 5, and Levene's test for equality of variance at the accepted  $\alpha = .01$ , appear in appendix H. Hypotheses 6 received support using nonparametric correlations. To capture perceptions, Spearman Rho for 2-tailed test for perception of information safeguard (PISGCNSP), information shared and analyzed appropriately (PISAACNSP), interpreted appropriately (PISIACNSP) and used appropriately (PISUACNSP). Correlations were determined significant at the 0.01 level. Significant correlations existed between all four perceptions related to trust).

Chapter 4 contained the data collection, analysis, and study results, including frequency tables for status, crosstabulations for mission and functions, and summary statistics for each predictor variable. Tables provided depicted the analysis using Spearman Rho and Cronbach's alpha, and for nonparametric correlation and crosstabulation. Additional reliability and inter-item statistics appear in Appendix H.

Chapter 5 presents conclusions and recommendations and presents a discussion of the findings based on the analysis presented in chapter 4. Chapter 5 also presents the limitations of the study, recommendations, and suggestions for future research and concluding summary.

## Chapter 5

### Conclusions and Recommendations

The general problem addressed in the study was that the relationship between internal and external communication among the Community of National Security Partners was not adequately combating terrorist finance activity. This study focused on determining if the level of information sharing among the community of national security partners was adequate to produce a reduction in terrorist funding and terrorist attacks in the United States. The research approach was quantitative using correlation to test relationship strength among the four variables, communication, culture, leadership/trust, and technology to determine if the level of information sharing among the community of national security partners was adequate to produce a reduction in terrorist funding and terrorist attacks in the United States. Chapter 5 includes conclusions and recommendations, results for hypotheses set, research recommendations, and final summary.

### Research Questions and Hypotheses

The research question and hypotheses associated with this research measured how communication and culture affect information sharing and interagency collaboration. Intra-agency communication of multi-organizational information sharing between the community of national security partners was measured as the second and final research question included. The study drew from a sample of the 805-member population of the personal, professional network of the researcher located on the LinkedIn Social Media site (<https://www.linkedin.com>). The general population for this group was part of the overall Community of National Security Partners from the federal government and private sector. Participation took place using an online survey, and participants answered questions about demographics and core survey questions.

The three purposes of this study were to determine if better interagency communication among national security partners increased the possibility of reducing terrorist's capability to adapt new strategies for funding terrorist activity, add to the body of knowledge in national security matters regarding the linkage between money laundering and terrorist activities and finally determine if national security partners might through interagency communication gain a deeper understanding of the culture and leadership differences outlined in reporting that the OIG believes necessary for effective information sharing. Testing of two research questions in this study, their null and alternative hypotheses occurred.

### **Discussion of Findings**

The data analysis for this quantitative correlation study determined the results of the two research questions testing the null hypothesis. SPSS software 23.0 analyzed data, research questions, and hypotheses testing. When using Spearman Rho, statistical significance occurred when testing for internal communication and information sharing. Measurements of the perceptions of the study participants was based on the survey instruments presented. This correlation study does not infer causation.

Interagency communication and information sharing (I2) are a function of the independent variables: internal communication, organizational culture, leadership/trust, and technology preparedness  $I2 = f [IC+OC+LT+T]$ . The first research question intended to find out using descriptive statistics and cross-tabulations how many of the surveyed participants worked for a CNSP; if and which CNSP they provided primary support to; and what their perception was of the quality of internal CNSP agency communication in comparison with intra-agency communication. The Cronbach Alpha Reliability Coefficient for each variable (communication, culture, information sharing, information technology, leadership/trust, and policy) in the

summary statistics table for descriptive statistics met the acceptable threshold of ( $\alpha > .70$ ). For communication and culture, the findings showed strong communication support when the primary CNSP supported was the military or intelligence information. However, this was not the case when the primary CNSP supported was homeland security or diplomacy. What was most interesting about this finding was that while communication and culture and a cross-tabulation for information technology showed the strongest support for the military and intelligence information, finance generated the highest scores for CNSP related to perceptions on safeguarding information, interpreting shared information appropriately and using shared information appropriately.

Additionally, the IT system compatibility outside one's organization was stronger for finance than intelligence information. These results show an indication that while CNSP partners who primarily support the military and intelligence information display more communication, the perception of confidence for interpretation and safeguarding the shared information indicates more trust for the finance CNSP. The findings suggest a need to have finance incorporated as a member of the CNSP.

Internal communication was of higher quality than intra-agency communication; however, when the primary external organization supported was the military or intelligence information, the quality of intra-agency communication appeared better. Table 8). The willingness and understanding of CNSP members to communicate with the military and intelligence information seems to suggest that while internal communication is of higher quality than intra-agency communication, an understanding of the need to share not only information but quality information on an intra-agency level does exist. The level of willingness and understanding does appear to lean more favorably towards the military and intelligence



information, which are also the two highest represented groups supported by the survey participants that completed the entire survey. If an equal amount of survey participants completed the entire survey that supported the entire CNSP, the level of intra-agency communication may have been just as strong.

The results of the descriptive statistics suggest that the quality of the communication is determined by the primary CNSP member supported. While survey results suggested a stronger quality of communication when support was the military and intelligence information the net agree with response totals still suggest support for the quality of communication between CNSP members. The emphasis placed on the military and intelligence information might result resulting from the level of media coverage when a terrorist attack occurs may spark external bias.

### **Limitations**

One limitation of this study was that it was the second survey used to address information sharing among the national security members using the adapted Federal Interagency Intelligence Information Sharing survey by Sandoval (2013). The second limitation was that 67 out of 540 potential participants completed the survey, and 35 participants completed the entire survey. There were significant correlations presented in this study; the findings, however, are based on 6.48 percent of the population. Of the 35 participants that completed the entire survey, only 14 percent identified themselves as senior decision-makers, and less than 9 percent identified themselves as responsible for policy/planning/legal. Additionally, the largest number of participants that completed the entire survey supported either the military or intelligence information. There is also the possibility that survey participants who support the military or intelligence information are more prone to complete their tasks because they support two entities seen as regimented and good at following instructions.

The survey could have benefitted from more participation. The researcher extended the time allocation for the survey responses twice from the initial two-week period to eleven weeks, at which point the minimum number of participants needed for a statistically significant study materialized. After the additional nine weeks, there were no additional participants. Use of the completed surveys appears in the data analysis to respond to the research questions and hypotheses. Finally, a limitation may exist on the accuracy of the survey responses based on the understanding of the questions by the participants and their understanding of how their organizations communicate.

### **Recommendations for Community of National Security Partners**

The recommendations for the Community of National Security Partners align with the results of this survey and the top information sharing concerns of the Government Accountability Office (GAO) regarding potential gaps in the internal and external communication between CNSP partners.

One recommendation is additional education sharing on the value of information sharing to enhance national security measures. This research study identified gaps in technology compatibility, and one mitigation strategy may be collaboration on an unclassified software for use by CNSP members. For enhancing communication across the CNSP beyond the military and intelligence information, which ranked the highest, CNSP leadership summits on a quarterly or annual base may increase communication sharing across the CNSP.

The findings of this study add to the body of knowledge by supplementing the GAO report with current information supplied based on the perception of members of the CNSP that work in various capacities and management levels, statistical analysis results in relation to the quality of communication agency and intra-agency communication and the quality of

communication between members of the CNSP community. One recommendation for assisting with intra-agency communication is the incorporation of the Financially Intuitive to Terrorism (FIT) wheel, a brainstorming concept for strategy implementation. The wheel uses a spinning top game concept to find potential attacks before they occur by conducting a review of past strategy results to determine several courses of action for implementation. The concept requires minimum effort for execution, and the blueprint is reproducible. The premise behind FIT is to use the acronym CALM. CALM stands for C-control, the climate, A-activate event, L-listen and think, and then M-make a response. For example, one would map the C in CALM to the F (Funding), I (Intelligence), N (Network), or D (Disruption) to determine the best course of action or strategy for implementation in response to a possible nexus of a terrorist event. The researcher believes that each CNSP partner may benefit from the incorporation of the FIT model and CALM strategy in unifying agency information strategies and leadership methods for multi-organization collaboration.

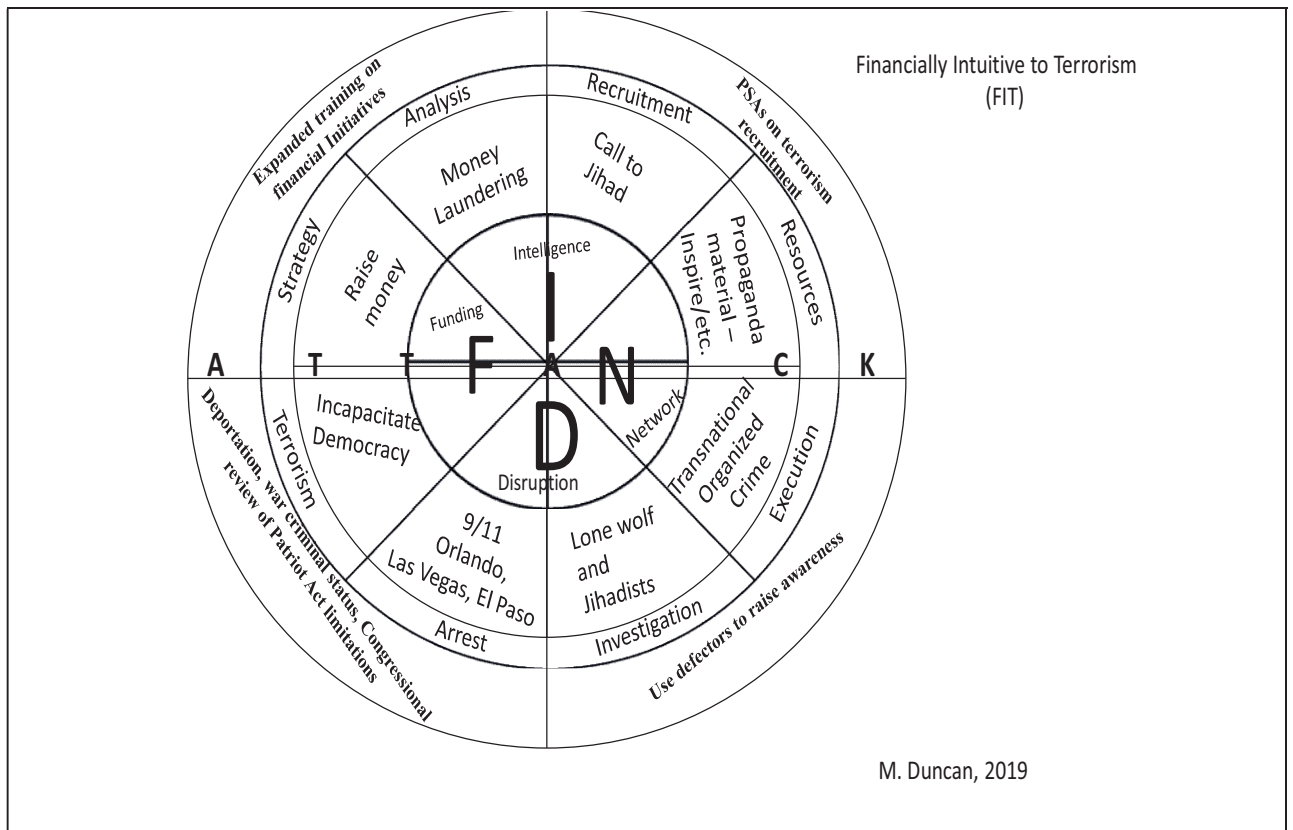


Figure 18. FIT Wheel, Duncan 2019

Future quantitative studies may include additional research on strategies to combat terrorist funding using an explanatory case study of homeland security and finance to show why these two CNSP partners fared well in information using technology, encouraging information sharing among colleagues and had a right balance regarding the perception of mission needs of other CNSP partners (Yin, 2013). An appreciative inquiry could examine further the results of this correlation study as a method for organizational improvement based on the positive information gained from the net agree with a response in communication and information sharing identified in this research study (Cooperrider and Srivastva, 1987). Such a study could also examine the likelihood that strategies to combat terrorist funding include inquiry into the use of funds from panhandling as an undetected initiative to fund terrorism (Panhandle, 2019).

A limitation of this research was that correlation does not determine causation. An experimental study that assigns CNSP members to experiment and control groups to manipulate leadership/trust and internal communication to determine cause and effect may provide insight into what aspects of the culture may encourage information sharing with CNSP members (Campbell and Stanley, 2015). A future research study may consider measuring the level of information sharing strategies of the CNSP regarding terrorist funding targeting senior decision-makers and employees responsible for policy/planning/legal and the frequency of use of the Terrorist Finance Tracking Program (TFTP) for pursuing terrorist and terrorist networks and the likelihood of incorporating finance as a member of the CNSP. An additional component to combat terrorist funding is an ethical viewpoint. No longer are large-scale terrorist attacks isolated to bombings. A future research study may consider exploring barriers and patterns to better data integration strategy (Benevoa, Hoskova-Mayerova, and Navratil (2019).

### **Researcher Reflection**

My dissertation journey was a colossal learning experience and refining process. I worked full-time throughout this degree program with the University of Phoenix. My full-time work allowed me to gain a better understanding of the work performed by the Community of National Security Partners and an appreciation for the challenges of national security in keeping the United States of America safe from foreign and domestic enemies. In this study, the threat against the United States is terrorism. Initial plans to study terrorist finance focusing on banks and credit unions changed to focus on the Community of National Security Partners (CNSP) and incorporate federal, public, and private sector partners because terrorism affects everyone. The type of research changed from a qualitative to quantitative one to measure the strength of communication. Measurements in this study derived from the perceptions of government,

contractor, and public sector workers that participated using the survey instrument. Information sharing continues to be a significant problem for national security partners, as supported by observations presented in the literature review. The challenge of this research was to attempt to gain an understanding of the quality of communication in sharing information based on the perceptions of members of the researcher's personal, professional network that fit the research criteria. The results from using this network increased knowledge on areas for improvement with regards to information sharing among CNSP members while adding to the body of knowledge regarding areas of strength in information sharing among CNSP members. Consideration of a mixed-method study as a future research design could capture both perceptions and observe a lived perspective from shadowing the information sharing process between CNSP members.

### **Summary**

Chapter 5 reiterated the problem that internal and external communication between the Community of National Security Partners was not adequate to combat terrorist finance activity. There were two research questions for this study. Research question one; Is internal CNSP agency communication of greater quality than intra-agency communication? Research question two; What is the quality of communication between members of the Community of National Security Partners? The results of this research suggest that internal CNSP agency communication is of higher quality than intra-agency communication. The results of this research suggest that the quality of communication between members of the Community of National Security Partners is better when the primary national security partners supported are military and intelligence information.

Chapter 5 responded to the null hypotheses of the research questions. Retention of null hypotheses one and two occurred with correlations at the  $\alpha = .01$  and the results of Levene's test

for equality of variance. Findings and survey results suggested that the primary CNSP member supported determined the quality of communication. For retention of null hypotheses three through six correlations were at the  $\alpha = .01$  and the results of Levene's test for equality of variance.

A finding of this study that warrants a further investigation is to consider measuring the level of information sharing strategies of terrorist funding targeting senior decision-makers and employees responsible for policy/planning/legal and the likelihood of incorporating finance as a member of the CNSP. This study shows evidence of improvement in information sharing among national security partners in the eighteen years since the attacks of 9/11. This study adds to the body of knowledge by supplementing the GAO report on information sharing deficiencies among the identified federal government agencies by supplying current information based on the perception of members of the CNSP that work in various capacities and management levels and presenting the study results. However, the findings add a critical development to the body of knowledge by revealing a gap in who the information is shared with and suggests there is still room for improvement based on the perception of the survey participants about the members of the Community of National Security Partners they support.

## References

- Ackerman, G., & Jacome, M. (2018). WMD terrorism: The once and future threat. *Prism*, 7(3), 22-37.
- Albanesius, C. (2012). FBI Director: Cyber Attacks Could Be Bigger Threat Than Terrorism. *PC Magazine*, 1.
- Alho, P. (2009). The role of the feeling function in moral judgments. *Jung Journal*, 3(4), 48-58.  
<https://doi.org/10.1525/jung.2009.3.4.48>
- Amrani, H. (2017). Understanding the transnational character of money laundering: The changing face of law enforcement from domestic affairs to the international cooperation. *Journal of Advanced Research in Law and Economics*, 8(1(23)), 7.  
[https://doi.org/10.14505/jarle.v8.1\(23\).01](https://doi.org/10.14505/jarle.v8.1(23).01)
- Andini, V., & Rao, S. (2018). Logistic modeling of university choice among student migrants to Karnataka for higher education. *College and University*, 93(4), 2-14.  
<https://doi.org/10.2139/ssrn.3181130>
- Andrade, T. A. (2016). *Policing: Family, gender, race/ethnicity, and recruiting in 21st century America* (Order No. 10133513). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (1802929811).
- Bacon, T. (2018, January). Is the enemy of my enemy my friend? *Security Studies*, 27(3), 345-378. <https://doi.org/10.1080/09636412.2017.1416813>
- Baker, L. (2006, September). Ten common pitfalls to avoid when conducting qualitative research. *British Journal of Midwifery*. 14(9), 530-531.  
<https://doi.org/10.12968/bjom.2006.14.9.21794>



- Barry, D. (2016, June 20). *Orlando shooting*. The New York Times. Retrieved from <https://www.nytimes.com/news-event/2016-orlando-shooting>
- Bean, H. (2009). Exploring the relationship between Homeland Security information sharing and local emergency preparedness. *Homeland Security Affairs*. 5(2), 1-18.
- Beňová, P., Hošková - Mayerová, Š., & Navrátil, J. (2019). Terrorist Attacks on Selected Soft Targets. *Journal of Security & Sustainability Issues*, 8(3), 453–471.  
[https://doi.org/10.9770/jssi.2019.8.3\(13\)](https://doi.org/10.9770/jssi.2019.8.3(13))
- Black, T. R. (1999). *Doing quantitative research in the social sciences: An integrated approach to research design, measurement, and statistics*. London, England: Sage.
- Black, T. (2005). *Doing quantitative research in the social sciences*. Thousand Oaks, CA: Sage Publications.
- Bonollo, M., and Neri, M. (2012). Data quality in banking: Regulatory requirements and best practices. *Journal of Risk Management in Financial Institutions*, 5(2), 146-161.
- Brake, T. (2008). *Where in the world is my team? Making a success of your virtual global workplace*. San Francisco, CA: Jossey-Bass.
- Bui, L., Zapotosky, M., Barrett, D., & Berman, M. (2017). At least 59 killed in Las Vegas shooting rampage, more than 500 others injured. *The Washington Post*.
- Byrnes, J. (2015). The Hill. Retrieved from <http://thehill.com/blogs/blog-briefing-room/233832-fbi-investigating-isis-suspects-in-all-50-states>
- Campbell, D., & Stanley, J. (2015). *Experimental and quasi-experimental designs for research*. Baltimore, MD: John Hopkins University

- CBS News. (2017). NYC terror attack suspect claims he did it for ISIS. Retrieved from <https://www.cbsnews.com/news/port-authority-bus-terminal-explosion-bomb-2017-12-11-live-stream-updating/>.
- Center of Excellence Defense Against Terrorism. (2008). Legal aspects of combating terrorism. Ankara, Turkey: *IOS Press*. Retrieved from <http://www.ebrary.com>
- Cheney, E. A. (2005). Leaving no loopholes for terrorist financing: The implementation of the USA Patriot Act in the real estate field. *Vanderbilt Law Review*, 58(5), 1705-1745.
- Cherniss, C., Grimm, L. G., and Liautaud, J. P. (2010). Process-designed training. *The Journal of Management Development*, 29(5), 413-431.  
<https://doi.org/10.1108/02621711011039196>.
- Churchill, Jr., G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*. 16(1), 64-73.  
<https://doi.org/10.1177/002224377901600110>.
- Choi, S., and Lee, H., and Yoo, Y. (2010). The impact of information technology and transactive memory systems on knowledge sharing, application, and team performance: A field study. *MIS Quarterly*, 34(4), 855-870. <https://doi.org/10.2307/25750708>.
- Clarkson, G., Jacobsen, T. E., Batcheller, A. L. (2007, January). Information asymmetry and information sharing. *Government Information Quarterly*. 24(4), 827-839.  
<https://doi.org/10.1016/j.giq.2007.08.001>.
- Cohen, G. (2018). Cultural fragmentation as a barrier to interagency collaboration: A qualitative examination of Texas law enforcement officers' perceptions. *The American Review of Public Administration*, 48(8), pp.886-901.

- <https://doi.org/10.1177/0275074017744659>. Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159. <https://doi.org/10.1037/0033-2909.112.1.155>.
- Cohen, J., Cohen, P., West, S. G., and Aiken, L.S. (1992). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Collins, J. (2008). Identity theft: the pros and cons of identity scoring vs. credit monitoring. (cover story). *Hudson Valley Business Journal*, 19(29), 13.
- Cone, J. D., and Foster, S. L. (2006). *Dissertations and theses from start to finish: Psychology and related fields* (2<sup>nd</sup> ed.). Washington, DC: American Psychological Association.
- Cooper, D., and Schindler, P. (2008). *Business research methods* (10th ed.). New York: McGraw-Hill Irwin.
- Cooper, T., & Stack, R. (2018). A recent overview of anti-money laundering organizations within the united states, Canada and internationally. *Journal of Management Policy and Practice*, 19(3), 129-146. <https://doi.org/10.33423/jmpp.v19i3.53>
- Cooperrider, D. L., & Srivastva, S. (1987). Appreciative inquiry in organizational life, In Woodman, R. W., & Pasmore, W.A., *Research in Organizational Change and Development*, Vol. 1, Stamford, CT: JAI Press, pp. 129–169.
- Cordesman, A.H. (2018 August). *Center for strategic and international studies*. Retrieved from [https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180814\\_Terrorism\\_Survey\\_START.Report.compressed.pdf?CcWCV M0hPUyTkP86\\_g1.y\\_oFDUqaWRnG](https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180814_Terrorism_Survey_START.Report.compressed.pdf?CcWCV M0hPUyTkP86_g1.y_oFDUqaWRnG).
- Corner, P. D. (2002, December). An integrative model for teaching quantitative research design. *Journal of Management Education*. 26, 671-692.

- Coyne, C. J., & Hall, A. R. (2016). The drone paradox: Fighting terrorism with mechanized terror. GMU Working Paper in Economics No. 16-29.  
<http://dx.doi.org/10.2139/ssrn.2815135>.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson.
- Creswell, J. W., and Plano Clark, V. L. (2006). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Davenport, T. H. (2005). *Thinking for a living: How to get better performance and results from knowledge workers*. Boston, MA: Harvard Business School Press.
- Davis, R. (2010, Summer). Introduction: The use of policing indicators in the developing world. *International Journal of Police Science and Management*, 12(2), 140-154.  
<https://doi.org/10.1350/ijps.2010.12.2.181>
- Dawes, S. S., Cresswell, A. M., and Pardo, T. A. (2009). From “need to know” to “need to share”: Tangled problems, information boundaries, and the building of public sector knowledge networks. *Public Administration Review*, 69(3), 392-402.  
[https://doi.org/10.1111/j.1540-6210.2009.01987\\_2.x](https://doi.org/10.1111/j.1540-6210.2009.01987_2.x)
- de Freytas-Tamura, K. (2018, August 14). *London Driver Held in Terrorism Inquiry After Car Crash Near Parliament*. The New York Times. Retrieved from  
<https://www.nytimes.com/2018/08/14/world/europe/uk-parliament-car-crash-.html>
- Delice, A. (2010). The sampling issues in quantitative research. *Educational Sciences: Theory and Practice*, 10(4), 2001-2018.
- Department of Homeland Security. (2002). *Homeland Security Act of 2002*. Retrieved from  
[http://www.dhs.gov/xabout/laws/law\\_regulation\\_rule\\_0011.shtm](http://www.dhs.gov/xabout/laws/law_regulation_rule_0011.shtm).

- Downing, M., and Mayer, M. (2013). Preventing the next lone-wolf terrorist attack requires stronger federal and state and local capabilities. Retrieved from <https://www.heritage.org/terrorism/report/preventing-the-next-lone-wolf-terrorist-attack-requires-stronger-federal-state>
- Duncan, M. (2011). Team performance and technology. Unpublished manuscript. University of Phoenix.
- Eisenhardt, K. M. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Ellet, W. (2007). *The case study handbook: How to read, discuss, and write persuasively about cases*. Boston, MA: Harvard Business School Press.
- Fawcett, J., and Garity, J. (2009). Chapter 7: evaluation of research designs for theory-generating and theory-testing research. In *Evaluating Research for Evidence-Based Nursing* (pp. 91-131). Philadelphia, Pennsylvania: F. A. Davis.
- Fetterman, D. M. (2010). *Ethnography: Step by step*. Newbury Park, CA: Sage.
- Financial action task force. (2004, October). Retrieved from <http://www.fatf-gafi.org/topics/fatfrecommendations/documents/the40recommendationspublishedoctober2004.html>.
- Financial action task force. (2018). Retrieved from <http://www.fatf-gafi.org/publications/fatfgeneral/documents/outcomes-plenary-february-2018.html>
- Financial action task force. (2018). Retrieved from <http://www.fatf-gafi.org/media/fatf/documents/bulletin/FATF-Business-Bulletin-March-2018.pdf>
- Finch, W., and Davenport, T. (2009). Performance of Monte Carlo permutation and approximate tests for multivariate means comparisons with small sample sizes when parametric

- assumptions are violated. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 5(2), 60-70. <https://doi.org/10.1027/1614-2241.5.2.60>
- Frauenheim, E. (2010). The manager question. *Workforce Management*, 89(4), 18-24.
- Frazier, R. M. (2014, February). A cannon for cooperation: A review of the interagency cooperation literature. *Journal of Public Administration and Governance*, 4(1), 1-22. <https://doi.org/10.5296/jpag.v4i1.4870>
- Gabriele, E. F. (2003). The Belmont ethos: The meaning of the Belmont principles for human subject protections. *Journal of Research Administration*, 34(2), 19-24.
- GAO U.S. Government Accountability Office. (n.d.). Retrieved from [https://www.gao.gov/key\\_issues/overview#t=2](https://www.gao.gov/key_issues/overview#t=2)
- Gardner, R. C. (2000). Correlation, causation, motivation, and second language acquisition. *Canadian Psychology/Psychologie Canadienne*, 41(1), 10-24. <https://doi.org/10.1037/h0086854>.
- Garfinkel, S. (2009). Privacy requires security, not abstinence. *Technology Review*, 112(4), 64.
- Gartenstein-Ross, D., & Barr, N. (2017). How al-Qaeda survived the Islamic state challenge. *Current Trends in Islamist Ideology*, 21, 50-116.
- Gazzar, B. (2014, October). Law enforcement agencies turn to technology to ease distractions. Government Technology, Retrieved from <http://www.govtech.com/public-safety/Law-Enforcement-Agencies-Turn-to-Technology-to-Ease-Distractions-.html>
- Gil-Garcia, J., Soon Ae, C., and Janssen, M. (2009). Government information sharing and integration: Combining the social and the technical. *Information Polity: The International Journal of Government and Democracy in the Information Age*, 14(1/2), 1-10. <https://doi.org/10.3233/IP-2009-0176>

- Gob, R., McCollin, C., and Ramalhoto, M. F. (2007). Ordinal methodology in the analysis of Likert scales. *Quality and Quantity*, 41(5), 601-626.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.
- Goleman, D. (2014). What it takes to achieve managerial success. *Talent Development*, 68(11), 48-52.
- Gordon, R. (2012). Terrorism financing indicators for financial institutions in the United States. *Case Western Reserve Journal of International Law*, 44(3), 765-801.
- Government Accountability Office. (2010). *GAO U.S. Government Accountability Office*. Retrieved from <http://www.gao.gov/products/GAO-10-972>.
- Hackney, R., Desouza, K. C., and Irani, Z. (2008). Constructing and sustaining competitive inter-organizational knowledge networks: An analysis of managerial web-based facilitation. *Information Systems Management*, 25(4), 356-363.  
<https://doi.org/10.1080/10580530802384654>.
- Harris, P. R., and Moran, R. T. (1987). *Managing cultural differences* (2nd ed.). Houston, TX: Gulf.
- Hassan, O. (2010). Constructing crises, (in) securitizing terror: The punctuated evolution of EU counter-terror strategy. *European Security*, 19(3), 445-466.  
<https://doi.org/10.1080/09662839.2010.526935>.
- Homan, A. C., Hollenbeck, J. R., Humphrey, S. E., Van Knippenberg, D., Ilgen, D. R., and Van Kleef, G. A. (2008). Facing differences with an open mind: Openness to experience, salience of intragroup differences, and performance of diverse work groups. *Academy of Management Journal*, 51(6), 1204-1222.

- Hsu, S. (2010). Suspect in metro bomb plot pleads not guilty; searches find weapons, lectures by radical cleric Aulaqi. Retrieved from <http://www.washingtonpost.com/wp-dyn/content/story/2010/10/27/ST2010102705265.html?sid=ST2010102705265>
- International association of chiefs of police.* (n.d.). Retrieved from <http://www.theiacp.org/History>
- International standards on combating money laundering and the financing of terrorism and proliferation - the FATF recommendations.* (February 2012). Retrieved from <http://www.fatf-gafi.org/topics/fatfrecommendations/documents/internationalstandardsoncombatingmoneylaundryingandthefinancingofterrorismproliferation-thefatfrecommendations.html>.
- Internet Fraud - CBN to Develop New Security Framework.* (2018, August 3). All Africa.
- Jackson, J. K. (2011). The financial action task force: An overview. Retrieved from <https://www.hsdl.org/?viewanddid=9681>.
- Jahoda, G. (2012). Critical reflections on some recent definitions of culture. *Culture and Psychology, 18*, 289-303. <https://doi.org/10.1177/1354067X12446229>.
- Jarvenpaa, S. L., and Majchrzak, A. (2008). Knowledge collaboration among professionals protecting national security: Role of transactive memories in ego-centered knowledge networks. *Organization Science, 19*(2), 260-276. <https://doi.org/10.1287/orsc.1070.0315>
- Jiao, A. Y., and Rhea, H. M. (2007). Integration of police in the United States: Changes and development after 9/11. *Policing and Society, 17*(4), 388-408. <https://doi.org/10.1080/10439460701718047>
- Johnson, B. R. (2011). United we stand. *Urgent Communications, 29*(10), 16-21.



- Johnston, C. W. (2009). Creative destruction: Has globalization been good for GM? *Review of Business Research*, 9(4), 22-30.
- Jones, G.R. (2010). *Organizational theory, design, and change* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Kahan, J. H (2015, Nov/Dec). Emergency management and homeland security: exploring the relationship. *Journal of Emergency Management*, 13(6), 483 - 498.
- Kahan, J. H (2015). Hedging against terrorism: Are US businesses prepared? *Journal of Business Continuity and Emergency Planning*, 9(1), 70-83.
- Kane, G. C., and Borgatti, S. P. (2011). Centrality-is proficiency alignment and workgroup performance. *MIS Quarterly*, 35(4), 1063-1078.
- Kane, J. R. (2018, August). Terrorism is still a problem. It has not gone away. *Small Wars Journal*. Retrieved from [http://smallwarsjournal.com/jrnl/art/terrorism-still-problem-it-has-not-gone-away#\\_edn12](http://smallwarsjournal.com/jrnl/art/terrorism-still-problem-it-has-not-gone-away#_edn12)
- Kapucu, N. (2006, June). Interagency communication networks during emergencies: Boundary spanners in multiagency coordination. *The American Review of Public Administration*, 36(2), 207-225. <https://doi.org/10.1177/0275074005280605>
- Kitchener, R. F. (2004). Bertrand Russell's flirtation with behaviorism. *Behavior and Philosophy*, 32(2), 273-291.
- Kochman, T., and Mavrelis, J. (2009). *Corporate Tribalism: White men/white women and cultural diversity at work*. Chicago: The University of Chicago Press.
- Kuhn, T. S. (1962). *The structure of scientific revolutions* (3rd ed.). Chicago: The University of Chicago Press.

- Laszlo, A., Laszlo, K., and Johnsen, C. S. (2009). From high-performance teams to evolutionary learning communities: New pathways in organizational development. *Journal of Organisational Transformation and Social Change*, 6(1), 29-48.  
[https://doi.org/10.1386/jots.6.1.29\\_1](https://doi.org/10.1386/jots.6.1.29_1)
- Laudon, K. C., and Laudon, J. P. (2008). *Management information systems: Managing the digital firm* (11th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Leedy, P. D., and Ormrod, J. E. (2010). *Practical research: Planning and design* (9th ed.). UpperSaddle River NJ: Pearson.
- Lei, P., Smith, M., and Suen, H. K. (2007). The use of generalizability theory to estimate data reliability in single-subject observational research. *Psychology in the Schools*, 44(5), 433-439. <https://doi.org/10.1002/pits.20235>
- Levine, D., Stephan, D., & Szabat, K. (2017). *Statistics for managers*. Boston, MA: Pearson Education, Inc.
- Lewis-Beck, M. S., Bryman, A., and Liao, T. F. (Eds.). (2004). *Encyclopedia of social science research methods*. (Vols. 1-3). Thousand Oaks, CA: SAGE Publications, Inc.  
<https://doi.org/10.4135/9781412950589>
- Lyotard, J. (1984). *The postmodern condition: A report on knowledge*. Minneapolis: University of Minnesota Press.
- Maciejewski, M. (2016, June). To do more, better, faster, and more cheaply: using big data in public administration. *International Review of Administrative Sciences.*, 83(1), 120-135.  
<https://doi.org/10.1177/0020852316640058>
- Marchand, A., and Haines III, V., and Dextras-Gauthier, J. (2013, May). Quantitative analysis of organizational culture in occupational health research: a theory-based validation in 30

- workplaces of the organizational culture profile instrument. *BMC Public Health*, 13(1), 443. <https://doi.org/10.1186/1471-2458-13-443>
- Marczyk, G., DeMatteo, D., and Festinger, D. (2005). *Essentials of research design and methodology*. Hoboken, NJ: Wiley.
- Mattessich, P., and Monsey, B.R. (1992). *Collaboration: What makes it work*. Saint Paul, MN Amherst H. Wilder Foundation.
- Mayer, J. D., Salovey, P., and Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist*, 63(6), 503.
- McCormack, W. (2009). State and local law enforcement: Contributions to terrorism prevention. *FBI Law Enforcement Bulletin*, 78(3) 1-7. (Publication No.AN 37599847).
- McKeen, J., and Smith, H. (2009). *IT strategy in action*. Upper Saddle River, NJ: Pearson Prentice Hall.
- McNeill, P., and S. Chapman. 2005. *Research Methods*. New York: Routledge.
- McNurlin, B. C., Sprague, R. H., Jr., and Bui, T. X. (Eds.). (2009). *Information systems management in practice* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Michalopoulou, C., & Symeonaki, M. (2017). Improving Likert scale raw scores interpretability with K-means clustering. *Bulletin de Méthodologie Sociologique*, 135(1), 101-109. <https://doi.org/10.1177/0759106317710863>
- Montalbano, E. (2010). *Information Week DARKReading*. Retrieved from <http://www.informationweek.com/government/security/cybersecurity-tensions-between-public-pr/226700399>.
- Morgan, G. (2007). *Images of organization*. Thousand Oaks, CA: Sage Publications

- Morris-Cotterill, N. (2011). *How not to be a money launderer* (2nd ed.). OGA, UK: Silkscreen Publications.
- Munshani, K. (2010). The essence of terrorist finance: An empirical study of the U. N. Sanctions Committee and the U. N. consolidated list. *International Law Commons*, 18(2), 230-265.
- National commission on terrorist attacks upon the United States. (2004, August 24) *Monograph on Terrorist Financing: Staff Report to the Commission*. By John Roth, Douglas Greenburg, Serena Wille. Washington: DC. Retrieved from [http://govinfo.library.unt.edu/911/staff\\_statements/911\\_TerrFin\\_Monograph.pdf](http://govinfo.library.unt.edu/911/staff_statements/911_TerrFin_Monograph.pdf).
- Naheem, M. A. (2016). Money laundering: A primer for banking staff. *International Journal of Disclosure and Governance*, 13(2), 135-156. <https://doi.org/10.1057/jdg.2015.10>
- Nasaw, D. (2009, December 31). Taliban suicide attack kills CIA agents at US outpost in Afghanistan. *The Guardian*. Retrieved from <https://www.theguardian.com/world/2009/dec/31/taliban-cia-agents-killed-afghanistan>
- Nold, H. A., I., II. (2011). *Relationship between organizational cultural enablers of knowledge creation and firm performance*. University of Phoenix.
- Norman, W. (2011). Business ethics as self-regulation: Why principles that ground regulations should be used to ground beyond-compliance norms as well. *Journal of Business Ethics*, 102, 43-57. <https://doi.org/10.1007/s10551-011-1193-2>.
- Office of The Director of National Intelligence (n.d.). Retrieved from <https://www.dni.gov/index.php/newsroom/reports-publications/reports-publications-2017/item/1746-ic-ig-dhs-and-doj-oigs-release-joint-report-on-the-domestic-sharing-of-counterterrorism-information>

- Ozeren, S. (2005). Global response to cyber-terrorism and cybercrime: A matrix for international cooperation and vulnerability assessment. University of North Texas.
- Papazoglou, K., & Tuttle, B. M. (2018). Fighting police trauma: Practical approaches to addressing psychological needs of officers. *SAGE Open*, 8(3).  
<https://doi.org/10.1177/2158244018794794>.
- Paradigm shift*. (2011). Retrieved from <http://www.taketheleap.com/define.html>
- Parry, H. (2016, June 27). Al Qaeda urges lone wolves to target white Americans. *Daily Mail*. Retrieved from <http://www.dailymail.co.uk/news/article-3662998/Al-Qaeda-urges-Lone-Wolves-target-white-Americans.html>
- Payne, A., and Frow, P. (2006). Customer relationship management: from strategy to implementation. *Journal of Marketing Management*, 22(1/2), 135-168.
- Patterson, J. (2007). *The Lectric law library*. Retrieved from <http://www.lectlaw.com/files/cjs07.htm>
- Pearlson, K., and Saunders, C. (2010). *Managing and using information systems* (4th ed.). Hoboken, NJ: John Wiley and Sons.
- Phillips, J. (2018). Risk in a digital age: Understanding risk in virtual networks through digital response networks (DRNs). *International Development Planning Review*, 40(3), 239-272.  
<https://doi.org/10.3828/idpr.2018.18>
- Pinkerton, J. (2014, March 26). Council ok's incentive pay for police cadets. *Houston Chronicle*. Retrieved from <http://www.houstonchronicle.com/news/houston-texas/houston/article/CouncilOKs-incentive-pay-for-police-cadets-5352682.php>

- Price, K., and Gioia, D. (2008). The self-monitoring organization: Minimizing discrepancies among differing images of organizational identity, *Corporate Reputation Review*, 11(3), 208-221. <https://doi.org/10.1057/crr.2008.17>
- PR Newswire. (2012, August 14). 69% of federal government IT pros consider cybersecurity and security extremely important according to new Information Week reports research. *PR Newswire US*.
- Rapoport, Robert N. (1970). Three dilemmas of action research, *Human Relations*. 23(6), 499 - 513.
- Ridley, N. (2009). Combating terrorist financing: The dichotomy between formulating the legal bases and effective operational intelligence. *Legal Aspects of Combating Terrorism*, 47(1), 57-62. <https://doi.org/10.3233/978-1-58603-930-1-57>
- Rogge, N., Agasisti, T., & De Witte, K. (2017, January). Big data and the measurement of public organizations' performance and efficiency: The state-of-the-art. *Public Policy and Administration*, 32(4), 263-281. <https://doi.org/10.1177/0952076716687355>
- Roşca, I. h., and Moldoveanu, G. (2010). The tandem culture - Organizational bureaucracy in public sector. *Theoretical and Applied Economics*, 17(6), 7-16.
- Rosenoer, J. (2018). Hardening the chain. *The RMA Journal*, 100(7), 42.
- Saad, L. (2013, April 26). Post-Boston, half in U.S. anticipate more terrorism soon; Confidence in U.S. government to protect citizens from terrorism is down slightly. *Gallup poll news service*.
- Saccone, R. (2009, Jun/July), First hand: Wedding counterintelligence to law enforcement. *Counter Terrorist*, 2(3), 14-24.

- Samuels, E. (2008). *Terrorism: A paradigm shift in business risk management*. University of Phoenix.
- Sandoval, C. C. (2013). Federal interagency intelligence and information sharing: A matter of mission, a function of trust and leadership (Order No. 3674161). Available from Dissertations and Theses @ University of Phoenix; ProQuest Dissertations and Theses Global. (1609375124).
- Sanger, M. (2008). Getting to the roots of change: Performance management and organizational culture. *Public Performance and Management Review*, 31(4), 621-653.
- Schneider, F., and Windischbauer, U. (2008). Money laundering: Some facts. *European Journal of Law and Economics*, 26(3), 387-404. <https://doi.org/10.1007/s10657-008-9070-x>
- Scott, W.R., and Davis, G.F. (2007). *Organizations and organizing*. Upper Saddle River, NJ: Prentice Hall.
- Security Magazine. (2004, December). Information security top-down. *Security: Solutions for Enabling and Assuring Business*. Retrieved from <http://www.securitymagazine.com/articles/information-security-top-down-1>.
- Selim, G. (2011). *Talking terrorism: Can we ethically communicate the threat*. Georgetown University).
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday Currency.
- Shah, N. D., Steyerberg, E. W., & Kent, D. M. (2018). Big data and predictive analytics: Recalibrating expectations. *Jama*, 320(1), 27-28. <https://doi.org/10.1001/jama.2018.5602>
- Shin, Y. A., Yeo, J., & Jung, K. (2018). The effectiveness of international non-governmental organizations' response operations during public health emergency: Lessons learned from

- the 2014 ebola outbreak in Sierra Leone. *International Journal of Environmental Research and Public Health*, 15(4), 650. <https://doi.org/10.3390/ijerph15040650>
- Simpson, G. R. (2004, December 30). Checking accounts: As investigations proliferate, big banks feel under the gun; links to cash-transfer firms raise troubling questions about money laundering; A probe of Bank of America. *Wall Street Journal*
- Sine, L. M. (2010). *Understanding cybercrime: A phenomenological study*. University of Phoenix.
- Skinner, B. F. (1953). *Science and Human Behavior*. New York: MacMillan.
- Smeyers, P. (2001). Qualitative versus quantitative research design: A plea for paradigmatic tolerance in educational research. *Journal of Philosophy of Education*, 35(3), 477.
- Smith, D. M. (2011). A study of command and control of multi-agency disaster response operations. University of Phoenix.
- Soy, S. K. (1997). The case study as a research method.  
<http://www.ischool.utexas.edu/~ssoy/usesusers/1391d1b.htm>
- Spink, J. (2017, May). Product fraud and product counterfeiting as a source of terrorist financing. *Security Journal*, 30(2), 640-645. <https://doi.org/10.1057/sj.2014.46>.
- Steele, A. (2018). Ask 5: Google drive vs. Microsoft SharePoint. *University Wire*.
- Steinberg, W.J. (2008). *Statistics alive!* Los Angeles: Sage.
- Summerfield, M. (2014). Leadership: a simple definition. *American Journal of Health-System Pharmacy*. 71(3), 251-253. <https://doi.org/10.2146/ajhp130435>
- SurveyMonkey. (2018). Retrieved from [https://www.surveymonkey.com/mp/lp/sample-size-calculator/?ut\\_source=mp&ut\\_source2=margin\\_of\\_error\\_calculator&utm\\_expnid=.cOMQ](https://www.surveymonkey.com/mp/lp/sample-size-calculator/?ut_source=mp&ut_source2=margin_of_error_calculator&utm_expnid=.cOMQ)



LyyUQhqbVct5bsJlAA.1&utm\_referrer=https%3A%2F%2Fwww.surveymonkey.com%2Fmp%2Fmargin-of-error-calculator%2F

Swanson, R. A., and Holton, E. F. (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco, California: Berrett-Koehler.

Tafoya, W. L. (2011). Cyber terror. *FBI Law Enforcement Bulletin*, 80(11), 1.

Takats, E. (2011). A theory of crying wolf: The economics of money laundering enforcement. *Journal of Law, Economics and Organization*, 27(1), 32-78.

Taylor, I. (2017, June). Data collection, counterterrorism, and the right to privacy. *Politics, Philosophy & Economics*, 16(3), 326-346. <https://doi.org/10.1177/1470594X17715249>

Teijlingen, E.v., and Hundley, V. (2002). The importance of pilot studies. *Nursing Standard*, 16(40), 33-6.

Panhandle. (2019). In *The American heritage dictionary of the English language*. Retrieved from <https://ahdictionary.com/word/search.html?q=panhandle>

The Federal Bureau of Investigation. (2003). Retrieved from <http://www.fbi.gov/news/testimony/the-war-against-terrorism-working-together-to-protect-america>

The war against terrorism: Working together to protect America: hearing before the Judiciary Committee of the United States Senate, 108th Congress, 89(2003) (testimony of Senate Committee on the Judiciary).

Thomas, J. (2008). *Cybercrime: A revolution in terrorism and criminal behavior creates change in the criminal justice system*. Retrieved from [http://www.associatedcontent.com/article/44605/cybercrime\\_a\\_revolution\\_in\\_terrorism\\_.html?page=2andcat=37](http://www.associatedcontent.com/article/44605/cybercrime_a_revolution_in_terrorism_.html?page=2andcat=37).

- Tillman, B. (2002). Spamming gets a closer look. *Information Management Journal*, 36(2), 10.
- Tree, O. (2012, July 17). Will HSBC be kicked out of America? Senate threatens action after probe shows bank laundered billions in terror and drug money. *International Business Times*.
- Tung, W., and Yuan, S. (2010). Intelligent service machine. *Communications of the ACM*, 53(8), 129-134. <https://doi.org/10.1145/1787234.1787268>.
- Turak, N. (2017, November 28). Terror attacks are likely to increase in 2018, with ISIS and al-Qaeda both still dangerous. *CNBC*. Retrieved from <https://www.cnbc.com/2017/12/28/terror-isis-and-al-qaeda-likely-to-carry-out-more-attacks-in-2018.html>.
- Unger, B. (2009, January). Money laundering--A newly emerging topic on the international agenda. *Review of Law and Economics*, 5(2). 1-1. <https://doi.org/10.2202/1555-5879.1417>.
- Uniform Crime Reporting. (n.d.). Retrieved from <https://ucr.fbi.gov/>.
- United States. Central Intelligence Agency. (2003, February). National Strategy for Combating Terrorism. Retrieved August 30, 2018, from the Central Intelligence Agency Website:[https://www.cia.gov/news-information/cia-the-war-on-terrorism/Counter\\_Terrorism\\_Strategy.pdf](https://www.cia.gov/news-information/cia-the-war-on-terrorism/Counter_Terrorism_Strategy.pdf).
- U.S. Department of the Treasury. (n.d.). Retrieved from <https://www.treasury.gov/resource-center/terrorist-illicit-finance/Terrorist-Finance-Tracking/Pages/tftp.aspx>.
- United States Department of the Treasury Financial Crimes Enforcement Network. (2002, January). SAR bulletin. Retrieved from [http://www.fincen.gov/news\\_room/rp/rulings/pdf/sarbul0201-f.pdf](http://www.fincen.gov/news_room/rp/rulings/pdf/sarbul0201-f.pdf).

United States Department of the Treasury Financial Crimes Enforcement Network (n.d.).

Retrieved from <https://www.fincen.gov/history-anti-money-laundering-laws>.

U.S. Congress (1933). Public Law 73-1, 48 STAT. 1 The Bank Conservation Act of 1933 March 9, 1933. U.S.C. 12 § 227.

U.S. Congress (1970). Public Law 91-507 The Bank Secrecy Act of 1970 October 26, 1970. U.S.C. §15073.

U.S. Congress (2002). Public Law 107-296, 116 STAT. 2794. The Homeland Security Act of 2002. November 25, 2002. U.S.C. 6 ch.1 §101.

U.S. Congress (1986). Public Law 99-570 The Money Laundering Control Act of 1986 October 27, 1986, 18 U.S.C. § 1956 and 18 U.S.C. §1957.

U.S. Congress (1988). Public Law 100-690 The Anti-Drug Abuse Act of 1988 November 18, 1988. U.S.C. §5210.

U.S. Congress (1992). Public Law 102-550 The Annunzio-Wylie Money Laundering Act of 1992 October 28, 1992. 106 STAT.3672. Washington, D.C. Author.

U.S. Congress (2001). Public Law 107-56 USA Patriot Act of 2001 October 26, 2001.U.S.C. §3162.

U.S. Congress (2001). Public Law 107-56 USA Patriot Act of 2001 October 26, 2001. U.S.C. §302.


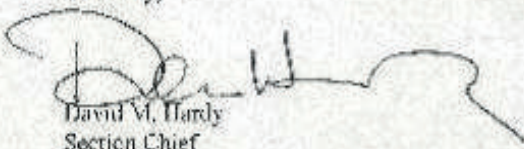
U. S. Congress. (2002). Public Law 107-296 Homeland Security Act of 2002. November 25, 2002. 116 STAT. 2135. Washington, D.C.

Van Waeyenberge, E. (2012, April 16). Accountability at the World Bank. *Development and Change*, 43(2), 615-621. <https://doi.org/10.1111/j.1467-7660.2012.01771.x>

- Viswanathan, M. (2005). *Measurement Error and Research Design*. Thousand Oaks, CA: Sage Publications, Inc. <https://doi.org/10.4135/9781412984935.n1>.
- Vogt, P. W. (2007). *Quantitative research methods for professionals*. Boston, MA: Allyn and Bacon.
- Wagner, E. E., Maloney, P., & Wilson, D. G. (1981). Split-half and test-retest hand test reliabilities for pathological samples. *Journal of Clinical Psychology, 37*(3), 589-592. [https://doi.org/10.1002/1097-4679\(198107\)37:3<589:AID-JCLP2270370325>3.0.CO;2-X](https://doi.org/10.1002/1097-4679(198107)37:3<589:AID-JCLP2270370325>3.0.CO;2-X).
- Warrick, D. D. (2009). Developing organization change champions. *OD Practitioner, 41*(1), 14-19.
- Weimann, P., Hinz, C., Scott, E., and Pollock, M. (2010). Changing the communication culture of distributed teams in a world where communication is neither perfect nor complete. *Electronic Journal of Information Systems Evaluation, 13*(2), 187-196.
- Weiss, J. A. (1987). Pathways to cooperation among public agencies. *Journal of Policy Analysis and Management (1986-1998), 7*(1), 94.
- Wheeler, S., and Kahan, D. (2005). *The concept of white-collar crime*. Retrieved April 19, 2009, from [www.wings.buffalo.edu/law/bclc/bclarticles/8/1/green.pdf](http://www.wings.buffalo.edu/law/bclc/bclarticles/8/1/green.pdf).
- Whittemore, R., and Melkus, G. (2008). Designing a research study. *Diabetes Educator, 34*(2), 201-216.
- Wilson, C. (2011). On collaboration. *Optimum Online, 41*(1), 2. 1p.
- Winer, J. M. (2008 July). Countering terrorist finance: A work, mostly in progress. *The ANNALS of the American Academy of Political and Social Science 7*(618), 112-132. <https://doi.org/10.1177/0002716208317696>.

- Worth, K. (2016). Pbs. Retrieved from <https://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>.
- Wren, J. T. (1995). *The Leader's Companion: Insights on Leadership through the Ages*.
- Yilmazkuday, H. (2017). Anti-Crime laws and retail prices. *Review of Law & Economics*, 13(3), 1-18. <https://doi.org/10.1515/rle-2016-0003>
- Yin, R. K. (2013). *Case study research: Design and methods (5<sup>th</sup> ed)*. Thousand Oaks, CA: Sage publications.

## Appendix A Permissions

	U.S. Department of Justice
	Federal Bureau of Investigation Records Management Division Fitchburg, VA 22602-4343
	September 6, 2012
Melanie Y. Duncan FBI Headquarters Room WB-420 935 Pennsylvania Avenue, Northwest Washington, DC 20535	
	Re: Dissertation Draft (Chapters 1-3)
Dear Ms. Duncan:	
This letter is in response to your request of August 31, 2012, for review of the above referenced dissertation for publication pursuant to the Federal Bureau of Investigation's (FBI) Prepublication Review Policy (PRP) and Prepublication Review Manual (POL05-001-RMD).	
Your submission was reviewed pursuant to the terms of the PRP and we concluded that none of the information presented falls within a restricted area of disclosure. Therefore, there is no objection to the publication of your dissertation, as presented. However, we do ask when the final version of your dissertation is completed, please submit it for Prepublication Review.	
You may include your FBI employment as part of your biographical data, providing that the FBI is given no more emphasis than other similar biographical information. In addition, please incorporate a disclaimer advising readers that the opinions expressed in the dissertation are yours and not those of the FBI.	
Should you have any questions, please do not hesitate to contact Zachary Wright at 540-868-1697 or via e-mail at <a href="mailto:zhprepub@ic.fbi.gov">zhprepub@ic.fbi.gov</a> . Thank you for your participation in the FBI's prepublication review process.	
	Sincerely,  David M. Hardy Section Chief Record/Information Dissemination Section



U.S. Department of Justice  
Federal Bureau of Investigation  
Information Management Division  
Winchester, VA 22602-4843

October 16, 2019

Ms. Melanie Duncan  
Management and Program Analyst  
Federal Bureau of Investigation

Re: Dissertation: "Right People Right Plan: Correlation Study of Communication among National Security Partners"

Dear Ms. Duncan,

This letter is in response to your request of September 30, 2019, for review of the above referenced dissertation for publication pursuant to the Federal Bureau of Investigation's (FBI) Prepublication Review Policy (PRP) and Prepublication Review Policy Guide (0792PG).

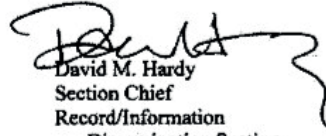
We have reviewed the work and concluded none of the information presented falls within a restricted area of disclosure. Therefore, there is no objection to the publication of the content of your work, as presented in your submission. Our findings are based on Bureau publication and security policy and extend only to the release of information contained in your submission. This, however, does not constitute approval by the FBI for you to engage in publication for compensation, sale, or other commercial use of your work. In that regard, you must also comply with the Standards of Ethical Conduct for the Executive Branch.

The Standards limit the circumstances under which an employee may accept compensation for the sale or publication of written works. The Standards also limit the extent to which you may use your official title, position, FBI status, or other indicia of your FBI employment in connection with publishing, advertising or marketing your work, to include mention in any biographical statement related to the work, such as in a "dust jacket." If you intend to mention in your biographical statement that you work for the FBI, you should consult the Office of Integrity and Compliance (OIC).

Again, compliance with the prepublication policy does not relieve you of the obligation to comply with the Standards and other applicable FBI and Office of Government Ethics regulations or policies. Prior to taking any further action with respect to this work, consider applicable regulations as set forth in the FBI Ethics and Integrity Program Policy Guide (0454PG), with particular attention to Sections 4.8. and 4.9. You may also be required to submit an FD-331 Outside Employment Form depending on how you intend to sell or market your work. Please contact the OIC if you have any questions regarding these regulations.

Should you have any questions, please do not hesitate to contact Kandi McCullough at (540) 868-1697 or via e-mail at [FBIPREPUB@FBI.GOV](mailto:FBIPREPUB@FBI.GOV). Thank you for your participation in the FBI's prepublication review process.

Sincerely,



David M. Hardy  
Section Chief  
Record/Information  
Dissemination Section

- 2 -

159



September 14, 2013

Melnic Y. Duncan

PO Box 4121

Alexandria, VA 22303

Dear Kochman Mavrelis Associates, Inc.,

This letter will confirm the recent email exchange with Mr. Thomas Kochman on September 5, 2013. I am completing a doctoral dissertation at the University of Phoenix entitled "A Study of National Security Partners Using Predictive Design." I would like your permission to reprint in my dissertation excerpts from the following: Cultural Mapping handout from the Three-Day Intelligence Community Cultural Diversity Training held at the National Geo-Spatial Agency in 2012. Full citation and original work to be used is as follows:

Kochman, T. & Mavrelis, J. (2009). *Corporate Tribalism: White Men/White Women and Cultural Diversity at Work*. Chicago: University of Chicago Press.

I created a culture comparison table for reproduction that outlines a breakdown of the following culture groups discussed by Kochman and Mavrelis: African American, Hispanic, South Asian, Arab/Middle Eastern, Russian, Asian/Pacific Islander, American Indian, Gender, Generational, Disability, Lesbian, Gay, Bi-sexual, and Transgender, and U.S. White males. The table displays the influence on mainstream culture by each group, the influence of the group culture, value and conflict, the disadvantage to teams as a result, and the advantage to teams as a result.

The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, to the electronic publication of my dissertation by the University of Phoenix, and to the prospective publication of my dissertation by ProQuest. ProQuest may supply copies of my dissertation on demand. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.

Your signing of this letter will also confirm that you own [or your company owns] the copyright to the above-described material. If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope and via the following e-mail address. dimikaj6@yahoo.com.

Sincerely,

Melanie Y. Duncan /s/

PERMISSION GRANTED FOR THE  
USE REQUESTED ABOVE:

Kochman Mavrelis and Associates, Inc

Thomas Kochman




Jean Mavrelis



Date: 9-15-13

From: Thomas Kochman <thomas.kochman@kmsdiversity.com>  
To: Melanie Duncan <dimikaj6@yahoo.com>  
Cc: Kimberly Lord <kimberly.lx@kmsdiversity.com>; Jean Mavrelis <jean.mavrelis@kmsdiversity.com>  
Sent: Sunday, September 15, 2013 11:51 AM  
Subject: Re: Letter of permission- Melanie Y. Duncan  
(Quoted text hidden)

 kma scan.pdf  
839K

https://s100.copyright.com/AppDispatchServlet#formTop

File Edit View Favorites Tools Help

Search Safe Web Identity Safe

Copyright Clearance Center RightsLink® Home Create Account Help

**Routledge**  
Taylor & Francis Group

**Title:** Integration of Police in the United States: Changes and Development after 9/11  
**Author:** Allan Y. Jiao, Harry M. Rhea  
**Publication:** Policing and Society: an International Journal  
**Publisher:** Taylor & Francis  
**Date:** Dec 1, 2007  
Copyright © 2007 Routledge

User ID  
Password  
 Enable Auto Login  
LOGIN  
[Forgot Password/User ID?](#)

If you're a copyright.com user, you can login to RightsLink using your copyright.com credentials. Already a RightsLink user or want to [learn more?](#)

**Thesis/Dissertation Reuse Request**

Taylor & Francis is pleased to offer reuses of its content for a thesis or dissertation free of charge contingent on resubmission of permission request if work is published.

BACK CLOSE WINDOW

https://s100.copyright.com/AppDispatchServlet#formTop

File Edit View Favorites Tools Help

Search Safe Web Identity Safe

Copyright Clearance Center RightsLink® Home Create Account Help

**Routledge**  
Taylor & Francis Group

**Title:** Customer Relationship Management: from Strategy to Implementation  
**Author:** Adrian Payne, Pennie Frow  
**Publication:** Journal of Marketing Management  
**Publisher:** Taylor & Francis  
**Date:** Feb 1, 2006  
Copyright © 2006 Routledge

User ID  
Password  
 Enable Auto Login  
LOGIN  
[Forgot Password/User ID?](#)

If you're a copyright.com user, you can login to RightsLink using your copyright.com credentials. Already a RightsLink user or want to [learn more?](#)

**Thesis/Dissertation Reuse Request**

Taylor & Francis is pleased to offer reuses of its content for a thesis or dissertation free of charge contingent on resubmission of permission request if work is published.

BACK CLOSE WINDOW

4:04 PM  
9/16/2013



**PERMISSION LETTER FOR DISSERTATION**

Permissions Manager  
Taylor & Francis  
325 Chestnut Street  
8th Floor  
Philadelphia  
PA 19106  
USA  
[Phdpermissions@taylorandfrancis.com](mailto:Phdpermissions@taylorandfrancis.com)

September 14, 2013

Melanie Y. Duncan  
PO Box 4121  
Alexandria, VA 22303

Dear Permissions Manager for Taylor and Francis,

This letter is a written request to republish material from a journal published by Taylor and Francis. I am completing a doctoral dissertation at the University of Phoenix entitled "A Study of National Security Partners Using Predictive Design." I would like your permission to reprint in my dissertation excerpts from the following: "Integration of Police in the United States: Changes and Development after 9/11. Full citation and original work to be used is as follows:

Jiao, A. Y., & Rhea, H. M. (2007). Integration of police in the United States: Changes and development after 9/11. *Policing & Society, 17*(4), 388-408. doi:10.1080/10439460701718047

I would like to use the following tables in my dissertation: 1 Organizational and operational integration after 9/11 from page 395 and Mentality/culture change by length of service, rank structure, and unit of service from page 400. The purpose of using these tables is to show shifts in police culture related to information sharing, and training, along with changes based on years of police service.

The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, to the electronic publication of my dissertation by the University of Phoenix, and to the prospective publication of my dissertation by ProQuest. ProQuest may supply copies of my dissertation on demand. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.

Your signing of this letter will also confirm that you own [or your company owns] the copyright to the above-described material. If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope and via the following e-mail address, [dinkaj6@yahoo.com](mailto:dinkaj6@yahoo.com).

Sincerely,

Melanie Y. Duncan /s/   
PERMISSION GRANTED FOR THE  
USE REQUESTED ABOVE:

Permissions Manager for Taylor & Francis

Date: \_\_\_\_\_

**PERMISSION LETTER FOR DISSERTATION**

Permissions Manager  
Emerald Group Publishing Inc.  
Brickyard Office Park  
84 Sherman Street  
Cambridge, MA 02140  
USA  
[america@emeraldinsight.com](mailto:america@emeraldinsight.com)  
September 14, 2013

Melanie Y. Duncan  
PO Box 4121  
Alexandria, VA 22303

Dear Permissions Manager for Emerald Group Publishing, Inc.,

This letter is a written request to republish work from the authors Payne and Frow, titled, "Customer Relationship Management: from Strategy to Implementation". I am completing a doctoral dissertation at the University of Phoenix entitled "A Study of National Security Partners Using Predictive Design." I would like your permission to reprint in my dissertation the figure "CRM Strategy and Implementation Model found on page 143. Full citation and original work to be used is as follows:

Payne, A., & Frow, P. (2006). Customer Relationship Management: from Strategy to Implementation. *Journal of Marketing Management*, 22, (1-2), p. 135-168.

The purpose of using this figure is for my discussion on information sharing within the federal government. The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, to the electronic publication of my dissertation by the University of Phoenix, and to the prospective publication of my dissertation by ProQuest. ProQuest may supply copies of my dissertation on demand. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.

Your signing of this letter will also confirm that you own [or your company owns] the copyright to the above-described material. If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope and via the following e-mail address, [dinukaj6@yahoo.com](mailto:dinukaj6@yahoo.com).

Sincerely,

Melanie Y. Duncan /s/   
PERMISSION GRANTED FOR THE  
USE REQUESTED ABOVE:

Permissions Manager for Emerald Group Publishing, Inc.

Date: \_\_\_\_\_

**PERMISSION LETTER FOR DISSERTATION**

**Kochman Mavrelis Associates, Inc.**  
845 N. Ridgeland Avenue  
Oak Park, IL 60302  
kimberly.lord@kmadiversity.com  
jean.mavrelis@kmadiversity.com

September 14, 2013

Melanie Y. Duncan  
PO Box 4121  
Alexandria, VA 22303

Dear Kochman Mavrelis Associates, Inc.,

This letter will confirm the recent email exchange with Mr. Thomas Kochman on September 5, 2013. I am completing a doctoral dissertation at the University of Phoenix entitled "A Study of National Security Partners Using Predictive Design." I would like your permission to reprint in my dissertation excerpts from the following: Cultural Mapping handout from the Three-Day Intelligence Community Cultural Diversity Training held at the National Geo-Spatial Agency in 2012. Full citation and original work to be used is as follows:

Kochman, T. & Mavrelis, J. (2009). *Corporate Tribalism: White Men/White Women and Cultural Diversity at Work*. Chicago: University of Chicago Press.

I created a culture comparison table for reproduction that outlines a breakdown of the following culture groups discussed by Kochman and Mavrelis: African American, Hispanic, South Asian, Arab/Middle Eastern, Russian, Asian/Pacific Islander, American Indian, Gender, Generational, Disability, Lesbian, Gay, Bi-sexual, and Transgender, and U.S. White males. The table displays the influence on mainstream culture by each group, the influence of the group culture, value and conflict, the disadvantage to teams as a result, and the advantage to teams as a result.

The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, to the electronic publication of my dissertation by the University of Phoenix, and to the prospective publication of my dissertation by ProQuest. ProQuest may supply copies of my dissertation on demand. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.

Your signing of this letter will also confirm that you own [or your company owns] the copyright to the above-described material. If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope and via the following e-mail address, dmksj6@yahoo.com.

Sincerely,

Melanie Y. Duncan /s/   
PERMISSION GRANTED FOR THE  
USE REQUESTED ABOVE:

Kochman Mavrelis and Associates, Inc

Thomas Kochman

Jean Mavrelis

Date: \_\_\_\_\_

## Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist

Wednesday, August 21, 2019 12:53 AM

Subject	Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist
Link to Outlook Item	<a href="#">Click here</a>
From	<a href="#">Melanie Duncan</a>
To	<a href="#">Christine Sandoval</a>
Sent	4/28/2019, 11:51:18 PM

Thank you so much Dr. Sandoval!

Melanie

Thank you  
Melanie Duncan  
Doctoral Candidate (until I graduate)  
University of Phoenix  
[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)

(757) 679-1075  
Eastern Standard Time Zone

**From:** Christine Sandoval <[christine.c.sandoval@gmail.com](mailto:christine.c.sandoval@gmail.com)>  
**Sent:** Saturday, April 27, 2019 6:03:34 PM  
**To:** Melanie Duncan  
**Subject:** Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist

Melanie, certainly. hope it helps.  
Chris



On Sat, Apr 27, 2019, 11:11 Melanie Duncan <[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)> wrote:

Good morning Dr. Sandoval,

I wanted to send the request in our original email chain. I would like to adapt your survey titled, Federal Interagency Intelligence Information Sharing used in your published dissertation titled, FEDERAL INTERAGENCY INTELLIGENCE AND INFORMATION SHARING: A MATTER OF MISSION, A FUNCTION OF TRUST AND LEADERSHIP for my dissertation study titled, RIGHT PEOPLE RIGHT PLAN: CORRELATION STUDY OF COMMUNICATION AMONG NATIONAL SECURITY PARTNERS.

Attached is the adapted survey. Thank you so much for your willingness to provide permission for the survey adaptation.

Melanie,

Thank you  
Melanie Duncan  
Doctoral Candidate (until I graduate)  
University of Phoenix  
[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)

(757) 679-1075  
Eastern Standard Time Zone

**From:** Melanie Duncan  
**Sent:** Wednesday, October 10, 2018 9:51:39 PM  
**To:** Christine Sandoval  
**Subject:** Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist

Thank you so much for the submission Dr. Sandoval.

Melanie Duncan  
Doctoral Candidate (until I graduate)  
University of Phoenix

[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)  
(757) 679-1075  
Eastern Standard Time Zone

**From:** Christine Sandoval <[christine.c.sandoval@gmail.com](mailto:christine.c.sandoval@gmail.com)>  
**Sent:** Friday, October 5, 2018 11:27:36 AM  
**To:** Melanie Duncan  
**Subject:** Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist

Not sure if you are at your work email...but I sent a few notes....and had to re-send the one to INTELST...messed up the address...will let you know what I hear...

ccs

On Thu, Oct 4, 2018 at 9:01 PM Melanie Duncan <[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)> wrote:

Dr. Sandoval,

Thank you so much!

Melanie Duncan  
Doctoral Candidate (until I graduate)  
University of Phoenix  
[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)  
(757) 679-1075  
Eastern Standard Time Zone

**From:** Christine Sandoval <[christine.c.sandoval@gmail.com](mailto:christine.c.sandoval@gmail.com)>  
**Sent:** Monday, October 1, 2018 10:01:10 PM  
**To:** Melanie Duncan  
**Subject:** Re: Melanie Duncan conversation on September 4, 2018 to adapt survey/intellist

Melanie,  
I will try and reach the Intelist folks tomorrow.

Chris

On Sat, Sep 29, 2018, 9:28 PM Melanie Duncan <[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)> wrote:

Good evening Dr. Sandoval,

I trust you are well. I wanted to send this touch point email to you before we begin a new month. I am still making some modifications for the survey portion and will send you a formal request for survey adaptation once I confirm the company hosting the research survey for me. You were correct, I have not heard back from WB&A Research.

My work email address is [myduncan@fbi.gov](mailto:myduncan@fbi.gov). I really appreciate the intel list for intel leads .

Melanie Duncan  
Doctoral Candidate (until I graduate)  
University of Phoenix  
[mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu)  
(757) 679-1075  
Eastern Standard Time Zone

## Appendix B Invitation for Survey Participation

I would like to invite you to participate in a brief survey as part of the data I am collecting for my dissertation. The goal of the study is to examine national security partners as it pertains to methods of information sharing. My name is Melanie Duncan, and I am a doctoral candidate at the University of Phoenix. This project will be conducted under the supervision of the School of Advanced Studies for the University of Phoenix.

You meet the eligibility criteria to participate in this study if you work for or support a government entity or financial institution and are between 21 and 65 years of age. No personally identifiable information is collected for this study. Participation in the survey and your answers will be kept confidential according to the terms in the Informed Consent, which must be acknowledged for survey participation.

My email address for this study is [mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu). The online survey is anticipated to take no more than 30 minutes. No compensation is provided for survey participation.

Please click on the link below to be directed to the survey, which is located outside of the LinkedIn environment on the SurveyMonkey website.

<https://www.surveymonkey.com/r/CNSPISS-19>

The Informed Consent, acknowledgment, and instructions will appear. Thank you so much for your participation.

Please call me at (757) 679-1075 or email me at [mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu), if you have any questions.

Respectfully,

Melanie Duncan Ph.D. candidate, University of Phoenix

## Appendix C Invitation for Participation Reminder

Dear Survey Participant,

As a reminder, you are invited to participate in a brief survey as part of the data that I am collecting for my dissertation as a doctoral candidate at the University of Phoenix. The goal of the study is to examine national security partners as it pertains to methods of information sharing. This project will be conducted under the supervision of the School of Advanced Studies for the University of Phoenix. Your participation is very important to the outcome of the study, and the survey will take no more than 30 minutes of your time. No personally identifiable information is collected for this survey. Your participation is strictly voluntary. There is no penalty if you choose not to participate. The link for survey participation is provided below.

The Informed Consent, acknowledgment, and instructions will appear. Thank you so much for your participation.

Please call me at (757) 679-1075 or email me at [mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu) if you have any questions.

Respectfully,

Melanie Duncan, Ph.D. candidate, University of Phoenix

## Appendix D Survey Instrument

The purpose of the survey instrument was to collect the responses of national security partners from the banking industry for hypotheses testing and determining correlation strength to answer the research question presented for this study. The web-based survey was selected as the instrument tool because of the ease in survey distribution, collection, and processing of data. Participants were asked for survey participation in an online social media environment and then provided with an online link to the survey separate from the social media environment where the solicitation occurred. No personally identifiable information was collected to add to the layer of confidentiality and safeguard the identity of survey participants. The survey was housed using Survey Monkey and the uniform resource locator (URL) <https://www.surveymonkey.com/r/CNSPISS-19> was used to find the web address for this study. Participants acknowledged consent using an active form of acceptance where all terms and questions needed to be accepted before the survey was presented. Additionally, the survey participant accepted all terms before viewing of the data collection instrument took place.

I understand the above statements, and I GIVE CONSENT to proceed with the questionnaire.

I understand the above statements, and I DO NOT GIVE CONSENT to proceed with the survey; I wish to terminate my participation.

Throughout this survey, the Community of National Security Partners (CNSP) is defined as a collaborative group of users who exchange information in pursuit of their shared goals, interests, mission, or business processes. Please select one response to the items in the survey below.

### Demographic Information

1. The primary mission of your organization is in support of which Community of National Security Partners (CNSP)? (PLEASE SELECT ONE RESPONSE ONLY.)

- 01 Diplomacy
- 02 Intelligence/Information
- 03 Military
- 04 Finance
- 05 Homeland Security
- 06 Law Enforcement
- 95 Other (SPECIFY: \_\_\_\_\_)

2. Other than the primary CNSP your organization supports, what other CNSPs does your organization support? (PLEASE SELECT ALL THAT APPLY.)

- 01 Diplomacy
- 02 Intelligence/Information
- 03 Military

- 04 Finance
- 05 Homeland Security
- 06 Law Enforcement
- 95 Other (SPECIFY: \_\_\_\_\_)
- 97 My organization does not support any other CNSPs

3. Within your organization, your primary role is to support which CNSP? (PLEASE SELECT ONE RESPONSE ONLY.)

- 01 Diplomacy
- 02 Intelligence/Information
- 03 Military
- 04 Finance
- 05 Homeland Security
- 06 Law Enforcement
- 95 Other (SPECIFY: \_\_\_\_\_)

4. What is your primary function within your organization? Would you say: (PLEASE SELECT ONE RESPONSE ONLY.)

- 01 Policy/Planning/Legal
- 02 Operations
- 03 Senior decision-maker
- 04 Collection
- 05 Analysis/Production
- 06 IT/Systems engineer



95 Something else (SPECIFY: \_\_\_\_\_)

5. Which best describes your current status? Would you say: (PLEASE SELECT ONE RESPONSE ONLY.)

01 Government civilian

02 Military

03 Contractor

95 Something else (SPECIFY: \_\_\_\_\_)

6. Are you male or female?

01 Male

02 Female

7. For how many years have you provided support to the federal government? (SELECT THE RANGE THAT BEST DESCRIBES YOUR YEARS OF SUPPORT TO THE FEDERAL GOVERNMENT).

01 From one to five years.

02 From six to ten years.

03 From eleven to fifteen years.

04 From sixteen to twenty years.

05 From twenty-one to twenty-five years.

06 From twenty-five to thirty years.

07 From thirty-one to thirty-five years.

08 From thirty-six to forty years.

09 More than forty years.

8. How many years have you worked in your current role? (SELECT THE RANGE THAT BEST DESCRIBES THE YEARS YOU HAVE WORKED IN YOUR CURRENT ROLE).

01 From one to five years.

02 From six to ten years.

03 From eleven to fifteen years.

04 From sixteen to twenty years.

05 From twenty-one to twenty-five years.

06 From twenty-five to thirty years.

07 From thirty-one to thirty-five years.

08 From thirty-six to forty years.

09 More than forty years.

9. In which of the following CNSPs (Communities of National Security Partners) have you worked previously? (PLEASE SELECT ALL THAT APPLY).

01 Diplomacy

02 Intelligence/Information

03 Military

04 Finance

05 Homeland Security

06 Law Enforcement

95 Other (SPECIFY: \_\_\_\_\_)

(RANDOMIZE ORDER THE FOLLOWING SERIES ARE ASKED: Q10, Q11, Q12, Q13, Q14, Q15, Q16) (SHOW INTRODUCTORY SENTENCE ON THE SAME SCREEN.)

The following questions are related to your perception of internal communication as they relate to information sharing among CNSPs. In this case, internal communication includes statuses, executive orders, and directives inherent in the establishment of an organization's assigned mission.

Using a scale of 1 to 6, where 1 means "strongly disagree" and 6 means "strongly agree," please rate your agreement with the statement

**I have a good understanding of the internal communications that govern information sharing...** (SHOW SCROLL OVER DEFINITION FOR INTERNAL COMMUNICATION. RANDOMIZE ATTRIBUTES. KEEP IN SAME ORDER FOR THE REST OF THE SURVEY.)

	Strongly disagree					Strongly agree
10. within my organization	01	02	03	04	05	06
11. with the Diplomacy CNSP	01	02	03	04	05	06
12. with the Intelligence/ Information CNSP	01	02	03	04	05	06
13. with the Military CNSP	01	02	03	04	05	06
14. with the Finance CNSP	01	02	03	04	05	06
15. with the Homeland Security CNSP	01	02	03	04	05	06
16. with the Law Enforcement CNSP	01	02	03	04	05	06

**My perception is that the internal communications of my organization promotes information sharing...** (Using the same 6-point scale, where 1 means "strongly disagree" and 6 means "strongly agree," please rate your agreement with the statements below.) (SHOW SCROLL OVER DEFINITION FOR INTERNAL COMMUNICATION.)

	Strongly disagree					Strongly agree
17. within my organization	01	02	03	04	05	06
18. with the Diplomacy CNSP	01	02	03	04	05	06
19. with the Intelligence/ Information CNSP	01	02	03	04	05	06
20. with the Military CNSP	01	02	03	04	05	06
21. with the Finance CNSP	01	02	03	04	05	06
22. with the Homeland Security CNSP	01	02	03	04	05	06
23. with the Law Enforcement CNSP	01	02	03	04	05	06

These next few questions ask about your perceptions of organizational culture and how it relates to information sharing among CNSPs. The word “culture” includes the written and unwritten rules and guidelines for your organization within which everyone must operate to achieve successful mission accomplishment.

Using a scale of 1 to 6, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statements below.

**I have a good understanding of information-sharing culture...** (SHOW SCROLL OVER DEFINITION FOR CULTURE.

	Strongly disagree					Strongly agree
24. within my organization	01	02	03	04	05	06
25. with the Diplomacy CNSP	01	02	03	04	05	06
26. with the Intelligence/ Information CNSP	01	02	03	04	05	06
27. with the Military CNSP	01	02	03	04	05	06
28. with the Finance CNSP	01	02	03	04	05	06
29. with the Homeland Security CNSP	01	02	03	04	05	06
30. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that my organization’s culture promotes information sharing...** (SHOW SCROLL OVER DEFINITION FOR POLICIES.

	Strongly disagree					Strongly agree
31. within my organization	01	02	03	04	05	06
32. with the Diplomacy CNSP	01	02	03	04	05	06
33. with the Intelligence/ Information CNSP	01	02	03	04	05	06
34. with the Military CNSP	01	02	03	04	05	06
35. with the Finance CNSP	01	02	03	04	05	06
36. with the Homeland Security CNSP	01	02	03	04	05	06
37. with the Law Enforcement CNSP	01	02	03	04	05	06

Now, we are going to ask you several questions about your perceptions of technology and how technology relates to information sharing among CNSPs. In this case, technology includes the hardware, software, data standards, and security classification of systems used to exchange data. Using a scale of 1 to 6, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statements below

**I have a good understanding of information technology...**

	Strongly disagree					Strongly agree
38. within my organization	01	02	03	04	05	06
39. with the Diplomacy CNSP	01	02	03	04	05	06
40. with the Intelligence/ Information CNSP	01	02	03	04	05	06
41. with the Military CNSP	01	02	03	04	05	06
42. with the Finance CNSP	01	02	03	04	05	06
43. with the Homeland Security CNSP	01	02	03	04	05	06

44. with the Law Enforcement CNSP	01	02	03	04	05	06
-----------------------------------	----	----	----	----	----	----

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statements below.

**My perception is that my organization’s Information Technology (IT) hardware is compatible...** (SHOW SCROLL OVER DEFINITION FOR COMPATIBLE)

	Strongly disagree					Strongly agree	Don't Know
45. within my organization	01	02	03	04	05	06	99
46. with the Diplomacy CNSP	01	02	03	04	05	06	99
47. with the Intelligence/ Information CNSP	01	02	03	04	05	06	99
48. with the Military CNSP	01	02	03	04	05	06	99
49. with the Finance CNSP	01	02	03	04	05	06	99
50. with the Homeland Security CNSP	01	02	03	04	05	06	99
51. with the Law Enforcement CNSP	01	02	03	04	05	06	99

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that my organization’s Information Technology (IT) software is compatible...** (SHOW SCROLL OVER DEFINITION FOR COMPATIBLE)

	Strongly disagree					Strongly agree	Don't Know
52. within my organization	01	02	03	04	05	06	99
53. with the Diplomacy CNSP	01	02	03	04	05	06	99
54. with the Intelligence/ Information CNSP	01	02	03	04	05	06	99
55. with the Military CNSP	01	02	03	04	05	06	99

56. with the Finance CNSP	01	02	03	04	05	06	99
57. with the Homeland Security CNSP	01	02	03	04	05	06	99
58. with the Law Enforcement CNSP	01	02	03	04	05	06	99

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that the security classification of my organization’s IT systems is compatible...** (SHOW SCROLL OVER DEFINITION FOR SECURITY CLASSIFICATION OF SYSTEMS. SHOW SCROLL OVER DEFINITION FOR COMPATIBLE.)

	Strongly disagree					Strongly agree	Don't Know
59. within my organization	01	02	03	04	05	06	99
60. with the Diplomacy CNSP	01	02	03	04	05	06	99
61. with the Intelligence/ Information CNSP	01	02	03	04	05	06	99
62. with the Military CNSP	01	02	03	04	05	06	99
63. with the Finance CNSP	01	02	03	04	05	06	99
64. with the Homeland Security CNSP	01	02	03	04	05	06	99
65. with the Law Enforcement CNSP	01	02	03	04	05	06	99

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement.

	Strongly disagree					Strongly agree	Don't Know
66. within my organization	01	02	03	04	05	06	99
67. with the Diplomacy CNSP	01	02	03	04	05	06	99
68. with the Intelligence/ Information CNSP	01	02	03	04	05	06	99

69. with the Military CNSP	01	02	03	04	05	06	99
70. with the Finance CNSP	01	02	03	04	05	06	99
71. with the Homeland Security CNSP	01	02	03	04	05	06	99
72. with the Law Enforcement CNSP	01	02	03	04	05	06	99

**My perception is that my organization receives information produced by the following CNSPs all of the time, most of the time, some of the time, rarely, only on request or never?**

	All of the time	Most of the time	Some of the time	Rarely	Only on request	Never	Don't Know
73. within my organization	06	05	04	03	02	01	99
74. with the Diplomacy CNSP	06	05	04	03	02	01	99
75. with the Intelligence/ Information CNSP	06	05	04	03	02	01	99
76. with the Military CNSP	06	05	04	03	02	01	99
77. with the Finance CNSP	06	05	04	03	02	01	99
78. with the Homeland Security CNSP	06	05	04	03	02	01	99
79. with the Law Enforcement CNSP	06	05	04	03	02	01	99

These next few questions ask about your perceptions of cultural encouragement and how this relates to information sharing among CNSPs. "Culture" refers to the observed, learned, and nurtured behavior within an organization by both leaders and colleagues. Some examples may include encouragement to: attend conferences and seminars, conduct site visits, learn about other organizations, host analytical exchanges, create bilateral or multilateral agreements, and include the degree of information sharing exhibited on performance evaluations.

Using a scale of 1 to 6, where 1 means "strongly disagree" and 6 means "strongly agree," please rate your agreement with the statement



**My perception is that the leadership of my organization encourages information sharing...**

	Strongly disagree					Strongly agree
80. within my organization	01	02	03	04	05	06
81. with the Diplomacy CNSP	01	02	03	04	05	06
82. with the Intelligence/ Information CNSP	01	02	03	04	05	06
83. with the Military CNSP	01	02	03	04	05	06
84. with the Finance CNSP	01	02	03	04	05	06
85. with the Homeland Security CNSP	01	02	03	04	05	06
86. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that my colleagues in my organization encourage information sharing...**

	Strongly disagree					Strongly agree
87. within my organization	01	02	03	04	05	06
88. with the Diplomacy CNSP	01	02	03	04	05	06
89. with the Intelligence/ Information CNSP	01	02	03	04	05	06
90. with the Military CNSP	01	02	03	04	05	06
91. with the Finance CNSP	01	02	03	04	05	06
92. with the Homeland Security CNSP	01	02	03	04	05	06
93. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that my organization understands the mission needs of organizations in the following CNSPs (Communities of National Security Partners)**

	Strongly disagree					Strongly agree
94. within my organization	01	02	03	04	05	06
95. with the Diplomacy CNSP	01	02	03	04	05	06
96. with the Intelligence/ Information CNSP	01	02	03	04	05	06
97. with the Military CNSP	01	02	03	04	05	06
98. with the Finance CNSP	01	02	03	04	05	06
99. with the Homeland Security CNSP	01	02	03	04	05	06
100. with the Law Enforcement CNSP	01	02	03	04	05	06

(SHOW INTRODUCTORY SENTENCE AND 14A-E ON THE SAME SCREEN.)

The next set of questions is about your perceptions of four levels of trust among CNSPs and how these relate to information sharing. Trust among CNSPs includes the expectation that members will act fairly, with self-discipline, wisdom, and perseverance.

Using a scale of 1 to 6, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement. **My perception is that information my organization shares is safeguarded/protected properly in the following CNSPs (Communities of National Security Partners) (SHOW SCROLL OVER DEFINITION OF SAFEGUARDING/PROTECTING.**

	Strongly disagree					Strongly agree
101. within my organization	01	02	03	04	05	06
102. with the Diplomacy CNSP	01	02	03	04	05	06
103. with the Intelligence/ Information CNSP	01	02	03	04	05	06
104. with the Military CNSP	01	02	03	04	05	06
105. with the Finance CNSP	01	02	03	04	05	06
106. with the Homeland Security CNSP	01	02	03	04	05	06
107. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that information my organization shares is analyzed appropriately by members in the following CNSPs (Communities of National Security Partners) (SHOW SCROLL OVER DEFINITION OF ANALYZING.**

	Strongly disagree					Strongly agree
108. within my organization	01	02	03	04	05	06
109. with the Diplomacy CNSP	01	02	03	04	05	06
110. with the Intelligence/ Information CNSP	01	02	03	04	05	06
111. with the Military CNSP	01	02	03	04	05	06
112. with the Finance CNSP	01	02	03	04	05	06
113. with the Homeland Security CNSP	01	02	03	04	05	06
114. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that information my organization shares is interpreted appropriately by members in the following CNSPs (Communities of National Security Partners)**

	Strongly disagree					Strongly agree
115. within my organization	01	02	03	04	05	06
116. with the Diplomacy CNSP	01	02	03	04	05	06
117. with the Intelligence/ Information CNSP	01	02	03	04	05	06
118. with the Military CNSP	01	02	03	04	05	06
119. with the Finance CNSP	01	02	03	04	05	06
120. with the Homeland Security CNSP	01	02	03	04	05	06
121. with the Law Enforcement CNSP	01	02	03	04	05	06

Using the same 6-point scale, where 1 means “strongly disagree” and 6 means “strongly agree,” please rate your agreement with the statement

**My perception is that information my organization shares is used appropriately by members in the following CNSPs (Communities of National Security Partners) (SHOW SCROLL OVER DEFINITION OF USING.**

	Strongly disagree					Strongly agree
122. within my organization	01	02	03	04	05	06
123. with the Diplomacy CNSP	01	02	03	04	05	06
124. with the Intelligence/ Information CNSP	01	02	03	04	05	06
125. with the Military CNSP	01	02	03	04	05	06
126. with the Finance CNSP	01	02	03	04	05	06
127. with the Homeland Security CNSP	01	02	03	04	05	06
128. with the Law Enforcement CNSP	01	02	03	04	05	06

INTRODUCTION: In these last few questions, please rank several attributes using a sliding scale.

**Please slide the bar for each of the following attributes to indicate the degree to which they hinder information sharing within your primary CNSP relative to the other attributes. Bars further to the left mean they are less of a hindrance, and bars further to the right mean they are more of a hindrance. (RANDOMIZE ATTRIBUTES. PROGRAM AS SLIDER SCALE)**

ATTRIBUTE	RANK
129. Internal communication (SHOW SCROLL OVER DEFINITION OF INTERNAL COMMUNICATION.)	
130. Policy (SHOW SCROLL OVER DEFINITION OF POLICIES.)	
131. Information Technology (IT) hardware	
132. Information Technology (IT) software	
133. Information Technology (IT) data standards	
134. Information Technology (IT) system security classification (SHOW SCROLL OVER DEFINITION OF SECURITY CLASSIFICATION OF SYSTEMS.)	
135. Culture - resistance from leaders (SHOW SCROLL OVER DEFINITION OF CULTURAL ENCOURAGEMENT.)	
136. Culture - resistance from peers (SHOW SCROLL OVER DEFINITION OF CULTURAL ENCOURAGEMENT.)	
137. Trust - expectations of lax safeguarding/ protecting of intelligence/information (SHOW SCROLL OVER DEFINITION OF SAFEGUARDING/PROTECTING.)	
138. Trust - expectations of inaccurate analysis of intelligence/information (SHOW SCROLL OVER DEFINITION OF ANALYZING.)	
139. Trust - expectations of inaccurate interpretation of intelligence/information (SHOW SCROLL OVER DEFINITION OF INTERPRETATION.)	
140. Trust - expectations of improper use of intelligence/information (SHOW SCROLL OVER DEFINITION OF USING.)	

**Please slide the bar for each of the following attributes to indicate the degree to which they aid information sharing within your primary CNSP relative to the other attributes. Bars further to the left mean they are less of an aid, and bars further to the right mean they are more of an aid. (RANDOMIZE ATTRIBUTES IN THE SAME PROGRAM AS SLIDER SCALE.**

ATTRIBUTE	RANK
141. Internal communication (SHOW SCROLL OVER DEFINITION OF INTERNAL COMMUNICATION.)	
142. Policy (SHOW SCROLL OVER DEFINITION OF POLICIES.)	
143. Information Technology (IT) hardware	
144. Information Technology (IT) software	
145. Information Technology (IT) data standards	
146. Information Technology (IT) system security classification (SHOW SCROLL OVER DEFINITION OF SECURITY CLASSIFICATION OF SYSTEMS.)	
147. Culture - resistance from leaders (SHOW SCROLL OVER DEFINITION OF CULTURAL ENCOURAGEMENT.)	
148. Culture - resistance from peers (SHOW SCROLL OVER DEFINITION OF CULTURAL ENCOURAGEMENT.)	
149. Trust - expectations of lax safeguarding/ protecting of intelligence/information (SHOW SCROLL OVER DEFINITION OF SAFEGUARDING/PROTECTING.)	
150. Trust - expectations of inaccurate analysis of intelligence/information (SHOW SCROLL OVER DEFINITION OF ANALYZING.)	
151. Trust - expectations of inaccurate interpretation of intelligence/information (SHOW SCROLL OVER DEFINITION OF INTERPRETATION.)	
152. Trust - expectations of improper use of intelligence/information (SHOW SCROLL OVER DEFINITION OF USING.)	

Thank you for your participation in this study. There are no identifiers attached to this survey, and the data will be disposed of three years following the completion of the survey.

## Appendix E Electronic Informed Consent:

Dear Participant, my name is Melanie Duncan, and I am a doctoral program student from the University of Phoenix, completing a DM/IST degree. I am conducting a research study entitled *Right People Right Plan: Correlation Study of Communication Among National Security Partners*. Thank you for considering participating in this research study. Your taking part in this study is done so on a voluntary basis. The results of this research study may be published; however, no personal information will be collected. If you have any questions concerning this research study, please e-mail me at [mduncan01@email.phoenix.edu](mailto:mduncan01@email.phoenix.edu) or call me at (757) 679-1075. At any time, you are welcome to discuss or ask questions about this study.

### Purpose of the Research

The purpose of this quantitative study is to examine the relationship of interagency communication, and information sharing among the community of national security partners (CNSP) using internal communication, organizational culture, leadership, and technology preparedness to determine the degree of interagency communication perceived by CNSP. For this study, the Community of National Security Partners (CNSP) is comprised of 10 federal departments overseen by the Government Accountability Office [Commerce Department, Defense Department, Department of Energy, Federal Deposit Insurance Corporation, Homeland Security Department, Justice Department, Office of the Director of National Intelligence, State Department, Transportation Department, and Treasury Department of Defense], public and private sector financial partners and the law enforcement community.

Two principal reasons for this evaluation are the continued terrorist attacks since September 11, 2001, and the lack of literature on the effectiveness of information sharing among national security partners as it relates to terrorist funding post-9/11 (McCormack, 2009). Data



collected from this study may be used to measure the degree to which relationship collaboration between multiple organizations may prove beneficial in increasing information sharing across multiple levels to combat terrorist financing.

## Procedures

Your participation in this study will involve answering an electronic survey, and your participation in the study is voluntary. You are asked to complete this survey using a link to the survey housed using Microsoft Forms. The survey consists of 142 content questions and nine 9 demographic questions. Upon completion of the survey, I may have some follow up questions to your initial responses. The follow-up information and initial responses will be analyzed to determine the benefits of interagency communication to prevent terrorist attacks.

### Time Duration of the Procedures and Study

Your involvement will last no more than approximately 30 minutes, but you should plan to take as much time as necessary to answer each question fully.

### Discomforts and Risks

You are not at risk for any known potentially harmful effects beyond what is expected in everyday experience.

### Potential Benefits

There are no specific benefits for taking part in this research study. The results of this research may lead to new ways of looking at collaboration among national security partners.

### Statement of Confidentiality

Your participation in this research is confidential. No personally-identifying information will be collected from you during the survey, and demographics will be coded alphanumerically. Your research data will be reviewed, analyzed, and kept in a secured database accessible only to me on a password-protected external hard drive. In the event of any publication or presentation resulting from the research, there will be no personally identifiable information to be shared. Upon completion of this study, survey information in the form of messages and notes will be

kept for the minimum retention time of three years in a locked fireproof safe at the residence of the PI of the study. At the appropriate time in accordance with the minimum retention time data will be destroyed via shredding by a local shredding company, and data from the password-protected external hard drive will be expunged by the PI of the study.

#### Costs for Participation

There is no cost to you for your voluntary participation in this study, and you will not lose any legal rights by consenting to participate.

#### Compensation for Participation

You will not receive any compensation (monetary or otherwise) for your voluntary participation in this study.

#### Research Funding

The institution and investigator are not receiving any funding in support of this research.

#### Voluntary Participation

Taking part in this research study is entirely voluntary. You may, at any time, withdraw your consent to participate by sending an e-mail to the principal investigator (PI) that documents that you no longer wish to participate in the study. There will be no penalty or loss of benefits to you, should you choose to cease participation.

## Contact Information for Questions or Concerns

As a participant in this study, you have the right to ask any questions you may have about this study at any time. If you have questions, complains, or concerns contact Melanie Duncan via e-mail at [mduncan01@e-mail.phoenix.edu](mailto:mduncan01@e-mail.phoenix.edu) or by telephone at (757) 679-1075.

If you have questions regarding your rights as a research participant or you have concerns or general questions about the research, contact the research subjects protection advocate located at the University of Phoenix's Subjects Protection Office at 866-766-0766. You may also call this number if you cannot reach the research team or wish to talk to someone else.

Please read and acknowledge consent as follows:

“By clicking I consent, you acknowledge that you understand the nature of the study, the potential risks to you as a participant, and the means by which your identity will be kept confidential. You also indicate that you are 18 years old or older and that you give your permission to voluntarily serve as a participant in the study described”.

## Appendix F Confidentiality Statement



RIGHT PEOPLE RIGHT PLAN: CORRELATION STUDY OF COMMUNICATION AMONG  
NATIONAL SECURITY PARTNERS  
Melanie Y. Duncan

### CONFIDENTIALITY STATEMENT

As a researcher working on the above research study at the University of Phoenix, I understand that I must maintain the confidentiality of all information concerning all research participants as required by law. Only the University of Phoenix Institutional Review Board may have access to this information. "Confidential Information" of participants includes but is not limited to: names, characteristics, or other identifying information, questionnaire scores, ratings, incidental comments, other information accrued either directly or indirectly through contact with any participant, and/or any other information that by its nature would be considered confidential. In order to maintain the confidentiality of the information, I hereby agree to refrain from discussing or disclosing any Confidential Information regarding research participants, to any individual who is not part of the above research study or in need of the information for the expressed purposes on the research program. This includes having a conversation regarding the research project or its participants in a place where such a discussion might be overheard; or discussing any Confidential Information in a way that would allow an unauthorized person to associate (either correctly or incorrectly) an identity with such information. I further agree to store research records whether paper, electronic or otherwise in a secure locked location under my direct control or with appropriate safe guards. I hereby further agree that if I have to use the services of a third party to assist in the research study, who will potentially have access to any Confidential Information of participants, that I will enter into an agreement with said third party prior to using any of the services, which shall provide at a minimum the confidential obligations set forth herein. I agree that I will immediately report any known or suspected breach of this confidentiality statement regarding the above research project to the University of Phoenix, Institutional Review Board.

  
Signature of Researcher

Melanie Y. Duncan \_\_\_\_\_  
Printed Name Date

09-02-2019  
Date

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Printed Name Date

\_\_\_\_\_  
Date

## Appendix G: Legislation, Acronyms, Additional Tables

### Legislation

#### **Panhandle. Beg for money from a stranger. (Panhandle, 2019)**

**Anti-Drug Abuse Act.** The Anti-Drug Abuse Act of 1988 required verification of identity purchasers of monetary instruments over \$3,000 ("United States Department of the Treasury Financial Crimes Enforcement Network", n.d., accessed August 13, 2018).

**The Annunzio-Wylie Money Laundering Act, 1992).** The Annunzio-Wylie Money Laundering Act (also known as the Money Laundering Enforcement Amendments of 1991) authorizes the appointment of a conservator for a depository institution convicted of money laundering offenses (U.S. Congress, 1992).

**The Bank Secrecy Act of 1970.** The Bank Secrecy Act of 1970 is “to prevent banks and other financial service providers from being used as intermediaries for, or to hide the transfer or deposit of money derived from, criminal activity, and mandated paper trail creation for financial records involving large currency amounts (U.S.C. 31 Chap 21 §5312).

**Currency and Foreign Transactions Reporting Act of 1970 (Declaration of Purpose).** Referred to as the Bank Secrecy Act and established by the 91st Congress, the Currency and Foreign Transactions Reporting Act of 1970 was the first money laundering law enacted in the United States (U.S. Congress, 1970).

**The Money Laundering Control Act, 1986.** According to FinCEN, the money laundering control act of 1986 established money laundering as a federal crime.

**The Money Laundering and Financial Crimes Strategy Act 1998.** This act required banking agencies to develop anti-money laundering training for examiners. (U.S. Congress, 1998).

**The Money Laundering Suppression Act, 1994.** Streamlined currency transaction reporting (CTR) exemption process that required Money Services Business (MSB) to be registered by an owner or controlling person of MSB and recommended states adopt uniform MSB laws (U.S. Congress, 1994).

Table 15  
Acronym List

AML/CFT	Anti-money laundering/ Counter Terrorist Financing
BSA	Bank Secrecy Act
CCI	Customer-Centric Innovation
CIA	Central Intelligence Agency
CNSP	Community of National Security Partners
CRM	Customer Relationship Management
CSF	Critical Success Factor
CTF	Counter-terrorist Finance
CTR	Currency transaction reporting
DBMS	Database Management System
DHS	Department of Homeland Security
DNFBP	Dealers in Non-Financial Businesses and Professions
FATF	Financial Action Task Force
FBI	Federal Bureau of Investigation
FINCEN	Financial Crime Enforcement Network
FISMA	Federal Information Security Management Act
GAO	Government Accountability Office
HIFCA	High Intensity Money Laundering and Related Financial Crime Area
HSBC	Hong Kong and Shanghai Banking Corporation
IACP	International Association of Chiefs of Police
IFF	Illicit Financial Flows
IMF	International Monetary Fund
IT	Information Technology
IVTS	Informal Value Transfer Systems
MSB	Money Services Business
MIT	Massachusetts Institute of Technology
NARA	National Archives Records Administration
NASD	National Association of Security Dealers, Inc.
PI	Principal Investigator
SAR	Suspicious Activity Report
START	Study of Terrorism and Responses to Terrorism
STS	Socio-technical Systems
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TCR	Total Customer Relationship
TFTP	Terrorist Finance Tracking Program
TMS	Transactive Memory Service
URL	Uniform Resource Locator
USAPATRIOT	USA Patriot Act
UNSCR	UN Security Council Resolutions



Table 16  
Culture Comparison

Group	Influence of mainstream culture	Influence of ethnic/group culture	Value and Conflict	Disadvantage to teams	Collaborative advantage to teams
African American	Breeds distrust based on inconsistent treatment. Dichotomous.	High level of distrust. Member of a group. Trust is earned. Holistic.	Often forthright and conflict can occur from probing questions.	Truth predicates peace. Socially vulnerable.	Believe in unifying and problem-solving. Respect for boundaries.
Hispanic	Loyalty is institutional, and everyone is free to speak. Individualistic.	Loyalty is personal. The boss is the one to speak. Collectivistic.	Not often self-promoting of experience or an individualistic view in the workplace.	Spontaneous. Friends and family come first. Initial low trust of others.	The group counts first. Works best when a role is determined for them.
South Asian	Functional authority and issue-oriented. Communicates directly and brainstorms. Rule driven. Egalitarian.	Believe in prescribed roles with no deviation. Relationship driven. Hierarchical	Values education more than experience. Brainstorming is a challenge because of prescribed roles.	Does not see the benefit of learning from mistakes- believes in getting it right the first time, all the time.	View coaching as a strong leadership skill and believes in the position authority.
Arab/Middle Eastern	Democratic leadership style. A high degree of impartiality.	Authoritarian and top-down approach to leadership. Believes in favoritism.	Big on social interaction. Loyal to superior.	Passionate about their ideas. Decisions are not impartial.	Peer coaching, loyalty when superior buy-in is evident.
Russian	Social lubricant. Somewhat direct. Egalitarian. Individualistic.	Intense. Very direct. Hierarchical. Against individualism	Critical and gives unsolicited advice. Punishes for mistakes.	Married to their ideas without deviation. Argues to win.	Researches an ideal exhaustively. Can endure hardship.
Asian/Pacific Islander	Initiative speaking. Legalistic Egalitarian	Role driven. Believes in deliberate speaking. Hierarchical Paternalistic.	Perfectionist. Not self-determining. Outsiders must become a trusted insider for work team competence.	Learns from mistakes and believes in constant practice. Trust is crucial to success within a team.	Believes in group harmony.
American Indian	Egalitarian Individualistic	Paternalistic consults with tribal members	Mentoring is key to success.	Team worth is often invisible due to mainstream stereotypes.	Observes group roles and structure.
Gender	Male: Compete, separation Female: Connect, relationship	Male: Linear conversation Female: Narrative	Male: minimize risk, role clarification  Female: Struggle for visibility and a voice.	Disadvantage comes when the two genders fail to include one another on par.	Ability to give multiple approaches to problem- solving from collaboration.
U.S. White males	Individual, trusting	Does not see group identification first.	Comfortable with an established network and like ideology.	More comfortable with prior experiences and past team	Trusted for collaboration and creative interaction

Note: From “Corporate Tribalism: White Men/White Women and Cultural Diversity at Work” by T. Kochman and J. Mavrelis, 2009, Chicago: University of Chicago Press. Copyright 2009 by University of Chicago Press. Adapted with permission (see Appendix A).

Table 17  
*Knowledge management*

Knowledge management, technology, and leadership for team performance				
Category	Characteristics	Technology	Advantage	Disadvantage
Knowledge Management (KM)	Began with early technology systems (Davenport, 2005).	Information retrieval and SharePoint	Ease in accessibility for team collaboration regardless of location and time zone.	Difficult to capture cross-culture effectiveness (Harris and Moran, 1987).
Socio-technical Systems (STS)	Relates to an exchange of relationships between people, products, processes, and projects (Tung and Yuan, 2010).	The people, processes, and projects function as the machine to move toward innovation.	Classifies knowledge management as socio-technical (Tung and Yuan, 2010). Interacts well with leadership theories.	Must align with organization culture for productivity.
Leadership theories (LT)	Motivational approach Ability of the leader to adjust his or her style based on the readiness of the follower to complete tasks (Wren, 1995). Platform for human capital development in knowledge sharing.	Virtual collaboration and a platform for empowering teams using existing LT approaches to build virtual leadership.	Hermeneutics aspect provides a platform for building trust with distributed teams. Collaborates with emotional intelligence (EI) for social effectiveness among distributed teams (Mayer, Salovey, and Caruso, 2008).	Ability exists to avoid responsibilities in distributed teams (Laszlo, Laszlo, and Johnsen, 2009).
Postmodern philosophy (PM)	A cross-cultural and legitimization of radically changing an accepted perception or value (Lyotard, 1984).	Assists the cultural influence for enhanced performance and productivity.	Systems improvement and reinvention for team dynamics based on self-reflection and past performance.	Constantly evolving like technology and the need for frequent adaptations are possible.
Justification	KM for communication and collaboration.	STS for relation exchange and innovation for build team performance.	LT for open source network.	PM for accepting and adapting to shifts in technology and team interaction

Note: “Team performance and technology” by M. Y. Duncan, Unpublished manuscript, p. 2-3. Unpublished manuscript. University of Phoenix.



## Appendix H: Statistical Analysis of Sharing

Table 18: Independent Samples T-test for Questions 9 – 24

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
UICGIS1	Equal variances assumed	.491	.506	1.155	7	.286	.66667	.57735	-.69855	2.03188
	Equal variances not assumed			1.348	6.142	.225	.66667	.49441	-.53637	1.86970
UICGIS2	Equal variances assumed	9.858	.016	.607	7	.563	.50000	.82375	-	2.44787
	Equal variances not assumed			.785	6.995	.458	.50000	.63683	1.00608	2.00608
UICGIS3	Equal variances assumed	9.858	.016	1.012	7	.345	.83333	.82375	-	2.78120
	Equal variances not assumed			1.309	6.995	.232	.83333	.63683	1.11454	2.33941
UICGIS4	Equal variances assumed	1.037	.342	.882	7	.407	1.00000	1.13389	-	3.68123
	Equal variances not assumed			1.074	6.680	.320	1.00000	.93095	1.68123	3.22292
UICGIS5	Equal variances assumed	.583	.470	.424	7	.685	.16667	.39340	1.22292	1.09690

	Equal variances not assumed			.415	3.890	.700	.16667	.40139	-.96031	1.29364
UICGIS6	Equal variances assumed	7.000	.033	1.323	7	.227	1.00000	.75593	-.78749	2.78749
	Equal variances not assumed			1.936	5.000	.111	1.00000	.51640	-.32744	2.32744
UICGIS7	Equal variances assumed	4.148	.081	.607	7	.563	.50000	.82375	1.44787	2.44787
	Equal variances not assumed			.785	6.995	.458	.50000	.63683	1.00608	2.00608
PICOIS1	Equal variances assumed	2.652	.147	- 1.155	7	.286	-.66667	.57735	- 2.03188	.69855
	Equal variances not assumed			-.933	2.621	.429	-.66667	.71492	- 3.13954	1.80620
PICOIS2	Equal variances assumed	.661	.443	.152	7	.883	.16667	1.09653	- 2.42622	2.75955
	Equal variances not assumed			.183	6.560	.860	.16667	.90982	- 2.01431	2.34764
PICOIS3	Equal variances assumed	2.046	.196	.611	7	.561	.66667	1.09109	- 1.91335	3.24668
	Equal variances not assumed			.830	6.586	.435	.66667	.80277	- 1.25607	2.58940
PICOIS4	Equal variances assumed	3.190	.117	.447	7	.668	.50000	1.11803	- 2.14373	3.14373

	Equal variances not assumed			.610	6.536	.563	.50000	.81989	- 1.46702	2.46702
PICOIS5	Equal variances assumed	.123	.736	-.764	7	.470	-.33333	.43644	- 1.36534	.69867
	Equal variances not assumed			-.791	4.476	.469	-.33333	.42164	- 1.45653	.78986
PICOIS6	Equal variances assumed	6.770	.035	.760	7	.472	.83333	1.09653	- 1.75955	3.42622
	Equal variances not assumed			1.112	5.000	.317	.83333	.74907	- 1.09222	2.75889
PICOIS7	Equal variances assumed	3.283	.113	.637	7	.544	.66667	1.04654	- 1.80800	3.14133
	Equal variances not assumed			.933	5.000	.394	.66667	.71492	- 1.17109	2.50443
GUISC1	Equal variances assumed	1.423	.272	.683	7	.516	.66667	.97590	- 1.64097	2.97430
	Equal variances not assumed			.791	6.013	.459	.66667	.84327	- 1.39568	2.72901
GUISC2	Equal variances assumed	1.697	.234	.326	7	.754	.33333	1.02353	- 2.08694	2.75360
	Equal variances not assumed			.363	5.453	.730	.33333	.91894	- 1.97103	2.63769
GUISC3	Equal variances assumed	7.860	.026	.701	7	.506	.66667	.95119	- 1.58254	2.91587

	Equal variances not assumed			.933	6.843	.383	.66667	.71492	- 1.03172	2.36506
GUISC4	Equal variances assumed	11.083	.013	.475	7	.649	.50000	1.05221	- 1.98808	2.98808
	Equal variances not assumed			.643	6.659	.542	.50000	.77817	- 1.35937	2.35937
GUISC5	Equal variances assumed	2.664	.147	.552	7	.598	.50000	.90633	- 1.64312	2.64312
	Equal variances not assumed			.728	6.914	.491	.50000	.68718	- 1.12904	2.12904
GUISC6	Equal variances assumed	7.860	.026	.701	7	.506	.66667	.95119	- 1.58254	2.91587
	Equal variances not assumed			.933	6.843	.383	.66667	.71492	- 1.03172	2.36506
GUISC7	Equal variances assumed	6.138	.042	.549	7	.600	.66667	1.21499	- 2.20632	3.53965
	Equal variances not assumed			.756	6.364	.477	.66667	.88192	- 1.46176	2.79510
POCPIS1	Equal variances assumed	.123	.736	-.764	7	.470	-.33333	.43644	- 1.36534	.69867
	Equal variances not assumed			-.791	4.476	.469	-.33333	.42164	- 1.45653	.78986
POCPIS2	Equal variances assumed	.333	.582	.000	7	1.000	.00000	.92582	- 2.18922	2.18922



	Equal variances not assumed			.000	5.714	1.000	.00000	.81650	- 2.02236	2.02236
POCPIS3	Equal variances assumed	2.664	.147	.552	7	.598	.50000	.90633	- 1.64312	2.64312
	Equal variances not assumed			.728	6.914	.491	.50000	.68718	- 1.12904	2.12904
POCPIS4	Equal variances assumed	1.423	.272	.683	7	.516	.66667	.97590	- 1.64097	2.97430
	Equal variances not assumed			.791	6.013	.459	.66667	.84327	- 1.39568	2.72901
POCPIS5	Equal variances assumed	.164	.698	-.333	7	.749	-.16667	.50000	- 1.34898	1.01565
	Equal variances not assumed			-.368	5.310	.727	-.16667	.45338	- 1.31193	.97860
POCPIS6	Equal variances assumed	2.664	.147	.552	7	.598	.50000	.90633	- 1.64312	2.64312
	Equal variances not assumed			.728	6.914	.491	.50000	.68718	- 1.12904	2.12904
POCPIS7	Equal variances assumed	3.246	.115	.651	7	.536	.66667	1.02353	- 1.75360	3.08694
	Equal variances not assumed			.877	6.713	.411	.66667	.76012	- 1.14642	2.47975
PGUIT1	Equal variances assumed	1.314	.289	.935	7	.381	1.00000	1.06904	- 1.52789	3.52789

	Equal variances not assumed			1.268	6.627	.248	1.00000	.78881	-.88672	2.88672
PGUIT2	Equal variances assumed	5.600	.050	.764	7	.470	1.00000	1.30931	- 2.09602	4.09602
	Equal variances not assumed			1.061	6.214	.328	1.00000	.94281	- 1.28788	3.28788
PGUIT3	Equal variances assumed	5.110	.058	.843	7	.427	1.16667	1.38444	- 2.10701	4.44034
	Equal variances not assumed			1.083	7.000	.315	1.16667	1.07755	- 1.38134	3.71467
PGUIT4	Equal variances assumed	1.314	.289	.312	7	.764	.33333	1.06904	- 2.19456	2.86122
	Equal variances not assumed			.423	6.627	.686	.33333	.78881	- 1.55339	2.22006
PGUIT5	Equal variances assumed	1.314	.289	.312	7	.764	.33333	1.06904	- 2.19456	2.86122
	Equal variances not assumed			.423	6.627	.686	.33333	.78881	- 1.55339	2.22006
PGUIT6	Equal variances assumed	8.346	.023	.617	7	.556	.83333	1.34960	- 2.35797	4.02464
	Equal variances not assumed			.860	6.155	.422	.83333	.96896	- 1.52322	3.18989
PGUIT7	Equal variances assumed	8.346	.023	.617	7	.556	.83333	1.34960	- 2.35797	4.02464

	Equal variances not assumed			.860	6.155	.422	.83333	.96896	- 1.52322	3.18989
POITH1	Equal variances assumed	.000	1.000	.000	7	1.000	.00000	.65465	- 1.54801	1.54801
	Equal variances not assumed			.000	3.684	1.000	.00000	.68313	- 1.96254	1.96254
POITH2	Equal variances assumed	7.467	.029	1.000	7	.351	1.00000	1.00000	- 1.36462	3.36462
	Equal variances not assumed			1.464	5.000	.203	1.00000	.68313	-7.5604	2.75604
POITH3	Equal variances assumed	.762	.412	1.528	7	.170	1.66667	1.09109	-9.1335	4.24668
	Equal variances not assumed			1.746	5.833	.133	1.66667	.95452	-6.8529	4.01863
POITH4	Equal variances assumed	.164	.698	1.000	7	.351	1.00000	1.00000	- 1.36462	3.36462
	Equal variances not assumed			1.103	5.310	.318	1.00000	.90676	- 1.29053	3.29053
POITH5	Equal variances assumed	.933	.366	-.624	7	.553	-.33333	.53452	- 1.59728	.93061
	Equal variances not assumed			-.707	5.714	.507	-.33333	.47140	- 1.50094	.83428
POITH6	Equal variances assumed	3.246	.115	1.628	7	.147	1.66667	1.02353	-7.5360	4.08694

	Equal variances not assumed			2.193	6.713	.066	1.66667	.76012	-1.4642	3.47975
POITH7	Equal variances assumed	4.262	.078	.927	7	.385	1.16667	1.25831	- 1.80875	4.14209
	Equal variances not assumed			1.282	6.292	.245	1.16667	.90982	- 1.03475	3.36808
POITS1	Equal variances assumed	.778	.407	.000	7	1.000	.00000	.53452	- 1.26394	1.26394
	Equal variances not assumed			.000	2.835	1.000	.00000	.63246	- 2.08084	2.08084
POITS2	Equal variances assumed	.000	1.000	1.080	7	.316	1.33333	1.23443	- 1.58562	4.25229
	Equal variances not assumed			1.085	4.135	.337	1.33333	1.22927	- 2.03622	4.70289
POITS3	Equal variances assumed	2.046	.196	.306	7	.769	.33333	1.09109	- 2.24668	2.91335
	Equal variances not assumed			.415	6.586	.691	.33333	.80277	- 1.58940	2.25607
POITS4	Equal variances assumed	.373	.561	.792	7	.454	.83333	1.05221	- 1.65474	3.32141
	Equal variances not assumed			.892	5.620	.409	.83333	.93393	- 1.48987	3.15654
POITS5	Equal variances assumed	.778	.407	.683	7	.516	.66667	.97590	- 1.64097	2.97430

	Equal variances not assumed			.598	3.025	.592	.66667	1.11555	- 2.86697	4.20030
POITS6	Equal variances assumed	.493	.505	1.748	7	.124	2.16667	1.23924	- .76367	5.09700
	Equal variances not assumed			1.872	4.905	.121	2.16667	1.15710	- .82510	5.15843
POITS7	Equal variances assumed	.549	.483	.921	7	.388	1.33333	1.44749	- 2.08945	4.75611
	Equal variances not assumed			1.000	5.089	.362	1.33333	1.33333	- 2.07607	4.74273
PSCITSC1	Equal variances assumed	.933	.366	.000	7	1.000	.00000	.53452	- 1.26394	1.26394
	Equal variances not assumed			.000	5.714	1.000	.00000	.47140	- 1.16761	1.16761
PSCITSC2	Equal variances assumed	.718	.425	1.821	7	.111	1.50000	.82375	- .44787	3.44787
	Equal variances not assumed			1.964	5.000	.107	1.50000	.76376	- .46331	3.46331
PSCITSC3	Equal variances assumed	2.083	.192	1.695	7	.134	1.33333	.78680	- .52714	3.19381
	Equal variances not assumed			2.169	6.998	.067	1.33333	.61464	- .12015	2.78682
PSCITSC4	Equal variances assumed	1.700	.234	1.581	7	.158	1.83333	1.15984	- .90926	4.57593

	Equal variances not assumed			1.938	6.750	.095	1.83333	.94575	-.41992	4.08659
PSCITSC5	Equal variances assumed	1.217	.306	1.861	7	.105	1.16667	.62678	-.31544	2.64877
	Equal variances not assumed			1.589	2.888	.214	1.16667	.73409	- 1.22157	3.55490
PSCITSC6	Equal variances assumed	2.625	.149	2.084	7	.076	1.83333	.87966	-.24674	3.91341
	Equal variances not assumed			2.314	5.406	.065	1.83333	.79232	-.15819	3.82486
PSCITSC7	Equal variances assumed	.929	.367	1.210	7	.265	1.50000	1.23924	- 1.43034	4.43034
	Equal variances not assumed			1.449	6.474	.194	1.50000	1.03548	-.98945	3.98945
PORIPCNSP1	Equal variances assumed	2.664	.147	.184	7	.859	.16667	.90633	- 1.97646	2.30979
	Equal variances not assumed			.243	6.914	.815	.16667	.68718	- 1.46238	1.79571
PORIPCNSP2	Equal variances assumed	.208	.662	-.588	7	.575	-.83333	1.41842	- 4.18735	2.52069
	Equal variances not assumed			-.514	3.026	.642	-.83333	1.62104	- 5.96700	4.30034
PORIPCNSP3	Equal variances assumed	9.333	.018	-.683	7	.516	-.66667	.97590	- 2.97430	1.64097

	Equal variances not assumed			- 1.000	5.000	.363	-.66667	.66667	- 2.38039	1.04705
PORIPCNSP4	Equal variances assumed	4.846	.064	-.312	7	.764	-.33333	1.06904	- 2.86122	2.19456
	Equal variances not assumed			-.423	6.627	.686	-.33333	.78881	- 2.22006	1.55339
PORIPCNSP5	Equal variances assumed	.139	.721	-.125	7	.904	-.16667	1.33184	- 3.31598	2.98264
	Equal variances not assumed			-.131	4.578	.902	-.16667	1.27584	- 3.53946	3.20612
PORIPCNSP6	Equal variances assumed	7.521	.029	-.155	7	.881	-.16667	1.07460	- 2.70769	2.37435
	Equal variances not assumed			-.210	6.617	.840	-.16667	.79232	- 2.06244	1.72911
PORIPCNSP7	Equal variances assumed	2.431	.163	.718	7	.496	.83333	1.15984	- 1.90926	3.57593
	Equal variances not assumed			.881	6.750	.409	.83333	.94575	- 1.41992	3.08659
PLEIS1	Equal variances assumed	9.333	.018	1.366	7	.214	1.33333	.97590	- -.97430	3.64097
	Equal variances not assumed			2.000	5.000	.102	1.33333	.66667	- -.38039	3.04705
PLEIS2	Equal variances assumed	.663	.442	.894	7	.401	.83333	.93223	- 1.37103	3.03770

	Equal variances not assumed			.955	4.875	.384	.83333	.87242	- 1.42665	3.09331
PLEIS3	Equal variances assumed	9.333	.018	1.366	7	.214	1.33333	.97590	-.97430	3.64097
	Equal variances not assumed			2.000	5.000	.102	1.33333	.66667	-.38039	3.04705
PLEIS4	Equal variances assumed	3.829	.091	1.609	7	.152	1.83333	1.13913	-.86028	4.52695
	Equal variances not assumed			2.200	6.497	.067	1.83333	.83333	-.16855	3.83521
PLEIS5	Equal variances assumed	5.286	.055	1.670	7	.139	1.16667	.69864	-.48535	2.81868
	Equal variances not assumed			2.445	5.000	.058	1.16667	.47726	-.06017	2.39350
PLEIS6	Equal variances assumed	9.333	.018	1.366	7	.214	1.33333	.97590	-.97430	3.64097
	Equal variances not assumed			2.000	5.000	.102	1.33333	.66667	-.38039	3.04705
PLEIS7	Equal variances assumed	7.146	.032	1.326	7	.226	1.16667	.87966	-.91341	3.24674
	Equal variances not assumed			1.941	5.000	.110	1.16667	.60093	-.37806	2.71139
PCEIS1	Equal variances assumed	3.646	.098	1.193	7	.272	.83333	.69864	-.81868	2.48535



	Equal variances not assumed			1.746	5.000	.141	.83333	.47726	-.39350	2.06017
PCEIS2	Equal variances assumed	3.646	.098	.447	7	.668	.50000	1.11803	- 2.14373	3.14373
	Equal variances not assumed			.542	6.632	.605	.50000	.92195	- 1.70485	2.70485
PCEIS3	Equal variances assumed	15.750	.005	1.426	7	.197	1.50000	1.05221	-.98808	3.98808
	Equal variances not assumed			2.087	5.000	.091	1.50000	.71880	-.34772	3.34772
PCEIS4	Equal variances assumed	4.846	.064	1.559	7	.163	1.66667	1.06904	-.86122	4.19456
	Equal variances not assumed			2.113	6.627	.075	1.66667	.78881	-.22006	3.55339
PCEIS5	Equal variances assumed	.773	.409	.683	7	.516	.50000	.73193	- 1.23073	2.23073
	Equal variances not assumed			.859	6.940	.419	.50000	.58214	-.87898	1.87898
PCEIS6	Equal variances assumed	7.521	.029	1.086	7	.314	1.16667	1.07460	- 1.37435	3.70769
	Equal variances not assumed			1.472	6.617	.187	1.16667	.79232	-.72911	3.06244
PCEIS7	Equal variances assumed	24.070	.002	.978	7	.360	1.33333	1.36277	- 1.88911	4.55577

	Equal variances not assumed			1.364	6.137	.220	1.33333	.97753	- 1.04572	3.71239
PMNCNSP1	Equal variances assumed	.000	1.000	.798	7	.451	.50000	.62678	- -.98211	1.98211
	Equal variances not assumed			.745	3.475	.503	.50000	.67082	- 1.47896	2.47896
PMNCNSP2	Equal variances assumed	.000	1.000	-.540	7	.606	-.33333	.61721	- 1.79281	1.12614
	Equal variances not assumed			-.500	3.404	.648	-.33333	.66667	- 2.31932	1.65265
PMNCNSP3	Equal variances assumed	1.540	.255	.218	7	.833	.16667	.76376	- 1.63934	1.97268
	Equal variances not assumed			.176	2.621	.873	.16667	.94575	- 3.10463	3.43797
PMNCNSP4	Equal variances assumed	.000	1.000	.447	7	.668	.50000	1.11803	- 2.14373	3.14373
	Equal variances not assumed			.455	4.286	.671	.50000	1.09798	- 2.46981	3.46981
PMNCNSP5	Equal variances assumed	.848	.388	- 1.366	7	.214	-.66667	.48795	- 1.82049	.48715
	Equal variances not assumed			- 1.085	2.551	.370	-.66667	.61464	- 2.83282	1.49948
PMNCNSP6	Equal variances assumed	.027	.873	.326	7	.754	.33333	1.02353	- 2.08694	2.75360

	Equal variances not assumed			.363	5.453	.730	.33333	.91894	- 1.97103	2.63769
PMNCNSP7	Equal variances assumed	.233	.644	.000	7	1.000	.00000	1.13389	- 2.68123	2.68123
	Equal variances not assumed			.000	6.046	1.000	.00000	.97753	- 2.38747	2.38747
PISGCNSP1	Equal variances assumed	.875	.381	1.528	7	.170	.50000	.32733	-27400	1.27400
	Equal variances not assumed			1.342	3.049	.271	.50000	.37268	-67536	1.67536
PISGCNSP2	Equal variances assumed	.875	.381	-509	7	.626	-.16667	.32733	-.94067	.60734
	Equal variances not assumed			-.447	3.049	.685	-.16667	.37268	- 1.34203	1.00870
PISGCNSP3	Equal variances assumed	2.042	.196	.370	7	.722	.16667	.44987	-.89710	1.23043
	Equal variances not assumed			.277	2.341	.804	.16667	.60093	- 2.08971	2.42305
PISGCNSP4	Equal variances assumed	9.333	.018	.000	7	1.000	.00000	.37796	-.89374	.89374
	Equal variances not assumed			.000	2.000	1.000	.00000	.57735	- 2.48414	2.48414
PISGCNSP5	Equal variances assumed	.875	.381	-509	7	.626	-.16667	.32733	-.94067	.60734

	Equal variances not assumed			-0.447	3.049	.685	-0.16667	.37268	-	1.00870
PISGCNSP6	Equal variances assumed	.000	1.000	.798	7	.451	.50000	.62678	-0.98211	1.98211
	Equal variances not assumed			.745	3.475	.503	.50000	.67082	-	2.47896
									1.47896	
PISGCNSP7	Equal variances assumed	.000	1.000	1.080	7	.316	.66667	.61721	-0.79281	2.12614
	Equal variances not assumed			1.000	3.404	.383	.66667	.66667	-	2.65265
									1.31932	
PISAACNSP1	Equal variances assumed	.000	1.000	1.764	7	.121	.66667	.37796	-0.22708	1.56041
	Equal variances not assumed			1.690	3.684	.172	.66667	.39441	-0.46641	1.79974
PISAACNSP2	Equal variances assumed	.718	.425	.000	7	1.000	.00000	.65465	-	1.54801
	Equal variances not assumed			.000	3.049	1.000	.00000	.74536	-	2.35073
									2.35073	
PISAACNSP3	Equal variances assumed	.848	.388	.683	7	.516	.33333	.48795	-0.82049	1.48715
	Equal variances not assumed			.542	2.551	.631	.33333	.61464	-	2.49948
									1.83282	
PISAACNSP4	Equal variances assumed	.612	.460	.251	7	.809	.16667	.66368	-	1.73603
									1.40270	

	Equal variances not assumed			.222	3.102	.838	.16667	.74907	- 2.17336	2.50669
PISAACNSP5	Equal variances assumed	.583	.470	1.000	7	.351	.50000	.50000	-68231	1.68231
	Equal variances not assumed			.808	2.621	.486	.50000	.61914	- 1.64157	2.64157
PISAACNSP6	Equal variances assumed	.848	.388	.683	7	.516	.33333	.48795	-82049	1.48715
	Equal variances not assumed			.542	2.551	.631	.33333	.61464	- 1.83282	2.49948
PISAACNSP7	Equal variances assumed	.848	.388	.683	7	.516	.33333	.48795	-82049	1.48715
	Equal variances not assumed			.542	2.551	.631	.33333	.61464	- 1.83282	2.49948
PISIACNSP1	Equal variances assumed	2.042	.196	.370	7	.722	.16667	.44987	-89710	1.23043
	Equal variances not assumed			.277	2.341	.804	.16667	.60093	- 2.08971	2.42305
PISIACNSP2	Equal variances assumed	.848	.388	- 1.366	7	.214	-.66667	.48795	- 1.82049	.48715
	Equal variances not assumed			- 1.085	2.551	.370	-.66667	.61464	- 2.83282	1.49948
PISIACNSP3	Equal variances assumed	5.600	.050	-.509	7	.626	-.33333	.65465	- 1.88134	1.21468

	Equal variances not assumed			-0.368	2.232	.745	-0.33333	.90676	- 3.87061	3.20394
PISIACNSP4	Equal variances assumed	7.292	.031	-0.798	7	.451	-0.50000	.62678	- 1.98211	.98211
	Equal variances not assumed			-0.557	2.144	.630	-0.50000	.89753	- 4.12308	3.12308
PISIACNSP5	Equal variances assumed	.848	.388	- 1.366	7	.214	-0.66667	.48795	- 1.82049	.48715
	Equal variances not assumed			- 1.085	2.551	.370	-0.66667	.61464	- 2.83282	1.49948
PISIACNSP6	Equal variances assumed	5.600	.050	-0.509	7	.626	-0.33333	.65465	- 1.88134	1.21468
	Equal variances not assumed			-0.368	2.232	.745	-0.33333	.90676	- 3.87061	3.20394
PISIACNSP7	Equal variances assumed	1.540	.255	-0.218	7	.833	-0.16667	.76376	- 1.97268	1.63934
	Equal variances not assumed			-0.176	2.621	.873	-0.16667	.94575	- 3.43797	3.10463
PISUACNSP1	Equal variances assumed	6.222	.041	.000	7	1.000	.00000	.53452	- 1.26394	1.26394
	Equal variances not assumed			.000	2.410	1.000	.00000	.69921	- 2.56720	2.56720
PISUACNSP2	Equal variances assumed	.711	.427	.350	7	.736	.33333	.95119	- 1.91587	2.58254

	Equal variances not assumed			.466	6.843	.656	.33333	.71492	- 1.36506	2.03172
PISUACNSP3	Equal variances assumed	.007	.934	.849	7	.424	.83333	.98198	- 1.48868	3.15535
	Equal variances not assumed			.928	5.198	.394	.83333	.89753	- 1.44768	3.11435
PISUACNSP4	Equal variances assumed	6.222	.041	.000	7	1.000	.00000	.53452	- 1.26394	1.26394
	Equal variances not assumed			.000	2.410	1.000	.00000	.69921	- 2.56720	2.56720
PISUACNSP5	Equal variances assumed	.000	1.000	-.882	7	.407	-.33333	.37796	- 1.22708	.56041
	Equal variances not assumed			-.845	3.684	.449	-.33333	.39441	- 1.46641	.79974
PISUACNSP6	Equal variances assumed	.027	.873	.651	7	.536	.66667	1.02353	- 1.75360	3.08694
	Equal variances not assumed			.725	5.453	.498	.66667	.91894	- 1.63769	2.97103
PISUACNSP7	Equal variances assumed	.027	.873	.651	7	.536	.66667	1.02353	- 1.75360	3.08694
	Equal variances not assumed			.725	5.453	.498	.66667	.91894	- 1.63769	2.97103

## Reliability

Scale: Independent Variable of Communication (Q9 and Q10)

**Case Processing Summary**

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.884	14

**Item Statistics**

	Mean	Std. Deviation	N
UICGIS1	4.8571	1.11521	35
UICGIS2	3.7429	1.24482	35
UICGIS3	4.0286	1.24819	35
UICGIS4	4.1143	1.45059	35
UICGIS5	4.0000	1.30609	35
UICGIS6	3.9429	1.34914	35
UICGIS7	4.3143	1.30094	35
PICOIS1	4.7429	1.14642	35
PICOIS2	4.0857	1.14716	35
PICOIS3	4.3143	1.23125	35
PICOIS4	4.3143	1.20712	35
PICOIS5	4.5143	1.03955	35
PICOIS6	4.2286	1.23873	35
PICOIS7	4.4286	1.37810	35

Figure 19. *Item Statistics for Communication (Q9 and Q10)*



Table 19

*Cronbach Alpha Results for Communication (Q9 and Q10)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
UICGIS1	54.7714	108.770	.505	.712	.879
UICGIS2	55.8857	105.692	.568	.727	.876
UICGIS3	55.6000	102.365	.707	.849	.869
UICGIS4	55.5143	108.139	.382	.660	.886
UICGIS5	55.6286	111.534	.309	.536	.888
UICGIS6	55.6857	101.751	.669	.863	.871
UICGIS7	55.3143	101.575	.706	.777	.869
PICOIS1	54.8857	115.634	.196	.792	.891
PICOIS2	55.5429	105.785	.622	.870	.874
PICOIS3	55.3143	103.045	.688	.877	.870
PICOIS4	55.3143	103.987	.663	.636	.871
PICOIS5	55.1143	111.339	.426	.719	.882
PICOIS6	55.4000	101.776	.739	.901	.868
PICOIS7	55.2000	101.635	.656	.864	.871

**Reliability**

Scale: Independent Variable of Culture (Q11, Q12, Q20, Q21 and Q22)

**Case Processing Summary**

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.939	35

### Item Statistics

	Mean	Std. Deviation	N
GUISC1	4.8857	1.05081	35
GUISC2	3.8000	1.43075	35
GUISC3	4.0000	1.47529	35
GUISC4	4.1714	1.40348	35
GUISC5	4.0571	1.39205	35
GUISC6	4.0000	1.37199	35
GUISC7	4.2000	1.62336	35
POCPIS1	4.8000	1.05161	35
POCPIS2	3.9429	1.13611	35
POCPIS3	4.0857	1.31443	35
POCPIS4	4.2857	1.12646	35
POCPIS5	4.3143	1.07844	35
POCPIS6	4.1429	1.21614	35
POCPIS7	4.2571	1.35783	35
PMNCNSP1	4.9429	.83817	35
PMNCNSP2	4.2571	1.22097	35
PMNCNSP3	4.4286	1.26690	35
PMNCNSP4	4.4857	1.29186	35
PMNCNSP5	4.1714	1.22440	35
PMNCNSP6	4.2857	1.27352	35
PMNCNSP7	4.4000	1.33284	35
PISGCNSP1	5.3143	.63113	35
PISGCNSP2	4.9143	.98134	35
PISGCNSP3	5.0857	.81787	35
PISGCNSP4	5.0571	.87255	35
PISGCNSP5	5.0286	.70651	35
PISGCNSP6	4.9714	.85700	35
PISGCNSP7	5.0571	.87255	35
PISAACNSP1	5.0571	.83817	35
PISAACNSP2	4.5714	.97877	35
PISAACNSP3	4.7143	1.01667	35
PISAACNSP4	4.6571	.96841	35
PISAACNSP5	4.5714	.97877	35
PISAACNSP6	4.6857	.99325	35
PISAACNSP7	4.7143	1.04520	35

Figure 20. Item Statistics for Culture (Q11, Q12, Q20, Q21, and Q22)

Table 20

*Item Total Statistics for Culture (Q11, Q12, Q20, Q21, and Q22)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
GUISC1	153.4286	505.134	.529	.	.940
GUISC2	154.5143	489.728	.623	.	.939
GUISC3	154.3143	486.104	.660	.	.939
GUISC4	154.1429	499.891	.468	.	.941
GUISC5	154.2571	507.432	.348	.	.942
GUISC6	154.3143	487.045	.698	.	.938
GUISC7	154.1143	482.281	.649	.	.939
POCPIS1	153.5143	510.316	.417	.	.941
POCPIS2	154.3714	497.476	.640	.	.939
POCPIS3	154.2286	488.299	.709	.	.938
POCPIS4	154.0286	503.970	.514	.	.940
POCPIS5	154.0000	512.412	.361	.	.941
POCPIS6	154.1714	491.499	.709	.	.938
POCPIS7	154.0571	486.644	.713	.	.938
PMNCNSP1	153.3714	516.299	.373	.	.941
PMNCNSP2	154.0571	492.761	.682	.	.938
PMNCNSP3	153.8857	484.339	.812	.	.937
PMNCNSP4	153.8286	491.323	.668	.	.938
PMNCNSP5	154.1429	502.067	.504	.	.940
PMNCNSP6	154.0286	490.499	.693	.	.938
PMNCNSP7	153.9143	491.257	.646	.	.939
PISGCNSP1	153.0000	527.588	.112	.	.942
PISGCNSP2	153.4000	517.894	.277	.	.942
PISGCNSP3	153.2286	517.593	.348	.	.941
PISGCNSP4	153.2571	514.844	.394	.	.941
PISGCNSP5	153.2857	528.563	.066	.	.943
PISGCNSP6	153.3429	511.585	.488	.	.940
PISGCNSP7	153.2571	510.608	.503	.	.940
PISAACNSP1	153.2571	511.138	.511	.	.940
PISAACNSP2	153.7429	504.491	.586	.	.939
PISAACNSP3	153.6000	498.835	.690	.	.939
PISAACNSP4	153.6571	508.232	.505	.	.940
PISAACNSP5	153.7429	511.608	.421	.	.941
PISAACNSP6	153.6286	498.711	.711	.	.938
PISAACNSP7	153.6000	497.306	.704	.	.938

## Reliability

Scale: Independent Variable of Information Technology (Q13, Q14, Q15, and Q16)

**Case Processing Summary**

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.953	.952	28

**Item Statistics**

	Mean	Std. Deviation	N
PGUIT1	5.0857	1.09468	35
PGUIT2	3.5714	1.57715	35
PGUIT3	3.8857	1.62284	35
PGUIT4	4.3143	1.30094	35
PGUIT5	4.0286	1.38236	35
PGUIT6	3.8571	1.75135	35
PGUIT7	4.0286	1.68882	35
POITH1	5.1143	1.02244	35
POITH2	4.5714	1.85164	35
POITH3	4.8857	1.74510	35
POITH4	4.7714	1.45695	35
POITH5	4.9429	1.49397	35
POITH6	4.6571	1.81404	35
POITH7	4.8857	1.72817	35
POITS1	5.0000	.90749	35
POITS2	4.6571	1.92419	35
POITS3	4.6571	1.67934	35
POITS4	4.8000	1.53009	35
POITS5	4.6571	1.69676	35
POITS6	4.5143	1.80476	35
POITS7	4.7714	1.80009	35
PSCITSC1	5.2857	.95706	35
PSCITSC2	5.1143	1.76187	35
PSCITSC3	5.0571	1.55190	35
PSCITSC4	5.3143	1.43017	35
PSCITSC5	5.6286	1.19030	35
PSCITSC6	5.0286	1.63574	35
PSCITSC7	5.1143	1.71106	35

Figure 21. *Item Statistics for Information Technology (Q13, Q14, Q15, Q16)*

Table 21:

*Item-Total Statistics for Information Technology (Q13, Q14, Q15, and Q16)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PGUIT1	127.1143	814.281	.529	.	.953
PGUIT2	128.6286	799.005	.527	.	.953
PGUIT3	128.3143	803.987	.455	.	.953
PGUIT4	127.8857	828.104	.250	.	.955
PGUIT5	128.1714	811.911	.440	.	.953
PGUIT6	128.3429	801.644	.442	.	.954
PGUIT7	128.1714	802.029	.456	.	.953
POITH1	127.0857	830.434	.289	.	.954
POITH2	127.6286	764.770	.784	.	.950
POITH3	127.3143	774.869	.727	.	.951
POITH4	127.4286	797.723	.591	.	.952
POITH5	127.2571	796.197	.594	.	.952
POITH6	127.5429	762.550	.825	.	.950
POITH7	127.3143	766.045	.831	.	.950
POITS1	127.2000	814.694	.637	.	.952
POITS2	127.5429	769.785	.703	.	.951
POITS3	127.5429	773.373	.774	.	.950
POITS4	127.4000	781.894	.751	.	.951
POITS5	127.5429	777.020	.725	.	.951
POITS6	127.6857	759.810	.859	.	.949
POITS7	127.4286	762.252	.835	.	.949
PSCITSC1	126.9143	822.316	.461	.	.953
PSCITSC2	127.0857	778.139	.684	.	.951
PSCITSC3	127.1429	788.185	.665	.	.951
PSCITSC4	126.8857	798.928	.588	.	.952
PSCITSC5	126.5714	806.134	.606	.	.952
PSCITSC6	127.1714	775.440	.773	.	.950
PSCITSC7	127.0857	768.492	.813	.	.950

## Reliability

Scale: Independent Variable of Trust (Q21, Q22, Q23, and Q24)

**Case Processing Summary**

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.955	.955	28

**Item Statistics**

	Mean	Std. Deviation	N
PISGCNSP1	5.3143	.63113	35
PISGCNSP2	4.9143	.98134	35
PISGCNSP3	5.0857	.81787	35
PISGCNSP4	5.0571	.87255	35
PISGCNSP5	5.0286	.70651	35
PISGCNSP6	4.9714	.85700	35
PISGCNSP7	5.0571	.87255	35
PISAACNSP1	5.0571	.83817	35
PISAACNSP2	4.5714	.97877	35
PISAACNSP3	4.7143	1.01667	35
PISAACNSP4	4.6571	.96841	35
PISAACNSP5	4.5714	.97877	35
PISAACNSP6	4.6857	.99325	35
PISAACNSP7	4.7143	1.04520	35
PISACNSP1	5.0571	.59125	35
PISACNSP2	4.6000	.65079	35
PISACNSP3	4.6286	.94202	35
PISACNSP4	4.6857	.86675	35
PISACNSP5	4.4857	.85307	35
PISACNSP6	4.6857	.90005	35
PISACNSP7	4.6286	.91026	35
PISUACNSP1	5.1714	.61767	35
PISUACNSP2	4.6857	1.05081	35
PISUACNSP3	4.7143	1.04520	35
PISUACNSP4	4.8286	.85700	35
PISUACNSP5	4.8571	.69209	35
PISUACNSP6	4.6571	1.21129	35
PISUACNSP7	4.6571	1.23533	35

Figure 22. Item Statistics for Trust (Q21, Q22, Q23, and Q24)



Table 22 *Item-Total Statistics for Trust (Q21, Q22, Q23, and Q24)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PISGCNSP1	129.4286	282.429	.431	.	.955
PISGCNSP2	129.8286	270.440	.637	.	.954
PISGCNSP3	129.6571	272.879	.681	.	.953
PISGCNSP4	129.6857	272.516	.649	.	.954
PISGCNSP5	129.7143	282.034	.397	.	.956
PISGCNSP6	129.7714	269.123	.786	.	.952
PISGCNSP7	129.6857	270.104	.736	.	.953
PISAACNSP1	129.6857	275.692	.559	.	.954
PISAACNSP2	130.1714	268.911	.688	.	.953
PISAACNSP3	130.0286	264.617	.795	.	.952
PISAACNSP4	130.0857	270.787	.635	.	.954
PISAACNSP5	130.1714	273.146	.552	.	.955
PISAACNSP6	130.0571	264.408	.822	.	.952
PISAACNSP7	130.0286	262.970	.823	.	.952
PISIAACNSP1	129.6857	285.104	.326	.	.956
PISIAACNSP2	130.1429	278.303	.610	.	.954
PISIAACNSP3	130.1143	270.516	.663	.	.954
PISIAACNSP4	130.0571	271.232	.700	.	.953
PISIAACNSP5	130.2571	281.197	.351	.	.956
PISIAACNSP6	130.0571	268.761	.759	.	.953
PISIAACNSP7	130.1143	269.457	.725	.	.953
PISUACNSP1	129.5714	281.370	.493	.	.955
PISUACNSP2	130.0571	268.820	.640	.	.954
PISUACNSP3	130.0286	268.029	.667	.	.954
PISUACNSP4	129.9143	268.787	.799	.	.952
PISUACNSP5	129.8857	277.928	.587	.	.954
PISUACNSP6	130.0857	261.551	.739	.	.953
PISUACNSP7	130.0857	262.904	.687	.	.954

## Reliability

Scale: Independent Variable of Policy (Q17 and Q20)

**Case Processing Summary**

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.836	.827	14

**Item Statistics**

	Mean	Std. Deviation	N
PORIPCNSP1	5.6286	.97274	35
PORIPCNSP2	5.0857	1.88448	35
PORIPCNSP3	5.1429	1.76806	35
PORIPCNSP4	5.0857	1.70417	35
PORIPCNSP5	4.9714	1.93247	35
PORIPCNSP6	5.2571	1.65108	35
PORIPCNSP7	5.2000	1.77896	35
PMNCNSP1	4.9429	.83817	35
PMNCNSP2	4.2571	1.22097	35
PMNCNSP3	4.4286	1.26690	35
PMNCNSP4	4.4857	1.29186	35
PMNCNSP5	4.1714	1.22440	35
PMNCNSP6	4.2857	1.27352	35
PMNCNSP7	4.4000	1.33284	35

Figure 23. *Item Statistics for Policy (Q17 and Q20)*

Table 23

*Item-Total Statistics for Policy (Q17 and Q20)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PORIPCNSP1	61.7143	127.269	.371	.522	.832
PORIPCNSP2	62.2571	111.550	.534	.862	.821
PORIPCNSP3	62.2000	108.576	.669	.841	.810
PORIPCNSP4	62.2571	111.197	.619	.775	.814
PORIPCNSP5	62.3714	109.593	.569	.790	.819
PORIPCNSP6	62.0857	111.198	.644	.921	.813
PORIPCNSP7	62.1429	111.538	.576	.882	.818
PMNCNSP1	62.4000	135.247	.021	.644	.845
PMNCNSP2	63.0857	120.257	.545	.853	.822
PMNCNSP3	62.9143	121.316	.481	.913	.825
PMNCNSP4	62.8571	125.420	.320	.906	.834
PMNCNSP5	63.1714	127.029	.283	.797	.836
PMNCNSP6	63.0571	123.232	.407	.971	.829
PMNCNSP7	62.9429	123.291	.381	.969	.831

## Reliability

Scale: Independent Variable of Information Sharing (Q18 and Q19)

### Case Processing Summary

		N	%
Cases	Valid	35	52.2
	Excluded <sup>a</sup>	32	47.8
	Total	67	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.952	.952	14

### Item Statistics

	Mean	Std. Deviation	N
PLEIS1	4.6857	1.32335	35
PLEIS2	4.0571	.93755	35
PLEIS3	4.4000	1.35473	35
PLEIS4	4.4286	1.33473	35
PLEIS5	4.2571	1.12047	35
PLEIS6	4.3143	1.15737	35
PLEIS7	4.4286	1.21959	35
PCEIS1	4.6857	.99325	35
PCEIS2	3.8286	1.20014	35
PCEIS3	4.1714	1.24819	35
PCEIS4	4.2286	1.13981	35
PCEIS5	4.0571	1.10992	35
PCEIS6	3.9429	1.25892	35
PCEIS7	4.0571	1.43369	35

Figure 24. *Item Statistics for Information Sharing (Q18 and Q19)*

Table 24

*Item-Total Statistics for Information Sharing (Q18 and Q19)*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PLEIS1	54.8571	150.067	.743	.841	.948
PLEIS2	55.4857	155.551	.833	.848	.947
PLEIS3	55.1429	146.950	.826	.920	.946
PLEIS4	55.1143	147.634	.817	.956	.946
PLEIS5	55.2857	157.151	.623	.872	.951
PLEIS6	55.2286	150.417	.851	.879	.945
PLEIS7	55.1143	149.692	.828	.926	.946
PCEIS1	54.8571	157.597	.694	.857	.949
PCEIS2	55.7143	153.622	.701	.859	.949
PCEIS3	55.3714	149.593	.811	.881	.946
PCEIS4	55.3143	155.281	.680	.862	.949
PCEIS5	55.4857	160.610	.500	.862	.953
PCEIS6	55.6000	151.188	.747	.866	.948
PCEIS7	55.4857	145.963	.805	.929	.947

Table 25 Tests of Normality results for survey items

**Tests of Normality**

	Statistic		Kolmogorov-Smirnov <sup>a</sup>	Shapiro-Wilk	df	Sig.
primary	.198	21	.030	.918	21	.080
secondary	.478	21	.000	.459	21	.000
Which best describes your current status? Would you say: (PLEASE SELECT ONE RESPONSE ONLY.)	.334	21	.000	.752	21	.000
Are you male or female?	.397	21	.000	.620	21	.000
function	.287	21	.000	.856	21	.005
years	.156	21	.198	.954	21	.412
role	.245	21	.002	.842	21	.003
UICGIS1	.241	21	.002	.803	21	.001
UICGIS2	.262	21	.001	.817	21	.001
UICGIS3	.226	21	.006	.911	21	.057
UICGIS4	.201	21	.027	.877	21	.013
UICGIS5	.253	21	.001	.874	21	.011
UICGIS6	.250	21	.001	.875	21	.012
UICGIS7	.254	21	.001	.877	21	.013
PICOIS1	.283	21	.000	.846	21	.004
PICOIS2	.290	21	.000	.873	21	.011
PICOIS3	.225	21	.007	.903	21	.040
PICOIS4	.227	21	.006	.904	21	.041

PICOIS5	.241	21	.003	.878	21	.013
PICOIS6	.281	21	.000	.853	21	.005
PICOIS7	.329	21	.000	.803	21	.001
GUISC1	.254	21	.001	.860	21	.006
GUISC2	.221	21	.009	.902	21	.038
GUISC3	.261	21	.001	.885	21	.018
GUISC4	.234	21	.004	.891	21	.024
GUISC5	.219	21	.010	.891	21	.023
GUISC6	.230	21	.005	.901	21	.036
GUISC7	.276	21	.000	.851	21	.004
POCPIS1	.291	21	.000	.817	21	.001
POCPIS2	.251	21	.001	.795	21	.001
POCPIS3	.230	21	.005	.867	21	.009
POCPIS4	.237	21	.003	.883	21	.016
POCPIS5	.267	21	.000	.857	21	.006
POCPIS6	.258	21	.001	.848	21	.004
POCPIS7	.259	21	.001	.843	21	.003
PGUIT1	.353	21	.000	.631	21	.000
PGUIT2	.252	21	.001	.843	21	.003
PGUIT3	.256	21	.001	.832	21	.002
PGUIT4	.290	21	.000	.780	21	.000
PGUIT5	.318	21	.000	.832	21	.002
PGUIT6	.300	21	.000	.828	21	.002
PGUIT7	.273	21	.000	.820	21	.001
POITH1	.205	21	.021	.871	21	.010
POITH2	.190	21	.045	.930	21	.139
POITH3	.152	21	.200*	.932	21	.150
POITH4	.162	21	.158	.942	21	.236
POITH5	.170	21	.113	.915	21	.068
POITH6	.175	21	.093	.913	21	.063
POITH7	.250	21	.001	.842	21	.003
POITS1	.240	21	.003	.849	21	.004
POITS2	.209	21	.017	.909	21	.053
POITS3	.202	21	.025	.919	21	.082
POITS4	.152	21	.200*	.932	21	.150
POITS5	.122	21	.200*	.933	21	.157
POITS6	.192	21	.041	.904	21	.041
POITS7	.183	21	.064	.866	21	.008
PSCITSC1	.283	21	.000	.848	21	.004
PSCITSC2	.227	21	.006	.890	21	.022
PSCITSC3	.218	21	.011	.881	21	.015
PSCITSC4	.209	21	.017	.862	21	.007
PSCITSC5	.242	21	.002	.857	21	.006
PSCITSC6	.283	21	.000	.843	21	.003
PSCITSC7	.266	21	.000	.828	21	.002
PORIPCNSP1	.245	21	.002	.875	21	.012
PORIPCNSP2	.202	21	.026	.866	21	.008
PORIPCNSP3	.215	21	.013	.874	21	.011
PORIPCNSP4	.166	21	.134	.889	21	.021
PORIPCNSP5	.130	21	.200*	.924	21	.102
PORIPCNSP6	.158	21	.187	.877	21	.013

PORPCNSP7	.183	21	.064	.861	21	.007
PLEIS1	.279	21	.000	.811	21	.001
PLEIS2	.276	21	.000	.765	21	.000
PLEIS3	.283	21	.000	.814	21	.001
PLEIS4	.272	21	.000	.817	21	.001
PLEIS5	.337	21	.000	.790	21	.000
PLEIS6	.282	21	.000	.859	21	.006
PLEIS7	.334	21	.000	.772	21	.000
PCEIS1	.324	21	.000	.786	21	.000
PCEIS2	.262	21	.001	.817	21	.001
PCEIS3	.309	21	.000	.840	21	.003
PCEIS4	.276	21	.000	.847	21	.004
PCEIS5	.245	21	.002	.846	21	.004
PCEIS6	.245	21	.002	.805	21	.001
PCEIS7	.262	21	.001	.829	21	.002
PMNCNSP1	.331	21	.000	.802	21	.001
PMNCNSP2	.262	21	.001	.780	21	.000
PMNCNSP3	.259	21	.001	.888	21	.021
PMNCNSP4	.293	21	.000	.841	21	.003
PMNCNSP5	.222	21	.008	.895	21	.028
PMNCNSP6	.262	21	.001	.802	21	.001
PMNCNSP7	.273	21	.000	.840	21	.003
PISGCNSP1	.273	21	.000	.774	21	.000
PISGCNSP2	.266	21	.000	.835	21	.002
PISGCNSP3	.262	21	.001	.852	21	.005
PISGCNSP4	.286	21	.000	.832	21	.002
PISGCNSP5	.240	21	.003	.815	21	.001
PISGCNSP6	.245	21	.002	.809	21	.001
PISGCNSP7	.236	21	.003	.864	21	.007
PISAACNSP1	.302	21	.000	.803	21	.001
PISAACNSP2	.314	21	.000	.778	21	.000
PISAACNSP3	.226	21	.006	.911	21	.057
PISAACNSP4	.220	21	.009	.909	21	.053
PISAACNSP5	.263	21	.001	.848	21	.004
PISAACNSP6	.251	21	.001	.897	21	.031
PISAACNSP7	.219	21	.010	.879	21	.014
PISIAACNSP1	.310	21	.000	.784	21	.000
PISIAACNSP2	.351	21	.000	.726	21	.000
PISIAACNSP3	.220	21	.009	.889	21	.021
PISIAACNSP4	.275	21	.000	.873	21	.011
PISIAACNSP5	.255	21	.001	.861	21	.007
PISIAACNSP6	.244	21	.002	.889	21	.021
PISIAACNSP7	.309	21	.000	.840	21	.003
PISUACNSP1	.268	21	.000	.808	21	.001
PISUACNSP2	.377	21	.000	.693	21	.000
PISUACNSP3	.289	21	.000	.806	21	.001
PISUACNSP4	.318	21	.000	.784	21	.000
PISUACNSP5	.360	21	.000	.783	21	.000
PISUACNSP6	.328	21	.000	.768	21	.000
PISUACNSP7	.306	21	.000	.800	21	.001
ICHIS	.097	21	.200*	.935	21	.173

PHIS	.101	21	.200*	.953	21	.395
ITHHIS	.176	21	.090	.910	21	.056
ITSHIS	.177	21	.083	.895	21	.028
ITDHIS	.126	21	.200*	.954	21	.406
ITSSHIS	.170	21	.116	.916	21	.073
CFLHIS	.145	21	.200*	.928	21	.123
CFPHIS	.166	21	.134	.906	21	.045
TRLSG2HIS	.170	21	.116	.889	21	.021
TREIA2HIS	.141	21	.200*	.936	21	.183
TRE3HIS	.124	21	.200*	.946	21	.290
TREIU2HIS	.186	21	.055	.905	21	.044
AIDIC	.155	21	.200*	.909	21	.052
AIDP	.108	21	.200*	.963	21	.586
AIDITH	.153	21	.200*	.931	21	.144
AIDITS	.129	21	.200*	.940	21	.213
AIDITDS	.150	21	.200*	.922	21	.096
AIDITSC	.198	21	.030	.910	21	.056
AIDCRFL	.123	21	.200*	.958	21	.476
AIDCRFP	.163	21	.149	.932	21	.154
AIDTRLSG2	.156	21	.195	.924	21	.105
AIDTREIA2	.158	21	.187	.922	21	.093
AIDTRE3	.161	21	.159	.941	21	.227
AIDTREIU2	.149	21	.200*	.929	21	.131

\* This is a lower bound of the true significance.  
a. Lilliefors Significance Correction



		Statistic	Std. Error
primary	Mean	3.4762	.32085
	95% Confidence Interval Lower Bound for Mean	Upper Bound	
		4.1455	
	5% Trimmed Mean	3.4709	
	Median	3.0000	
	Variance	2.162	
	Std. Deviation	1.47034	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.50	
	Skewness	.417	.501
	Kurtosis	-.699	.972
secondary	Mean	16.3810	7.36675
	95% Confidence Interval Lower Bound for Mean	Upper Bound	
		31.7477	
	5% Trimmed Mean	12.7566	
	Median	2.0000	
	Variance	1139.648	
	Std. Deviation	33.75867	
	Minimum	1.00	
	Maximum	97.00	
	Range	96.00	
	Interquartile Range	3.50	
	Skewness	2.193	.501
	Kurtosis	3.115	.972
Which best describes your current status? Would you say: (PLEASE SELECT ONE RESPONSE ONLY.)	Mean	2.0000	.24881
	95% Confidence Interval Lower Bound for Mean	Upper Bound	
		2.5190	
	5% Trimmed Mean	1.9444	
	Median	1.0000	
	Variance	1.300	
	Std. Deviation	1.14018	
	Minimum	1.00	
	Maximum	4.00	
	Range	3.00	
	Interquartile Range	2.00	
	Skewness	.447	.501
	Kurtosis	-1.510	.972
Are you male or female?	Mean	1.3810	.10859
	95% Confidence Interval Lower Bound for Mean	Upper Bound	
		1.6075	
	5% Trimmed Mean	1.3677	
	Median	1.0000	

	Variance	.248	
	Std. Deviation	.49761	
	Minimum	1.00	
	Maximum	2.00	
	Range	1.00	
	Interquartile Range	1.00	
	Skewness	.529	.501
	Kurtosis	-1.913	.972
function	Mean	3.7143	.39123
	95% Confidence Interval Lower Bound for Mean	2.8982	
	Upper Bound	4.5304	
	5% Trimmed Mean	3.7381	
	Median	5.0000	
	Variance	3.214	
	Std. Deviation	1.79284	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	3.00	
	Skewness	-.272	.501
	Kurtosis	-1.535	.972
years	Mean	4.7143	.46364
	95% Confidence Interval Lower Bound for Mean	3.7471	
	Upper Bound	5.6814	
	5% Trimmed Mean	4.6878	
	Median	5.0000	
	Variance	4.514	
	Std. Deviation	2.12468	
	Minimum	1.00	
	Maximum	9.00	
	Range	8.00	
	Interquartile Range	2.50	
	Skewness	-.139	.501
	Kurtosis	-.419	.972
role	Mean	2.3810	.33435
	95% Confidence Interval Lower Bound for Mean	1.6835	
	Upper Bound	3.0784	
	5% Trimmed Mean	2.2593	
	Median	2.0000	
	Variance	2.348	
	Std. Deviation	1.53219	
	Minimum	1.00	

	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.50	
	Skewness	.848	.501
	Kurtosis	-.168	.972
UICGIS1	Mean	5.1429	.17301
	95% Confidence Interval Lower Bound for Mean	4.7820	
	Upper Bound	5.5037	
	5% Trimmed Mean	5.1587	
	Median	5.0000	
	Variance	.629	
	Std. Deviation	.79282	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	1.50	
	Skewness	-.272	.501
	Kurtosis	-1.312	.972
UICGIS2	Mean	4.0000	.23905
	95% Confidence Interval Lower Bound for Mean	3.5014	
	Upper Bound	4.4986	
	5% Trimmed Mean	4.1085	
	Median	4.0000	
	Variance	1.200	
	Std. Deviation	1.09545	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-1.261	.501
	Kurtosis	1.557	.972
UICGIS3	Mean	4.4286	.23474
	95% Confidence Interval Lower Bound for Mean	3.9389	
	Upper Bound	4.9182	
	5% Trimmed Mean	4.4735	
	Median	5.0000	
	Variance	1.157	
	Std. Deviation	1.07571	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	

	Skewness	-.462	.501
	Kurtosis	-.148	.972
UICGIS4	Mean	4.2857	.33907
	95% Confidence Interval Lower Bound for Mean	3.5784	
	Upper Bound	4.9930	
	5% Trimmed Mean	4.3730	
	Median	5.0000	
	Variance	2.414	
	Std. Deviation	1.55380	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.882	.501
	Kurtosis	.091	.972
	UICGIS5	Mean	4.1905
95% Confidence Interval Lower Bound for Mean		3.5863	
Upper Bound		4.7947	
5% Trimmed Mean		4.2646	
Median		5.0000	
Variance		1.762	
Std. Deviation		1.32737	
Minimum		1.00	
Maximum		6.00	
Range		5.00	
Interquartile Range		1.50	
Skewness		-.952	.501
Kurtosis		.386	.972
UICGIS6		Mean	4.2857
	95% Confidence Interval Lower Bound for Mean	3.7444	
	Upper Bound	4.8270	
	5% Trimmed Mean	4.3677	
	Median	5.0000	
	Variance	1.414	
	Std. Deviation	1.18924	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-1.010	.501
	Kurtosis	1.460	.972
	UICGIS7	Mean	4.6667

	95% Confidence Interval Lower Bound for Mean	4.2269	
	Upper Bound	5.1064	
	5% Trimmed Mean	4.6852	
	Median	5.0000	
	Variance	.933	
	Std. Deviation	.96609	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.340	.501
	Kurtosis	-.648	.972
PICOIS1	Mean	4.5238	.24513
	95% Confidence Interval Lower Bound for Mean	4.0125	
	Upper Bound	5.0352	
	5% Trimmed Mean	4.5820	
	Median	5.0000	
	Variance	1.262	
	Std. Deviation	1.12335	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.001	.501
	Kurtosis	.804	.972
PICOIS2	Mean	4.0476	.21243
	95% Confidence Interval Lower Bound for Mean	3.6045	
	Upper Bound	4.4907	
	5% Trimmed Mean	4.0556	
	Median	4.0000	
	Variance	.948	
	Std. Deviation	.97346	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.462	.501
	Kurtosis	.719	.972
PICOIS3	Mean	4.2381	.24789
	95% Confidence Interval Lower Bound for Mean	3.7210	
	Upper Bound	4.7552	
	5% Trimmed Mean	4.2646	

	Median	4.0000	
	Variance	1.290	
	Std. Deviation	1.13599	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-.517	.501
	Kurtosis	-.296	.972
PICOIS4	Mean	4.0952	.29199
	95% Confidence Interval Lower Bound for Mean	3.4861	
	Upper Bound	4.7043	
	5% Trimmed Mean	4.1587	
	Median	4.0000	
	Variance	1.790	
	Std. Deviation	1.33809	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.744	.501
	Kurtosis	-.004	.972
PICOIS5	Mean	4.5714	.21349
	95% Confidence Interval Lower Bound for Mean	4.1261	
	Upper Bound	5.0168	
	5% Trimmed Mean	4.6323	
	Median	5.0000	
	Variance	.957	
	Std. Deviation	.97834	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.752	.501
	Kurtosis	1.163	.972
PICOIS6	Mean	4.2381	.23810
	95% Confidence Interval Lower Bound for Mean	3.7414	
	Upper Bound	4.7348	
	5% Trimmed Mean	4.2672	
	Median	5.0000	
	Variance	1.190	
	Std. Deviation	1.09109	

	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-.778	.501
	Kurtosis	-.161	.972
PICOIS7	Mean	4.4762	.27272
	95% Confidence Interval Lower Bound for Mean	3.9073	
	Upper Bound	5.0451	
	5% Trimmed Mean	4.5291	
	Median	5.0000	
	Variance	1.562	
	Std. Deviation	1.24976	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.044	.501
	Kurtosis	.220	.972
GUISC1	Mean	4.9048	.20592
	95% Confidence Interval Lower Bound for Mean	4.4752	
	Upper Bound	5.3343	
	5% Trimmed Mean	4.9497	
	Median	5.0000	
	Variance	.890	
	Std. Deviation	.94365	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	2.00	
	Skewness	-.585	.501
	Kurtosis	-.302	.972
GUISC2	Mean	3.9524	.28010
	95% Confidence Interval Lower Bound for Mean	3.3681	
	Upper Bound	4.5367	
	5% Trimmed Mean	4.0026	
	Median	4.0000	
	Variance	1.648	
	Std. Deviation	1.28360	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	

	Interquartile Range	2.00	
	Skewness	-.687	.501
	Kurtosis	-.136	.972
GUIISC3	Mean	4.1429	.29508
	95% Confidence Interval Lower Bound for Mean	3.5273	
	Upper Bound	4.7584	
	5% Trimmed Mean	4.2116	
	Median	5.0000	
	Variance	1.829	
	Std. Deviation	1.35225	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.821	.501
	Kurtosis	-.004	.972
	GUIISC4	Mean	4.2381
95% Confidence Interval Lower Bound for Mean		3.6122	
Upper Bound		4.8640	
5% Trimmed Mean		4.3175	
Median		5.0000	
Variance		1.890	
Std. Deviation		1.37495	
Minimum		1.00	
Maximum		6.00	
Range		5.00	
Interquartile Range		1.50	
Skewness		-.857	.501
Kurtosis		.204	.972
GUIISC5		Mean	4.1429
	95% Confidence Interval Lower Bound for Mean	3.5444	
	Upper Bound	4.7413	
	5% Trimmed Mean	4.2116	
	Median	4.0000	
	Variance	1.729	
	Std. Deviation	1.31475	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-.872	.501
	Kurtosis	.363	.972



GUISC6	Mean	4.0952	.25732
	95% Confidence Interval Lower Bound for Mean	3.5585	
	Upper Bound	4.6320	
	5% Trimmed Mean	4.1058	
	Median	4.0000	
	Variance	1.390	
	Std. Deviation	1.17918	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-.403	.501
	Kurtosis	-.328	.972
	GUISC7	Mean	4.3810
95% Confidence Interval Lower Bound for Mean		3.6835	
Upper Bound		5.0784	
5% Trimmed Mean		4.4762	
Median		5.0000	
Variance		2.348	
Std. Deviation		1.53219	
Minimum		1.00	
Maximum		6.00	
Range		5.00	
Interquartile Range		2.00	
Skewness		-.904	.501
Kurtosis		-.245	.972
POCPIS1		Mean	4.7143
	95% Confidence Interval Lower Bound for Mean	4.3035	
	Upper Bound	5.1250	
	5% Trimmed Mean	4.7884	
	Median	5.0000	
	Variance	.814	
	Std. Deviation	.90238	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.170	.501
	Kurtosis	3.022	.972
	POCPIS2	Mean	4.1429
95% Confidence Interval Lower Bound for Mean		3.7042	
Upper Bound		4.5815	

	5% Trimmed Mean	4.2143	
	Median	4.0000	
	Variance	.929	
	Std. Deviation	.96362	
	Minimum	2.00	
	Maximum	5.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-1.051	.501
	Kurtosis	.443	.972
POCPIS3	Mean	4.2381	.25732
	95% Confidence Interval Lower Bound for Mean	3.7013	
	Upper Bound	4.7749	
	5% Trimmed Mean	4.2646	
	Median	4.0000	
	Variance	1.390	
	Std. Deviation	1.17918	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.713	.501
	Kurtosis	-.029	.972
POCPIS4	Mean	4.2857	.27726
	95% Confidence Interval Lower Bound for Mean	3.7074	
	Upper Bound	4.8641	
	5% Trimmed Mean	4.3175	
	Median	5.0000	
	Variance	1.614	
	Std. Deviation	1.27055	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-.597	.501
	Kurtosis	-.518	.972
POCPIS5	Mean	4.5238	.20259
	95% Confidence Interval Lower Bound for Mean	4.1012	
	Upper Bound	4.9464	
	5% Trimmed Mean	4.5794	
	Median	5.0000	
	Variance	.862	

	Std. Deviation	.92839	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.905	.501
	Kurtosis	1.628	.972
POCPIS6	Mean	4.1429	.24187
	95% Confidence Interval Lower Bound for Mean	3.6383	
	Upper Bound	4.6474	
	5% Trimmed Mean	4.1614	
	Median	4.0000	
	Variance	1.229	
	Std. Deviation	1.10841	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.795	.501
	Kurtosis	.124	.972
POCPIS7	Mean	4.1905	.28132
	95% Confidence Interval Lower Bound for Mean	3.6037	
	Upper Bound	4.7773	
	5% Trimmed Mean	4.2116	
	Median	5.0000	
	Variance	1.662	
	Std. Deviation	1.28915	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-.700	.501
	Kurtosis	-.588	.972
PGUIT1	Mean	5.1429	.24187
	95% Confidence Interval Lower Bound for Mean	4.6383	
	Upper Bound	5.6474	
	5% Trimmed Mean	5.3175	
	Median	5.0000	
	Variance	1.229	
	Std. Deviation	1.10841	
	Minimum	1.00	
	Maximum	6.00	

	Range	5.00	
	Interquartile Range	1.00	
	Skewness	-2.743	.501
	Kurtosis	9.943	.972
PGUIT2	Mean	3.8571	.32576
	95% Confidence Interval Lower Bound for Mean	3.1776	
	Upper Bound	4.5367	
	5% Trimmed Mean	3.8995	
	Median	4.0000	
	Variance	2.229	
	Std. Deviation	1.49284	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.928	.501
	Kurtosis	-.141	.972
PGUIT3	Mean	4.3333	.30342
	95% Confidence Interval Lower Bound for Mean	3.7004	
	Upper Bound	4.9663	
	5% Trimmed Mean	4.4259	
	Median	5.0000	
	Variance	1.933	
	Std. Deviation	1.39044	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.00	
	Skewness	-1.284	.501
	Kurtosis	1.519	.972
PGUIT4	Mean	4.5238	.23522
	95% Confidence Interval Lower Bound for Mean	4.0331	
	Upper Bound	5.0145	
	5% Trimmed Mean	4.6323	
	Median	5.0000	
	Variance	1.162	
	Std. Deviation	1.07792	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.00	
	Skewness	-1.789	.501

	Kurtosis	5.001	.972
PGUIT5	Mean	4.3333	.27889
	95% Confidence Interval Lower Bound for Mean	3.7516	
	Upper Bound	4.9151	
	5% Trimmed Mean	4.4233	
	Median	5.0000	
	Variance	1.633	
	Std. Deviation	1.27802	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-1.177	.501
	Kurtosis	1.054	.972
	PGUIT6	Mean	4.0476
95% Confidence Interval Lower Bound for Mean		3.3355	
Upper Bound		4.7598	
5% Trimmed Mean		4.1085	
Median		5.0000	
Variance		2.448	
Std. Deviation		1.56449	
Minimum		1.00	
Maximum		6.00	
Range		5.00	
Interquartile Range		2.50	
Skewness		-.866	.501
Kurtosis		-.535	.972
PGUIT7		Mean	4.1429
	95% Confidence Interval Lower Bound for Mean	3.4049	
	Upper Bound	4.8809	
	5% Trimmed Mean	4.2143	
	Median	5.0000	
	Variance	2.629	
	Std. Deviation	1.62129	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-1.032	.501
	Kurtosis	-.028	.972
	POITH1	Mean	5.1905
Lower Bound		4.7931	

	95% Confidence Interval Upper Bound for Mean	5.5878	
	5% Trimmed Mean	5.1587	
	Median	5.0000	
	Variance	.762	
	Std. Deviation	.87287	
	Minimum	4.00	
	Maximum	7.00	
	Range	3.00	
	Interquartile Range	1.50	
	Skewness	.095	.501
	Kurtosis	-.742	.972
POITH2	Mean	4.2857	.34602
	95% Confidence Interval Lower Bound for Mean	3.5639	
	Upper Bound	5.0075	
	5% Trimmed Mean	4.3175	
	Median	4.0000	
	Variance	2.514	
	Std. Deviation	1.58565	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	1.50	
	Skewness	-.355	.501
	Kurtosis	.428	.972
POITH3	Mean	4.8095	.32819
	95% Confidence Interval Lower Bound for Mean	4.1249	
	Upper Bound	5.4941	
	5% Trimmed Mean	4.8942	
	Median	5.0000	
	Variance	2.262	
	Std. Deviation	1.50396	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.520	.501
	Kurtosis	.607	.972
POITH4	Mean	4.6667	.31873
	95% Confidence Interval Lower Bound for Mean	4.0018	
	Upper Bound	5.3315	
	5% Trimmed Mean	4.7354	

	Median	5.0000	
	Variance	2.133	
	Std. Deviation	1.46059	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.524	.501
	Kurtosis	.601	.972
POITH5	Mean	4.9048	.31551
	95% Confidence Interval Lower Bound for Mean	4.2466	
	Upper Bound	5.5629	
	5% Trimmed Mean	5.0000	
	Median	5.0000	
	Variance	2.090	
	Std. Deviation	1.44585	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.695	.501
	Kurtosis	1.333	.972
POITH6	Mean	4.5714	.36234
	95% Confidence Interval Lower Bound for Mean	3.8156	
	Upper Bound	5.3273	
	5% Trimmed Mean	4.6349	
	Median	5.0000	
	Variance	2.757	
	Std. Deviation	1.66046	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	1.50	
	Skewness	-.609	.501
	Kurtosis	.499	.972
POITH7	Mean	4.8571	.34700
	95% Confidence Interval Lower Bound for Mean	4.1333	
	Upper Bound	5.5810	
	5% Trimmed Mean	4.9524	
	Median	5.0000	
	Variance	2.529	
	Std. Deviation	1.59015	

	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-1.144	.501
	Kurtosis	1.913	.972
POITS1	Mean	5.0476	.18868
	95% Confidence Interval Lower Bound for Mean	4.6540	
	Upper Bound	5.4412	
	5% Trimmed Mean	5.1058	
	Median	5.0000	
	Variance	.748	
	Std. Deviation	.86465	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.50	
	Skewness	-.610	.501
	Kurtosis	-.106	.972
POITS2	Mean	4.7619	.34437
	95% Confidence Interval Lower Bound for Mean	4.0436	
	Upper Bound	5.4803	
	5% Trimmed Mean	4.8413	
	Median	4.0000	
	Variance	2.490	
	Std. Deviation	1.57812	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.241	.501
	Kurtosis	.081	.972
POITS3	Mean	4.8095	.23522
	95% Confidence Interval Lower Bound for Mean	4.3189	
	Upper Bound	5.3002	
	5% Trimmed Mean	4.7910	
	Median	5.0000	
	Variance	1.162	
	Std. Deviation	1.07792	
	Minimum	3.00	
	Maximum	7.00	
	Range	4.00	



	Interquartile Range	2.00	
	Skewness	.151	.501
	Kurtosis	-.631	.972
POITS4	Mean	4.8095	.32819
	95% Confidence Interval Lower Bound for Mean	4.1249	
	Upper Bound	5.4941	
	5% Trimmed Mean	4.8942	
	Median	5.0000	
	Variance	2.262	
	Std. Deviation	1.50396	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.520	.501
	Kurtosis	.607	.972
POITS5	Mean	4.8095	.34928
	95% Confidence Interval Lower Bound for Mean	4.0809	
	Upper Bound	5.5381	
	5% Trimmed Mean	4.8942	
	Median	5.0000	
	Variance	2.562	
	Std. Deviation	1.60060	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.385	.501
	Kurtosis	.022	.972
POITS6	Mean	4.7143	.36608
	95% Confidence Interval Lower Bound for Mean	3.9507	
	Upper Bound	5.4779	
	5% Trimmed Mean	4.7937	
	Median	5.0000	
	Variance	2.814	
	Std. Deviation	1.67758	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.764	.501
	Kurtosis	.616	.972

POITS7	Mean	5.0000	.37161
	95% Confidence Interval Lower Bound for Mean	4.2248	
	Upper Bound	5.7752	
	5% Trimmed Mean	5.1111	
	Median	5.0000	
	Variance	2.900	
	Std. Deviation	1.70294	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-1.074	.501
	Kurtosis	1.198	.972
	PSCITSC1	Mean	5.4286
95% Confidence Interval Lower Bound for Mean		5.0596	
Upper Bound		5.7976	
5% Trimmed Mean		5.4233	
Median		6.0000	
Variance		.657	
Std. Deviation		.81064	
Minimum		4.00	
Maximum		7.00	
Range		3.00	
Interquartile Range		1.00	
Skewness		-.368	.501
Kurtosis		-.397	.972
PSCITSC2		Mean	5.1429
	95% Confidence Interval Lower Bound for Mean	4.4049	
	Upper Bound	5.8809	
	5% Trimmed Mean	5.2646	
	Median	5.0000	
	Variance	2.629	
	Std. Deviation	1.62129	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-.876	.501
	Kurtosis	.609	.972
	PSCITSC3	Mean	5.2857
95% Confidence Interval Lower Bound for Mean		4.7256	
Upper Bound		5.8459	

	5% Trimmed Mean	5.3175	
	Median	5.0000	
	Variance	1.514	
	Std. Deviation	1.23056	
	Minimum	3.00	
	Maximum	7.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.606	.501
	Kurtosis	-.198	.972
PSCITSC4	Mean	5.3810	.32715
	95% Confidence Interval Lower Bound for Mean	4.6985	
	Upper Bound	6.0634	
	5% Trimmed Mean	5.5291	
	Median	6.0000	
	Variance	2.248	
	Std. Deviation	1.49921	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	1.50	
	Skewness	-1.321	.501
	Kurtosis	2.416	.972
PSCITSC5	Mean	5.6190	.23377
	95% Confidence Interval Lower Bound for Mean	5.1314	
	Upper Bound	6.1067	
	5% Trimmed Mean	5.6323	
	Median	5.0000	
	Variance	1.148	
	Std. Deviation	1.07127	
	Minimum	4.00	
	Maximum	7.00	
	Range	3.00	
	Interquartile Range	2.00	
	Skewness	.063	.501
	Kurtosis	-1.268	.972
PSCITSC6	Mean	5.2857	.33197
	95% Confidence Interval Lower Bound for Mean	4.5932	
	Upper Bound	5.9782	
	5% Trimmed Mean	5.4233	
	Median	5.0000	
	Variance	2.314	

	Std. Deviation	1.52128	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	1.50	
	Skewness	-1.196	.501
	Kurtosis	1.993	.972
PSCITSC7	Mean	5.1905	.38184
	95% Confidence Interval Lower Bound for Mean	4.3940	
	Upper Bound	5.9870	
	5% Trimmed Mean	5.3228	
	Median	5.0000	
	Variance	3.062	
	Std. Deviation	1.74983	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	1.50	
	Skewness	-1.311	.501
	Kurtosis	1.516	.972
PORIPCNSP1	Mean	5.5238	.17754
	95% Confidence Interval Lower Bound for Mean	5.1535	
	Upper Bound	5.8941	
	5% Trimmed Mean	5.5265	
	Median	6.0000	
	Variance	.662	
	Std. Deviation	.81358	
	Minimum	4.00	
	Maximum	7.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.084	.501
	Kurtosis	-.218	.972
PORIPCNSP2	Mean	5.0476	.38095
	95% Confidence Interval Lower Bound for Mean	4.2530	
	Upper Bound	5.8423	
	5% Trimmed Mean	5.1614	
	Median	5.0000	
	Variance	3.048	
	Std. Deviation	1.74574	
	Minimum	1.00	
	Maximum	7.00	

	Range	6.00	
	Interquartile Range	3.00	
	Skewness	-.516	.501
	Kurtosis	-.123	.972
PORIPCNSP3	Mean	5.1905	.34928
	95% Confidence Interval Lower Bound for Mean	4.4619	
	Upper Bound	5.9191	
	5% Trimmed Mean	5.3201	
	Median	5.0000	
	Variance	2.562	
	Std. Deviation	1.60060	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.00	
	Skewness	-1.070	.501
	Kurtosis	1.362	.972
PORIPCNSP4	Mean	4.9048	.39584
	95% Confidence Interval Lower Bound for Mean	4.0791	
	Upper Bound	5.7305	
	5% Trimmed Mean	5.0053	
	Median	5.0000	
	Variance	3.290	
	Std. Deviation	1.81397	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	2.50	
	Skewness	-.733	.501
	Kurtosis	.136	.972
PORIPCNSP5	Mean	4.7619	.40181
	95% Confidence Interval Lower Bound for Mean	3.9237	
	Upper Bound	5.6001	
	5% Trimmed Mean	4.8439	
	Median	5.0000	
	Variance	3.390	
	Std. Deviation	1.84132	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	3.00	
	Skewness	-.410	.501

	Kurtosis	-.748	.972
PORIPCNSP6	Mean	5.2381	.36453
	95% Confidence Interval Lower Bound for Mean	4.4777	
	Upper Bound	5.9985	
	5% Trimmed Mean	5.3730	
	Median	5.0000	
	Variance	2.790	
	Std. Deviation	1.67047	
	Minimum	1.00	
	Maximum	7.00	
	Range	6.00	
	Interquartile Range	3.00	
	Skewness	-.986	.501
	Kurtosis	.838	.972
	PORIPCNSP7	Mean	5.1429
95% Confidence Interval Lower Bound for Mean		4.3124	
Upper Bound		5.9733	
5% Trimmed Mean		5.2698	
Median		5.0000	
Variance		3.329	
Std. Deviation		1.82444	
Minimum		1.00	
Maximum		7.00	
Range		6.00	
Interquartile Range		3.00	
Skewness		-1.052	.501
Kurtosis		.691	.972
PLEIS1		Mean	4.8095
	95% Confidence Interval Lower Bound for Mean	4.2783	
	Upper Bound	5.3407	
	5% Trimmed Mean	4.8995	
	Median	5.0000	
	Variance	1.362	
	Std. Deviation	1.16701	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	2.00	
	Skewness	-1.262	.501
	Kurtosis	1.531	.972
	PLEIS2	Mean	4.1905
Lower Bound		3.7679	

	95% Confidence Interval Upper Bound for Mean	4.6131	
	5% Trimmed Mean	4.2672	
	Median	4.0000	
	Variance	.862	
	Std. Deviation	.92839	
	Minimum	2.00	
	Maximum	5.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-1.243	.501
	Kurtosis	1.213	.972
PLEIS3	Mean	4.6190	.28010
	95% Confidence Interval Lower Bound for Mean	4.0348	
	Upper Bound	5.2033	
	5% Trimmed Mean	4.6878	
	Median	5.0000	
	Variance	1.648	
	Std. Deviation	1.28360	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-1.076	.501
	Kurtosis	.475	.972
PLEIS4	Mean	4.6190	.31226
	95% Confidence Interval Lower Bound for Mean	3.9677	
	Upper Bound	5.2704	
	5% Trimmed Mean	4.7407	
	Median	5.0000	
	Variance	2.048	
	Std. Deviation	1.43095	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-1.283	.501
	Kurtosis	1.134	.972
PLEIS5	Mean	4.5238	.23522
	95% Confidence Interval Lower Bound for Mean	4.0331	
	Upper Bound	5.0145	
	5% Trimmed Mean	4.5820	

	Median	5.0000	
	Variance	1.162	
	Std. Deviation	1.07792	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.259	.501
	Kurtosis	1.342	.972
PLEIS6	Mean	4.3810	.24374
	95% Confidence Interval Lower Bound for Mean	3.8725	
	Upper Bound	4.8894	
	5% Trimmed Mean	4.4233	
	Median	5.0000	
	Variance	1.248	
	Std. Deviation	1.11697	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.860	.501
	Kurtosis	.261	.972
PLEIS7	Mean	4.4762	.26385
	95% Confidence Interval Lower Bound for Mean	3.9258	
	Upper Bound	5.0266	
	5% Trimmed Mean	4.5820	
	Median	5.0000	
	Variance	1.462	
	Std. Deviation	1.20909	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.00	
	Skewness	-1.627	.501
	Kurtosis	2.820	.972
PCEIS1	Mean	4.8571	.19863
	95% Confidence Interval Lower Bound for Mean	4.4428	
	Upper Bound	5.2715	
	5% Trimmed Mean	4.9471	
	Median	5.0000	
	Variance	.829	
	Std. Deviation	.91026	



	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	.50	
	Skewness	-1.453	.501
	Kurtosis	3.932	.972
PCEIS2	Mean	4.0000	.23905
	95% Confidence Interval Lower Bound for Mean	3.5014	
	Upper Bound	4.4986	
	5% Trimmed Mean	4.1085	
	Median	4.0000	
	Variance	1.200	
	Std. Deviation	1.09545	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-1.261	.501
	Kurtosis	1.557	.972
PCEIS3	Mean	4.3810	.21243
	95% Confidence Interval Lower Bound for Mean	3.9378	
	Upper Bound	4.8241	
	5% Trimmed Mean	4.4233	
	Median	5.0000	
	Variance	.948	
	Std. Deviation	.97346	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.888	.501
	Kurtosis	.375	.972
PCEIS4	Mean	4.3333	.27021
	95% Confidence Interval Lower Bound for Mean	3.7697	
	Upper Bound	4.8970	
	5% Trimmed Mean	4.4233	
	Median	5.0000	
	Variance	1.533	
	Std. Deviation	1.23828	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	

	Interquartile Range	1.00	
	Skewness	-1.235	.501
	Kurtosis	1.573	.972
PCEIS5	Mean	4.1905	.25466
	95% Confidence Interval Lower Bound for Mean	3.6593	
	Upper Bound	4.7217	
	5% Trimmed Mean	4.2672	
	Median	4.0000	
	Variance	1.362	
	Std. Deviation	1.16701	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.00	
	Skewness	-1.242	.501
	Kurtosis	1.781	.972
PCEIS6	Mean	4.0476	.24374
	95% Confidence Interval Lower Bound for Mean	3.5392	
	Upper Bound	4.5561	
	5% Trimmed Mean	4.1614	
	Median	4.0000	
	Variance	1.248	
	Std. Deviation	1.11697	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-1.291	.501
	Kurtosis	1.476	.972
PCEIS7	Mean	4.0000	.30861
	95% Confidence Interval Lower Bound for Mean	3.3563	
	Upper Bound	4.6437	
	5% Trimmed Mean	4.0582	
	Median	4.0000	
	Variance	2.000	
	Std. Deviation	1.41421	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-1.055	.501
	Kurtosis	.206	.972

PMNCNSP1	Mean	4.9524	.18868
	95% Confidence Interval Lower Bound for Mean	4.5588	
	Upper Bound	5.3460	
	5% Trimmed Mean	5.0026	
	Median	5.0000	
	Variance	.748	
	Std. Deviation	.86465	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	.50	
	Skewness	-.929	.501
	Kurtosis	.930	.972
	PMNCNSP2	Mean	3.9524
95% Confidence Interval Lower Bound for Mean		3.3506	
Upper Bound		4.5541	
5% Trimmed Mean		4.0582	
Median		4.0000	
Variance		1.748	
Std. Deviation		1.32198	
Minimum		1.00	
Maximum		5.00	
Range		4.00	
Interquartile Range		2.00	
Skewness		-1.196	.501
Kurtosis		.494	.972
PMNCNSP3		Mean	4.1905
	95% Confidence Interval Lower Bound for Mean	3.6037	
	Upper Bound	4.7773	
	5% Trimmed Mean	4.2646	
	Median	5.0000	
	Variance	1.662	
	Std. Deviation	1.28915	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.855	.501
	Kurtosis	.404	.972
	PMNCNSP4	Mean	4.1429
95% Confidence Interval Lower Bound for Mean		3.4787	
Upper Bound		4.8070	

	5% Trimmed Mean	4.2143	
	Median	5.0000	
	Variance	2.129	
	Std. Deviation	1.45896	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-1.020	.501
	Kurtosis	.226	.972
PMNCNSP5	Mean	3.9048	.29199
	95% Confidence Interval Lower Bound for Mean	3.2957	
	Upper Bound	4.5139	
	5% Trimmed Mean	3.9497	
	Median	4.0000	
	Variance	1.790	
	Std. Deviation	1.33809	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	2.00	
	Skewness	-.640	.501
	Kurtosis	-.486	.972
PMNCNSP6	Mean	4.0000	.25820
	95% Confidence Interval Lower Bound for Mean	3.4614	
	Upper Bound	4.5386	
	5% Trimmed Mean	4.1085	
	Median	4.0000	
	Variance	1.400	
	Std. Deviation	1.18322	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.50	
	Skewness	-1.201	.501
	Kurtosis	.764	.972
PMNCNSP7	Mean	4.1429	.27848
	95% Confidence Interval Lower Bound for Mean	3.5620	
	Upper Bound	4.7238	
	5% Trimmed Mean	4.2143	
	Median	5.0000	
	Variance	1.629	

	Std. Deviation	1.27615	
	Minimum	1.00	
	Maximum	6.00	
	Range	5.00	
	Interquartile Range	1.50	
	Skewness	-1.091	.501
	Kurtosis	.577	.972
PISGCNSP1	Mean	5.3333	.14365
	95% Confidence Interval Lower Bound for Mean	5.0337	
	Upper Bound	5.6330	
	5% Trimmed Mean	5.3704	
	Median	5.0000	
	Variance	.433	
	Std. Deviation	.65828	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	1.00	
	Skewness	-.474	.501
	Kurtosis	-.551	.972
PISGCNSP2	Mean	4.7619	.20592
	95% Confidence Interval Lower Bound for Mean	4.3324	
	Upper Bound	5.1914	
	5% Trimmed Mean	4.8413	
	Median	5.0000	
	Variance	.890	
	Std. Deviation	.94365	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.052	.501
	Kurtosis	2.423	.972
PISGCNSP3	Mean	5.0000	.18257
	95% Confidence Interval Lower Bound for Mean	4.6192	
	Upper Bound	5.3808	
	5% Trimmed Mean	5.0529	
	Median	5.0000	
	Variance	.700	
	Std. Deviation	.83666	
	Minimum	3.00	
	Maximum	6.00	

	Range	3.00	
	Interquartile Range	1.50	
	Skewness	-.566	.501
	Kurtosis	.075	.972
PISGCNSP4	Mean	5.0476	.17561
	95% Confidence Interval Lower Bound for Mean	4.6813	
	Upper Bound	5.4139	
	5% Trimmed Mean	5.1058	
	Median	5.0000	
	Variance	.648	
	Std. Deviation	.80475	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.727	.501
	Kurtosis	.699	.972
PISGCNSP5	Mean	4.9524	.16148
	95% Confidence Interval Lower Bound for Mean	4.6155	
	Upper Bound	5.2892	
	5% Trimmed Mean	4.9471	
	Median	5.0000	
	Variance	.548	
	Std. Deviation	.74001	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	1.50	
	Skewness	.077	.501
	Kurtosis	-1.040	.972
PISGCNSP6	Mean	4.8571	.15865
	95% Confidence Interval Lower Bound for Mean	4.5262	
	Upper Bound	5.1881	
	5% Trimmed Mean	4.8413	
	Median	5.0000	
	Variance	.529	
	Std. Deviation	.72703	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	1.00	
	Skewness	.229	.501

	Kurtosis	-.945	.972
PISGCNSP7	Mean	4.9524	.18868
	95% Confidence Interval Lower Bound for Mean	4.5588	
	Upper Bound	5.3460	
	5% Trimmed Mean	5.0000	
	Median	5.0000	
	Variance	.748	
	Std. Deviation	.86465	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	2.00	
	Skewness	-.416	.501
	Kurtosis	-.382	.972
	PISAACNSP1	Mean	4.9048
95% Confidence Interval Lower Bound for Mean		4.4752	
Upper Bound		5.3343	
5% Trimmed Mean		5.0000	
Median		5.0000	
Variance		.890	
Std. Deviation		.94365	
Minimum		2.00	
Maximum		6.00	
Range		4.00	
Interquartile Range		1.00	
Skewness		-1.374	.501
Kurtosis		3.397	.972
PISAACNSP2		Mean	4.2381
	95% Confidence Interval Lower Bound for Mean	3.8086	
	Upper Bound	4.6676	
	5% Trimmed Mean	4.3175	
	Median	5.0000	
	Variance	.890	
	Std. Deviation	.94365	
	Minimum	2.00	
	Maximum	5.00	
	Range	3.00	
	Interquartile Range	1.50	
	Skewness	-.921	.501
	Kurtosis	-.254	.972
	PISAACNSP3	Mean	4.4286
Lower Bound		3.9389	

	95% Confidence Interval Upper Bound for Mean	4.9182	
	5% Trimmed Mean	4.4735	
	Median	5.0000	
	Variance	1.157	
	Std. Deviation	1.07571	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.462	.501
	Kurtosis	-.148	.972
PISAACNSP4	Mean	4.3333	.22183
	95% Confidence Interval Lower Bound for Mean	3.8706	
	Upper Bound	4.7961	
	5% Trimmed Mean	4.3677	
	Median	4.0000	
	Variance	1.033	
	Std. Deviation	1.01653	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.444	.501
	Kurtosis	.048	.972
PISAACNSP5	Mean	4.2381	.21718
	95% Confidence Interval Lower Bound for Mean	3.7851	
	Upper Bound	4.6911	
	5% Trimmed Mean	4.2672	
	Median	4.0000	
	Variance	.990	
	Std. Deviation	.99523	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.865	.501
	Kurtosis	.959	.972
PISAACNSP6	Mean	4.3810	.22335
	95% Confidence Interval Lower Bound for Mean	3.9150	
	Upper Bound	4.8469	
	5% Trimmed Mean	4.4206	



	Median	5.0000	
	Variance	1.048	
	Std. Deviation	1.02353	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.572	.501
	Kurtosis	.075	.972
PISAACNSP7	Mean	4.4286	.24467
	95% Confidence Interval Lower Bound for Mean	3.9182	
	Upper Bound	4.9389	
	5% Trimmed Mean	4.4762	
	Median	5.0000	
	Variance	1.257	
	Std. Deviation	1.12122	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.744	.501
	Kurtosis	.471	.972
PISIACNSP1	Mean	5.0000	.13801
	95% Confidence Interval Lower Bound for Mean	4.7121	
	Upper Bound	5.2879	
	5% Trimmed Mean	5.0000	
	Median	5.0000	
	Variance	.400	
	Std. Deviation	.63246	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	.00	
	Skewness	.000	.501
	Kurtosis	-.132	.972
PISIACNSP2	Mean	4.4762	.14831
	95% Confidence Interval Lower Bound for Mean	4.1668	
	Upper Bound	4.7856	
	5% Trimmed Mean	4.5291	
	Median	5.0000	
	Variance	.462	
	Std. Deviation	.67964	

	Minimum	3.00	
	Maximum	5.00	
	Range	2.00	
	Interquartile Range	1.00	
	Skewness	-.962	.501
	Kurtosis	-.102	.972
PISIACNSP3	Mean	4.5238	.20259
	95% Confidence Interval Lower Bound for Mean	4.1012	
	Upper Bound	4.9464	
	5% Trimmed Mean	4.5265	
	Median	5.0000	
	Variance	.862	
	Std. Deviation	.92839	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.076	.501
	Kurtosis	-.658	.972
	PISIACNSP4	Mean	4.4762
95% Confidence Interval Lower Bound for Mean		4.0298	
Upper Bound		4.9226	
5% Trimmed Mean		4.5265	
Median		5.0000	
Variance		.962	
Std. Deviation		.98077	
Minimum		2.00	
Maximum		6.00	
Range		4.00	
Interquartile Range		1.00	
Skewness		-.805	.501
Kurtosis		.794	.972
PISIACNSP5		Mean	4.3810
	95% Confidence Interval Lower Bound for Mean	4.0146	
	Upper Bound	4.7473	
	5% Trimmed Mean	4.3704	
	Median	4.0000	
	Variance	.648	
	Std. Deviation	.80475	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	

	Interquartile Range	1.00	
	Skewness	-.208	.501
	Kurtosis	-.405	.972
PISIACNSP6	Mean	4.4286	.21349
	95% Confidence Interval Lower Bound for Mean	3.9832	
	Upper Bound	4.8739	
	5% Trimmed Mean	4.4735	
	Median	5.0000	
	Variance	.957	
	Std. Deviation	.97834	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.665	.501
	Kurtosis	.657	.972
PISIACNSP7	Mean	4.3810	.21243
	95% Confidence Interval Lower Bound for Mean	3.9378	
	Upper Bound	4.8241	
	5% Trimmed Mean	4.4233	
	Median	5.0000	
	Variance	.948	
	Std. Deviation	.97346	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.888	.501
	Kurtosis	.375	.972
PISUACNSP1	Mean	5.0952	.15283
	95% Confidence Interval Lower Bound for Mean	4.7764	
	Upper Bound	5.4140	
	5% Trimmed Mean	5.1058	
	Median	5.0000	
	Variance	.490	
	Std. Deviation	.70034	
	Minimum	4.00	
	Maximum	6.00	
	Range	2.00	
	Interquartile Range	1.00	
	Skewness	-.132	.501
	Kurtosis	-.764	.972

PISUACNSP2	Mean	4.6667	.17366
	95% Confidence Interval Lower Bound for Mean	4.3044	
	Upper Bound	5.0289	
	5% Trimmed Mean	4.7381	
	Median	5.0000	
	Variance	.633	
	Std. Deviation	.79582	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.925	.501
	Kurtosis	5.734	.972
	PISUACNSP3	Mean	4.6190
95% Confidence Interval Lower Bound for Mean		4.2255	
Upper Bound		5.0126	
5% Trimmed Mean		4.6825	
Median		5.0000	
Variance		.748	
Std. Deviation		.86465	
Minimum		2.00	
Maximum		6.00	
Range		4.00	
Interquartile Range		1.00	
Skewness		-1.176	.501
Kurtosis		3.208	.972
PISUACNSP4		Mean	4.6667
	95% Confidence Interval Lower Bound for Mean	4.2769	
	Upper Bound	5.0565	
	5% Trimmed Mean	4.7354	
	Median	5.0000	
	Variance	.733	
	Std. Deviation	.85635	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.369	.501
	Kurtosis	3.804	.972
	PISUACNSP5	Mean	4.6667
95% Confidence Interval Lower Bound for Mean		4.3670	
Upper Bound		4.9663	

	5% Trimmed Mean	4.6852	
	Median	5.0000	
	Variance	.433	
	Std. Deviation	.65828	
	Minimum	3.00	
	Maximum	6.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.689	.501
	Kurtosis	.888	.972
PISUACNSP6	Mean	4.5714	.22437
	95% Confidence Interval Lower Bound for Mean	4.1034	
	Upper Bound	5.0394	
	5% Trimmed Mean	4.6349	
	Median	5.0000	
	Variance	1.057	
	Std. Deviation	1.02817	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.432	.501
	Kurtosis	2.336	.972
PISUACNSP7	Mean	4.6190	.23377
	95% Confidence Interval Lower Bound for Mean	4.1314	
	Upper Bound	5.1067	
	5% Trimmed Mean	4.6878	
	Median	5.0000	
	Variance	1.148	
	Std. Deviation	1.07127	
	Minimum	2.00	
	Maximum	6.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-1.286	.501
	Kurtosis	1.926	.972
ICHIS	Mean	31.3810	3.92518
	95% Confidence Interval Lower Bound for Mean	23.1932	
	Upper Bound	39.5687	
	5% Trimmed Mean	30.1058	
	Median	30.0000	
	Variance	323.548	

	Std. Deviation	17.98743	
	Minimum	8.00	
	Maximum	79.00	
	Range	71.00	
	Interquartile Range	30.50	
	Skewness	.805	.501
	Kurtosis	.787	.972
PHIS	Mean	37.7143	5.27264
	95% Confidence Interval Lower Bound for Mean	26.7158	
	Upper Bound	48.7128	
	5% Trimmed Mean	36.4471	
	Median	38.0000	
	Variance	583.814	
	Std. Deviation	24.16225	
	Minimum	3.00	
	Maximum	96.00	
	Range	93.00	
	Interquartile Range	33.50	
	Skewness	.682	.501
	Kurtosis	.257	.972
	ITHHIS	Mean	36.2381
95% Confidence Interval Lower Bound for Mean		24.3411	
Upper Bound		48.1351	
5% Trimmed Mean		34.9074	
Median		37.0000	
Variance		683.090	
Std. Deviation		26.13600	
Minimum		6.00	
Maximum		91.00	
Range		85.00	
Interquartile Range		46.50	
Skewness		.475	.501
Kurtosis		-.858	.972
ITSHIS		Mean	37.0476
	95% Confidence Interval Lower Bound for Mean	25.4777	
	Upper Bound	48.6175	
	5% Trimmed Mean	35.6931	
	Median	31.0000	
	Variance	646.048	
	Std. Deviation	25.41747	
	Minimum	9.00	
	Maximum	90.00	

	Range	81.00	
	Interquartile Range	39.00	
	Skewness	.597	.501
	Kurtosis	-.761	.972
ITDHHIS	Mean	37.6190	5.32848
	95% Confidence Interval Lower Bound for Mean	26.5040	
	Upper Bound	48.7341	
	5% Trimmed Mean	36.6455	
	Median	40.0000	
	Variance	596.248	
	Std. Deviation	24.41818	
	Minimum	2.00	
	Maximum	91.00	
	Range	89.00	
	Interquartile Range	32.50	
	Skewness	.547	.501
	Kurtosis	-.348	.972
ITSSHIS	Mean	36.2857	5.15389
	95% Confidence Interval Lower Bound for Mean	25.5349	
	Upper Bound	47.0365	
	5% Trimmed Mean	35.7222	
	Median	40.0000	
	Variance	557.814	
	Std. Deviation	23.61809	
	Minimum	5.00	
	Maximum	78.00	
	Range	73.00	
	Interquartile Range	42.00	
	Skewness	.164	.501
	Kurtosis	-1.407	.972
CFLHHIS	Mean	40.0952	5.75198
	95% Confidence Interval Lower Bound for Mean	28.0968	
	Upper Bound	52.0937	
	5% Trimmed Mean	39.4947	
	Median	44.0000	
	Variance	694.790	
	Std. Deviation	26.35888	
	Minimum	6.00	
	Maximum	85.00	
	Range	79.00	
	Interquartile Range	45.50	
	Skewness	.256	.501

	Kurtosis	-1.105	.972
CFPHIS	Mean	35.2381	5.86877
	95% Confidence Interval Lower Bound for Mean	22.9961	
	Upper Bound	47.4801	
	5% Trimmed Mean	33.6984	
	Median	32.0000	
	Variance	723.290	
	Std. Deviation	26.89406	
	Minimum	4.00	
	Maximum	95.00	
	Range	91.00	
	Interquartile Range	45.00	
	Skewness	.608	.501
	Kurtosis	-.664	.972
	TRLSG2HIS	Mean	31.5238
95% Confidence Interval Lower Bound for Mean		19.6245	
Upper Bound		43.4231	
5% Trimmed Mean		30.4630	
Median		25.0000	
Variance		683.362	
Std. Deviation		26.14119	
Minimum		1.00	
Maximum		81.00	
Range		80.00	
Interquartile Range		46.50	
Skewness		.724	.501
Kurtosis		-.768	.972
TREIA2HIS		Mean	39.8095
	95% Confidence Interval Lower Bound for Mean	28.7177	
	Upper Bound	50.9014	
	5% Trimmed Mean	39.0820	
	Median	40.0000	
	Variance	593.762	
	Std. Deviation	24.36723	
	Minimum	7.00	
	Maximum	86.00	
	Range	79.00	
	Interquartile Range	42.00	
	Skewness	.224	.501
	Kurtosis	-1.012	.972
	TRE3HIS	Mean	40.3810
Lower Bound		29.6481	



	95% Confidence Interval Upper Bound for Mean	51.1138	
	5% Trimmed Mean	39.9259	
	Median	42.0000	
	Variance	555.948	
	Std. Deviation	23.57854	
	Minimum	5.00	
	Maximum	84.00	
	Range	79.00	
	Interquartile Range	33.00	
	Skewness	.270	.501
	Kurtosis	-.879	.972
TREIU2HIS	Mean	38.3333	5.72144
	95% Confidence Interval Lower Bound for Mean	26.3986	
	Upper Bound	50.2681	
	5% Trimmed Mean	37.5344	
	Median	41.0000	
	Variance	687.433	
	Std. Deviation	26.21895	
	Minimum	7.00	
	Maximum	84.00	
	Range	77.00	
	Interquartile Range	47.00	
	Skewness	.332	.501
	Kurtosis	-1.183	.972
AIDP	Mean	43.2857	5.88709
	95% Confidence Interval Lower Bound for Mean	31.0055	
	Upper Bound	55.5660	
	5% Trimmed Mean	42.1772	
	Median	49.0000	
	Variance	727.814	
	Std. Deviation	26.97803	
	Minimum	10.00	
	Maximum	97.00	
	Range	87.00	
	Interquartile Range	45.00	
	Skewness	.338	.501
	Kurtosis	-.683	.972
AIDP	Mean	43.7619	5.60013
	95% Confidence Interval Lower Bound for Mean	32.0802	
	Upper Bound	55.4436	
	5% Trimmed Mean	43.7302	

	Median	47.0000	
	Variance	658.590	
	Std. Deviation	25.66302	
	Minimum	.00	
	Maximum	88.00	
	Range	88.00	
	Interquartile Range	42.00	
	Skewness	-.076	.501
	Kurtosis	-.764	.972
AIDITH	Mean	39.3810	5.96597
	95% Confidence Interval Lower Bound for Mean	26.9362	
	Upper Bound	51.8257	
	5% Trimmed Mean	38.8016	
	Median	39.0000	
	Variance	747.448	
	Std. Deviation	27.33949	
	Minimum	.00	
	Maximum	89.00	
	Range	89.00	
	Interquartile Range	42.00	
	Skewness	.482	.501
	Kurtosis	-.839	.972
AIDITS	Mean	37.8095	5.81526
	95% Confidence Interval Lower Bound for Mean	25.6791	
	Upper Bound	49.9399	
	5% Trimmed Mean	37.0106	
	Median	35.0000	
	Variance	710.162	
	Std. Deviation	26.64886	
	Minimum	.00	
	Maximum	90.00	
	Range	90.00	
	Interquartile Range	43.50	
	Skewness	.483	.501
	Kurtosis	-.767	.972
AIDITDS	Mean	41.0000	6.22132
	95% Confidence Interval Lower Bound for Mean	28.0226	
	Upper Bound	53.9774	
	5% Trimmed Mean	40.7672	
	Median	40.0000	
	Variance	812.800	
	Std. Deviation	28.50965	

	Minimum	.00	
	Maximum	86.00	
	Range	86.00	
	Interquartile Range	52.00	
	Skewness	.232	.501
	Kurtosis	-1.419	.972
AIDITSC	Mean	41.8571	6.24015
	95% Confidence Interval Lower Bound for Mean	28.8404	
	Upper Bound	54.8739	
	5% Trimmed Mean	40.5899	
	Median	40.0000	
	Variance	817.729	
	Std. Deviation	28.59595	
	Minimum	7.00	
	Maximum	100.00	
	Range	93.00	
	Interquartile Range	49.50	
	Skewness	.502	.501
	Kurtosis	-1.014	.972
AIDCRFL	Mean	39.0000	5.15660
	95% Confidence Interval Lower Bound for Mean	28.2435	
	Upper Bound	49.7565	
	5% Trimmed Mean	38.8201	
	Median	38.0000	
	Variance	558.400	
	Std. Deviation	23.63049	
	Minimum	.00	
	Maximum	81.00	
	Range	81.00	
	Interquartile Range	38.50	
	Skewness	.308	.501
	Kurtosis	-.916	.972
AIDCRFP	Mean	35.5238	4.98981
	95% Confidence Interval Lower Bound for Mean	25.1153	
	Upper Bound	45.9324	
	5% Trimmed Mean	35.1772	
	Median	31.0000	
	Variance	522.862	
	Std. Deviation	22.86617	
	Minimum	1.00	
	Maximum	76.00	
	Range	75.00	

	Interquartile Range	41.00	
	Skewness	.352	.501
	Kurtosis	-1.130	.972
AIDTRLG2	Mean	36.9048	5.73664
	95% Confidence Interval Lower Bound for Mean	24.9383	
	Upper Bound	48.8712	
	5% Trimmed Mean	35.6402	
	Median	35.0000	
	Variance	691.090	
	Std. Deviation	26.28860	
	Minimum	4.00	
	Maximum	93.00	
	Range	89.00	
	Interquartile Range	43.50	
	Skewness	.562	.501
	Kurtosis	-.666	.972
AIDTREIA2	Mean	44.0476	6.06492
	95% Confidence Interval Lower Bound for Mean	31.3964	
	Upper Bound	56.6988	
	5% Trimmed Mean	43.0979	
	Median	47.0000	
	Variance	772.448	
	Std. Deviation	27.79294	
	Minimum	8.00	
	Maximum	98.00	
	Range	90.00	
	Interquartile Range	53.00	
	Skewness	.153	.501
	Kurtosis	-1.222	.972
AIDTRE3	Mean	45.1905	5.68315
	95% Confidence Interval Lower Bound for Mean	33.3356	
	Upper Bound	57.0453	
	5% Trimmed Mean	44.5661	
	Median	52.0000	
	Variance	678.262	
	Std. Deviation	26.04346	
	Minimum	8.00	
	Maximum	94.00	
	Range	86.00	
	Interquartile Range	41.50	
	Skewness	.171	.501
	Kurtosis	-1.182	.972

AIDTREIU2	Mean	44.6667	5.86488
	95% Confidence Interval Lower Bound for Mean	32.4327	
	Upper Bound	56.9006	
	5% Trimmed Mean	43.8228	
	Median	37.0000	
	Variance	722.333	
	Std. Deviation	26.87626	
	Minimum	10.00	
	Maximum	95.00	
	Range	85.00	
	Interquartile Range	47.00	
	Skewness	.307	.501
	Kurtosis	-1.249	.972

Figure 25:

Descriptives for Survey Instrument for CNSP

## Author Biography

Melanie Y. Duncan is a Navy Veteran and Native New Yorker currently working with the Information and Technology Branch of the Federal Bureau of Investigation. She has over 20 years of experience with the federal government working on the national and international levels. Her recent efforts have focused on counterterrorism and information sharing. She is an adjunct for the FBI Training Division at Quantico for communications. She holds a Master of Arts in Organizational Management from the University of Phoenix and obtained Executive Women in Leadership certification from Cornell University. Ms. Duncan resides in Alexandria, Virginia, and is the mother of one Staff Sergeant in the United States Air Force serving overseas and one daughter, a senior dual-enrolled in the Fairfax County School system and Northern Virginia Community College.