Development and Evaluation of a Model to Identify Perceptions of Toxic Leadership

A Dissertation submitted
to the Graduate School
Valdosta State University

in partial fulfillment of requirements
for the degree of

DOCTOR OF PUBLIC ADMINISTRATION

in the Department of Political Science

December 2022

Danielle L. Willis

BSE, University of Michigan, 1996
MS, Oklahoma State University, 2005
MS, Air University, 2018

The views expressed in this dissertation are those of the author and do not reflect the official policy or position of the Air Force, Department of Defense, or the U.S. Government

This dissertation, "Development and Evaluation of a Model to Identify Perceptions of Toxic Leadership" by Danielle L. Willis, is approved by:

Dissertation Committee Chair

DocuSigned by:
Gerald Merwin
5ABC33AB273D4FF...

Gerald A. Merwin, Ph.D.
Professor of Public Administration

Committee Members

DocuSigned by:
Jonathan Krispin
668F0CC4B60A4F7...

Jonathan V. Krispin, Ph.D.
Associate Professor of Management

DocuSigned by:
Samantha Weeks
18477A937577406E...

Samantha A. Weeks, Ph.D.
Defense Advisory Committee on Women in the Services

Associate Provost for Graduate Studies and Research

DocuSigned by:
Becky da Cruz
84AFF646370449F...

Becky K. da Cruz, Ph.D., J.D.
Professor of Criminal Justice

Defense Date

September 8, 2022

FAIR USE

DUPLICATION

I authorize the Head of Interlibrary Loan or the Head of Archives at the Odum Library at Valdosta State University to arrange for duplication of this thesis for educational or scholarly purposes when so requested by a library user. The duplication shall be at the user's expense.

Signature Danielle F Willis

I refuse permission for this thesis to be duplicated in whole or in part.

Signature _____

Abstract

The perception of toxic leadership or a toxic work environment in a military organization can negatively impact the unit's health and the organization's ability to carry out military operations. While much of the literature on toxic leadership explores its impact on employees and organizations, little attention has been paid to the decision-making processes followers use to evaluate toxic behaviors. This study hypothesized that introducing a force field analysis to explain the relationship between leadership, followership, and the environment could help identify and ameliorate the perception of toxic or destructive leadership in U.S. Air Force and U.S. Space Force organizations.

This project used exploratory, sequential mixed-methods with qualitative and quantitative phases to test an intervention tool designed to identify the factors leading to the perception of toxic leadership. The quantitative phase was a single-factor design, group comparison using a pretest-posttest of current and former Department of the Air Force personnel who self-identified as having experienced toxic leadership. The data were interpreted using both quantitative and qualitative methods. The study also explored whether demographic differences exist in those perceived as toxic leaders.

The study found that using a force field analysis of an organizational system allowed participants to identify the factors that impact toxic leadership and changed their perception of negative influences on followership and the environment. Further, the study found that racial-ethnic and female leaders were disproportionately perceived as toxic compared to their representation in the U.S. Air Force and U.S. Space Force.
Keywords: toxic leadership, toxic triangle, toxic environment, followership, human reasoning, perception, military

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

Air Force Instruction	AFI
Analysis of Covariance	ANCOVA
Cultural Leadership Theory	CLT
Department of the Air Force	DAF
Department of Defense	DoD
Defense Equal Opportunity Climate Survey	DEOCS
Defense Equal Opportunity Management Institute	DEOMI
General Schedule	GS
Inspector General	IG
Institutional Review Board	IRB
Leader-Member Exchange Theory	LMX
Masculinity Contest Culture	MCC
Observe, Orient, Decide, Act	OODA
Professional Military Education	PME
Quick Response	QR
Senior Executive Schedule	SES
Statistical Package for the Social Sciences	SPSS
Toxic Leadership Scale	TLS
United States Air Force	USAF
United States Marine Corps	USMC
United States Space Force	USSF

ACKNOWLEDGMENTS

I would like to thank the following people for making this project possible.

My distinguished committee:

Dr. Gerald Merwin graciously offered his time and expertise to chair my committee despite his busy schedule. His encouragement and advice were well-timed and incredibly helpful, but his true superpower was keeping the project on its timeline.

Dr. Jonathan Krispin not only gave his time and advice as a committee member but also dedicated countless hours to coaching me through the statistical calculations that transformed this project from ideas into tangible results.

Dr. Samantha Weeks (Colonel, U.S. Air Force, Retired) shared her expertise and perspective on Air Force leadership—both vital to my research. She challenged me to be better and she led by example as an executive, corporate board member, and member of the Defense Advisory Committee for Women in the Service.

Elsevier Publishing permitted me to use the Toxic Triangle figure in the body of this dissertation.

The study participants who generously gave their time so I could understand the experience of toxic leadership through their eyes.

My children: Megan, and Lauren, for whom the idea of their mom earning a doctoral degree made the hours in front of the computer worthwhile, even when it meant missed time together. Finally, my husband Darren was the constant for our family through the hours of research, writing, and statistical runs. Without the love and support of the three of them, this project would never have been completed.

Chapter I

INTRODUCTION

> The military censures toxic leadership where it is found, but it can be difficult to recognize such misconduct, unlike more actionable offenses that are easier to identify. What constitutes good or bad leadership often lies open to interpretation.
>
> – Michael Piellusch, "Toxic Leadership or Tough Love: Does the U.S. Military Know the Difference?"

Toxic leadership in the public sector has wide-ranging impacts. In times of change and uncertainty, perceptions of toxic leadership can increase in the workforce when the reality of the work experience does not match the expectation of employees (Dobbs & Do, 2019). The perception of toxic leadership can even hinder change development in an organization (Moutousi & May, 2018). Nearly every governmental agency or department experiences this phenomenon, and the Department of the Air Force is no exception. In 2018, the U.S. Air Force Inspector General's office reported that toxic or destructive leadership allegations were the leading category of complaints and accusations by service members. However, two-thirds of those allegations were unsubstantiated after investigation or resolved during the initial intake of the complaint (DAF Inspector General, 2018). These reports highlight that recognizing toxic leadership or a toxic work environment may be difficult, but it is crucial to maintaining healthy organizations, especially those charged with carrying out military operations.

One way to recognize toxic leadership is to understand what it is and what causes it. Leadership theory is taught at all Air Force professional military education levels, mostly from the positive or servant leadership perspective (Department of the Air Force,

2017; Reed, 2015). The darker side of leadership is often neglected as an academic pursuit in professional military education, leaving students to their own devices to understand and interpret the phenomenon.

This neglect extends from academics to policy. To date, the Department of the Air Force has not adopted an official definition of toxic leadership, leading to inconsistent expectations of leadership behaviors and boundaries in the workplace. As a result, the service struggles to understand negative, destructive, and toxic leadership and balance acceptable leadership behavior with complex and often dangerous mission requirements. This study explored whether introducing an analysis tool to explain the relationship between leadership, followership, and the environment could help identify and mitigate the perception of toxic or destructive leadership in the U.S. Air Force and the U.S. Space Force.

The decision-making process that followers use to determine whether they are experiencing toxic leadership in the workplace is based on their own experiences, perceptions, and expectations. While a significant amount of research defines toxic leadership and studies the effect of toxic leadership on subordinates and organizations, there is a gap in research on follower decision-making and interpretation of the environment. Most research places significant value on the subordinate's experiences and takes their perceptions and conclusions at face value without understanding how they were reached (Burns, 2017; Lipman-Blumen, 2005; Schmidt, 2008; Reed, 2015).

Furthermore, the instruments researchers use to measure toxic leadership ask followers to make value judgments on leader behavior without qualifying how the followers' conclusions were reached. For example, in their validation of the Servant

Leadership Scale, Gocen and Cen asked participants to evaluate statements like “My leader can tell if something work-related is going wrong” and “My leader makes my career development a priority” (Gocen & Cen, 2021, p. 759). Similarly, Schmidt’s Toxic Leadership Scale, which was used in this study, asks participants to agree or disagree on statements such as “The most destructive supervisor I have experienced expresses anger at subordinates for unknown reasons” and “does not like acting on the ideas of others” (Schmidt, 2008, p. 107).

While these surveys can help identify the perception of toxic leadership, they neglect to determine why followers came to the conclusions they did. Is the leader unable to determine if something is going wrong at work, or do they lack the resources or the communication skills to address it? How does the follower determine that the leader does not like acting on the ideas of others? Schmidt (2008) identified some of the same limitations in his study conclusion, noting that some interview and survey responses may have been more attributable to follower interpretation and attribution of actions than measurable markers of toxic leadership.

When describing toxic leadership, many researchers assert that it is not contingent upon leader intent, only follower perception (Lipman-Blumen, 2005; Reed, 2015). The follow-on observation is that toxic leaders rarely think they are toxic, even when confronted with examples of their behavior (Reed, 2015). Further, leadership is often viewed through a leader-centric lens, placing the sole responsibility for a healthy organizational climate on the leader (Barling et al., 2008; Bass, 1985; Bass et al., 2003; Lipman-Blumen, 2005; Reed, 2015). However, leadership is a process that exists in conjunction with followership in the context of the environment (Follett, 1949; Padilla et

al., 2007; Rybacki & Cook, 2016). A central theme for this study is understanding leadership as part of a system that includes leaders, followers, and the environment. The interplay between the three is hypothesized to be critical to a member of an organization's perception of positive or negative (toxic) leadership.

A quantitative understanding of how leadership, followership, and the environment interact has proven elusive for researchers. For example, there is little data on whether a workplace environment can be considered toxic based on the perception of a single follower or if there needs to be consensus across the organization. Gallus et al. attempted to measure employee consensus on toxic leadership and its effect on a military unit using the standard deviation of toxic leadership perceptions to measure congruence. The higher the standard deviation, the lower the agreement that toxic leadership exists in an organization. This method provided data on the homogeneity of opinion about toxic leadership but not on the scope of impact on the organization (Gallus et al., 2013).

Gallus et al. concluded that consensus on the perception of toxic leadership does not moderate its impacts on an organization. They found a “trickle-down” effect where the agreement from respondents that toxic leadership exists led to lower overall civility in the military unit. What is clear from these examples is that a tremendous opportunity exists for future research. More needs to be understood about followers' perception of toxic leadership, as individuals and as groups.

Problem Statement

Neither an official definition of toxic leadership nor a structured method of evaluating acceptable leadership behavior exists within the Department of the Air Force (DAF). The lack of guidance and policy leads to inconsistent perceptions of acceptable

leadership behavior across the force, impacting organizational performance. This study proposes that an intervention with a cognitive model can identify and influence the perception of toxic leadership in an organization. Further, it proposes that the Department of the Air Force adopt a definition of toxic leadership and codify it in official policy.

Definitions

A definition of toxic leadership alone may be insufficient to describe the behaviors and motivations associated with organizational dysfunction. Therefore, this study defines four separate but interrelated concepts which were tested for validity and applicability in the research design: organizational toxicity, toxic leadership, toxic followership, and the toxic workplace.

- **Organizational toxicity** is the sustained combination of environmental factors, leader and follower behavior, and follower perceptions that erode trust, communication, and workplace productivity.
- **Toxic leadership** is the sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in the behavior of followers who interpret the leader's behavior as counterproductive.
- **Toxic followership** is the sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade organizational performance.
- A **toxic environment** is a physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership.

Theoretical Foundation

Perceptions of toxic leadership flow from a mismatch between expectations for the workplace experience and the reality of the experience (Dobbs & Do, 2019). When humans experience such a mismatch, the psychological tendency is to engage in sense-making: constructing a story to fill in the gaps in knowledge (Lombrozo, 2006). Once those blanks have been filled in from experience, a conclusion is drawn, which may not align with the experiences of coworkers or leaders. To understand the perception of toxic leadership, this study looks at theories of human reasoning and the theory of dark, destructive, or toxic leadership.

The mental model theory is a theory of human reasoning in which a structured thought process builds on perceptions, assertions, and memories to predict systematic errors in reasoning (Johnson-Laird, 2010). A conceptual model further refines a thought by taking a mental model and creating a system image to represent the desired process (Norman, 2013). This study introduced a conceptual model as an analysis tool for toxic leadership. The study focused on the perception of toxic leadership rather than its impact on followers or the organization. It applied a systematic method to answer the question, "how do you know that what you are experiencing is toxic leadership?"

Study Description

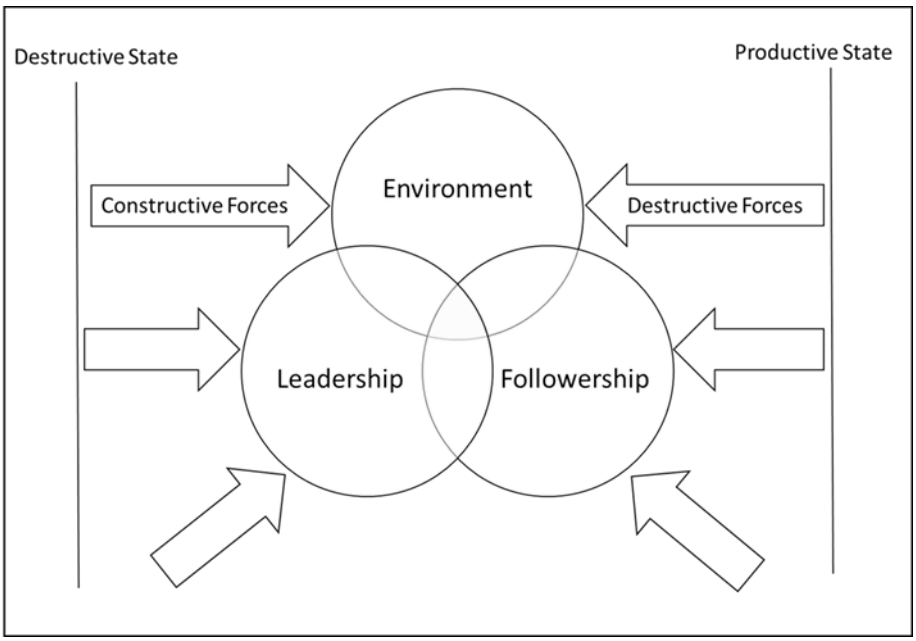
This exploratory, sequential mixed methods study sought to determine whether the introduction of a structured decision-making process influences the perception of toxic leadership behaviors for personnel (employees) in Department of the Air Force organizations.

First, a qualitative analysis and triangulation of academic literature, Department of Defense (DoD), and Department of the Air Force (DAF) policy, instructions, and regulations relating to leadership, culture, ethics, and abuse of power was conducted to develop the definition of toxic leadership proposed in this study. This research triangulation was used to select and refine the measurement scales and develop the instruments needed for the quantitative phase (Cresswell & Cresswell, 2018). Next, the conceptual model shown in Figure 1 was used in an experimental intervention tool to identify and influence the perception of toxic leadership. A full description of how the model was derived is found in Chapter II.

The quantitative portion of the study consisted of three parts: a pretest, an intervention, and a posttest. In the first part, study participants were asked to consider a situation where they perceived toxic leadership. Next, participants completed a survey of leadership behaviors based on the scenario from step one. Once the survey was complete, participants were separated into control and experimental groups. The experimental group was introduced to the intervention and asked to evaluate the perceived toxic situation using the force field analysis model (Figure 1). The control group was asked to read an article on U.S. Space Force personnel practices. In step three, all participants were administered the posttest. The pretest and posttest results were analyzed to determine if the model influenced the perception of toxic leadership for the participants.

Figure 1

Force Field Analysis of an Organizational System



Note. The force field analysis model was developed for use in this study.

Contribution

Especially in military organizations, leaders are often fired for toxic behaviors while other organizational dynamics are not considered (Piellusch, 2017). Conducting a structured analysis of an organization may help understand leader and follower behavior, which in turn may aid in determining if and why a toxic situation exists. This study looks closely at the roles and responsibilities of leaders and followers, their behaviors, and the forces influencing their interactions in the work environment. If using the model points to negative behaviors at work resulting from environmental factors or organizational culture, one can conclude that the source of the toxic workplace is an institutional factor. If the model points to traits, perceptions, ambition, competency, or bias, the source of toxicity can be assumed to be an individual.

The results of this study will be useful to leaders, followers, and policymakers in organizations that have dealt with toxic leadership accusations. As a practical tool, administrators and human resource managers can use the model to assist organizations suspected of having toxic environments in evaluating the validity of the accusations. If a toxic situation is assessed, the model can help determine which aspects of leadership, followership, and the environment have contributed to the dysfunction. In public administration, where personnel practices make it challenging to hire and fire employees at will, providing a tool to understand the forces acting upon the organizational system can help diffuse a toxic situation. If a toxic situation is not found, the model can help members of an organization understand why controversial decisions were made or actions were taken.

Research Questions and Hypotheses

This project addressed several research questions which informed the hypotheses. The questions are:

1. Would an official Department of the Air Force definition of toxic or destructive leadership clarify policy and behavioral expectations?
2. Are there any patterns in the demographics of those perceived as toxic leaders?
3. Do perceived toxic leaders tend to follow highly respected leaders in an organization?
4. How do personnel who believe they have been exposed to toxic leadership come to that conclusion?

5. Can using a conceptual model by an Air Force employee reduce bias in the perception of toxic leadership?
6. Can an Air Force employee use a conceptual model to identify toxic leadership?
7. Can an Air Force employee use a conceptual model to change their perception of toxic leadership?

The research questions informed four hypotheses:

H_1: Women and people of color are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White male counterparts.

Research has shown a bias toward White male leadership in Western societies, especially in elite positions (Glass & Cook, 2020; Gundemir et al., 2014). Furthermore, women and people of color are perceived to be less capable of leadership, even when displaying strong leadership attributes (Brescoll et al., 2018; Carton & Rosette, 2011; Walker & Aritz, 2015). This hypothesis sought to determine if these assertions hold for the U.S. Air Force.

H_2: Leaders are more likely to be perceived as toxic if they follow a leader favorably viewed by subordinates.

An abrupt change in leadership style from one leader to the next may trigger a perception of toxic leadership in an organization, especially if the new leader acts outside accepted cultural norms (House et al., 2014).

H_3: Using the structured decision-making process enabled by the study's conceptual model will change an employee's perception of toxic leadership.

Introducing the force field analysis as a decision-making tool was expected to change the employee's perception that toxic leadership exists because it introduced factors that influence the environment, leaders, and followers that may have previously been seen as unrelated.

H_4: Using the structured decision-making process enabled by the study's conceptual model will enable an employee to pinpoint perceived areas of toxic leadership.

Because the conceptual model leads the study participant to consider factors that influence the leader, followers, and environment in an organization, it can help determine what causes toxic or destructive leadership.

Assumptions, Limitations, and Delimitations

Although there is a large body of research on toxic, dark, or counterproductive leadership, gaps remain in understanding the phenomenon. Most notably, the subordinate experience of toxic leadership is taken at face value. In contrast, the leader's experience is discounted as an inability to recognize the counterproductive nature of the situation (Reed, 2015). Some extreme forms of toxic or dark leadership result from personality disorders like Machiavellianism or narcissism; however, not all negative workplace experiences stem from these clinical conditions (Schmidt, 2008; Burns, 2017). This study assumes that not all toxic leadership is deliberate and seeks to provide a mechanism to give both leaders and followers a common lexicon to describe the current state. Examining the effect of toxic leadership on an organization and its members is a much-researched topic and is beyond this project's scope.

Participants were delimited to those who self-identify as having experienced toxic leadership in the workplace. Further, they were assumed to be true to their recollections and experiences when answering survey questions and applying the conceptual model. Surveys were employed using standard administration protocols. All study activities, including surveys and experiments, were administered through academic and unofficial channels to encourage participation without the fear of retribution or reprisal. Survey participants were solicited from a population of military members through formal and informal communication and recruitment channels.

Chapter II

LITERATURE REVIEW

While the U.S. Air Force strives to promote positive leadership and culture, there are still instances of toxic leadership in the service. Toxic leadership is a broad term with no consensus definition, but the perception of toxic leadership in the workplace profoundly impacts organizational performance. Moreover, leadership is often perceived as productive or counterproductive, constructive, destructive, heroic, or toxic based solely on the follower's experience. To understand how employees interpret their experience at work and decide whether toxic leadership exists, we must first understand how people sense and interpret the world around them. Theories of human reasoning, specifically heuristics, causal explanation theory, System 1 and 2 thinking, and the mental model theory provide a theoretical context for the methodology used in this study. This baseline in human reasoning, in turn, informs the literature on organizational dynamics and toxic leadership.

Theories of Human Reasoning

When humans experience a mismatch between their expectations and experiences, their brains try to make sense of the disconnect through reasoning, which transfers information from a premise to a conclusion based on experience and possibility (Lombrozo, 2006). Because it is often difficult to process every piece of information required to make an informed decision, humans rely on heuristics and intuition to make decisions (Lombrozo, 2006). Heuristics provide an efficient way to make sense of the world, but a structured process of deliberate reasoning and critical thinking is more

effective in reducing errors in interpretation (Johnson-Laird, 2010). Heuristics can also lead to bias. While not all biases come from heuristics, heuristics can cause a systematic error in decision-making that leads to cognitive bias, the demonstrated preference for what we find familiar (Shirev & Levy, 2016).

Nobel Prize-winning psychologist and economist Daniel Kahneman expressed the concepts of heuristics and mental shortcuts as System 1 and System 2 thinking, otherwise known as thinking fast and slow (Kahneman, 2011). System 1 thinking, which happens quickly using heuristics, emotions, and experiences to inform our choices, comprises nearly 98% of cognitive processing. System 2 thinking, by contrast, is when we slow down to consider the complexity of a choice or situation and comprises only 2% of human decision-making.

A mental model can facilitate System 2 thinking and introduce a quantitative interpretation of qualitative data that blends science with intuition to define and communicate broad, complex, or nuanced concepts (Johnson-Laird, 1983; Young, 2008). The deliberate reasoning introduced by a mental model can reduce errors in conclusions about the environment around us (Johnson-Laird, 2010). However, mental models are user dependent. While they provide structure, they are still based on the individual's experiences and views of the world (Mahyar, 2021).

Conceptual models take mental models a step further by applying systems thinking to mental models, making them universally applicable (Mahyar, 2021). Conceptual models are highly simplified explanations of complex concepts (Norman, 2013). If done well, a conceptual model provides understanding, predicts outcomes, and provides a framework to determine what to do with unexpected results (Norman, 2013).

This study proposes that introducing a reasoning strategy to process the circumstances and behaviors in an organization may influence how members perceive and interpret what is happening around them.

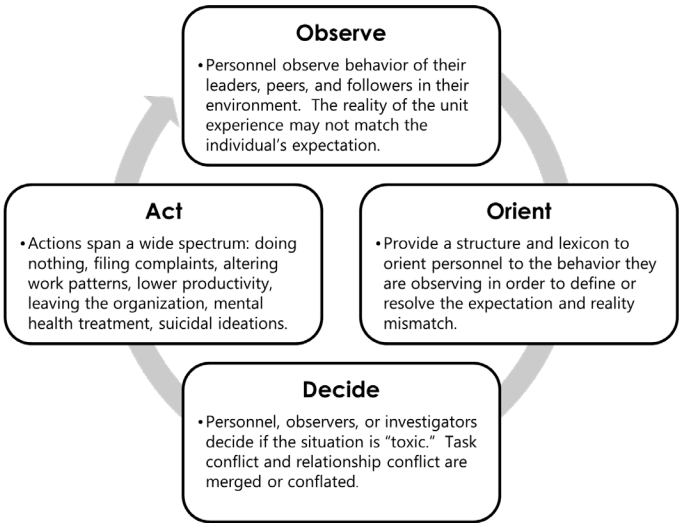
OODA Loop

One conceptual model common in military thinking is the OODA Loop (Figure 2), derived by Air Force strategist John Boyd. OODA stands for observe, orient, decide, and act. Developed to describe the thought process fighter pilots use to prevail in aerial combat, the OODA loop was discovered to have near-universal applications (Rule, 2013). While commonly depicted as a simple circular process, Boyd conceived the loop as a more complex depiction of human decision-making (Boyd, 2018). The critical step in the process is orientation, which amalgamates and synthesizes observations and information through the lenses of culture, education, experience, heuristics, and new information (Maccuish, 2011). Boyd explains the importance as "…orientation shapes decision, shapes action, and, in turn, is shaped by the feedback and other phenomena coming into our sensing or observation window" (Boyd, 2010, p. 3).

This research project approached the cycle of toxic leadership through the perspective of the OODA loop, aiming to provide a framework for understanding individual experiences in the organizational system during the "orient" step of the process. Suppose leaders, followers, and observers could quantify an inherently qualitative experience. In that case, they could better articulate what they are experiencing and how it impacts organizational behavior and outcomes.

Figure 2

The OODA Loop for Toxic Leadership Analysis



Adapted from Boyd, J. (2018). A discourse on winning and losing. (G. T. Hammond, Ed.) Maxwell AFB, AL: Air University Press. https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0151_Boyd_Discourse_Winning_Losing.PDF

Using the simplified, circular version of the OODA loop in Figure 2, one can see the process members of an organization use to evaluate if their experiences constitute organizational toxicity. They begin by observing behavior with inputs from unfolding circumstances and feedback from expectations and previous experiences. Next, they orient themselves to the situation.

Orientation occurs through the filters of established definitions, experience, culture, heuristics, education, synthesis, and analysis (Boyd, 2018). Once personnel decide whether they believe toxic leadership or a toxic environment exists in their workplace, they take action. Follower actions can range from doing nothing to filing complaints, altering work patterns, lowering productivity, leaving the organization,

seeking mental health treatment, and in extreme cases, suicidal ideations (Housman & Minor, 2015; Milosevic et al., 2020; Williams, 2019).

Leadership

To define toxic leadership, one must begin with the concept of leadership. Leadership can be defined simply as the "interaction between leaders and followers" (Lipman-Blumen, 2005, p. 16), but the nuance in the interaction is a vital component. It is essential to understand that leadership is not merely an action by the leader. It is a contract between leaders and followers in an environmental context to create a result. From another perspective, leadership is a tool to cultivate group performance, which requires individuals to trade off short-term and self-serving goals for long-range organizational objectives (Padilla et al., 2007). Furthermore, effective leadership has a component of emotional intelligence (Reed, 2015).

Leadership style is a concept closely related to the definition of leadership. While important, leadership style is unrelated to technical competence or devotion to the organization or mission (Reed, 2015). Leadership style can either develop organically or be selected explicitly by the leader to achieve specific effects or organizational goals. In both contexts, leadership is not just actioned by the leader. It is the result of a contract or interaction between leaders and followers. The interaction between the two parties can be positive or negative, with negative leadership often described as toxic, destructive, or unethical.

Negative Leadership

Negative leadership describes exchanges between leaders and followers that do not lead to a positive experience. Researchers have chosen many words to describe the

nature and severity of negative experiences, including dark, destructive, dysfunctional, counterproductive, abusive, bullying, harmful, and toxic leadership (Burns, 2017; Lipman-Blumen, 2005; Padilla et al., 2007; Schmidt, 2008; Thoroughgood et al., 2018). Each description has nuances, but common themes include psychological impacts on employees and negative impacts on organizations, independent of leader intent. Table 1 outlines a small sample of definitions from the body of literature.

Table 1

Summary of Negative Leadership Definitions

Source	*Negative Leadership Concept*	*Date*	*Definition*
Milosevic, I., Maric, S., & Lončar, D.	Toxic Leadership	2020	Leadership focused on maintaining a position of control via toxic influence attempts, whose harmfulness, although relatively unintentional (i.e., relatively low intent to cause harm), "cause[s] serious harm by reckless behavior, as well as by their incompetence" Lipman-Blumen (2005, p. 29). Toxic leaders are concerned with the position of control and act to protect that position. Consequently, despite the lack of strong intent to induce harm, the harmfulness of toxic leaders is higher relative to ineffective leaders but somewhat less harmful compared with destructive and abusive leaders whose intent and harmfulness of influence are quite considerable
Einarsen, Asland, & Skogstad	Destructive Leadership	2007	The systematic and repeated behavior by a leader, supervisor, or manager violates the organization's legitimate interest by undermining and/or sabotaging the organization's goals, tasks, resources, and effectiveness and/or the motivation, well-being, or job satisfaction of subordinates.
Tepper	Abusive Supervision	2000	Subordinates' perceptions of the extent to which supervisors engage in *the sustained display of hostile verbal and nonverbal*

Source	*Negative Leadership Concept*	*Date*	*Definition*
			behaviors, excluding physical contact. This definition characterizes abusive supervision as a subjective assessment. The same individual could view a supervisor's behavior as abusive in one context and as non-abusive in another context. Two subordinates could differ in their evaluations of the same supervisor's behavior.
Vega & Comer	Bullying	2005	Workplace bullying is the pattern of destructive and generally deliberate demeaning of co-workers or subordinates that reminds us of the activities of the schoolyard bully. Unlike the schoolyard bully, the workplace bully is an adult, usually (but not always) aware of the impact of his or her behavior on others. Bullying in the workplace, often tacitly accepted by the organizational leadership, can create an environment of psychological threat that diminishes corporate productivity and inhibits individual and group commitment.
Moutousi & May	Unethical Leadership	2018	Unethical leadership is more than the mere absence of ethical leadership: not being perceived as particularly ethical as a leader does not automatically imply that the leader is behaving normatively inappropriate (e.g., not emphasizing fairness does not necessarily imply unfairness). Perceptions of unethical leadership, on the other hand, require observable violations of the followers' normative frame of reference.
Jha & Jha	Dysfunctional Leadership	2015	In simple terms, dysfunctional leadership can be equated with 'abusive supervision' –a phrase popularized by Tepper. Further, dysfunctional leadership is an ill-disposed form of aggression, such as conniving, humiliating, and oppressive behavior that undermines performance, belittles, and contributes to workplace and personal demoralization

Toxic Leadership

Although toxic leadership began to emerge in literature as a subset of negative leadership in 2005, there is no consensus on the definition; however, most researchers treat it as a process or set of behaviors rather than an outcome or effect (Padilla et al., 2007). Generally, definitions of toxic leadership fall into two categories: toxic leadership as an umbrella term encompassing a range of negative leadership behaviors and toxic leadership as a subset of unethical, negative, or destructive leadership (Pagan, 2016). Notably, having a single bad day does not make a leader toxic. The consistent undermining of a subordinate or an organization is the hallmark of toxic behaviors (Lipman-Blumen, 2005, 2005a; Reed, 2015; Schmidt, 2008, 2014). Regardless of where leader behaviors fall on the scale of negative leadership, toxic leadership contains three elements: 1) lack of concern for the welfare of followers, 2) a negative impact on the organizational climate through leadership style or actions, and 3) a self-serving attitude, prioritizing personal welfare over the organizational well-being (Reed, 2004).

Toxic Leadership as an Umbrella Term

Lipman-Blumen (2005) constructed a multi-dimensional framework emphasizing that toxic leaders are self-centered and actively work to destroy a subordinate's morale, motivation, and self-esteem while promoting themselves and re-packaging toxic agendas as noble endeavors. Meanwhile, Schmidt (2008, 2014) theorized that intent to harm could differentiate toxic leadership from other forms of destructive leadership. Destructive leadership that encompasses intent to harm includes Machiavellianism, narcissism, bullying, and abusive leadership. Schmidt's empirical investigation confirmed the

structure of toxic leadership as a broad category encompassing five dimensions: self-promotion, abusive supervision, unpredictability, narcissism, and authoritarianism. Similarly, Williams (2017) described toxicity as a wide range of behaviors ranging from indifference to harmful leadership and abuse.

Toxic Leadership on a Spectrum of Negative Leadership

An alternate perspective is that toxic leadership is merely a subset of dark or negative leadership, along with destructive leadership, abusive leadership, ineffective leadership, bullying, narcissism, incompetence, and unpredictability (Burns, 2017; Milosevic et al., 2020; Pelletier, 2010). The critical differentiator between these concepts varied among researchers, with some finding intent to harm as an essential toxicity component (Padilla et al., 2007; Pelletier, 2010). In contrast, others found incompetence and ambition were the driving factors (Milosevic et al., 2020). Another model of leadership behavior identified tyrannical, derailed, and disloyal leadership as other subsets of destructive leadership (Einarsen et al., 2007). The wide range of interpretations further underscores the fluidity of the concept. Whether used as an umbrella term or on a spectrum of negative leadership traits and behaviors, toxic leadership is a concern for organizations.

Schmidt's Toxic Leadership Scale

If defining toxic leadership is the first step to understanding it, the next step is to measure toxic leadership. Andrew Schmidt's 2008 study and development of the Toxic Leadership Scale (TLS) compared twelve other scales measuring negative leadership forms. His findings highlighted five leadership dimensions that quantify toxicity and predict turnover rates, turnover intentions, and employee job satisfaction, which are

described in Table 2: abusive supervision, authoritarian leadership, narcissism, unpredictability, and self-promotion (Schmidt, 2008).

In his study, Schmidt created a third-party measurement for toxic leadership through a qualitative exploratory analysis of a small sample of military personnel and a confirmatory quantitative analysis of 218 participants from various professions. One significant limitation of the scale is that it is based on subordinate perceptions of leadership traits and behaviors without considering the organizational environment or the behaviors of followers. Nevertheless, Schmidt's work has been downloaded more than 35,000 times and validated in several studies (Bell, 2020).

Table 2

Dimensions of Toxic Leadership

Dimension	*Description*
Abusive Supervision	Consistent and sustained display of hostile verbal, non-verbal, and physical behaviors
Authoritarian Leadership	Leadership behavior that exercises control over subordinates and demands obedience
Narcissism	An arrogant belief in oneself, to the extent of assuming he/she is more capable than others, paired with a sense of personal entitlement
Unpredictability	Varies in degrees of approachability, expressing anger at subordinates for unknown reasons and allowing his or her mood to dominate the workplace climate
Self-Promotion	Accepting credit for successes that are not theirs, changing demeanor in the presence of a superior, denying responsibility for mistakes made in his or her department

Adapted from Schmidt, A. A. (2008). Development and validation of the toxic leadership scale. [Master's Thesis, University of Maryland].

https://drum.lib.umd.edu/bitstream/handle/1903/8176/umi-umd 5358.pdf?sequence = 1&isAllowed = y

Toxic Leadership and Organizational Performance

Although toxic leadership can negatively impact workers and an organization, it does not always translate into poor results (Higgs, 2014; House et al., 2014; Lipman-Blumen, 2005; Reed, 2015). Two competing theories on effective leadership within a given culture or organization explain this phenomenon. One set of research indicates that leadership consistent with culturally acceptable behaviors and norms is more effective than behavior that is not (House et al., 2014). The theory of toxic leadership falls under this construct. Leadership can be considered destructive because the methods used to achieve results are outside the accepted norms for a given society or organization.

Conversely, there is a theory that task performance increases when the leader acts outside the typical behavior patterns and accepted cultural norms (House et al., 2014). In this proposition, the leader who bucks cultural norms is seen as visionary and can foster innovation and performance improvement in their organization. Both theories are grounded in the psychology of culture and organization and illustrate that there is no single ideal leadership style (House et al., 2014). Indeed, what one subordinate might perceive as toxic leadership could be viewed as heroic by another (Lipman-Blumen, 2005b). Accordingly, we can conclude that destructive leadership is rarely wholly destructive, and constructive leadership does not always produce positive results (Padilla et al., 2007).

The Cost of Toxic Leadership in the Public Sector

In the public sector, the perception of workplace hostility and incivility can translate into actual costs through decreased work effort, decreased time spent at work,

intentionally reduced work quality, loss of time worrying and avoiding the offender, and exit from the organization (Porath & Pearson, 2010). Tolerating a toxic employee in an organization can cost up to ten times as much as recruiting and retaining a superstar employee (Housman & Minor, 2015). The lost productivity due to avoidance and coping tactics, paired with the cost of physical and mental health treatment, costs the U.S. Air Force an estimated one billion dollars annually (Williams, 2019). For government organizations in the United States, which derive their budgets from tax revenues and provide a service to and on behalf of the constituency, there is a fiduciary duty to understand and combat work environments that reduce productivity and increase costs.

Toxic Leadership in the Military Context

Leadership in the military is more nuanced than in the private sector or other parts of the public sector. Military commanders are responsible for leading a peacetime bureaucratic organization, but they must also be able to lead the same organization and the same people into conflict or battle. They are the forces that maintain security for the nation, making the consequences of military failure much higher than for any other type of organization (Reed, 2015). This duality of mission drives the hierarchical structure of military organizations, with clear lines of authority and specific responsibilities vested in command. A military leader's success in the context of such authority can create a sense of entitlement exacerbated by access to information, people, and power (DAF Inspector General, 2018).

Department of Defense

The Department of Defense (DoD) does not have an official definition of toxic leadership. However, the Department of Defense Equal Opportunity Management

Institute (DEOMI) notes that "toxic leadership behaviors include disregard for subordinate input, defiance of logic or predictability, and self-promoting tendencies" (2021). DEOMI administers and manages the Defense Equal Opportunity Climate Survey (DEOCS), a feedback mechanism between military personnel and their chain of command: the officers and non-commissioned officers appointed to lead personnel and military units. DEOCS surveys are required for every military organization annually and are regularly updated to meet DoD requirements. According to the latest version of the DEOCS instructions, unit commanders must share the survey results with the unit and complete action plans to address any issues identified by subordinates (DEOMI, 2021).

In addition, many Professional Military Education (PME) research papers and papers published in military-focused journals have explored toxic leadership in all service branches. Some define leadership via observed behaviors (Box, 2012), while others examine the lack of ethics and values as the root cause of toxic leadership (Aubrey, 2012). In a *Joint Forces Quarterly* article, Williams (2017) asserts that the root of toxicity in the Department of Defense is the emphasis on mission accomplishment or "getting results." The pressure to meet high-demand or no-fail expectations in organizational downsizing, budget cuts, and uncertainty eclipses values-based leadership, especially if the leader aspires for promotion (Williams, 2017).

Most papers written by military officers at military institutions categorize toxic leadership as an umbrella term encompassing behaviors such as unethical leadership, abusive leadership, self-serving leadership, bullying, authoritarianism, and unpredictability (Aubrey, 2012; Boger, 2016; Box, 2012; Williams, 2019). Much military research focuses on the impact such behaviors have on subordinates and organizational

performance. Recommendations in these papers are generally leader-focused, with several researchers recommending a 360-Degree feedback program to identify toxic leadership traits in commanders and senior leaders early in their military careers (Boger, 2016; Box, 2012; Harberichter, 2018; Williams, 2019). However, despite the research emphasis on toxic leadership, the military services have not adopted a standardized definition. At the same time, each service is taking steps to identify toxic leadership in its ranks and mitigate its effects.

Department of the Army

George Reed's inaugural work on toxic leadership for the Army offered the following broad definition: "toxic leadership, like leadership in general, is more easily described than defined, but terms like self-aggrandizing, petty, abusive, indifferent to unit climate, and interpersonally malicious seem to capture the concept" (Reed, 2004, p. 71). The U.S. Army attempted to codify toxic leadership by defining it in the 2012 version of Army Doctrine Publication 6-22, *Army Leadership and the Profession.* However, the 2019 revision of the document abandoned the term "toxic leadership" in favor of "counterproductive leadership." Despite the change in terminology, the concept is still described as an umbrella term encompassing several types of negative leadership: abusive behaviors, self-serving behaviors, erratic behaviors, and leadership incompetence (Headquarters, Department of the Army, 2019).

In addition to defining the term in their publications, the Army is combatting toxic leadership in its ranks (Steele, 2011). The U.S. Army Talent Management Task Force has instituted assessment programs for prospective Battalion and Brigade leadership designed to screen potential unit commanders and key staff officers for strategic thinking,

communication, physical skills, and positive and negative leadership traits (Pilgrim, 2020). Each five-day course includes psychological and stress testing designed to root out toxic or counterproductive leaders before they are assigned to command. The Army is developing a prototype of a similar program for senior enlisted personnel who round out the command team as Command Sergeant Majors (Army Talent Management Task Force, 2020).

Department of the Navy

Similarly, the U.S. Navy does not have an official definition of toxic leadership, nor have any published studies explicitly looked at toxic leadership in the Navy. However, the Navy Inspector General's Office has authored several reports looking at commanders removed from their positions or "detached for cause." Among the reasons a commander can be detached for cause is creating an adverse command climate (Higgs, 2014). A 2021 congressional study found that a zero-defect mentality and diminishing resources created a culture of micromanagement that hindered the Navy's ability to perform in wartime (Schmidle & Montgomery, 2021). While not explicitly identifying toxic leadership, the findings are consistent with the terminology used by researchers and other military branches to describe workplace toxicity.

In response to a perceived increase in unethical or toxic leadership in its ranks, the U.S. Navy formed the College of Leadership and Ethics at the Naval War College in 2018 and updated the Navy Leader Development Framework (Eckstein, 2018). The coursework and research focus on values-based instruction on reflection, understanding, acceptance, and commitment to counter the negative trends seen in the fleet (Klein M., 2020). The U.S. Navy is also overhauling its officer fitness report system, the annual

performance report for naval officers. The new construct looks to balance competence and character while providing leaders access to anonymous feedback from peers, subordinates, and supervisors to understand how they are perceived and provide opportunities to improve (Eckstein, 2018).

The U.S. Marine Corps (USMC) has taken a different approach to identifying and mitigating toxic leadership. In the middle of a 5-year study that began in 2018, the USMC is working to identify toxic leadership earlier in careers by administering an emotional intelligence test to Marines at the end of their first term of enlistment (Seck, 2017). The goal is to collect 3,600 data points with 300 complete reports by 2023 to inform future policy decisions. The USMC culture that celebrates and rewards accomplishment under the harshest conditions can inadvertently create a climate where leaders value mission accomplishment over people and core values. As a result, the line between effective leadership and toxic leadership in the Marine Corps is especially fine (Haberichter, 2018). The USMC is attempting to combat toxic leadership by optimizing military assignments for personnel to ensure they have the appropriate leadership development for the roles in which they will be placed (Seck, 2017).

Department of the Air Force

The Department of the Air Force (DAF) has also not defined toxic leadership. However, the DAF inspector general (IG) offers that "no one strives to be a toxic leader, but toxic traits sometimes develop as a by-product of success" (DAF Inspector General, 2018). Interestingly, while the IG document refers to toxic traits, the Air Force never defines them, complicating an already complex and emotional issue. The service seems to be grappling with the knowledge that the system used to select and promote leaders

somehow contributes to the development of toxic leadership. At the same time, Air Force policies put the responsibility for leadership behavior and organizational outcomes squarely on the shoulders of leaders (U.S. Air Force, 2014).

To investigate accusations of toxic leadership, the IG applies two primary standards. The Department of Defense's *Joint Ethics Regulation* mandates fairness, caring, and respect, and Air Force Instruction 1-2, Commander's Responsibilities, which requires commanders to ensure that military members are treated with dignity, respect, and inclusion (DAF Inspector General, 2018). The definition of toxic leadership lies nebulously in the inverse of the standards of behaviors outlined in those policies.

The IG's one-page 2018 "Holding the Line on Toxic Leadership" circular is the only DAF document specifically addressing toxic leadership. It briefly glimpses three case studies of toxic leadership allegations against senior ranking officers. However, it falls short of providing a satisfactory definition, asserting that "studies have found success may drive a sense of self-preoccupation; afford privileged access to information, people, and objects; and/or provide unrestrained control of organizational resources" (DAF Inspector General, 2018). While the IG does not cite specific literature, these concepts link directly back to Lipman-Blumen (2005), Reed (2004, 2015), Schmidt (2008, 2014), Einarsen et al. (2007), Padilla et al. (2007), and Thoroughgood et al.'s (2018) work in defining dark, destructive, negative, and toxic leadership.

Even though many definitions encompass toxic leadership behaviors that stem from personality disorders or a desire to harm the organization, this project assumes that leaders in the Department of the Air Force, who are vetted and selected based on past performance, do not desire to destroy the organization. Most perceived toxic behaviors in

the Air Force result from unintended consequences, expectation mismatches, a desire for promotion or advancement, or are deliberately selected to produce short-term results (Williams, 2017).

Toxic Leadership as Part of a System

Toxic leadership does not occur in a vacuum. It is a multi-dimensional concept of behavior, character, and impact on the organization enabled by the interplay between leaders and the followers who enable them (Lipman-Blumen, 2005). Adding the dimension of the environment and organizational governance structure to the mix, leadership becomes a product of the relationship between the leader, the follower, and the environment in which they operate (Herbert, 2011). The notion that leadership is a relationship between leaders and followers in a given context over time dates back to the work of Lewin (1947) and Follett (1949) and has been oft-repeated in the literature on the subject since 2000 (Harms & Spain, 2014; House et al., 2014; Kellerman, 2012; Lipman-Blumen, 2005; Padilla et al., 2007; Reed, 2015; Riggio, 2020; Thoroughgood et al., 2018).

The Toxic Triangle

Padilla, Hogan, and Kaiser (2007) constructed a "toxic triangle" model of leadership to show which traits, behaviors, and environmental factors can lead to a toxic organization or toxic leadership. They assert that the defining characteristics of destructive leaders are the following: charisma and impression management, personal ambition, the need for power, negative life themes, and an ideology of hate. On the other hand, susceptible followers include those with unmet basic needs like food and safety, negative self-worth, lack of maturity, high ambition, and values consistent with the

destructive leader. Finally, a conducive environment for toxic leadership is unstable. The perception of imminent threat, cultural values that endorse centralized power, uncertainty avoidance, and a lack of checks and balances create the toxic triangle (Padilla et al., 2007).

The Transformational Triangle

Rybaki and Cook (2016) explored the positive side of the leader-follower-environment relationship by coining a "transformational triangle" to describe constructive leadership and high-performing organizations. The transformational triangle differs from Padilla et al.'s toxic triangle by emphasizing a positive environment, values-based leadership, and capable followers. The critical difference between the toxic and transformational models is that organizational objectives are accomplished through subordinates in the transformational model. In contrast, in toxic situations, objectives are often achieved despite subordinates. Notably, Rybaki and Cook orient the triangle with the positive environment at the apex. This emphasizes the role of the environment in the transformational model. In Padilla et al.'s model, the leader is the primary driver of the counterproductive situation in a toxic environment (Rybaki and Cook, 2016).

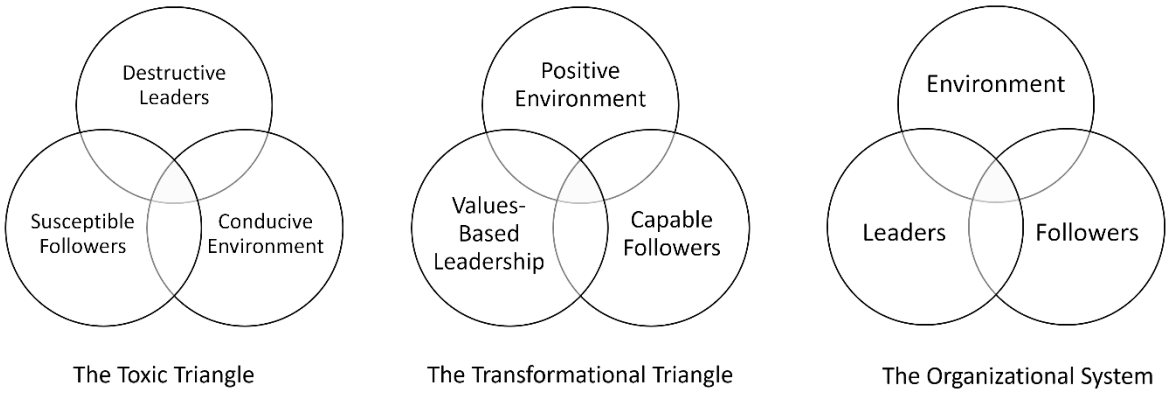
The Organizational System

Determining whether the organizational system's climate, culture, or experiences are positive or negative requires going back to the simple concepts of the leader-follower relationship in a context over time (Kellerman, 2012; Riggio, 2020). Leaving out any part of the triad provides an incomplete picture and can result in the misattribution of success or misdiagnosis of a root cause of issues (Riggio, 2020). This research project proposes a neutral version of the organizational triangle as a basis for a structured decision-making

tool. Whether positive or negative, the organization has the same essential elements: leaders, followers, and the environment. Like Rybaki and Cook's model, the environment is at the apex, signaling its importance in the system. The leader and follower relationship makes up the base that anchors the environment. Each of the three elements will be discussed in detail to illustrate the dimensions that interact to create a unique system and experience for every leader and follower in an organization.

Figure 3

Variations of the Organizational System



Note. This figure represents variations of the organizational system from the basic system of leaders, followers, and the environment. The Toxic Triangle was adapted from Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *The Leadership Quarterly, 18*(3), 176-194. https://doi.org/10.1016/j.leaqua.2007.03.001. The Transformational Triangle was adapted from Rybacki, M., & Cook, C. (2016). Switching the paradigm from reactive to proactive: Stopping toxic leadership. *Joint Forces Quarterly, 82*(3), 33-39.

The Environment

Several environmental factors influence the perception of toxic leadership, including national culture, organizational culture, organizational climate, institutional rules, organizational resourcing, and institutional requirements (Padilla et al., 2007; Rybacki & Cook, 2016; Williams, 2017). Additionally, the perceptions of higher-level

leadership and peers are critical environmental factors as they can help build the picture of what is going on within the organization (Boger, 2016). Finally, in the military context, whether the organization is deployed in combat or exercises or at home in garrison may change the character of the environment (Schmidt, 2014).

Culture

A growing body of research finds that social science, leadership, and organizational theories may be culturally dependent (House et al., 2014). From a practical and research standpoint, it is essential to consider whether national cultural, or organizational differences are relevant in discussing the concept of toxic leadership. Just as there is no single definition of toxic leadership, there is no single, universally accepted expression for all that culture encompasses. Geert Hofstede defined culture as "the collective programming of the mind which distinguishes members of one human group from another" (2001, p. 1). By contrast, House et al. defined culture as “shared motives, values, beliefs, and interpretations of significant events that result from common experiences of members of collectives that are transmitted across generations” (2014, p. 11).

Culture can also be defined as the accumulated shared learning of a group as it adapts to external problems and integrates internally and perpetually as new members are taught the “correct way to perceive, think, feel and behave” (Schein & Schein, 2017). The group can be anything from a family unit to a formal organization. As a social unit of people interacting with one another, all organizations have a unique culture characterized by artifacts, espoused values, and basic underlying assumptions (Schein & Schein, 2017). Culture can be simultaneously deliberately cultivated and something that groups

intrinsically possess. Leadership must be viewed through the lens of culture. In fact, some leadership behaviors may be universally accepted in all national cultures, commonly accepted among certain national cultures, or acceptable only in a single national culture (House et al., 2014).

American Culture

American culture values independence, equality, hard work, competition, and the opportunity for a better life (Datesman et al., 2014). On Hofstede's scale of cultural dimensions, the United States scores low on power distance, the degree of influence or power that one individual has over another, but high on individualism (Hofstede Insights, 2020). This combination implies that organizational hierarchies are usually established for convenience, but people are hired and consulted based on their expertise. Add in a high score for masculinity and a low score for future orientation, and one can see a pattern of competition and the belief that hard work, grit, and discipline can overcome obstacles. Americans tend to see changes in the status quo as problems to be solved rather than situations to be endured (Hofstede Insights, 2020).

American Military Culture

American military culture is characterized by its organizational hierarchy, common mental framework, and adherence to rules (Reed, 2015). Because of the mental and emotional challenges created by intense work environments, deployments, and frequent moves, military personnel and their families show higher resilience than their civilian counterparts (Redmond, et al., 2014). Within these generalizations, military culture varies based on the branch of service, the status of service (active duty versus reserves or national guard), rank, and military occupation. Each of those subcategories

has its own subculture. However, they all follow the hierarchical notion of a chain of command for decisions and orders and embrace some form of a "warrior ethos" (Redmond, et al., 2014). Military culture is unique in American culture because it emphasizes and values the group over the individual (Redmond et al., 2014; Reed, 2015; Williams, 2017). This trait is seen as essential to survival on the battlefield.

Department of the Air Force Culture

The Department of the Air Force is comprised of the U.S. Air Force, which was formed in 1947, and the U.S Space Force, which was formed in 2019. Unlike the other U.S. military services, most Air Force members see themselves as technicians first, then as members of the greater organization (Thomas, 2018). This worldview leads to lower unit cohesion than other military branches and tends toward individualism and occupationalism. On the other hand, focusing on technology and individual contributions allows innovation to become a central theme in Air Force culture. Its heroes are men like Billy Mitchell, Robin Olds, Chappie James, Jimmy Doolittle, Chuck Yeager, and Bud Day, all known for "bucking the system," even in the face of demotions and stagnating promotions (Stillwell, 2016). Some of these heroes' leadership behaviors may have even been perceived as toxic today. Air Force leaders understand this dichotomy and make concerted efforts to emphasize common values and assumptions across the force. Air Force regulations charge unit commanders with setting and enforcing an organizational culture that is in keeping with the stated values of integrity, service before self, and excellence (U.S. Air Force, 2014).

However, the ingrained subcultures of individual Air Force disciplines are challenging to overcome and can lead to organizational inertia. Rather than espousing the

Air Force's written values, the service's actual culture reflects Hofstede's observations of Americans valuing competition and winning. Byrnes (2020) observed that demands for excellence and aspirations toward membership in a world-class team lead to a perceived hierarchy of occupations within the Air Force. This hierarchy is created by the Air Force's goal with respect to budget and policy: "to make air superiority a central tenet of American strategy" (Zimmerman, et al., 2019, p. xv). Occupations more closely associated with attaining the goal have a higher perceived status reinforced by increased funding.

General Charles Brown, Jr., the Chief of Staff of the Air Force, recognized these institutional challenges and published a strategic vision, "Accelerate Change or Lose," to combat some of the issues inherent in bureaucracy (Hlad, 2020). In the document, Brown makes a case for why the underlying hierarchical assumptions must be overcome for the service to evolve, stating, "only through collaboration within and throughout will we succeed" (Brown, 2020).

The U.S. Space Force (USSF) makes up the rest of the Department of the Air Force. Founded in 2019, it is in the early stages of developing an organizational identity and culture. Space Force members have been dubbed "Guardians," and the central organizational unit transformed from an Air Force Wing to a Space Force Delta. As of 2022, the force's rank structure and other organizational details have yet to be determined. While the U.S. Space Force is recruiting and onboarding new military personnel, most of its ranks are filled with those who have transferred from other military services. However, just as the U.S. Air Force developed a distinct identity when it detached from the U.S. Army and became its own service in 1947, the U.S. Space Force

will develop a culture that matures as its mission becomes more defined (Klein J. J., 2020).

The U.S. Space Force may be new, but American involvement in space is not. The young service is likely to draw on the National Aeronautics and Space Administration (NASA) heritage, the traditions in the space missions of each service, and the Space Force's predecessor, the Air Force Space Command (Anthony, 2019). In some ways, this foundation is helpful as a starting point. In others, it may be a hindrance. Garretson (2019) points out that the Air Force Space Command's legacy is a subset of U.S. Strategic Command, which oversees the nuclear forces and weapons capabilities in all the services. This focus on nuclear weapons drives a strict culture of compliance to ensure that a fatal, strategic mistake is not made. By contrast, the opportunity to develop a service that shifts the focus in space from a supporting role to a warfighting domain is to focus on innovation and empowerment over compliance (Garretson, 2019).

Another critical factor is the acceptance among the whole of government that space is a separate warfighting domain and not just an extension of airpower. This distinction sets the conditions for the Space Force as a truly unique and necessary branch of the military. If the Space Force embraces an entirely innovative culture, then the leadership styles of those in command need to follow a less hierarchical, top-down structure and a more responsive and team-oriented force.

Masculinity Contest Culture

One type of organizational culture often found in military organizations is the masculinity contest culture (MCC). Four traits characterize this type of culture: showing no weakness in the workplace, valorizing strength and stamina, putting work first, and

hyper-competition (Berdahl et al., 2018). In an MCC organization, men and women must play “the game” to survive and adhere to the pre-defined roles and organizational structure. To venture outside those norms, especially for women or people of color, means to receive pushback for assertiveness or self-promotion (Berdahl & Min, 2012). In America, White males tend to succeed more in the MCC environment because they value competition and individual achievement more than other ethnic and gender groups (Berdahl et al., 2018).

In examining the intersection between MCC and toxic leadership, Matos, O’Neill, and Lei (2018) found that the masculinity contest culture decreases organizational citizenship and productivity. This effect may be buffered by a leadership style that is out of sync with the masculinity of the culture. That is, toxic leaders in low-masculinity cultures were buffered by their environment, and non-toxic leaders who succeeded in MCCs seemed to balance the more extreme characteristics of the culture (Matos et al., 2018). Surprisingly they also discovered that men who reported working for toxic leaders in an MCC had higher work engagement and meaning levels than expected, a finding which did not extend to women in similar organizations with a masculinity contest culture (Matos et al., 2018). While an in-depth examination of the relationship between gender, organizational citizenship, and perceived toxic leadership is beyond this project's scope, a rudimentary understanding of implicit bias and affinity bias in a masculinity contest culture highlights the potential for future research.

Organizational Climate and Performance

Related to culture is the concept of organizational climate. Both climate and culture deal with employees' overall emotions about their experience in an organization.

While organizational culture refers to the shared meaning employees have about the underlying values and beliefs of the organization, organizational climate deals with the meaning attached to policies, practices, and behaviors in the workplace (Schneider & Barbera, 2014). More simply put, if culture is the "why" of the organization, the climate is the "what" (Schneider & Barbera, 2014). Climate can also be expressed as morale or how members of an organization feel about their workplace (Reed, 2015). Military organizations, particularly in the Department of the Air Force, term this "command climate" (Department of the Air Force, 2014). Department of the Air Force regulations assert that the organization's leader or commander is responsible for setting a positive command climate during his or her leadership tenure (Department of the Air Force, 2014).

Workplace policies provide the foundation for employee practices—the differentiation between which behaviors are rewarded and punished reinforces cultural norms and values and sets the tone for the organizational climate. An adverse climate can develop when policies are viewed as overly restrictive, intrusive, or counterproductive to organizational objectives. Williams (2017, p.59) points to themes of "failure is not an option" and "do more with less" in military organizations as an illustration of negative influences on climate. He asserts that these no-fail objectives can negatively influence policy implementation, leading to mediocrity and employee apathy. By contrast, if employees and service members fully understand the desired state and feel empowered to implement policies that make sense, the command climate is more likely to be positive. Leaders can set a positive climate by choosing to accomplish the mission or

organizational goals through subordinates rather than despite them (Rybacki & Cook, 2016).

Diversity Climate

Though not prevalent, some academic literature examines the role of diversity in organizational climate. A diversity climate is a shared perception among employees about organizational processes, procedures, and practices that recognize and appreciate individual differences (Moon & Christensen, 2019). Organizations with a higher percentage of diverse employees and a favorable diversity climate are more likely to embrace further diversity efforts and experience lower turnover rates than those without (Ward et al., 2022). Gender is a moderating factor in counterproductive work behaviors contributing to an adverse organizational climate (Lipinska-Grobelny, 2021). Further, racial diversity increases organizational performance, but age diversity does not significantly impact performance (Moon & Christensen, 2019). The impact of a positive diversity climate on an organization is more profound in less diverse communities. In short, when the surrounding community is more homogeneous, a diverse organization positively impacts organizational performance more than it would in a more diverse community (Pugh et al., 2008).

Demographics and Disparity in the U.S. Air Force

The active-duty Air Force is comprised of 78.6% men and 21.4% women. 70.0% of the total force is White, 15.0% Black or African American, 16.5% Hispanic or Latinx, 4.7% Asian, 4.9% multi-ethnic, 1.2% Native Hawaiian or Pacific Islander, and 0.8% Native American or Native Alaskan (Air Force Personnel Center, 2022). There is evidence of disparity in treatment and climate perceptions between service members in

the White majority and those belonging to minority groups in the service (DAF Inspector General, 2021). Between 2020 and 2021, the Department of the Air Force conducted a series of disparity reviews to understand the experience of underrepresented groups in the service (DAF Inspector General, 2020; 2021; 2021a). The reviews examined recruiting, retention, military discipline, promotion rates, and leadership development opportunities for different racial, ethnic, and gender groups. It did not include IG and Equal Opportunity allegations, complaints, and investigations. The reports only record what disparities exist, not why. As a result, there are no solid conclusions about racism, sexism, discrimination, or the underlying reasons for disparate treatment, only the existence of the disparity (DAF Inspector General, 2021).

The first report looked at the population of African American service members and found that black service members were 72.0% more likely to face military justice and discipline than their White counterparts and less likely to be promoted to ranks and positions of leadership (DAF Inspector General, 2020). Native American service members were 10.0% more likely to receive discipline than White peers and 70.0% less likely to be promoted to higher officer ranks (DAF Inspector General, 2021). Hispanic Americans and Latinx service members were less likely to receive discipline than their White counterparts but 34.0% less likely to be promoted to ranks associated with command and authority. Asian Americans were the least likely to face military justice or discipline but were promoted at the lowest rates and were the most underrepresented in leadership and command positions (DAF Inspector General, 2021).

Those with intersecting identities, including multi-racial and multi-ethnic service members, were more likely to receive discipline than their White counterparts and were

promoted at below-average promotion rates (DAF Inspector General, 2021). Finally, when looking at gender disparity, the reports found that women, especially White women, were much less likely to face discipline than their male counterparts and were promoted at higher rates. However, this statistic did not hold for black women, who were promoted below the average rate in all categories (DAF Inspector General, 2021). Additionally, women of all races and ethnicities were much less likely to be in operational career fields, which led to command opportunities and general officer promotions, effectively describing the glass ceiling in the U.S. Air Force (DAF Inspector General, 2021).

Resources and Requirements

When resources such as manpower, funding, and equipment are insufficient to complete the mission or accomplish organizational objectives, leaders and followers are forced to choose how to implement policies and achieve outcomes (Williams, 2017). This creates instability and breeds a conducive environment for toxic leadership (Padilla et al., 2007). Organizations where leaders consolidate power and decision-making in the face of instability may become dysfunctional or toxic, while those that empower employees to handle instability at the lowest level may not (Padilla et al., 2007; Rybacki & Cook, 2016).

For U.S. military branches, resources tend to be abundant (or at least adequate) during wartime. During inter-war years, resources are quickly drawn down and leaders must find ways to encourage personnel while posturing the force for the next challenge, threat, and technological advancement (Reed, 2015). Motivating personnel to perform can be tricky in an unstable geopolitical environment, like the one experienced by U.S. forces after the withdrawal of troops from Iraq and Afghanistan (Brown, 2020).

Threats

Unstable conditions can lead to the perception of a threat to the organization (Padilla et al., 2007). Whether it is a country facing a threat of terrorism or war, the economic uncertainty of a recession, or the threat of budget and manpower cuts in the military, people who feel that their livelihood is at stake are more likely to gravitate toward strong and assertive leadership which can develop into toxic leadership. This desire for strong leadership is how dictators have come to power in many struggling nations (Padilla et al., 2007).

The shared experience of perceived threat can also bond people together to overcome the common enemy (Reed, 2015). This bonding experience is especially true for military personnel serving in combat (Ellerman, 2016). The common goal of survival forges solid bonds and fuels the desire to succeed in the military mission, even with high costs. However, Schmidt (2014) did not find a difference in the relationship between negative group cohesion and toxic leadership between combat and non-combat environments. This lack of appreciable difference may be because the modern combat experience is not limited to the battlefield. It is a complex and stressful environment that requires soldiers to shift quickly from seeking and destroying an enemy in a firefight to protecting a local population, serving as infrastructure project managers, or winning hearts and minds in engagements with key community leaders (Laurence, 2011).

Checks and Balances

Without checks and balances in an organization, power is more likely to be abused, even if the misuse of power is unintentional (Padilla et al., 2007). Leaders at the top of an organization generally have fewer supervisors and are subject to less scrutiny

than those lower in the organization (Padilla et al., 2007). As a result, senior leaders may view the organization and use power much differently than those in the middle or bottom of the hierarchy (Reed, 2015). This phenomenon is also described as hourglass leadership, where subordinates see a different side of a leader than peers and supervisors, especially in organizations focused on outcomes rather than processes and relationships (Williams, 2017).

Ensuring a system of checks and balances in the organization is key to a healthy environment and countering hourglass leadership (Padilla et al., 2007). The Department of the Air Force uses the Inspector General system to implement checks and balances in its organizations (Secretary of the Air Force, 2018). The IG system works as a communication tool between layers of hierarchy and provides a venue for individuals to voice complaints or concerns. Another tool to limit power in the Air Force and Space Force is limiting command assignments to two years (U.S. Air Force, 2014). Rotating leaders out of organizations regularly reduces the ability to gain and abuse the power afforded to command.

Leaders

Leaders make up the second piece of the organizational system. In the toxic triangle, charisma, personalized power, narcissism, negative life themes, and hate are leadership factors that can lead to toxic work environments (Padilla et al., 2007). Character, selflessness, servant leadership, and values can sway the triangle toward a transformational model (Rybacki & Cook, 2016). Other factors, such as bias with respect to age, gender, race, and sexual orientation, can impact the perception that leadership behavior is toxic (Ellerman, 2016). Furthermore, a leader's professional qualifications

and alignment with organizational priorities can contribute to perceptions of competency and effective or toxic leadership (Milosevic et al., 2020). Ultimately, personal and culturally contingent leadership styles can impact the perception of leader behavior in the organizational system (House et al., 2014; Reed, 2015). The "romance of leadership" credits leaders for organizational successes and blames them for organizational failures, even when there is no direct link between behaviors and outcomes (Bligh et al., 2007).

Leader Demographics and Bias

A leader's gender, race, sexual orientation, professional qualities, and perceived competency can trigger bias among followers and influence the perception of toxic leadership in an organization. Leadership categorization theory explains the affinity and ingroup biases we apply to determine when a leader's characteristics and behaviors match a follower's implicit ideas about a typical leader (Gundemir et al., 2014). If they match, there tends to be a positive feeling about that leader. In western societies, there was an implicit bias toward White leaders by groups of White and non-White study participants in observing leadership traits (Gundemir et al., 2014). Those that do not fit the perception of effective leadership, particularly women or people of color, experience increased scrutiny of their actions, gestures, speech, and deportment and often enact patterns of behavior aimed at fitting into the mold of the organization to gain more respect and status as a leader (Glass & Cook, 2020). Further, stereotyping is at the root of systematic bias against black leaders, regardless of whether they succeed or fail at a task (Carton & Rosette, 2011).

Women face similar biases. Even when women exert leadership qualities, they are not always perceived as strong leaders. In a study of 22 mixed-gender decision-making

groups in the United States, Walker and Aritz found a clear bias against women as leaders in a masculine organizational culture, even when women demonstrated leadership skills (2015). Further, there is ample evidence that because American culture sees leadership as a traditionally male role, women leaders experience social and economic penalties—backlash—for stepping outside gender-congruent roles (Brescoll et al., 2018). More specifically, people express contempt, disgust, revulsion, and disdain towards women leaders who display dominance and agency. At the same time, men who exhibit those traits are not subject to the same treatment (Brescoll et al., 2018). These feelings of moral outrage may be associated with the perception of toxic leadership when women lead organizations.

The Glass Cliff

Another theory involving leadership by women and people of color is the glass cliff phenomenon. The theory proposes that women and people of color are more likely to be appointed to leadership positions in times of crisis and judged more harshly than their White male counterparts would be if they fail (Morgenroth et al., 2020; Ryan & Haslam, 2005). Despite the preference for White male leadership in organizations across sectors (Gundemir et al., 2014), women are seen as more cooperative and caring, which are valuable traits in crisis situations (Morgenroth et al., 2020). Members of underrepresented groups can also be appointed in times of crisis to signal change from the status quo (Kulich et al., 2015). Members of these underrepresented groups may be more willing to accept precarious or risky job positions, especially if these leaders see the position as a pathway to promotion (Darouei & Pluut, 2018).

Leadership Style

Leadership style is how a leader chooses to interact with his or her followers in the organization's context (Kets de Vries, 2001). The intersection between the leader's character, the follower's character, and the situation is established over time (Reed, 2015). While there are thousands of studies on leadership styles, Rensis Likert's work remains a classic. He outlined four basic styles: 1) exploitative-authoritarian, in which the leader has no confidence in subordinates and subordinates have no power or freedom, 2) benevolent-autocratic, in which the leader has condescending confidence in subordinates and motivates employees with a mixture of rewards and punishments, 3) consultative, in which the leader maintains decision-making authority because he or she has substantial, but not complete trust in subordinates, and 4) democratic, in which the leader has complete confidence and trust in subordinates and empowers employees at every level (Likert, 1961).

Bass (1985) simplified the concept, asserting that a leadership style can be transactional or transformational. Transactional leadership is a reactive style that focuses on results. It is based on rewarding workers for meeting agreed-upon expectations, with the underlying theory that workers are not self-motivated. They require structure, training, and feedback to achieve results (Bass, 1985). On the other hand, transformational leadership is proactive and emphasizes motivation and empowerment at the individual level. It is a hands-off style that relies on organizational citizenship behavior to achieve results (Bass, 1985).

More than one style of leadership can be effective in a military setting. Bass, Avolio, Jung, and Berson conducted a 2003 study on U.S. Army platoons participating in

combat simulation exercises. Both transactional and transformational leadership styles were essential to achieving organizational success. Transactional leadership provided clarity of each person's roles in the event, while the transformational style added a layer of mutual trust and respect (Bass et al., 2003).

Leadership style is not necessarily associated with competence, dedication, or character (Reed, 2015). Bass (1985) found that "transformational leadership is more likely to reflect social values and to emerge at times of distress and change while transactional leadership is more likely to be observed in a well-ordered society" (p.154). Richter's research at the North Atlantic Treaty Organization (NATO) Supreme Headquarters Allied Powers Europe (SHAPE) reinforced this concept, concluding that a democratic and participative leadership style is preferred on a military headquarters staff in peacetime. In contrast, a more authoritative style is preferred in the operational or combat environment (Richter, 2018). Selection of the leadership style and the awareness of how it impacts subordinates is the critical component in the perception of toxic leadership (Lipman-Blumen, 2005a; Reed, 2015).

Leadership Traits

While leadership style can be bifurcated from competence, character, and values, leadership traits are attributes of character that are manifested in actions (Linzey, 2015). Whether leadership traits are positive or negative can depend significantly on context. In the 2014 Strategic Leadership Across Cultures study, House et al. introduced their culturally endorsed implicit leadership theory (CLT). This theory postures that some attributes of leaders are universal, and some are culturally contingent (House et al. 2014). Their research analyzed 382 attributes, eventually defining 21 primary leadership

dimensions, 6 of which they considered universal. They determined that some were universally positive, some universally negative, and some were culturally contingent. The culturally contingent attributes are generally related to the power distance of the national culture (Hofstede, 2001; House et al., 2014). A list of universally applicable and culturally contingent leadership traits is shown in Table 3.

Table 3

Universal and Culturally Contingent Leadership Traits

Universally Positive	*Universally Negative*	*Culturally Contingent*
Trustworthy	Non-explicit	Ambitious
Dynamic	Dictatorial	Logical
Decisive	Loner	Sincere
Intelligent	Ruthless	Enthusiastic
Dependable	Asocial	Intuitive
Planner	Egocentric	Orderly
Excellence Oriented	Irritable	Willful
Team Builder	Non-cooperative	Worldly
Encouraging		Self-sacrificial
Confidence Builder		Sensitive
Informed		Intragroup competitor
Honest		Compassionate
Effective bargainer		Procedural
Motive arouser		Unique
Problem Solver		Status conscious
Positive		Formal
Foresight		Risk Taker
Just		Class conscious
Communicative		Intragroup conflict avoider
Motivational		Independent
Coordinator		Self-effacing
Administrative skilled		Autonomous
		Cautious
		Domineering
		Habitual
		Individualistic
		Micromanager
		Elitist
		Ruler
		Cunning
		Provocateur

Adapted from House, R. J., Dorfman, P. W., Javidan, M., Hanges, P. J., & Sully de Luque, M. F. (2014). *Strategic Leadership Across Cultures.* Thousand Oaks, California: Sage Publications.

Independent of the cultural component, nearly every study on destructive leadership includes a list of characteristics displayed by leaders perceived as toxic. Charisma, especially, bears examination because it is central to both positive leadership (Alarcon et al., 2012; Bass, 1985; Bass et al., 2003) and negative leadership (Dobbs & Do, 2019; Lipman-Blumen, 2005; Padilla et al., 2007; Reed, 2015; Rybacki & Cook, 2016; Schmidt, 2008). Charismatic leadership entails using charm, attractiveness, and communication to influence subordinate behaviors by tolerating risk, articulating a vision, and valuing the collective (Earhart & Klein, 2001). Charismatic leaders inspire those who follow them.

In striking contrast, charisma is one of the critical factors in Padilla et al.'s (2007) description of the destructive leader. They point out that charismatic leaders may abuse power for self-serving needs by exaggerating achievements and covering up mistakes and failures (Padilla et al., 2007). Impression management is central to charismatic leaders, a hallmark of toxic leadership. While not all charismatic leaders are destructive, the most successful destructive leaders have been charismatic. What distinguishes the two are a personal code of ethics and the difference between the noble vision of a constructive leader and the unfulfilled grand illusion of her toxic counterpart (Lipman-Blumen, 2005).

Leadership Behaviors

Leadership behaviors and how they are interpreted are also a function of the relationship between the leader, the follower, and the environment (Harms & Spain, 2014). For example, some of the behaviors associated with the transformational leadership style: sharing risks with followers, questioning assumptions, reframing problems, and understanding an individual's need for growth (Bass et al., 2003). Leaders

may see themselves as providing helpful comments and reframing problems, but subordinates may interpret such actions as micromanagement. In contrast, if a leader allows a subordinate to take the lead to spur individual growth. That action may be interpreted as unresponsiveness and ignoring the team (Reed, 2015). Similarly, a transactional leadership style could be interpreted as lacking commitment to values and empathy for the organization's members.

While some leadership behaviors may stem from intrinsic characteristics or leadership style, other behaviors result from how leaders cope with the stress of leadership positions. Leaders may react differently to a situation when leading an overtasked and under-resourced organization, especially in combat, than they would act at the helm of a successful, established organization. Indicators of impending leadership failure include conforming under pressure, showing off, or blowing up in reaction to outside stressors (Alarcon et al., 2012). Furthermore, leaders who use a transactional leadership style may struggle with the emotional side of coping with adversity, instead focusing on action-based outcomes. The action-based coping strategy may produce results, but subordinates could feel undervalued by their leader (Alarcon et al., 2012).

Leader Motives

Another interrelated concept is leader motivation. Counterproductive work behaviors are more likely to develop and organizational performance suffers when leaders are motivated by a desire for power (Schattke et al., 2021). Moreover, a leader's intrinsic motivation and response to empowerment from higher levels impact their subordinates and the organization. Leaders who are motivated by prestige are more likely to empower subordinates. In contrast, leaders motivated by dominance are more likely to

exhibit controlling behaviors over subordinates, even when being empowered themselves (Lee et al., 2021). The leader's underlying motivation thus links back to perceived behaviors and why toxic leaders rarely admit mistakes and seldom see their behavior as destructive (Reed, 2015).

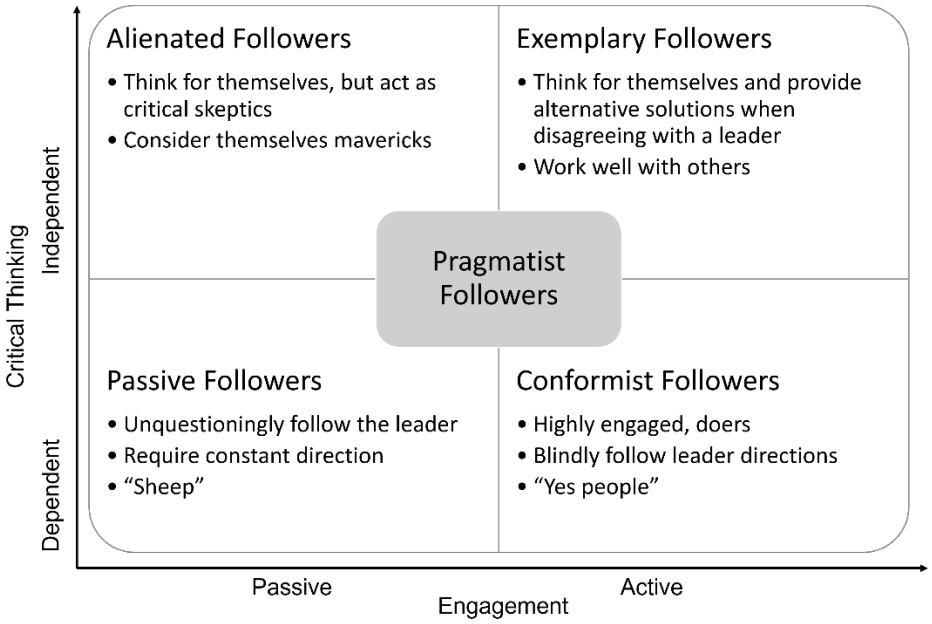
Followers

Followers are the third vital part of the organizational system; they exist within the context of the environment and their relationship with leaders (Padilla et al., 2007; Rybacki & Cook, 2016; Headquarters, Department of the Army, 2019; Milosevicet al., 2020). Without followers, no leaders exist (Uhl-Bien et al., 2014). Their personal beliefs and biases with respect to age, gender, race, sexual orientation, and other demographic differences can influence their behaviors and assessment of leadership behaviors (Harms & Spain, 2014). A follower's perception that toxic leadership exists in an organization can stem from more than one type of experience (Webster et al., 2014).

Followers have a responsibility to themselves, their leaders, and the organization. The act of followership is a choice, not just a byproduct of position (Martinez, 2021). However, the extent of the followers' influence on the organization is not well understood, as most theories of organizational performance remain leader-centric (Riggio, 2020).

Figure 4

The Five Types of Followers



Adapted from Kelley, R. (1992). *The power of followership: How to create leaders people want to follow, and followers who lead themselves.* New York: Doubleday.

Types of Followers

The classic description of follower types and behaviors comes from Robert Kelley's 1992 work, *The Power of Followership.* He derived a scale that categorized followers by their degree of engagement and critical thinking (Kelley, 1992). Those that rank high in critical thinking but low in engagement are alienated followers. They often see themselves as mavericks but act as unproductive critical skeptics in an organization. "Somehow, sometime, something turned them off" (Kelley, 1988, p. 143). Passive followers lack critical thinking skills and require constant direction, like a flock of sheep that must be constantly tended. Conformist followers, also known as "yes people," are biased toward action but low in critical thinking, instead unquestioningly following a

leader's direction. Pragmatic followers, or survivors, are at the mid-level of engagement and critical thinking. These group members will wait to act based on how they see a situation evolve. They may resist change and are interested in maintaining the status quo (Kelley, 1992).

Exemplary or effective followers rate high in both critical thinking and engagement. They tend to contribute the most to an organization because they work well with others and strive to achieve organizational goals (Kelley, 1992). These followers display several essential qualities: self-management, commitment, competence, focus, and courage, which manifest in behaviors like building credibility, aligning personal goals with the organizational goals, disagreeing agreeably, and moving smoothly between leadership and followership roles (Kelley, 1988, p. 147). Exemplary followers use an ethical lens to balance behavior and organizational outcomes (Berg, 2014).

However, not all followers contribute to a positive organizational context. Sometimes followers can become toxic. Padilla et al. classify toxic followers into conformers and colluders (Padilla et al., 2007). In this explanation, conformers are followers with low self-esteem, unmet needs, or low maturity levels, while colluders are those who seek to benefit from the toxic leader and may share a set of skewed values or priorities (Rybacki & Cook, 2016). They are similar to Kelley's passive and conformist models; both present a low degree of critical thinking but vary in the range of active engagement.

Leader-Member Exchange

Leader-member exchange theory (LMX) explores the relationships between leaders and followers, a critical step in putting leadership and follower traits into context.

While research has found that a high-quality leader-member relationship unquestionably increases organizational performance, a fundamental assertion of the theory is that leaders cannot maintain high-quality relationships with all their subordinates (Yu et al., 2018). The resulting relationship differential can result in the perception that leaders exhibit favoritism, which can be interpreted as toxic leadership (Schmidt, 2008; Milosevic et al., 2020).

On the dark side of the leader-member relationship, followers fall victim to controlling myths to enable and prolong toxic leadership. These are methods in which followers rationalize that they cannot resist or overthrow a toxic leader. The rationalizations gradually grow stronger among the group until the notion that the leader cannot be removed from power is an accepted organizational or societal norm (Lipman-Blumen, 2008). Control myths work in seven ways: physiological and achievement myths play on the requirement for basic needs employment, inferiority myths play on the employee's belief that the leader knows more than the followers, isolation myths play on the fear of being isolated from the social circle, status quo myths play on the human need for order, meaning myths cause followers to look for meaning in their circumstances, self-actualization myths exploit the employee's desire to dream about success rather than achieve it, and immortality myths imply that by participating in the toxic leader's vision, followers will achieve notoriety or transcendence (Lipman-Blumen, 2008). In all these situations, followers rationalize their behavior and perpetuate a toxic situation by self-enforcement of the toxic policies.

Organizational Citizenship

One way to envision the leader-follower relationship in a follower-centric way is the concept of organizational citizenship (Riggio, 2020). Engagement and buy-in to organizational goals result in organizational citizenship when employee action goes beyond the position's requirements and goes the extra mile (Reed, 2015). Organizational citizenship behaviors are highest when employees feel supported and empowered in the workplace (Koc et al., 2021; Matos et al., 2018;). When the employee experience does not meet their workplace expectations, organizational citizenship behaviors decrease, especially when an organization does not appear to live up to its espoused values and leaders are perceived to exhibit traits of self-promotion (Dobbs & Do, 2019).

Conflict in the Workplace

Conflict is a natural by-product of teamwork and can benefit mission or task accomplishment. Task conflict describes differences of opinion or conflict surrounding the task at hand. In contrast, process conflicts are disagreements over logistical, delegation, and decision-making issues such as the distribution of resources, procedures, policy, or outcomes (Jehn et al., 2008). Relationship conflicts tend to be about values, preferences, personal taste and style, communication, and leadership style (De Dreu & Weingart, 2003).

When conflicts surrounding tasks or processes are conflated with a conflict over social or relationship issues, team performance is impaired, and organizational citizenship behaviors are impeded (Jehn et al., 2008). This is especially true when organizations or teams do not have an open communication style. The negative emotions caused by relationship conflict can spill over into task and process conflict, hindering overall performance and group cohesion (Jehn et al., 2008).

Toxic Leadership Definition for this Study

The literature review reinforced the researcher's impression that toxic leadership is a complex concept heavily influenced by human perception. Depending on the follower's values and background, a leader's behavior can be interpreted much differently by different members of the same organization (Lipman-Blumen, 2005). As with any form of leadership, toxic leadership is a byproduct of the interplay between leaders, followers, and the environment. It is difficult to capture the nuance of the system in a single definition. Therefore, this study defines four separate but interrelated concepts for use in the research: organizational toxicity, toxic leadership, toxic followership, and toxic workplace.

- **Organizational toxicity** is the sustained combination of environmental factors, leader and follower behavior, and follower perceptions that erode trust, communication, and workplace productivity.
- **Toxic leadership** is the sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in the behavior of followers who interpret the leader's behavior as counterproductive.
- **Toxic followership** is the sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade organizational performance.
- A **toxic environment** is a physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership.

The Force Field Analysis Model

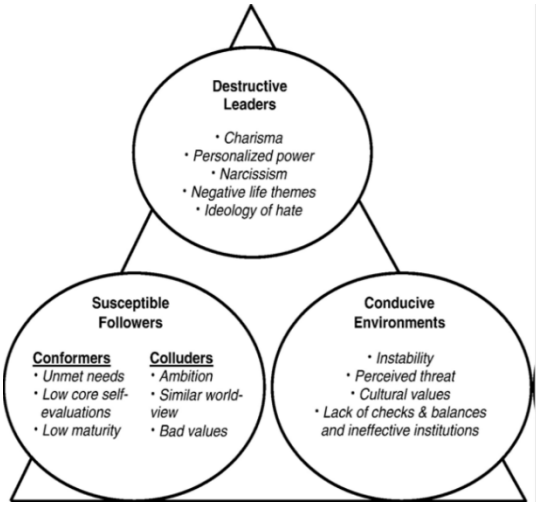
This literature review established how leadership, followership, and the environment are interrelated, as illustrated in the toxic triangle shown in Figure 5 (Padilla et al., 2007). Further, organizational toxicity is not a single event. Instead, it develops over time (Thoroughgood et al., 2018). While several researchers have developed models to describe negative, destructive, or toxic leadership, none of them address the motivation behind the behaviors of leaders and followers or the factors that influence the conditions of the environment (Burns, 2017; Einarsen et al., 2007; Milosevic et al., 2020; Padilla et al., 2007; Thoroughgood et al., 2018).

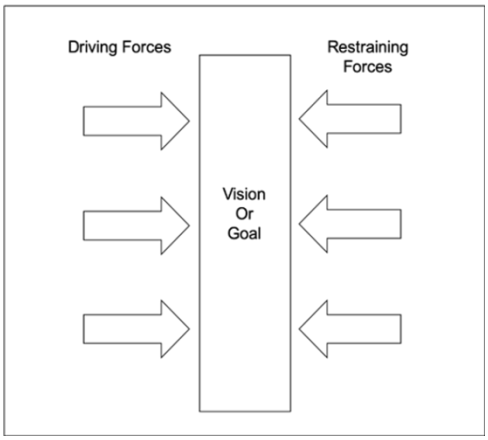
There is a need to define and consider what other forces or factors act upon the environment, leaders, and followers to influence outcomes. For example, why might a follower be inclined to condone autocratic leadership, or what conditions led to an environment of instability that allows toxic leadership to develop?

Psychologist Kurt Lewin's work from the 1940s provides a method to identify and analyze the influence of outside forces on an organization. Lewin saw behavior as part of a scientific system and argued that to understand human behavior, one must understand the forces acting upon it (Lewin, 1947). Identifying the driving and restraining forces acting on an organization may allow members of the organization to assess whether their climate is positive or negative.

Figure 5

The Toxic Triangle and Force Field Analysis





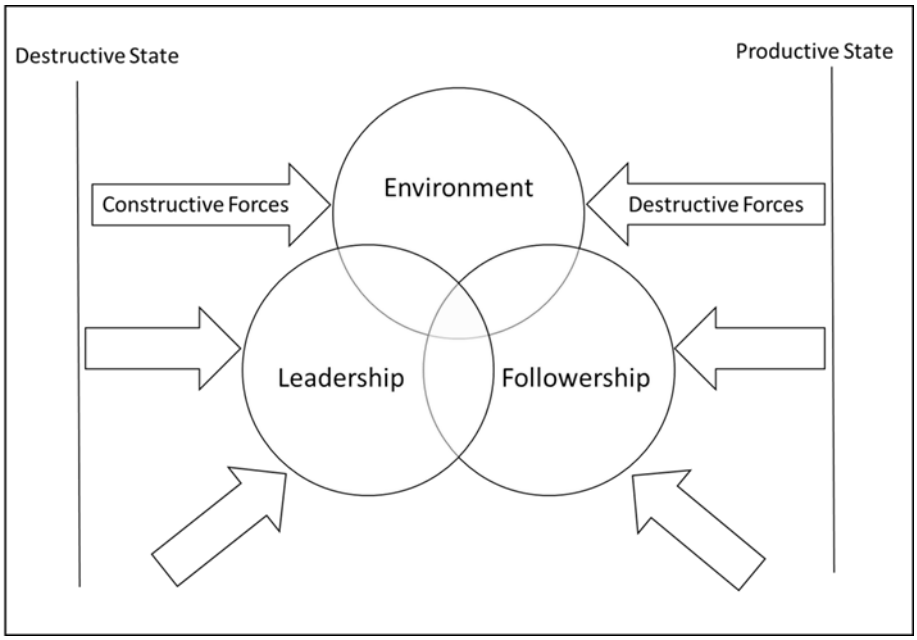
Note: The Toxic Triangle figure was published in *The Leadership Quarterly*, Vol 18, Padilla, A., Hogan, R., & Kaiser, R. B., The Toxic Triangle: Destructive Leaders, Susceptible Followers, and Conducive Environments, 176-194, Copyright Elsevier (2007). Force field analysis figure adapted from Supervision, Vol 78, Ennis, G., What does it take to change this? 15-18, Copyright Elsevier (2017).

The conceptual model to identify and predict toxic leadership behaviors and systems shown in Figure 6 was developed by combining the organizational triangle with a force field analysis. While Padilla et al. (2007) defined the triangle in terms of toxic leadership, this relationship holds in any form of leadership, constructive or destructive.

When applying a force field analysis to the organizational triangle, constructive forces push the leadership system toward positive outcomes and an ideal constructive state. Destructive forces push the system toward a toxic state. The magnitude of the force will determine how far the system is pushed toward one side or the other. The force field analysis determines which forces carry the most weight toward constructive or destructive leadership, not whether the system will become wholly constructive or destructive.

Figure 6

Force Field Analysis of an Organizational System



Note. The force field analysis model was developed for use in this study.

Summary of Literature Review

The literature surrounding toxic and negative leadership is plentiful, especially defining toxic traits and behaviors or toxic leadership's impact on followers and organizations. Lipman-Blumen (2005a, 2005b, 2008) and Padilla, et al. (2007) introduced the elements of leader-follower relationships and the environment but still work from the assumption that toxic leadership has been validated in the organization. This literature review has set the stage to provide a structured framework for members of an organization to evaluate whether their experience constitutes toxic leadership. This is done by understanding that the human brain will resolve a mismatch between expectations and experiences through System 1 thinking, heuristics, or causal reasoning (Kahneman, 2011). The conceptual model theory can replace heuristics when evaluating leader behavior to identify toxic leadership and determine its cause.

Chapter III

METHODOLOGY

This project used an exploratory, sequential mixed-methods study with qualitative and quantitative phases to test the hypothesis that an intervention tool could change the perception of toxic leadership for members of Department of the Air Force organizations (Cresswell & Cresswell, 2018). It also explored demographic differences in those perceived as toxic leaders and whether a standardized definition of toxic leadership would benefit the Department of the Air Force. The qualitative phase informed the data collection for the quantitative phase, a single factor design, group comparison using a pretest-posttest of current and former Department of the Air Force personnel who self-identified as having experienced toxic leadership. This chapter details the study design and implementation from participant recruitment and sampling design, instrumentation, procedures, and data analysis. The study received Institutional Review Board (IRB) approval, which may be found in Appendix A.

Participants

Participants for this project were recruited via flyers, social media postings, word of mouth, and snowball methods from a population of current and former Department Air Force personnel who self-identified as having experienced toxic leadership in the workplace.

Sampling

The objective was to achieve a random, stratified sample to mirror the Department of the Air Force demographics regarding age, gender, race, years of

experience, and rank as closely as possible. However, the Department of the Air Force neither makes military member contact information available to academic researchers nor permits academic researchers to distribute surveys through official channels (U.S. Air Force, 2022). Even though a truly random and representative sample proved elusive, enough data was collected to draw meaningful conclusions (Rudestam & Newton, 2007).

A simple sample size calculation with a 95% confidence level and a 5% margin of error revealed that 384 participants were needed to produce statistically valid results as a representative sample of the 336,000-member Department of the Air Force population (Cresswell & Cresswell, 2018). Because there is inherent value in all survey responses, the determination was made at the beginning of the data collection that the study would proceed even if the mathematically determined minimum sample size was not achieved. The objective was to recruit 50 to 100 study participants with a mix of age, gender, race, ethnicity, military rank, and experience that mirrors the Department of the Air Force composition. The pilot study was designed for 10 to 15 participants to test the data collection methods.

Recruiting

Participant recruitment was conducted via formal and informal Department of the Air Force personnel networks through unofficial email and social media platforms like Facebook, Instagram, and LinkedIn. Professional group Facebook forums where personnel of all ranks and military jobs collaborate were also canvassed. These forums included the Department of the Air Force (DAF) Women's Officer Forum, the Combat Air Force (CAF) Fighter Page, The Weapons Systems Officer (WSO) Union, the Air Force Leadership University, and Air Force Quarantine University. The recruiting

materials were re-shared from those groups and personal LinkedIn pages as part of the snowball technique to achieve sufficient participation (Rudestam & Newton, 2007). The recruiting materials used in the study are found in Appendix B.

Quantitative data collection was conducted through unofficial channels for two reasons. First, DAF policies only permit Air Force-sponsored surveys on Air Force networks. Those designed for academic purposes are not permitted (U.S. Air Force, 2022). Second, even if official recruitment were permitted, discussing toxic or counterproductive leadership in official channels would likely deter participants from fully and honestly engaging in the project.

Data Collection

The data collection period spanned a month between March and April 2022. Initial social media posts were made on the researcher's Facebook, LinkedIn, and Instagram accounts and the professional group pages identified earlier in this chapter. Recruiting materials were also distributed to known current and former members of the Air Force, and those contacts were asked to share the information with others they knew that met the study's participant criteria. Recruiting materials and follow-up reminders were re-posted to social media once a week to keep the study near the top of the social media feed.

The study pretest had 550 responses, 458 of which were valid and complete. Of the 458, 186 (40.6%) were randomly assigned to the control group, and 272 (59.4%) were randomly assigned to the experimental group. When the survey was closed for data collection, there were 76 valid posttest responses in the control group and 36 valid responses in the experimental group for 112 total responses. The posttest had an overall

24.5% completion rate among the pretest participants, which breaks down to a 40.9% completion rate for control group participants and a 13.2% completion rate for experimental group participants. The low completion rate for the experimental group is likely due to the length and complexity of the intervention activity.

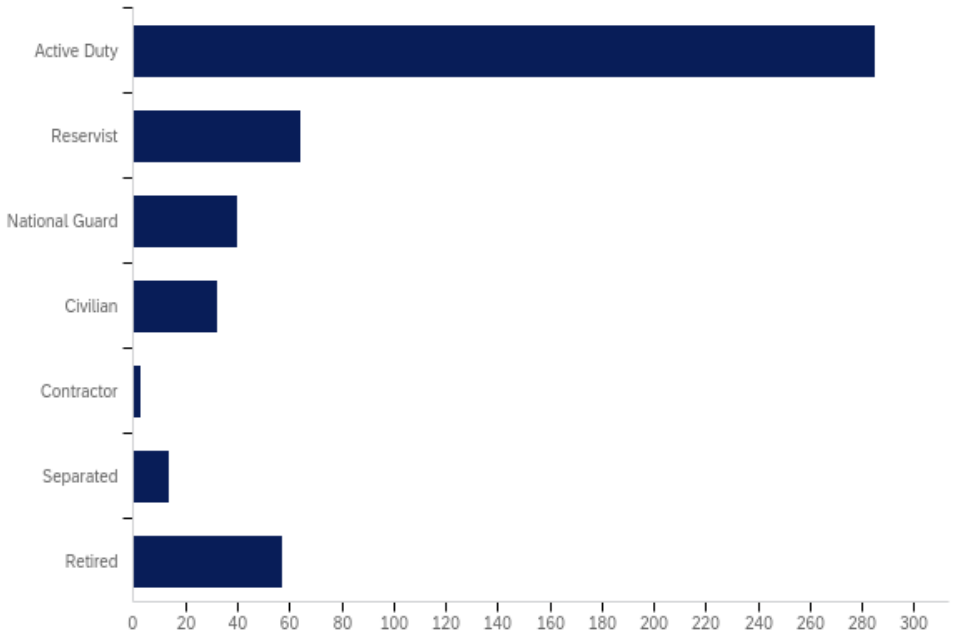
The pretest sample size exceeded the 384 required for a 95% confidence level and a 5% margin of error (Cresswell & Cresswell, 2018). The complete study did not meet the 384-participant threshold for the desired confidence level, with only 112 valid responses for all portions of the survey. However, there were still enough responses to derive statistically significant results from which to draw conclusions and recommend further research.

Demographics

Study participants represented all parts of the total force in the Department of the Air Force. However, the composition of the participant pool differed slightly from the Air Force population, with 57.6% of respondents on Active Duty, 21.0% in the Reserve Component (Air Force Reserves and Air National Guard), 6.5% civilian, 0.6% contractors, and 14.5% separated or retired from active service. The total force military population is 38.2% Active Duty, 29.2% Reserve, 25.7% civilian, and 5.7% other categories.

Figure 7

Duty Status of Study Participants

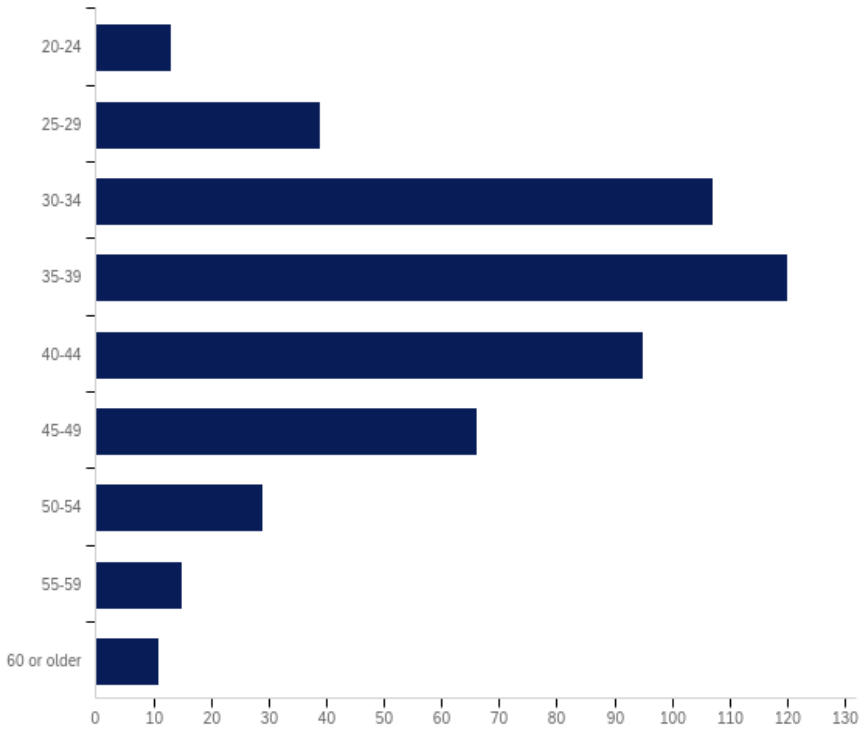


Gender and Age

Survey participants in the study were 46.4% male and 53.6% female. Comparatively, the U.S. Air Force is 78.9% male and 21.1% female. As depicted in Figure 8, 43.6% of the study participants were over 40 years old. By contrast, only 7.5% of the USAF force is over 40 years old (Military One Source, 2021), indicating that more senior leaders participated in the study than junior personnel.

Figure 8

Age of Study Participants

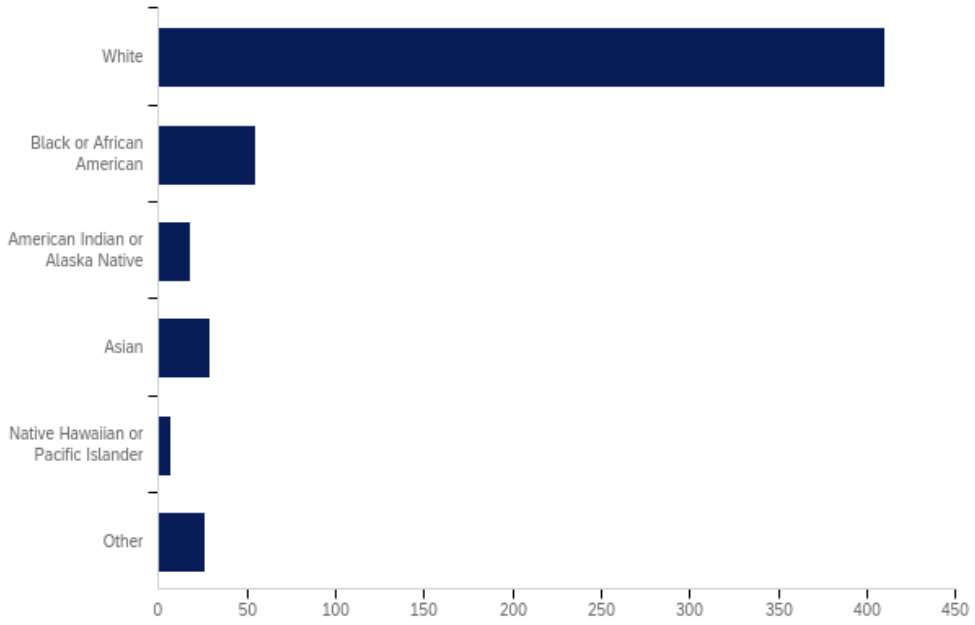


Ethnicity and Race

14.0% of the study participants identified as Hispanic, Latinx, or of Spanish origin, while 86.0% did not; the sample closely mirrors the Air Force demographic of 15.5% Hispanic or Latinx. In addition, 75.2% of study participants were White, 10.1% Black or African American, 3.3% American Indian or Alaskan Native, 5.3% Asian, 1.3% Native Hawaiian or Pacific Islander, and 4.8% other or multi-racial. By comparison, 70.9% of U.S. Air Force personnel are White, 14.9% Black or African American, 0.7% American Indian or Alaskan Native, 4.3% Asian, and 1.2% Native Hawaiian or Pacific Islander, and 8% reported other, unknown, or multi-racial (Military One Source, 2021).

Figure 9

Race of Study Participants

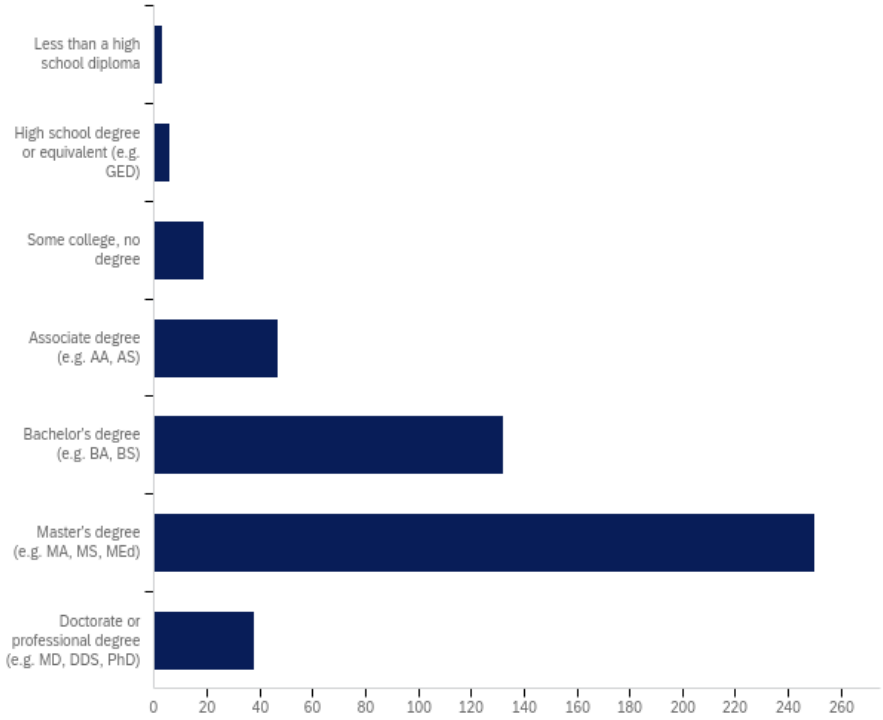


Education Level

Study participants tended to be more educated than the larger Air Force population. 0.61% had less than a high school diploma, 5.1% had a High School Diploma or some college, 9.5% had an Associate Degree, 26.7% had a Bachelor's Degree, and 58.2% had a Master's Degree or Higher. In the broader Air Force population, 0.0% report less than a High School Diploma, 51.8% had a High School degree and some college, 18.5% have an Associate Degree, 15.7% have a Bachelor's Degree, 12.1% have a Master's Degree or Higher, and 1.9% are unknown.

Figure 10

Education Level of Study Participants



Rank and Pay Grade

Military ranks and pay grades are divided into enlisted and officer categories, with junior Airmen in the rank of Airman Basic to Senior Airmen. Their associated pay grades are E-1 to E-4. The non-commissioned officer corps encompasses the rank of Staff Sergeant at paygrade E-5 and Technical Sergeant at paygrade E-6. The senior non-commissioned officer ranks are Master Sergeant (E-7), Senior Master Sergeant (E-8), and Chief Master Sergeant (E-9).

Similarly, officer ranks and grades are categorized as junior or company grade, field grade, and general officers. Company grade officer ranks are Second Lieutenant, First Lieutenant, and Captain (O-1 through O-3). Field grade officers are Major,

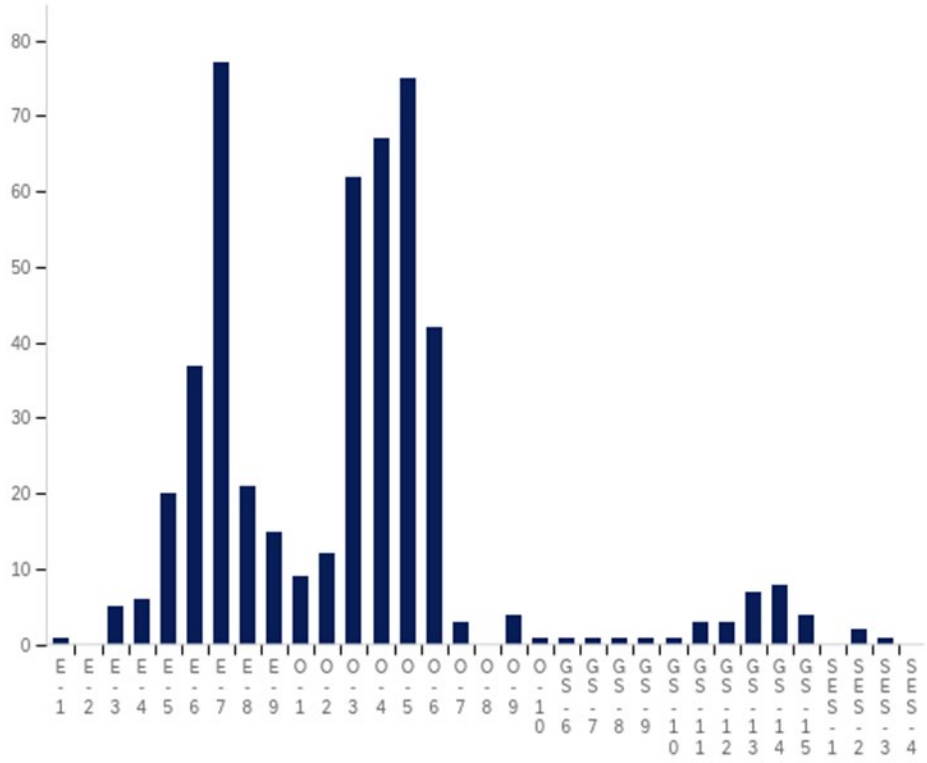
Lieutenant Colonel, and Colonel (O-4 through O-6), while General Officers are Brigadier General, Major General, Lieutenant General, and General (O-7 through O-10).

Civilian personnel fall under the General Scale (GS) pay system or Senior Executive Service (SES) pay system. Like the military grades, the higher the number, the higher the pay grade. SES personnel are civilian equivalents of military general officers (Military One Source, 2021).

Study participants represented a wide range of ranks and civilian paygrades. In the broader Air Force population, 80.5% are enlisted personnel, with almost one-half of the total force in the grade of E-4 to E-6 (Military One Source, 2021). The officer corps makes up 19.5% of the Air Force. 80% of the officer corps in the grade of O-4 (Major) or below. The survey participants tended to be higher ranking than the general Air Force population, with the most enlisted respondents in the grade of E-7 (Master Sergeant), the most officer respondents in the O-5 grade (Lieutenant Colonel), and the most civilian respondents in GS-14.

Figure 11

Pay Grade of Study Participants



Privacy and Data Disposition

Data collection in the survey portion of the research was conducted via Qualtrics on the Valdosta State University network. In the interest of privacy and anonymity, participant names were not recorded. Instead, each participant was assigned a randomly generated identification number. Records were coded and sorted by age, rank, gender, ethnicity, and other demographic categories. All raw data collected via the survey was stored on the researcher's hard drive per Institutional Review Board (IRB) requirements and will not be uploaded to the internet. Results were aggregated, included in the dissertation, will be shared with the Department of the Air Force, and may be published in future studies.

Instrumentation

The study had an exploratory, mixed-methods design, where a qualitative discovery phase generated data that informed the design of the quantitative phase. The qualitative phase involved policy analysis of academic literature, the United States Code, Department of Defense (DoD), and Department of the Air Force (DAF) instructions and regulations. These documents were synthesized to give the researcher an understanding of Department of the Air Force training and policy on toxic leadership. The first phase results were included in the literature review and used to develop the intervention tool used in the quantitative phase.

The quantitative phase of the study was a group comparison experiment of a clinical sample with experiment and control groups and a pretest-intervention-posttest methodology using Schmidt's Toxic Leadership Scale (TLS) and the definition of toxic leadership proposed by this study. A pilot study validated the data collection methods before the main study began. IRB approval was obtained from the university prior to the quantitative data collection. The approval document may be found in Appendix A.

Measurement Tool Selection

Thousands of recent studies published in peer-reviewed journals and academic dissertation databases examine toxic, negative, and dark leadership and its effect on organizations. Several studies that used an exploratory sequential mixed-methods approach, particularly those researching behavior in the United States military, were referenced when designing the methodology and selecting the instrumentation for this study (Higgs, 2014; Moutousi & May, 2018; Sendjaya et al., 2017; Schmidt, 2008, 2014).

Researchers have developed several scales to measure toxic leadership. Crawford and Kedler (2019) examined 17 leadership scales from 10 peer-reviewed journals to develop evaluation criteria and best practices for these scales. Their criteria included theory generation, item development, and content validity. These recommendations were used to determine the most appropriate scale for this research. Since the study had both a pretest and posttest questionnaire, it was crucial to avoid survey fatigue in participants (Porter et al., 2004). Therefore, the additional criterion of thirty questions or fewer was added to the evaluation. Schmidt's Toxic Leadership Scale was selected for this study based on the outlined criteria.

Measurement Tools

The study measured several items, including the participant and leader demographics, a comparison between the toxic leader and the previous leader, toxic leadership definitions, perceptions, and participant reactions to the intervention. The specific measurement tools are discussed in the following sections in the order in which they appear in the survey. A summary of the components of the study is in Table 4, and a detailed list of the study components is in Appendix C.

Table 4

Components of the Study

	Toxic Leader Demographics (H_1)	**Leader Comparison (H_2)**	**Organizational Triangle Perceptions (H_3)**	**Toxic Leadership Perceptions (H_3)**	**Reaction to Intervention (H_3, H_4)**
Instrument	Pretest Demographic Questions	Pretest Questions	Pre/Posttest Question	Pre/Posttest Schmidt TLS	Posttest Questions

	Toxic Leader Demographics (H_1)	**Leader Comparison (H_2)**	**Organizational Triangle Perceptions (H_3)**	**Toxic Leadership Perceptions (H_3)**	**Reaction to Intervention (H_3, H_4)**
Type of Data Gathered	Quantitative Demographic Data	Quantitative (2 questions with 5-point Likert and 5-point time scale)	Quantitative (4 questions with a 5-point Likert scale)	Quantitative (28 questions with a 5-point Likert scale)	Quantitative (6 questions with 5-point Likert)
Type of Score Produced	Single Item Indicators	Two factors: favorability and time	Pre/Posttest Score	Pre/Posttest Total Score Plus five dimensions	Posttest score on five factors

Leader Demographics

In addition to answering demographic questions about themselves, participants provided the demographics of the leaders that they perceived to be toxic. Demographic categories mirrored those tracked by the Air Force, including gender, age, race, ethnicity, marital status, education level, military rank, military duty status, and the number of years of military service. This information was used to compare the demographics of the toxic leaders to that of the broader Air Force population for each leadership category.

Organizational Triangle Definitions

Survey participants were asked to evaluate the organization they believed to be toxic using the definitions for organizational toxicity, toxic leadership, toxic followership, and a toxic environment introduced in Chapter I of this study. The four questions about the definitions were worded, "In the organization where I experienced toxic leadership, I observed…." The definitions followed with responses on a 5-point Likert scale ranging from Strongly Disagree to Strongly Agree.

To determine if the questions about the organizational triangle were closely related enough to be considered a reliable scale, Cronbach's Alpha was calculated using

the Statistical Package for the Social Sciences (SPSS). The value of Chronbach's Alpha ranges between 0 and 1, and a scale is said to have good reliability with a value between 0.7 and 0.8, high reliability between 0.8 and 0.9, and very high reliability above 0.9 (Cresswell & Cresswell, 2018). The calculated value of Cronbach's Alpha for the organizational triangle definitions was 0.746 for the 458 valid responses in the pretest and 0.739 for the 112 valid responses in the posttest, indicating acceptable reliability for the group of definitions.

Table 5

Cronbach's Alpha for Organizational Triangle Definitions

	N	Number of Items	Alpha
Organizational Triangle Pretest	458	4	.746
Organizational Triangle Posttest	112	4	.739

Toxic Leadership Scale

In addition to the questions about the definition of toxic leadership, the study included the Toxic Leadership Scale to measure the perception of the phenomenon in Air Force organizations. The Toxic Leadership Scale survey is comprised of thirty questions that test the five dimensions of toxic leadership: abusive supervision, authoritarian leadership, narcissism, unpredictability, and self-promotion (Schmidt, 2008). The instrument was developed with 23 U.S. Navy and U.S. Marine Corps Personnel in focus groups, using a two-step methodology, capturing descriptive statements and themes surrounding toxic leadership. Schmidt initially developed six factors incorporating questions from the Abusive Leadership Scale (Tepper, 2000). Schmidt refined the questions through a Q-sort process to narrow them down to five factors and 108 items, validated in a survey administered to 215 students. After data analysis and refinement, the

final scale comprised 30 questions that measured the five factors (Higgs, 2014). This project used a 28-question TLS, with the Abusive Supervision scale truncated from 7 items to 5 for simplicity.

Cronbach's Alpha was again calculated using SPSS to determine the reliability of the TLS for the pretest and posttest in this study. Cronbach's Alpha for the individual scale variables ranged from .793 to .889, indicating high reliability for the individual variables in the TLS. The calculated value for the overall scale in the pretest was .935, and the posttest was .939, indicating very high reliability for the scale in this study.

Table 6

Cronbach's Alpha for the Toxic Leadership Scale

	N	Number of Items	Alpha
Pretest Overall Scale	109	28	.935
Posttest Overall Scale	105	28	.939
Abusive Supervision	112	5	.793
Authoritarian Leadership	111	6	.801
Narcissism	112	5	.811
Self-promotion	110	5	.814
Unpredictability	112	7	.889

Reaction to the Intervention

In the posttest, a series of questions asked if the intervention changed the participant's perception of toxic leadership, gave them the tools to evaluate toxic behavior, and whether the study helped them understand toxic leadership behaviors and factors. These questions were also measured on a 5-point Likert scale ranging from "Disagree" to "Agree," allowing a neutral option of "Neither Agree nor Disagree." As with the other scales in the study, Cronbach's Alpha was calculated for the 6-question

scale based on the 112 valid posttest responses, resulting in a value of 0.80, indicating good internal reliability.

Procedures

The quantitative portion of the study consisted of a pretest survey (Appendix D), an activity, and a posttest survey (Appendix E). Participants entered the study by scanning a quick response (QR) code or clicking a direct link to the pretest survey. Once they completed the pretest, participants were randomly assigned to either the control or experimental group for an activity, then asked to take a common posttest survey. A detailed explanation of each step is outlined in this section. All materials from the study may be found in the appendices.

Pretest Survey

The pretest survey began with consent and demographic questions. Then, participants were asked to think of a toxic leader and a situation where they experienced toxic leadership in an Air Force organization. This study's definition of toxic leadership set a common reference for toxic leadership behavior. For the remainder of the survey, participants were asked to answer questions based on the leader they believed to be toxic, including the demographics of that leader. Next, two questions were asked about the leader or supervisor the participant had before the toxic leader: how favorably that leader was viewed and how long the participant worked for that leader.

The remainder of the questions used a five-point Likert scale with responses ranging from "Strongly Disagree" to "Strongly Agree." The first set of questions was designed to elicit feedback on the definition of organizational toxicity, toxic leadership, toxic followership, and a toxic environment introduced in this study. Each definition was

preceded by the statement, “In the organization where I experienced toxic leadership, I observed….”

The last set of questions used the TLS instruments, measuring the five toxic leadership dimensions: abusive supervision, authoritarian leadership, narcissism, self-promotion, and unpredictability. Again, using a five-point Likert scale, participants were asked to react to statements regarding the leader they believed was toxic. The first two question sets on abusive supervision and authoritarian leadership offered responses ranging from “Strongly Disagree” to “Strongly Agree.” The questions on narcissism, self-promotion, and unpredictability asked how often the leader’s behavior conformed to statements, with responses ranging from “Not at All” to “Frequently.” This method differs slightly from Schmidt’s development of the TLS, as he used a six-point Likert scale to avoid a neutral option (Schmidt, 2008).

At the end of the pretest, each participant was assigned a randomly generated survey ID number between 1000 and 9999, which was used to pair pretest and posttest responses and sort participants into the control and experimental groups. Those with ID numbers less than or equal to 5000 received an email assigning them to the control group, and those with an ID number greater than 5000 received an email assigning them to the experimental group. The emails also provided instructions for the group activity and access to the posttest survey. Reminder emails were sent two, seven, and ten days after the pretest to boost study completion rates.

Control Group Activity

Participants in the control group read a short article on U.S. Space Force personnel practices before taking the posttest survey, which may be found in Appendix F.

The article “The Space Force’s Critical Lesson for the Rest of the Military” relates to leadership and personnel management without mentioning toxic leadership. Instead, it outlined the Space Force’s approach to personnel management as a talent development system designed to address some of the challenges the U.S. Air Force and other military branches have encountered in their personnel systems (Mullin, 2021). Selecting an activity that does not directly involve toxic leadership allowed the researcher to control for toxic leadership perceptions (Cresswell & Cresswell, 2018).

Experimental group Activity

Participants sorted into the experimental group were asked to watch a 15-minute video on toxic leadership perceptions, then complete the intervention activity based on the same toxic leadership experience used to answer the questions in the pretest. The video was recorded specifically for the project. The script for the video was designed to teach participants about the factors and behaviors that may lead them to perceive toxic leadership in the workplace. It included a presentation on the concepts of human reasoning, the toxic triangle, force field analysis, and some factors that could influence the environment, leaders, and followers. It also reviewed the instructions to complete the intervention activity.

After viewing the video, participants completed the intervention activity using the instructions and worksheet found in Appendix G. The worksheet was designed for the study to merge the organizational triangle described with a force field analysis. A force field analysis aims to identify factors that impact organizational performance and give them a numerical value on a scale of 1 to 10 (Lewin, 1947). This analysis helped participants determine how much each factor influenced the organization.

Participants identified factors that impact leadership, followership, and the environment in their organizations and determined if they have a positive (constructive) influence on the organization or a negative (destructive) influence. Then they assessed how strongly the factors influence the organization by assigning a value to the magnitude of the influence—the more significant the factor, the greater the value. When combined with the assigned magnitude, the factor became a force acting upon the triangle. Constructive forces push the leadership system toward positive outcomes and a positive state. Destructive forces push the system toward a toxic state. The magnitude of the force determines how far the system is pushed toward one side or the other. After assigning values to each part of the triangle, participants added all the values together to determine an overall "score" of organizational toxicity.

Based on the topics introduced in the video, the worksheet included several general factors pre-filled for the environment, leadership, and followership. The instruction sheet also included a list of 60-question prompts for additional factors to help the participants evaluate the behaviors and actions they experienced in their organizations. The instruction sheet and the video reminded participants that there was no right or wrong answer. The activity was designed to help them organize and understand their experiences, and two people in the same work section could complete the activity and come to very different conclusions. The video script, experimental group activity instructions, and worksheet are included in Appendix G.

Posttest Survey

After completing the activities, all participants were vectored to take the posttest questionnaire, which included the same questions on the definition of toxic leadership

and the same modified version of the TLS survey as the pretest. Six questions were added to the posttest using a 5-point Likert scale from “Disagree” to “Agree.” The additional questions gathered data on participants’ views on whether the intervention changed their opinion of toxic leadership or provided them with tools to evaluate the perception of toxic leadership in their workplace. Participants in the experimental group were also invited to share their completed activity worksheets in the posttest survey. Participants were instructed to provide their survey ID in the posttest to allow the researcher to match the pretest and posttest responses for data analysis. The posttest survey is found in Appendix H.

Pilot Study

A pilot study was conducted before the primary data collection effort began. The pilot study design called for ten to fifteen participants, but of the ten people identified, only seven were able to complete the pilot study. The volunteers were emailed the study link and asked to complete the pretest survey, control or experimental group activity, and posttest survey. Pilot study participants verified that the links and QR codes to access the surveys worked as planned and provided feedback on the questions and materials to complete the activities. Because the study was altered significantly after the pilot study, responses from the pilot study were not incorporated into the primary data collection.

The original instructions for the experimental group in the pilot study directed participants to join a video teleconference to learn about the model and how to apply it to a perceived toxic leadership situation. Even with the small sample size, it became immediately apparent that requiring participants to attend a meeting at a set time would be labor-intensive for the researcher and challenging to coordinate and track study

participation. Pilot study participants also expressed concerns about protecting their anonymity in the teleconference, despite the measures taken to protect their identities, including signing in with the study ID only and keeping cameras off during the presentation.

In response to the feedback on the teleconference, the experimental group activity instrumentation was changed to ask participants to watch a video that covered the material planned for the teleconference: an introduction to human reasoning, an overview of toxic leadership, the force field analysis method, and some of the factors that might influence the environment, leaders, and followers. Pilot study participants were then asked to view and comment on the video presentation. Participants found the first version too long and not engaging, so the researcher created and used a shorter version.

Pilot study participants also found the experimental group activity worksheet and instructions complicated. Two of the seven participants suggested that pre-filling some of the factors that influence leaders, followers, and the environment with the themes discussed in the video would make the worksheet easier to understand. Those changes were made, and the experimental group used the updated worksheet in the main study.

Finally, pilot study participants expressed concern about providing an email address in the pretest survey, citing that many people use portions of their name in their email addresses. They believed that providing that information to the researcher would decrease participant anonymity in the survey responses. For this reason, the study design was such that participant email addresses were not stored with or associated with study ID numbers. However, the survey and other materials provided to the participants were

unclear, so clarifying language was added to the survey to ensure participants were aware that personally identifiable information would not be kept with their survey responses.

Data Analysis Methodologies

Once the data were collected, the researcher analyzed them and tested the four hypotheses using the SPSS software. Specific statistical tests for each hypothesis are as follows. Each hypothesis is detailed below, and a summary of the statistical tests is found in Appendix C.

H_1: Women and people of color are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White male counterparts.

H_1 was tested using a Chi-Square analysis to determine the relationship between the demographic data collected about those whom survey participants perceived to be toxic leaders and the overall population of the U.S. Air Force (Frankfort-Nachimas & Leon-Guerrero, 2018). The data were further divided to compare survey results for the following categories: officers, enlisted personnel, and Department of the Air Force civilians.

Because H_1 did not require completing both the pretest and posttest for valid data, the entire pretest study population was used to test this hypothesis. Expected values for the Chi-Square analysis were calculated using the Department of Defense's 2020 report on military demographics. The expectation was that there would be a statistically significant difference between the demographics reported for the perceived toxic leader and the Department of the Air Force population in gender, race, and ethnicity.

H_2: Leaders are more likely to be perceived as toxic if they follow a leader viewed favorably by subordinates.

A Spearman's Rank Order Correlation coefficient was calculated to test H_2. The coefficient used the organizational triangle and TLS scores to compare how favorably the participant viewed the leader before the toxic leader to the degree of negativity identified toward the toxic leader. The expectation was that the more favorably the previous leader was viewed, the more negatively perceived the toxic leader was. Spearman's Coefficient was then calculated to determine if the amount of time the participant worked for the leader before the toxic leader was related to how negatively the toxic leader was perceived. The expectation was that the longer the participant worked for a favorable leader, the more negatively perceived the toxic leader.

H_3: Using the structured decision-making process enabled by the study's conceptual model will change an employee's perception of toxic leadership.

H_3 was the first of two main hypotheses in this study. It was evaluated using an analysis of covariance (ANCOVA) of posttest responses, looking for differences between experiment and control groups while controlling for pretest responses (Frankfort-Nachimas & Leon-Guerrero, 2018). The expectation was that the experimental group would score differently than the control group on the posttest toxic leadership definitions and TLS dimensions, showing that the intervention had some effect on the perception of toxic leadership.

H_4: Using the structured decision-making process enabled by the study's conceptual model will enable an employee to pinpoint perceived areas of toxic leadership.

H_4 was the second main hypothesis in this study. It was tested using an ANCOVA of the posttest questions related to participants' views on the intervention. The

expectation was that the difference in responses on the efficacy of the intervention between the control and experimental groups would be statistically significant, showing that participants felt the intervention improved their ability to evaluate toxic leadership. H_4 was also evaluated qualitatively by reviewing and analyzing the intervention worksheets provided by experimental group participants. The expectation was that the researcher would be able to identify the factors that led to the toxic leadership perceptions from the worksheet responses.

In addition to testing the four hypotheses, the definitions of organizational toxicity, toxic leadership, toxic followership, and a toxic work environment were evaluated using ANCOVA. The expectation was that there would be a statistically significant difference in responses to the questions on the definitions between the experiment and control groups. The experimental group was expected to change the degree of agreement with each definition due to the intervention. A difference would indicate that the definition was useful and valid.

Assumptions

This study assumed that not all toxic leadership is deliberate and sought to provide a mechanism to give leaders and followers a common lexicon to describe the current state of an organization. It did not attempt to determine the effect of toxic leadership on an organization, only the presence of the perception of toxicity in the leader, follower, or environment. The study also did not determine the reason for the toxic leadership or followership behavior. It only described the perception of that behavior by others in the organization.

Validity

Three threats to validity were addressed in the study: participant selection, participant history, and experiment design. The first threat to internal validity was participant selection. The study recruited only Department of the Air Force members who self-identified as having experienced toxic leadership in the workplace, effectively creating a clinical trial of behavior modification. Using a clinical population in the study has some ramifications in extrapolating the findings to a broader population (Flather et al., 2006). However, the structure was necessary because the study hypothesized that the force field analysis could reduce the perception of toxic leadership. Including participants who have not experienced toxic leadership in the study would have made it more difficult to evaluate H_3.

The second threat to validity was participant history and memory. Study participants were assumed to be true to their recollections and experiences when answering survey questions and applying the conceptual model. While an imperfect assumption, it was necessary for the simplicity of the study. Just as sense-making occurs when understanding the perception of toxic leadership, sense-making occurs when we remember people, places, and events. The human brain rewrites memories each time they are accessed, updating them to include new information in post-decision evidence accumulation (Bridge & Voss, 2014; Fleming, 2016; Gold & Shadlen, 2007; Shute, 2014).

Further, memories are tied to feelings. When memories are altered, the feelings associated with those memories are also likely to evolve (Lee et al., 2017). Suppose study participants chose a toxic leadership experience in the past as their scenario for the study.

In that case, the memory of the actions and feelings may not truly reflect what was happening in the organization. This threat was mitigated by designing the study to measure a participant's perception of toxic leadership rather than attempting to measure or define objective behaviors that constitute toxic leadership.

The third threat to validity was the experiment design. The original design for the intervention included a 10-minute pretest survey, a 60-minute teleconference to learn about the intervention tool and conduct the activity, and a 5-minute posttest survey. The researcher determined that the teleconference was impractical based on pilot study feedback, given the desired sample size of 384 participants. The teleconference was reduced to a 15-minute instructional video on the intervention tool. While the format change simplified the experiment so it could go forward, it may have reduced the effectiveness of the intervention. This trade-off was deemed acceptable in the experiment design.

Ethical Considerations

The researcher is an active-duty United States Air Force member in a senior leadership position. Allowing personnel in her organization to participate in the study would be unethical. Further, she took measures to ensure that her rank and position were not used in connection with the recruiting materials. These measures included removing her military affiliation from her social media accounts during the data collection phase and monitoring re-posts of the recruiting materials to ensure others did not add her demographic information.

Summary

This chapter detailed the purpose and design of the study, including sampling, participant selection, instrumentation, study procedures, data analysis methodologies for the four hypotheses, study assumptions, validity, and ethical considerations. The exploratory mixed-methods format allowed a policy analysis to inform the definitions of toxic leadership, followership, the environment used in the study, and the design of the intervention in the quantitative phase. A pilot study further refined the methodology and allowed the researcher to identify and mitigate potential threats to the validity of the experiments. The results of the data analysis will be presented in Chapter IV.

Chapter IV

RESULTS

This study aimed to understand more about the perception of toxic leadership in Department of the Air Force organizations. It began with scoping the problem to the following: neither an official definition of toxic leadership nor a structured method of evaluating acceptable leadership behavior exists within the Department of the Air Force. This lack of definition leads to inconsistent perceptions of acceptable leadership behavior across the force, impacting organizational performance. Several research questions were posed to address the problem statement and inform the four hypotheses in the study. This chapter will summarize the study's results, presenting the results of the statistical tests conducted for each hypothesis and any findings of interest. The implications of the results will be discussed in the next chapter.

Table 7

Summary of Hypotheses and Statistical Tests

Hypotheses	Question	Scale	Variables	Stat Test
$H_{1.1}$: Women are perceived as toxic leaders more than their U.S. Air Force male counterparts.	Pre: Q12	Demographic Questions	IND = USAF Demographics DEP = Leader demographics reported in pretest	Chi-Square Cramer's V
$H_{1.2}$: Hispanic people are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White counterparts.	Pre: Q14	Demographic questions	IND = USAF Demographics DEP = Leader demographics reported in pretest	Chi-Square Cramer's V

Hypotheses	Question	Scale	Variables	Stat Test
$H_{1.3}$: People of color are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White counterparts.	Pre: Q15	Demographic questions	IND = USAF Demographics DEP = Leader demographics reported in pretest	Chi-Square Cramer's V
$H_{2.1}$: Leaders are more likely to be perceived as toxic if they follow a leader viewed favorably by subordinates.	Pre: Q20, 21	Organizational Triangle Definitions; TLS Dimensions	IND = Toxic Leader Definition and Average of TLS scale responses DEP = Favorability of the previous supervisor	Spearman's Rho Correlation Coefficient
$H_{2.2}$: Leaders are more likely to be perceived as toxic if they follow a leader viewed favorably by subordinates over time	Pre: Q20, 21	Toxic Leadership Definition; TLS Dimensions	IND = Toxic Leader Definition and Average of TLS scale responses DEP = Favorability of the previous supervisor over time	Spearman's Rho Correlation Coefficient
H_3: Using the structured decision-making process enabled by the study's conceptual model will change an employee's perception of toxic leadership.	Pre: Q22-28 Post: Q2-7	Organizational Triangle Definitions; TLS dimensions	IND = Pretest responses DEP = Posttest responses Covariates: control and experimental group	ANCOVA
H_4: Using the structured decision-making process enabled by the	Post: Q8	Reaction to intervention	Covariates: control and experimental group	ANCOVA Qualitative Analysis

Hypotheses	Question	Scale	Variables	Stat Test
study's conceptual model will enable an employee to pinpoint perceived areas of toxic leadership.				

Gender, Race, Ethnicity, and Toxic Leadership Perceptions

The research question that explored patterns in the demographics of those perceived to be toxic leaders in an organization led to the first hypothesis, which predicted a positive relationship between gender and toxic leadership and racial-ethnic minority populations and toxic leadership. H_1 was further subdivided into $H_{1.1}$, $H_{1.2}$, and $H_{1.3}$. $H_{1.1}$ hypothesized that women are perceived as toxic leaders at a greater rate than men. $H_{1.2}$ hypothesized that those of Hispanic or Latinx ethnicity were seen as toxic at a higher rate than non-Hispanics. Finally, $H_{1.3}$ hypothesized that leaders were more likely to be perceived as toxic if they were from a non-White race. All three sub-hypotheses were tested using Chi-Square analysis for the goodness of fit of the 458 valid pretest responses. This test compared the percentage of leaders identified as toxic in each of the identified demographic categories in the study pre-test sample with the percentages of those same categories in the overall population of the U.S. Air Force (Frankfort-Nachimas & Leon-Guerrero, 2018).

The data were divided to compare survey results for the following categories to capture the subsets of the force most likely to be in leadership positions: Department of the Air Force officers, enlisted personnel, and Air Force civilians. Each test was run for gender, ethnicity, and race in these service categories, with the USAF demographics as the independent variable and the demographics of toxic leaders reported by pretest

respondents as the dependent variable. Calculations were also made for Cramer's V to test the relationship between toxic leadership, gender, ethnicity, race, and intersecting identities.

Gender

The Air Force officer corps is 77.20% men and 22.80% women (Military One Source, 2021). With 295 toxic leaders reported to be officers, the demographic composition of the sample was expected to be comprised of 228 men and 67 women. In the survey, 224 men and 71 women were reported to be toxic. The Chi-Square for N = 295 was calculated at .309 with 1 degree of freedom and a p = .578, indicating no significant difference between the leaders reported to be toxic and the larger Air Force officer population.

Air Force enlisted leaders in the pay grade of E-1 to E-9 are 79.18% men and 20.82% women (Military One Source, 2021). A proportionate response in the study (N = 120) would yield 95 men and 24 women enlisted personnel identified as toxic. Instead, study participants reported that 79 enlisted men and 40 enlisted women were toxic. The Chi-Square for the calculation was 11.785 with 1 degree of freedom and p = <.001, indicating a significant difference in the expected and reported values of women perceived to be toxic leaders in the enlisted ranks.

For civilian leaders in the paygrades GS-6 through SES-3, 70.3% of the force are men, and 29.3% are women, meaning the expected number of responses in the study (N = 43) was 30 men and 13 women (Air Force Personnel Center, 2022). In the survey, 28 men and 15 women were viewed as toxic with a Chi-Square value of .441, 1 degree of freedom, and p = .507. As with the officer category, there was no significant difference

in the gender demographics between reported toxic leaders and the broader DAF civilian workforce. $H_{1.1}$ was validated for the enlisted leaders but not for the officer or civilian leaders.

Table 8

Gender of Perceived Toxic Leaders

	Officer (N = 295)		**Enlisted (N = 119)**		**Civilian (N = 43)**	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
Observed	224	71	79	40	28	15
Expected	228	67	94	25	30	13
Residual	-4	4	-15	15	-2	2
Chi-Square	.309		11.875**		.441	

** Correlation is significant at the 0.01 level.

Ethnicity

In the officer category with valid responses (N = 275), the number of Hispanic or Latinx toxic leaders was expected to match the 7.20% proportion of Hispanic or Latinx officers with a total of 21, but 24 toxic leaders were observed. The Chi-Square was calculated to be 1.076 with 1 degree of freedom and p = .300, again showing no significant difference in the reported ethnicity of toxic leaders and the larger Air Force officer population. Similarly, for enlisted leaders, 113 of the 120 participants answered the question (N = 113). The expected frequency of enlisted Hispanic toxic leaders was 18 for 15.50% of the population, but 19 were observed. The resultant Chi-Square was .802 with 1 degree of freedom and p = .775, indicating no significant difference in ethnicity between reported enlisted toxic leaders and the larger enlisted population.

There were 8 reported Hispanic toxic leaders for civilian leaders, compared to 3 expected based on the 9.00% percent of the civilian workforce that is Hispanic or Latinx (Department of Defense, 2020). The Chi-Square was 7.622 with 1 degree of freedom and

p = .006. The p-value indicates a statistically significant difference from the greater civilian population. Therefore, $H_{1.2}$, which hypothesized that Hispanic or Latinx leaders are more likely to be considered toxic than their White counterparts, is unsupported for the officer and enlisted categories but supported for the civilian leadership category.

Table 9

Ethnicity of Perceived Toxic Leaders

	Officer (N = 275)		Enlisted (N = 113)		Civilian (N = 35)	
	Hispanic	*Not Hispanic*	*Hispanic*	*Not Hispanic*	*Hispanic*	*Not Hispanic*
Observed	24	251	19	95	8	27
Expected	20	255	18	25	3	32
Residual	4	-4	1	1	5	-5
Chi-Square	1.076		.802		7.622**	

** Correlation is significant at the 0.01 level.

Race

Table 10 shows the racial demographics of the reported toxic leaders. In the officer category, there were 10 surveys with this question left blank, for a total N = 285. 77.77% of the officer population are White, 0.49% American Indian and Alaskan Natives, 5.40% Asian Americans, 0.52% Native Hawaiian or Pacific Islanders, and 9.54% of the officer population identify as other or mixed race (Military One Source, 2021). All categories except Black or African American leaders reported rates of toxic leadership were lower or equal to the expected rate. Black or African American people, who make up 6.27% of the officer corps, were reported to be toxic at a much higher rate than anticipated (N = 32 versus an expected N = 17). The Chi-Square for race in officers was calculated to be 17.890 with 5 degrees of freedom and p = .003, showing a significant difference in the expected values.

Table 10

Race of Perceived Toxic Leaders

	Officer		**Enlisted**		**Civilian**	
	Observed	*Expected*	*Observed*	*Expected*	*Observed*	*Expected*
White	223	222	93	82	31	28
Black or African American	32	17	16	20	2	6
American Indian or Alaska Native	1	1	1	1	3	2
Asian	10	15	1	5	1	2
Native Hawaiian or Pacific Islander	2	2	1	2	2	1
Other or Mixed Race	17	27	6	9	2	3
Total (N)	285		118		41	
Chi-Square (df = 5)	17.890**		6.785		5.182	

** Correlation is significant at the 0.01 level.

Enlisted personnel in the Department of the Air Force are 69.30% White, 17.00% Black or African American, 0.80% American Indian or Alaskan Native, 4.00% Asian, 1.40% Native Hawaiian or Pacific Islander, and 7.60% other or mixed race (Military One Source, 2021). For the enlisted leadership category, there were 118 valid responses out of 120 records (N = 118). All six demographic categories had less than expected numbers of reported toxic leaders, except White enlisted leaders. The Chi-Square is 6.785 with 5 degrees of freedom and $p = .237$, showing no significant relationship between race and toxic leaders in the enlisted category.

The Department of the Air Force civilian workforce is 72.70% White, 13.00% Black or African American, 1.30% American Indian or Alaskan Native, 4.00% Asian, 0.70% Native Hawaiian or Pacific Islander, and 8.20% other or mixed race (Air Force Personnel Center, 2022). As with the enlisted leaders identified as toxic, there was no statistically significant relationship between race and toxic leadership for civilian leaders ($N = 41$) in any race category. The Chi-Square is 5.182 with 5 degrees of freedom and a $p = .394$.

Intersecting Identities

To better understand how the intersection of gender, race, and ethnicity interact with the perception of toxic leadership, a crosstab calculation to determine Chi-Square and Cramer's V was run for each leadership category. The only significant relationship that emerged was among officers. Black or African American women officers were perceived to be toxic leaders at a higher rate than other intersecting identities and at a higher rate than their representation in the Air Force. Pearson's Chi-Square for the calculation was 25.282 with 5 degrees of freedom and $p = <.001$. Cramer's V was .298 with a significance of $p = <.001$, indicating that the intersection between female leaders and Black or African American leaders was significant. The results are summarized in Tables 11 and 12.

Table 11

Intersecting Gender and Race

		White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Other or Mixed Race	Total
		Number of toxic leaders reported in each category						
Officer								
	Male	183	14	1	7	1	11	217
	Female	40	18	0	3	1	6	68
	Total	223	32	1	10	2	17	285
Cramer's V .298**	.							
Enlisted								
	Male	64	9	0	0	1	3	77
	Female	28	7	1	1	0	3	40
	Total	92	16	1	1	1	6	117
Cramer's V .014								
Civilian								
	Male	23	1	2	1	1	0	28
	Female	8	1	1	0	1	2	13
	Total	31	2	3	1	2	2	41
Cramer's V .379								

** Correlation is significant at the 0.01 level.

Table 12

Intersecting Gender and Ethnicity

		Hispanic or Latin Origin	Non-Hispanic or Latin Origin	Total
		Number of toxic leaders reported in each category		
Officer	Male	17	191	208
	Female	7	60	67
	Total	24	251	275
Cramer's V	.035			
Enlisted	Male	13	62	75
	Female	6	31	37
	Total	19	93	112

		Hispanic or Latin Origin	Non-Hispanic or Latin Origin	Total
Cramer's V	.014			
Civilian	Male	5	18	23
	Female	3	9	12
	Total	8	27	35
Cramer's V	.037			

Relationship Between Previous Supervisors and Perceived Toxic Leaders

The second hypothesis sought to answer the question, "Do perceived toxic leaders tend to follow highly respected leaders in an organization?" H_2 was divided into two parts; the first part ($H_{2.1}$) looked only at the perception of the toxic leader, using the toxic leadership definition and average of the TLS scales, compared to the favorability rating of the previous leader. The second part of the hypothesis ($H_{2.2}$) examined the favorability of the previous leader as a function of the amount of time the participant worked for that person to see if a toxic leader was perceived to be more toxic if the previous leader had been in place for a while. Because the comparison of responses was not contingent upon the intervention in the experimental group, the complete data set from the pretest (N = 458) was used to test H_2. The two questions were scaled such that the higher the response on the Likert scale, the less favorably the leader was viewed.

The comparison of $H_{2.1}$ was calculated using Spearman's Rho Correlation Coefficient. Pearson's R Correlation Coefficient was initially considered a good test for the correlation between the two leader categories. However, it is generally used to calculate a correlation for scaled data if the scales provide enough of a range of responses to approximate continuous data (Stanimirović, 2020). Since the organizational triangle scale was not used in its entirety, and there was only one question regarding the leader before the toxic leader, the data were not deemed continuous enough to employ Pearson's

R. Instead, Spearman's Rho for rank-ordered correlations was used for the ordinal data in the Likert scale. The calculations were made for a one-tailed test since the expected direction of the correlation was known. The results were expected to correlate negatively, with the toxic leader being viewed as more toxic than the previous leader.

The results were interpreted using Cohen's standard of a Spearman's Rho value of .10 to .29 for a small effect size, .30 to .49 for a medium effect size, and greater than .50 for a large effect size (Cohen et al., 2003). There was a small but statistically significant negative correlation between how positively the previous leader was perceived and how negatively the toxic leader was viewed. For the toxic leader definition, Spearman's Rho was -.157 with p = <.001; for the TLS average, Spearman's Rho was -.130 with p = .005. The result means that the more positively the previous leader was viewed, the more negatively the toxic leader was viewed. There was also a medium positive correlation (Spearman's Rho = .412, p = <.001), showing the relationship between the toxic leadership definition and the average of the TLS scales as an overall measure of the perception of toxic leadership. In other words, respondents that rated a leader as toxic based on the definition offered in the organizational triangle scale also indicated the leader was toxic based on the TLS.

Table 13

Correlation between the Previous Leader and Degree of Perceived Toxic Leadership

		Leader Before the Toxic Leader	Toxic Leadership Definition	Average of TLS Scale Scores
Leader Before the Toxic Leader	Spearman's Rho	1	-.157**	-.130**
	Sig. (1-tailed)		<.001	0.005
	N	456	439	389

		Leader Before the Toxic Leader	Toxic Leadership Definition	Average of TLS Scale Scores
Toxic Leadership Definition	Spearman's Rho	-.157**	1	.412**
	Sig. (1-tailed)	<.001		<.001
	N	439	441	391
Average of TLS Scale Scores	Spearman's Rho	-.130**	.412**	1
	Sig. (1-tailed)	0.005	<.001	
	N	389	391	391

** Correlation is significant at the 0.01 level (1-tailed).

Next, Spearman's Rho Rank Order Correlation was calculated to test $H_{2.2}$, whether there was a relationship between how long the participants worked for the leader before the toxic leader and how negatively they perceived the toxic leader. The time participants worked for the previous leader was ranked by category from less than 6 months to more than 24 months. These time categories were chosen because most active-duty Department of the Air Force personnel change supervisors or jobs approximately every 24 months.

The relationship between the previous leader and the amount of time working for him or her showed a small, statistically significant, negative correlation for unfavorability (Spearman's Rho = -.245, p = <.001). Similarly, there was a small, statistically significant correlation between the length of time the participant worked for the previous leader and the response to the toxic leadership definition (Spearman's Rho = .122, p = .010) and score on the TLS scale (Spearman's Rho = .111, p = .028). Therefore, the longer participants worked for the previous leader, the more favorable the previous leader was perceived.

Table 14

Correlation between the Previous Leader and the Toxic Leader over Time

		Leader Before the Toxic Leader	Toxic Leadership Definition	Average of TLS Scale Scores	Length of Time working for Previous Leader
Leader Before the Toxic Leader	Spearman's Rho	1	-.157**	-.130**	-.245**
	Sig. (1-tailed)		<.001	.005	<.001
	N	456	439	389	455
Toxic Leadership Definition	Spearman's Rho	-.157**	1	.412**	.122**
	Sig. (1-tailed)	<.001		<.001	.005
	N	439	441	391	441
Average of TLS Scale Scores	Spearman's Rho	-.130**	.412**	1	.111*
	Sig. (1-tailed)	.005	<.001		.014
	N	389	391	391	391
Length of Time Working for Previous Leader	Spearman's Rho	-.245**	.122**	.111*	1
	Sig. (1-tailed)	<.001	.005	.014	
	N	455	441	391	457

* Correlation is significant at the 0.05 level (1-tailed).
** Correlation is significant at the 0.01 level (1-tailed).

Effectiveness of the Intervention in Changing Toxic Leadership Perceptions

H_3, the central hypothesis in the study, proposed that the structured decision-making process enabled by the study's conceptual model would change an employee's perception of toxic leadership. It predicted that using the intervention tool would significantly affect survey participants' perception of toxic leadership. It was tested using an analysis of covariance (ANCOVA) for the participants who completed both the pretest and posttest (N = 112). The objective was to test for differences in the posttest responses

of the experiment and control groups for the average of the organizational toxic triangle definitions, each definition, the overall TLS scale, and each of the five dimensions of the TLS scale, while controlling for the pretest scores (Frankfort-Nachimas & Leon-Guerrero, 2018).

Organizational Toxic Triangle

Testing for the covariance of the control and experimental groups for the organizational triangle, the results showed no significant effect of the intervention on the perception of organizational toxicity ($F = .116$, $p = 0.734$) or toxic leadership ($F = .263$, $p = .609$). However, toxic followership ($F = 6.522$, $p = .012$), the toxic environment ($F = 4.377$, $p = .039$), and the average of all the definitions ($F = 4.911$, $p = .029$) all showed a statistically significant difference in scores between the control group and the experimental group. The difference indicates that the intervention changed the perception of followers, the environment, and the overall organization. For all parts of the organizational triangle except organizational toxicity, the experimental group saw a decrease in the degree of agreement that each described the participant's experience. Participants believed the followers and environment were less harmful after the intervention than they believed before the intervention compared to the control group.

Table 15

Intervention Effect on Perception of Organizational Triangle

N = 112	Control Gp Mean	Experiment Gp Mean	F	Sig (p)	Partial Eta Squared
Overall	4.28	4.08	4.911*	.029	.043
Organizational Toxicity	4.41	4.47	.116	.734	.001

N = 112	Control Gp Mean	Experiment Gp Mean	F	Sig (p)	Partial Eta Squared
Toxic Leadership	4.46	4.44	.263	.609	.002
Toxic Followership	4.09	3.67	6.522*	.012	.056
Toxic Environment	4.14	3.72	4.377*	.039	.039

* Correlation is significant at the 0.05 level.

Toxic Leadership Scale

The ANCOVA calculated for the Toxic Leadership Scale showed that for each dimension, participants in the control group had a slightly different perception of toxic leadership before and after the intervention. However, the results were statistically insignificant in any of the five TLS dimensions. For the overall TLS, the F statistic was .951 with a p-value of .332, showing a slight decrease in the overall perception of toxic leadership on the scale, but the result was not significant. In the abusive supervision dimension, the ANCOVA showed a decrease in the perception of negativity between the control and experimental groups, with an F = 1.155 and a p-value of .285. For authoritarian leadership, the difference between the control and experimental groups was nearly negligible, with an F-statistic of .003 and p = .958. The narcissism dimension (F = .311, p = .578), self-promotion dimension (F = .001, p = .972), and unpredictability dimension (F = .357, p = .552) all showed extremely small changes in perception, which were statistically insignificant.

Table 16

Intervention Effect on Toxic Leadership Scale

N = 112	Control Gp Mean	Experiment Gp Mean	F	Sig (p)	Partial Eta Squared
Overall	3.96	3.90	.951	.332	.010
Abusive Supervision (AS)	4.02	3.82	1.155	.285	.010
Authoritarian Leadership (AL)	4.14	4.16	.003	.958	.000
Narcissism (N)	4.11	3.89	.311	.578	.003
Self-Promotion (SP)	3.92	3.90	.001	.972	.000
Unpredictability (U)	3.71	3.73	.357	.552	.003

Effectiveness of the Intervention on Toxic Leadership Perceptions

Study participants evaluated how they felt about the intervention and its utility in analyzing toxic leadership behavior. These questions addressed H_4, which hypothesized that using the study's conceptual model enables employees to pinpoint perceived areas of toxic leadership. H_4 predicted a statistically significant difference in participants' opinions of toxic leadership, behaviors, and factors between the pretest and posttest responses. An ANCOVA was performed with the covariates of the control and experimental groups to test H_4 (N = 112). In addition to the statistical test, the researcher conducted a qualitative analysis of the intervention worksheets submitted with the posttest survey responses.

Quantitative Results

The first question in the series asked whether the study provided participants with tools to evaluate their perception of toxic leadership. Those in the experimental group responded more favorably than the control group, with a significance of p = <0.001

showing a medium-large effect size (eta squared = 0.115). When asked if participation in the study changed the perception of toxic leadership, there was no statistically significant difference between the control and experimental groups (F = 1.009, p = .317).

However, when asked if the study provided the knowledge to identify behaviors associated with toxic leadership, the experimental group showed a strong, statistically significant positive response compared to the control group (F = 7.092, p = .006). Similarly, experimental group participants felt that the intervention helped them understand the factors that impact the organization and lead to toxic leadership (F = 8.163, p = .005). Experimental group participants also showed a change in the perception of toxic leadership in their organization, but not at a statistically significant amount. For the perception that there was more toxic leadership in the organization after the intervention, the F statistic was .313 with p = .577, while the perception that there was less toxic leadership in the organization after the intervention yielded an F = .515 and p = .474.

Table 17

Opinion on Intervention Effectiveness

N = 112	Control Group Mean	Experimental group Mean	F	Sig (p)	Partial Eta Squared
Tools to evaluate my perception of toxic leadership	3.12	4.03	14.435**	<.001	.115
Changed my perception of toxic leadership	2.54	2.81	1.009	.317	.009

N = 112	Control Group Mean	Experimental group Mean	F	Sig (p)	Partial Eta Squared
Evaluate toxic leader behaviors	3.45	4.08	7.092**	.006	.067
Evaluate toxic leadership factors	3.26	4.00	8.163**	.005	.069
More toxic leadership	2.92	3.08	.313	.577	.003
Less toxic leadership	2.46	2.28	.515	.474	.005

** Correlation is significant at the 0.01 level.

Qualitative Results

Eight of the thirty-six experimental group study participants provided their intervention worksheets to the researcher for review. The answers on the force field analysis were compared to see if any trends could be identified to support H_4. In the environment category, the factors that received the most negative scores were command climate, external threats to the organization, and military culture. Leadership style, traits, and behaviors topped the list of negative scores in the leadership category, followed closely by leader motivation. In the followership category, the leader-member exchange relationship and resolving conflict in the workplace had the highest negative scores.

Table 18

Intervention Force Field Analysis Scores per Factor

	Worksheet Scores*							
Worksheet Number	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Total*
Environmental Factors								
National Culture	0	0	7	0	-3	-2	-8	-6
Military/Air Force Culture	-2	-3	4	-10	-4	0	-10	-25
Command Climate	-9	-10	-2	-10	-5	-5	-5	-46
Diversity Climate	0	0	1	-10	-2	-2	0	-13
Resourcing/Requirements	-5	-5	-3	0	3	0	0	-10

	Worksheet Scores*							
Worksheet Number	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Total*
Threats	-3	-10	-4	-10	-1	0	0	-28
Physical Attributes	0	-3	4	-8	-1	0	0	-8
Checks and Balances	-3	-5	-2	-3	-1	5	0	-9
Leadership Factors								
Demographics	0	0	0	-10	-7	-5	0	-22
The Glass Cliff	0	0	-7	0	-5	0	-8	-20
Leadership Style	-9	-10	-7	-10	-6	0	0	-42
Leadership Traits	-9	-10	-5	-10	-5	-5	-8	-52
Leadership Behaviors	-9	-10	-3	-10	-3	5	0	-30
Coping Behaviors	-6	-5	-3	7	-2	-5	0	-14
Leader Motivation	-7	-10	1	-4	-5	0	0	-25
Followership Factors								
Personal Beliefs/Bias	-1	0	-3	7	0	-5	0	-2
Coping Behaviors	-1	-5	2	10	2	-7	-10	-9
Types of Followers	-1	-10	-4	5	3	0	0	-7
Leader-Member Exchange	2	-10	1	-10	2	0	-5	-20
Organizational Citizenship	-1	-5	1	6	-4	2	0	-1
Conflict Resolution	-5	-5	1	-10	-7	10	-5	-21

* Worksheet 1 did not use the pre-populated factors

What was notable was the range of total scores assigned to the situation, as seen in Table 19. Participants evaluated a toxic situation of their choosing, and the total scores ranged from -14 to -121, a wide range for the perception of a toxic situation in the workplace. One of the survey responses returned a positive score for the environment, and two other worksheets showed a positive score for followership.

Table 19

Intervention Force Field Analysis Score Totals

Force Field Analysis Score				
Worksheet	*Environment*	*Leadership*	*Followership*	*Total*
1	-47	-30	-12	-87
2	-23	-26	-20	-69
3	-9	-10	+5	-14
4	-8	-26	-6	-40
5	-53	-39	+8	-84

Force Field Analysis Score				
6	+7	-27	-2	-22
7	-36	-45	-40	-121
8	-22	-40	-11	-73

Summary

The data supported some, but not all, of the four hypotheses in the study. H_1 hypothesized that women and people of color are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White male counterparts. H_1 was supported for Black or African American officers, specifically for female Black or African American officers. In the enlisted category, H_1 was supported for female leaders but not racial-ethnic or intersecting identities. In the civilian category, the hypothesis was supported for Hispanic leaders but not for gender or intersecting identities.

H_2 hypothesized that leaders are more likely to be perceived as toxic if they follow a leader viewed favorably by subordinates. Spearman's rank order coefficient calculations supported the theory that toxic leaders follow more favorably viewed leaders. Additionally, the longer participants worked for the previous leader, the more favorably they viewed that person compared to the toxic leader.

H_3, the study's central hypothesis, predicted that the intervention tool would change study participants' perception of toxic leadership. While the intervention did not significantly change the opinion of the toxic leader, it did influence participants' perceptions of the environment and the followers in the organization. The test for H_3 was divided into two parts: an ANCOVA for the definitions of toxic portions of the organizational triangle offered in this study and an ANCOVA for the Toxic Leadership Scale (Schmidt, 2008). There were no statistically significant changes in the perception of

toxic leadership in the organizational triangle or the TLS dimensions from the pretest to the posttest between the experimental and control groups. However, there were statistically significant differences between the pretest and posttest responses for the overall scale of the organizational triangle, the environment, and followership.

H_4 hypothesized that using the force field analysis in the intervention tool would enable an employee to pinpoint perceived areas of toxic leadership in an organization. The ANCOVA for the series of questions posed to participants on whether they thought the intervention was effective showed a statistically significant result in the questions related to gaining the tools to evaluate toxic leadership, toxic behaviors, and the factors that influence a toxic organization.

A qualitative analysis of the eight worksheets submitted in the posttest survey showed that while all participants perceived a toxic leader in the organization, some felt the environment and the followers were positive. Moreover, the worksheets revealed some factors that participants felt were the most harmful to the organization. For the environment, these included command climate, military or Air Force culture, and external threats to the organization. For leaders, the most destructive factors were leadership style, traits, and behaviors. At the same time, the followership category found the leader-member exchange and conflict resolution to be the two most negative factors. A detailed analysis of the implications of these findings will follow in Chapter V.

Chapter V

DISCUSSION

The results of this study suggest that there is value in providing a mental model or structured decision-making process to members of organizations who feel that they are experiencing toxic leadership. Further, it would benefit the Department of the Air Force to adopt an official definition of toxic leadership and provide training on identifying and countering it on an enterprise scale. This final chapter will present a summary of this research study that includes the problem statement, research questions, methods, findings, implications for the current theory, recommendations for future research, and policy recommendations for the Department of the Air Force.

Statement of the Problem

Many researchers have focused their attention on the impact dark, destructive, or toxic leadership has on followers and organizations. However, few have investigated the process followers use to determine if toxic leadership exists, except to note that it is a pattern that emerges over time rather than a one-time event (Lipman-Blumen, 2005, 2005a; Schmidt, 2008, 2014; Reed, 2015). This study began by recognizing that neither an official definition of toxic leadership nor a structured method of evaluating acceptable leadership behavior exists within the Department of the Air Force (DAF). The lack of policy and structure resulted in inconsistent perceptions of acceptable leadership behavior across the force, ultimately impacting organizational performance.

Purpose of the Study

This study aimed to evaluate whether a structured method of decision-making to assess leader behavior in the Department of the Air Force would change an employee's perception of toxic leadership in an organization. Additionally, it had some subordinate objectives of understanding the demographics of leaders perceived as toxic and how those leaders compared to other supervisors. A series of research questions were posed to guide the development of the study and the problem statement, but they were not all fully addressed in this project. They are as follows:

1. Would an official Department of the Air Force definition of toxic or destructive leadership clarify policy and behavioral expectations?

This study proposed definitions for toxic leadership, followership, and the environment based on observations from the policy and regulation review completed in the initial qualitative phase of the study. Further, feedback from study participants indicated that the lack of a standard definition led to inconsistent behavioral expectations for leaders and followers in Air Force organizations. The proposed definitions represent the first step in a common understanding of toxic leadership across the force. However, a full policy analysis of guidance on negative, toxic, and destructive leadership was beyond this project's scope.

2. Are there any patterns in the demographics of those perceived as toxic leaders?
3. Do perceived toxic leaders tend to follow highly respected leaders in an organization?

4. How do personnel who believe they have been exposed to toxic leadership come to that conclusion?

As with the first research question, the study was not specifically designed to examine followers' thought processes. Rather, based on the literature on human reasoning, decision-making, and toxic leadership, the study assumed that the interpretation of leader behavior as toxic was generally rooted in heuristics and System I (fast) thinking (Kahneman, 2011; Lombrozo, 2006; Reed, 2015). The study focused on whether introducing System II (slow) thinking would impact the perception of toxic leadership.

5. Can using a conceptual model by an Air Force employee reduce bias in the perception of toxic leadership?

Before bias in toxic leadership perceptions can be reduced, they must be identified. While this research question was vital to framing the problem, the study focused first on identifying demographic inconsistencies in perceived toxic leaders. Further research can be designed to identify and reduce bias in those perceptions.

6. Can an Air Force employee use a conceptual model to identify toxic leadership?
7. Can an Air Force employee use a conceptual model to change their perception of toxic leadership?

Review of the Methodology

This project used an exploratory, sequential mixed-methods study with qualitative and quantitative phases to test the hypothesis that an intervention tool could change the perception of toxic leadership for members of Department of the Air Force organizations

(Cresswell & Cresswell, 2018). Data for the qualitative phase was collected through a review of existing literature, Department of Defense, and Department of the Air Force regulations and policies dealing with acceptable leadership behavior. The results of this phase of the study informed the proposed definitions of organizational toxicity, toxic leadership, toxic followership, and a toxic environment, as well as the design of the force field analysis model used in the experiment.

The experimental portion of the study collected two forms of data. The first was survey responses, which were analyzed quantitatively. Additionally, eight participants submitted their intervention worksheets, which were analyzed using qualitative and quantitative methods. The study also explored demographic differences in those perceived as toxic leaders and whether a standardized definition of toxic leadership would benefit the Department of the Air Force. The qualitative phase informed the data collection for the quantitative phase, a single factor design, group comparison using a pretest-posttest of current and former Department of the Air Force personnel who self-identified as having experienced toxic leadership.

Participants were recruited via flyers, social media postings, word of mouth, and snowball methods from a population of current and former Department of the Air Force personnel who self-identified as having experienced toxic leadership in the workplace. While the objective of a random, stratified sample that mirrors the Department of the Air Force demographics proved elusive, enough data was collected to derive statistically significant results from which to draw meaningful conclusions (Cresswell & Cresswell, 2018).

The study pretest had 550 responses, 458 of which were valid and complete. Of the 458, 186 (40.6%) were randomly assigned to the control group, and 272 (59.4%) were randomly assigned to the experimental group. When the survey was closed for data collection, there were 112 valid posttest responses, 76 in the control group and 36 in the experimental group. While nearly 60% of the study participants were randomly sorted into the experimental group, only 13.2% of that group completed the full study, and 40.9% of the control group completed the study. The low completion rate for the experimental group is likely due to the complexity of the study and the approximately 90-minute time commitment required to complete the pretest, intervention activity, and posttest.

Discussion of the Findings

The following four hypotheses were tested in the study. They will be discussed in thematic order starting with H_3 and H_4, which address the study's central concepts.

H_1: Women and people of color are perceived as toxic leaders at a higher rate in the U.S. Air Force than their White male counterparts.

H_2: Leaders are more likely to be perceived as toxic if they follow a leader favorably viewed by subordinates.

H_3: Using the structured decision-making process enabled by the study's conceptual model will change an employee's perception of toxic leadership.

H_4: Using the structured decision-making process enabled by the study's conceptual model will enable an employee to pinpoint perceived areas of toxic leadership.

Effectiveness of the Model in Changing Toxic Leadership Perceptions

H_3 proposed introducing a mental model and structured decision-making process to employees who felt they had experienced toxic leadership would change their perception of the behaviors or environment. This hypothesis was evaluated using two scales that examined the perception of toxic leadership and dysfunctional work environments from different perspectives: the organizational triangle scale developed in this study and the Toxic Leadership Scale developed by Andrew Schmidt (2008). The organizational triangle scale aggregates the perception of the environment, leadership, and followership, while the Toxic Leadership Scale is leader centric. Although the two scales examined different aspects of toxic leadership, they produced similar results.

Using the organizational triangle comprised of the environment, leadership, and followership as a baseline, participants who perceived toxic leadership in the Air Force evaluated their experience by completing the force field analysis exercise introduced in the intervention. The exercise led the participants to identify factors, traits, and behaviors that they believed were positive or negative influences on their workplace.

Responses were analyzed in the five categories that comprise the organizational triangle scale: organizational toxicity, toxic leadership, toxic followership, a toxic environment, and the overall organization. The "organizational toxicity" and the "overall organization" measures both sought to aggregate the scores for toxic leadership, followership, and the environment through different approaches. The "overall organization" score was derived from the average of the individual scores for leadership, followership, and the environment. In contrast, the "organizational toxicity" score was

based on the definition offered by this study that combined the definitions of toxic leadership, toxic followership, and a toxic environment into a single concept.

The results partially supported the hypothesis that the intervention could reduce the perception of toxic leadership. Between the pretest and the posttest, experimental group participants showed a statistically significant increase in their positive view of the overall organization, toxic followership, and the toxic environment. This result means that the intervention successfully reduced the perception of toxicity in the organization, the environment, and follower behavior.

When the toxic leadership concept was isolated from the rest of the scale, the experimental group showed a very small but not statistically significant decrease in how negatively the toxic leader was perceived after the intervention. This result means that the intervention did not significantly reduce the perception of toxic leadership using the organizational triangle approach. This finding is consistent with the toxic leadership scale results, which will be discussed in the next section.

Surprisingly, the experimental group saw a small but not statistically significant increase in the perception of organizational toxicity from the pretest to the posttest. As a reminder, this study's definition of organizational toxicity was “the sustained combination of environmental factors, leader and follower behavior, and follower perceptions that erode trust, communication, and workplace productivity.” Since the definition of organizational toxicity combined the toxic leadership, toxic followership, and toxic environment definitions, the results for this category were expected to correlate with the overall average score for those categories. Instead, it was the only part of the organizational triangle scale to see an increase in negative responses. These results may

be because it is the only definition explicitly identifying trust, communication, and productivity in its text.

The efficacy of the intervention was also examined using the Toxic Leadership Scale dimensions: abusive supervision, authoritarian leadership, narcissism, self-promotion, and unpredictability (Schmidt, 2008). The analysis results for this scale were consistent with the organizational triangle scale, where the perception of toxic leadership decreased slightly from the pretest but not at a statistically significant rate. This result leads to the conclusion that intervention is unlikely to change a person's opinion of whether toxic leadership traits and behaviors exist.

There are two possible explanations for the findings. The first is that the intervention successfully identified areas of toxic leadership in organizations, confirming the participants' perception and interpretation of the behavior they observed. The cognitive model in the intervention was designed to replace heuristics, bias, and System 1 (fast) thinking with System 2 (slow) thinking to reduce errors in conclusions based on each person's view of the world (Johnson-Laird, 1983; Kahneman, 2011; Lombrozo, 2006; Mahyar, 2021; Young, 2008). After reducing the use of heuristics and explanation in favor of deliberate reasoning, participants concluded that the leader's behavior constituted toxic leadership. While this explanation does not support the assertion that the intervention can reduce the perception of toxic leadership proposed in H_3, it does support H_4, which proposed that the intervention could help identify specific traits, behaviors, and factors considered toxic.

The second explanation also relates to the discussions of heuristics, bias, and memory presented in earlier chapters. Humans use heuristics, intuition, and bias to make

sense of situations where they experience a mismatch between their expectations and experiences (Dobbs & Do, 2019; Lombrozo, 2006). Shortcuts constitute System 1 (fast) thinking, which comprises most human decision-making (Kahneman, 2011). Once a decision is made, the human brain engages in post-decision evidence accumulation, which can reinforce the decision if confirmation bias is at play (Fleming, 2016; Gold & Shadlen, 2007). Remembering a toxic situation that occurred in the past means survey participants relied on memories and stored feelings to assess the events (Bridge & Voss, 2014; Shute, 2014). In such a case, it is unlikely that introducing deliberate System 2 thinking would change their perception of the situation (Lee, Nader, & Schiller, 2017). One way to evaluate this explanation would be to conduct further research using participants who feel they are currently experiencing toxic leadership, which would control for time, memory, and post-decision evidence accumulation.

Effectiveness of the Cognitive Model in Identifying Toxic Leadership

The second central hypothesis (H_4) proposed that the intervention would enable participants to identify toxic leadership traits, behaviors, and factors that impact their organization. Experimental group participants strongly agreed that the intervention provided them with the tools to evaluate their perception of toxic leadership, especially when evaluating the factors that impact the organizational triangle and the ability to evaluate toxic leadership behaviors. However, participants did not feel that the intervention changed their perception of toxic leadership. These results are consistent with H_3, indicating that the utility of the cognitive model may be in identifying rather than reducing the perception that toxic leadership exists in an organization.

Using the method introduced in the study, the participants identified factors influencing the work environment, leadership behaviors, and followership behaviors. Then they assigned a value to the factors based on how much they felt each impacted the organization, with positive values having positive impacts and negative values having negative impacts. Once the process was repeated for each part of the organizational triangle, the values were added together to create an overall score. An overall positive score indicated a positive organizational experience, and a negative score indicated a negative or toxic organization. Higher scores, both positive and negative, indicated stronger opinions about the state of the organization.

The qualitative analysis of the intervention worksheets yielded some interesting insights into the participants' thought processes and values. The wide range of scores in this study reinforced the profound and personal impacts toxic leadership can have on employees. The qualitative results are discussed in the order they are presented on the intervention worksheet, with the environment at the top of the organizational triangle, followed by leadership and followership.

Environmental Factors

The environmental factor reported to be the most negative was command climate, a subset of organizational climate, defined as morale or the meaning attached to policies, practices, and behaviors in the workplace (Schein & Schein, 2017). Command climate can relate directly to command leadership and organizational values (U.S. Air Force, 2014). Military culture, which is more deeply held than climate, was also highly reported as unfavorable in the intervention. Something about the military or Air Force culture did not resonate with some study participants. These two results are consistent with previous

studies on toxic leadership in military organizations, which conclude that unhealthy cultures and command climates are the breeding grounds for toxic leadership (Gallus et al., 2013; Laurence, 2011; Martinez, 2021; Reed, 2004, 2015; Rybacki & Cook, 2016; Williams, 2017).

External threats to the organization, real or perceived outside forces that can harm the organization or its members, were also rated highly negatively. External threats can set the conditions for strong or authoritarian leadership behaviors, especially when the leader is presented as the best or only way to counter the threat (Padilla et al., 2007). The prevalence of external threats as a toxic leadership and toxic environment factor is something that organizational leaders can further explore. Identifying, mitigating, or removing the threat may change the behavior of members of the organization or military unit.

Participants displayed a wide range of opinions on the impact of the environment on the organizational climate. On two of the eight worksheets, the environment was identified as the most significant contributor to organizational strife, outweighing leadership behaviors. These responses noted that the combination of Air Force culture, command climate, threats, and physical attributes created a negative work environment. Another participant recorded a positive score for the environment, noting that the Air Force culture, diversity climate, and physical environment overcame the challenges with the command climate and external threats to the organization.

Leadership Factors

Of the three organizational triangle elements, leadership factors received the most negative scores on the worksheets. This result is consistent with the expectation that the

individual leader sets the tone and climate for the organization and that most problems can be solved through leadership (Reed, 2015; U.S. Air Force, 2014). Unsurprisingly, leadership style and traits were the leading factors identified under the leadership category. However, leadership behaviors scored far less negatively than style and traits, indicating that the study participants recognized that toxic leadership is not a single behavior but a combination of behaviors, traits, and styles (Reed, 2015).

Also surprising was that leader motivation was not seen as much a contributing factor as style, traits, or behaviors. Leaders motivated by power or promotion, even in the extreme case of narcissism, are more likely to exhibit controlling behaviors than those motivated by service (Lee et al., 2021; Schattke & Marion-Jetten, 2021). In military organizations, a higher-than-average desire for promotion has been found to negatively impact organizational performance (Reed, 2015; Williams, 2017). Nevertheless, this study found that leader motivation was less impactful than leadership traits or behaviors.

Followership Factors

The study participants generally saw followership as a balancing force to leadership behaviors. Followership scores on the force field analysis activity were much less negative than either leadership or the environment in the participant responses. Two of the worksheets even had net positive scores for followership factors. Poor coping behaviors, poor conflict resolutions, and a poor relationship between leaders and followers were the participants' top three followership factors contributing to toxic leadership. Changing behaviors to avoid the toxic leader and the inability to successfully resolve conflict only perpetuates the toxic situation (Porath & Pearson, 2010; Reed, 2015). Unlike the style and traits identified in the leadership category, coping and conflict

resolution are both skills that can be taught to followers to mitigate the effects of other parts of the toxic triangle.

Demographic Trends for Perceived Toxic Leaders

The hypothesis that women and people of color would be overrepresented in the demographics of the leaders identified as toxic in the pretest survey was partially supported in each of the three leadership categories: officers, enlisted personnel, and civilian personnel. Research on leadership, race, ethnicity, and gender suggested that there would be a disparity in which women or people of color would be seen as toxic at higher rates than their White male counterparts (Carton & Rosette, 2011; Glass & Cook, 2020). In Western societies, there is a demonstrated preference for White male leadership by groups of White and non-White followers (Gundemir et al., 2014). Further, bias has been found to be a factor in women experiencing backlash and social and economic penalties for stepping outside of gender-congruent roles (Brescoll et al., 2018).

Officers

Black or African American officers, especially Black or African American women, were more likely to be seen as toxic when compared to their representation in the Air Force officer population. This result is especially significant when considering the Air Force's 2021 Racial Disparity Review results, which found that Black officers had a 36.0% lower chance of promotion to the field grade officer ranks than White officers (DAF Inspector General, 2021). Not only were Black officers less likely to be promoted, but they were also more likely to be seen as toxic in leadership roles.

The 2021 DAF report found that women were overrepresented in officer promotions to the field grade ranks and selection for developmental education. At the

same time, women were underrepresented in the general officer ranks due to their propensity to serve in support roles rather than operational career fields that lead to senior command opportunities (DAF Inspector General, 2021a). Black female officers were underrepresented in nearly every category of officer professional development: promotion, developmental education selection, and command selection (DAF Inspector General, 2021a). However, 45.0% of the female officers identified as toxic in this study were Black. This disparity seems to confirm the research on affinity bias and stereotyping, especially for Black leaders in the officer corps (Carton & Rosette, 2011; Glass & Cook, 2020).

Enlisted Personnel

For enlisted leadership, women were found to be toxic at a higher rate than expected, based on their representation across the force. Women make up 20.8% of the active-duty enlisted corps in the Department of the Air Force (Military One Source, 2021), but 33.3% of the toxic enlisted leaders reported in this study were women. These results are especially significant given that women are underrepresented in the highest levels of enlisted leadership for the active-duty corps (DAF Inspector General, 2021). Of note, in the Air Force Reserve and Air National Guard, women are overrepresented for their demographic in the highest enlisted leadership positions (DAF Inspector General, 2021). It is unclear from the data why women leaders in the enlisted corps are seen as toxic more than women officers.

Civilian Personnel

Women and people of color are underrepresented in the senior levels of the civil service in the Department of the Air Force. They tend to start at lower entry pay grades

than their White male counterparts, and the percentage of both women and racial-ethnic groups decreases as job pay grades increase (DAF Inspector General, 2021). In this study, the only demographic group reported to be toxic in the civilian leader category at a statistically significant rate was Hispanic or Latinx leaders. Given that Hispanic or Latinx personnel hold 12.0% of entry-level positions, 6.0% of upper-level jobs, and 4.0% of senior executive service jobs, it was surprising that the rate was reported so high. Further analysis with a larger sample of civilian personnel is warranted to confirm these results. Nonetheless, they are consistent with previous research by the Department of the Air Force, including the 2015 Barrier Analysis Working Group, which shows that disparities exist for racial-ethnic minorities in the civilian workforce (DAF Inspector General, 2021).

All Categories of Leaders

Despite the statistically significant results for certain leader demographics in each leadership category, there were no consistent, significant results for all categories. For example, Black or African American leaders, especially Black women, were identified as toxic at a higher rate among officers but not in the enlisted or civilian populations. Similarly, women were seen as toxic at a higher rate than expected in the enlisted category but not in the officer or civilian category. One possible explanation for this inconsistency is that subcultures in the officer, enlisted, and civilian personnel sectors result in preferences for different types of leadership. Another possible explanation is that the small sample size for each category limited the results.

Toxic Leaders and Highly Respected Leaders

One of the research questions asked whether toxic leaders were likely to follow highly respected leaders. The question implies that the more respected a leader is, the starker the contrast becomes when a toxic leader is put in place. There was a small, statistically significant relationship between how positively a leader was seen and how negatively a toxic leader was perceived. This trend held when controlled for time. The longer the study participant worked for the leader before the toxic leader, the more negatively the toxic leader was seen. These results show that although the study participants worked for leaders they perceived to be toxic, they did not see all leaders as toxic.

Toxic Leadership Definition

Given the wide range of personal interpretations of what constitutes toxic leadership, the Department of the Air Force needs to adopt an official definition. In the body of research on dark, destructive, and toxic leadership, the only consensus about the definition is that there is no consensus. There is risk in the Air Force defining a concept for which there is no common baseline, but there is more risk in continuing to allow each service member to define it for themselves.

It is apparent that toxic leadership is insufficient to describe the behaviors and motivations that lead to organizational dysfunction. This study proposed that the definition be expressed as four separate, but interrelated concepts based on the organizational triangle: organizational toxicity, toxic leadership, toxic followership, and toxic workplace:

- Organizational toxicity is the sustained combination of behaviors, environmental factors, and perceptions that erode trust, communication, and workplace productivity.
- Toxic leadership is the sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in follower behavior.
- Toxic followership is the sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade organizational performance.
- A toxic environment is a physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership.

Study participants were asked to evaluate their leadership and organization based on these definitions in both the pretest and posttest surveys. Questions exploring the usability of these definitions were included in the experiment's posttest. For all parts of the organizational triangle except organizational toxicity, the experimental group saw a decrease in the degree of agreement that each described the participant's experience. Participants believed the followers and environment were less harmful after the intervention than before, as compared to the control group, partly validating the proposed definitions.

Having four separate definitions to describe a harmful environment is thorough, but it may be impractical. The Department of the Air Force may need a simplified definition of toxic leadership that encompasses the spectrum of destructive leadership while considering the relationship between leaders, followers, and the environment. In that case, Thoroughgood, Sawyer, Padilla, and Lunsford (2018) present a more concise offering:

"Destructive leadership is a group process involving flawed, toxic, or ineffective leaders, susceptible followers, and conducive environments consisting of destructive group or organizational outcomes as well as a dynamic timeframe." (p.628)

This definition encompasses the four concepts proposed in this study. However, unlike this project's proposal, Thoroughgood et al. capture the relationship between leaders, followers, and the environment and the critical point that toxic leadership is not a single event in one definition. Analysis of the definition shows how it includes all the essential elements of the toxic leadership system. First, by defining destructive leadership rather than toxic leadership, Thoroughgood et al. satisfy both schools of thought on toxic leadership, namely that it is either an umbrella term for other forms of destructive leadership or one of the types of leadership on a scale of negative leadership. Their definition includes references to traits and behaviors essential to understanding toxic leadership (Barling et al., 2008; Einarsen et al., 2007; Lipman-Blumen, 2005; Reed, 2015; Schmidt, 2008).

The typical Department of the Air Force civilian employee or service member will not be familiar with the nuances and specific research examples of leader and follower behavior and conducive environments for destructive organizational outcomes. However, Thoroughgood et al.'s definition is simple enough that the user can recognize that what may be perceived as toxic leadership behavior results from the relationship between leader behavior, follower behavior, the organizational environment, and a time dimension. Whether the Department of the Air Force adopts the four-part definition offered in this study or Thoroughgood et al.'s simplified version, it is recommended that a definition be added to DAF policy and regulations.

Limitations of the Study

This study provided insight into the demographics of perceived toxic leaders in the Air Force and the utility of a cognitive model to evaluate workplace conditions and behaviors. However, limitations in the assumptions, sample, and study design must be considered when examining the results.

Assumptions

Some extreme forms of toxic or dark leadership result from personality disorders like psychopathy, Machiavellianism, or narcissism; however, not all negative workplace experiences stem from these clinical conditions (Schmidt, 2008; Burns, 2017). This study assumed that toxic leaders in the military were not suffering from clinical conditions. Toxic leadership is also rarely deliberate. Military leaders who use a destructive leadership style are often highly trained, dedicated, and motivated but lose sight of the long-term impact of their behaviors in favor of short-term mission accomplishment (Reed, 2015). This study assumed that the toxic leadership described by participants was not deliberate and did not seek to harm the organization. It also assumed that the style, traits, and behaviors that were perceived as toxic by followers were unrecognized as destructive by the leaders who displayed them.

Additionally, study participants were assumed to be true to their recollections and experiences of leadership behaviors and the organizational environment. While an imperfect assumption, it was necessary for the simplicity of the study. Flaws can occur in memory when sense-making short-cuts in the brain are combined with new information while remembering people, places, and events (De Brigard et al., 2019; Lombrozo, 2006). Further, the study did not differentiate between participants who perceived toxic

leadership in the past and those who were currently experiencing toxic leadership, even though the human brain rewrites memories each time they are accessed, updating them to include new information (Bridge & Voss, 2014; Shute, 2014). By measuring a participant's perception of toxic leadership rather than attempting to capture specific events and behaviors that constitute toxic leadership, the study accounted for imperfect memory.

Sampling

Participants for this project were recruited via flyers, social media postings, word of mouth, and snowball methods from a population of current and former Department Air Force personnel who self-identified as having experienced toxic leadership in the workplace. This sampling method had several limitations. The first was self-selection bias. Self-selection studies generally recruit more vested participants than randomly generated samples, which may skew results (Khazaal, et al., 2014). The snowball sampling method also leads to chain sampling bias, in which self-selected participants share information about the study with others with similar experiences and motivations (Fenner, et al., 2012).

Limiting the study to participants who self-identified as having experienced toxic leadership in the workplace created a clinical sample. This limitation is similar to strategies used in the medical field, where some studies limit participation to only those with diagnosed medical conditions. This approach was chosen because one of the study's objectives was to determine if applying critical thinking or structured decision-making would reduce the perception of toxic leadership. Including participants who had not experienced toxic leadership in the sample negated the ability to evaluate the model's

utility for that purpose. However, using a clinical population in the study has some ramifications in extrapolating the findings to a broader population, including understanding other applications for the model (Flather et al., 2006).

Excluding the population of Air Force personnel who have not experienced toxic leadership from the study also meant there is no data on how the force field analysis model performs as a prevention rather than an intervention tool. Exposure to the model before experiencing toxic leadership may alter the experience for these followers when they perceive destructive leadership behaviors and make them better equipped to evaluate the disconnect between their expectations and experience in an organization. For example, followers may be more likely to recognize heuristics and System 1 thinking in their reaction to an unexpected work environment and use the model to force System 2 analysis of the situation. Future studies of the model's application should move beyond the clinical sample and include broader populations.

Study Design

The study design had limitations that may have influenced the results. The intervention was designed to be presented to participants in a classroom-type setting where the information on the force field analysis and factors that influence the organizational triangle would be presented in a way that allowed for more explanation and discussion. The original study design sought to accomplish this via teleconference. Based on pilot study feedback on scheduling and privacy concerns, the teleconference was reduced to a 15-minute video. While the format change simplified the experiment so it could go forward, it may have reduced the effectiveness of the intervention. The complexity of the study's pretest-intervention-posttest design led to a low return rate

between the pretest and posttest, especially for the experimental group. Only 13.2% of experimental group participants completed the entire study. Despite these limitations, the study provided a solid baseline from which to continue gathering data on the decision-making processes used by followers experiencing toxic leadership.

Implications for Current Theory

This study viewed the perception of toxic leadership through the lens of cognitive decision-making. It started with the assertion that most human decisions are based on System 1 (fast) thinking, using heuristics and bias to make sense of a mismatch between expectations and reality. It then proposed that introducing a more structured framework to evaluate the workplace experience would benefit employees, leaders, and the organization (Dobbs & Do, 2019; Kahneman, 2011; Lombrozo, 2006). The findings support the utility of a cognitive model in identifying and sometimes mitigating the perception of negative influences on an organization.

This study's organizational triangle model reaffirmed the relationship between leaders, followers, and the environment that has been a theme of literature on leadership since at least the 1940s (Follett, 1949; Harms & Spain, 2014; Lewin, 1947; Lipman-Blumen, 2005; Padilla et al., 2007; Reed, 2015; Riggio, 2020; Thoroughgood et al., 2018). Visualizing the relationship between the three in a model was introduced for negative organizational impacts in the toxic triangle (Padilla et al., 2007) and refined for positive outcomes in the transformational triangle (Rybacki & Cook, 2016). By presenting the organizational system as a neutral Venn diagram, this study acknowledged the interplay between the environment, leaders, and followers and allowed participants to evaluate factors that influence each part of the organizational triangle. Participants could

self-determine whether the organization is toxic, transformational, or in something along that spectrum using a method based on psychologist Karl Lewin's force field analysis (1947). Often employed by businesses to evaluate factors that help or hinder change, the force field analysis was adapted for this study to apply to the entire organizational system rather than just a single event or concept (Ennis, 2017).

Toxic leadership is challenging to identify early in the process because there is a wide range of behaviors and intentions on the spectrum of negative leadership, from benign neglect to deliberate destruction of the organization (Padilla et al., 2007; Reed, 2015). Furthermore, toxic leadership is not a single, isolated event; it is a pattern that builds over time (Lipman-Blumen, 2005; Reed, 2004). When followers realize that a destructive situation exists, much of the damage has already been done.

By combining theories of human reasoning with theories on toxic leadership, this study addressed the gap in research surrounding the decision by followers that toxic leadership exists. The methods presented here could also be applied by leaders to help self-identify problems with their leadership style or within an organization. The force field analysis of an organization can be incorporated into a recurring activity aimed at identifying problems early and maintaining a healthy command climate.

The force field analysis of the organizational triangle also fits neatly into the OODA loop model widely used in Department of the Air Force processes. Derived by strategist John Boyd to describe the decision cycle fighter pilots use to prevail in aerial combat, OODA stands for observe, orient, decide, and act (Boyd, 2018). The loop has near-universal applications, including evaluating an organization for positive and negative influences. The critical step in the process is orientation, which amalgamates

and synthesizes observations and information through the lenses of culture, education, previous experience, heuristics, and new information, all of which are factors considered in this study (Maccuish, 2011). Nesting this study's force field analysis in the OODA loop provides a holistic approach to identifying and countering negative influences on the organizational triangle.

The data gathered in this study on the demographics of toxic leaders affirm the literature about leadership, race, gender, and ethnicity. Despite the social advances of the last half-century, there is still a preference for leadership traits typified by White male leaders in western societies (Gundemir et al., 2014; Peters et al., 2004). Women and people of color often feel they are subjected to more scrutiny than their White male counterparts and report changing their appearance or behavior to conform to the workplace, especially as they rise to elite leadership roles (Berdahl et al. 2018; DAF Inspector General, 2021; Glass & Cook, 2020). Moreover, racial-ethnic minorities and women in the Department of the Air Force cite a lack of minority representation in senior leadership positions and command as barriers to elite-level service, along with inappropriate comments, perceived biases, and stereotyping (DAF Inspector General, 2021; 2021a)

Implications for Practitioners and Applied Settings

Force Field Analysis

Given that this study showed the force field analysis of the organizational triangle to be effective in identifying factors that influence toxic leadership, it can be used in several applied settings. First, as presented in this study, it can be a self-assessment tool for followers to identify the specific factors and behaviors that lead to the perception of

toxic leadership. It can also be used as a self-assessment tool for leaders or commanders who suspect or have been given feedback that their leadership style is negatively impacting the organization.

Conducting the force field analysis as part of a more comprehensive look at unit health and command climate could also be beneficial. Suppose multiple members of the same organization completed the process simultaneously. In that case, the results could be triangulated to identify areas of friction and serve as the basis for an action plan to improve the organization. To make it even more useful, the force field analysis worksheet could be digitized, and the responses fed into a database and computer program that produces a hot-spot report with suggested improvements for commanders to implement.

The individual and group assessments of the organization could also be used as a tool by investigating officers in the Inspector General corps and officers appointed to conduct Commander Directed Investigations to provide a tangible framework for substantiating allegations. The current procedure for investigating toxic leadership allegations is to conduct interviews and evaluate answers based on the standards outlined in the Department of Defense's *Joint Ethics Regulation* and Air Force Instruction 1-2, *Commander's Responsibilities* (Department of the Air Force, 2018). The method developed in this study could produce more detailed and actionable results for an IG or commander's directed investigation.

Furthermore, the force field analysis could be incorporated into DAF professional military education courses at every level, from basic training through the highest ranks of civilians, officers, and the enlisted corps. By establishing the force field analysis of the organization as a baseline tool for Airmen and Guardians to understand their operating

environments, the Department of the Air Force could create a common lexicon for what is currently a topic with many different interpretations.

Demographics of Perceived Toxic Leaders

This study's findings that Black officers, especially Black women, enlisted women leaders, and Hispanic civilian leaders, were seen as toxic at higher rates than their representation in the Air Force and Space Force suggest some residual bias in the department. These results reinforce the Air Force's findings that Black female military members have the most negative perceptions of organizational climate and lowest levels of trust in the chain of command, followed by Black males, then Hispanic or Latina females (DAF Inspector General, 2021a). The 2021 Department of the Air Force study gathered 16,900 pages of feedback showing a marked difference in perception of culture, climate, and fairness between White and non-White servicemembers and between men and women. Racial-ethnic minority and female Airmen perceived barriers to service, but most White male Airmen and Guardians did not share the perception that those barriers exist (DAF Inspector General, 2021).

Recommendations from the Air Force's series of Racial Disparity Reviews include developing systemic action plans to address the barriers to service identified by Airmen and Guardians (DAF Inspector General, 2020; 2021; 2021a). The reports also recommend correcting the lack of mentorship and representation of racial-ethnic minorities and women at the senior level (DAF Inspector General, 2021). The force field analysis could be a valuable tool in helping to identify specific behaviors, command climates, and military sub-cultures that serve as barriers to racial-ethnic minorities and women succeeding at the most senior levels.

Recommendations for Future Research

This study explored the link between theories of human reasoning and perceptions of toxic leadership. The results identified several areas for future research. First, research needs to be done to determine if the results for toxic leader demographics and the efficacy of the force field analysis are specific to this sample or generalizable to a broader population. It would be helpful to replicate the study in a classroom setting where the intervention can be explained in more detail. A larger sample size might also provide more insight into the utility of the Toxic Leadership Scale (Schmidt, 2008) as part of the methodology. The Department of the Air Force's Air University would be an ideal setting for such a study. It contains colleges offering professional military education at all leadership levels, and thousands of students take in-residence courses there yearly. Regardless of the setting, future studies should continue to collect demographic information on the leaders perceived to be toxic. That type of data is rarely collected in toxic leadership research and proved helpful in understanding the role of gender, race, and ethnicity in the perception of counterproductive leadership.

Second, it would be beneficial to conduct a study using the force field analysis methodology in struggling organizations to triangulate issues. An organizational setting would again allow researchers to present the intervention in a small group classroom setting and provide an opportunity for discussion prior to completing the worksheet. Qualitative data collection in interviews and feedback groups could supplement the quantitative data. Such research could validate the assertion that the force field analysis would be useful for commanders and investigating officers.

Third, the relationship between perceived toxic leaders and the highly respected leaders who preceded them is an area with very little existing research. This study asked some exploratory questions on the topic and produced preliminary results. It found a correlation between how positively a leader was perceived over time and how negatively the toxic leader who followed was viewed. This line of data collection leads to some interesting questions on whether the leader perceived to be toxic was truly toxic or just not as effective as the previous, well-respected leader. However, further exploration was beyond the scope of this study.

Conclusion

Recognizing when toxic leadership or a toxic work environment exists is crucial to maintaining healthy organizations ready to carry out military operations. However, the Department of the Air Force's lack of an official definition of toxic leadership hampers the ability to name, evaluate, and correct the problem. Further, there is little research on followers' decision-making process to determine if leader behavior is destructive leadership, an isolated event, or part of a toxic organizational system. This study proposed that a force field analysis could be valuable in identifying and mitigating the factors that drive an organization toward a toxic state.

The quantitative and qualitative results showed that a force field analysis enabled participants to identify the factors influencing toxic situations. It was also shown to mitigate the perception of a toxic environment and conducive followers in an organization. However, the model did not have a statistically significant impact on the perception of toxic leadership itself. Furthermore, the research in this study on the

demographics of perceived toxic leaders and the relationship between well-respected leaders and the toxic leaders who follow can provide starting points for future studies.

This study's results point to several policy implications for the Department of the Air Force. First, the Air Force needs to adopt a standardized definition of toxic leadership and teach it in professional military education. Second, the force field analysis can be taught at DAF professional military education courses at every level as a fundamental tool for understanding organizational dynamics. Third, the model can be used by investigating officers in the Inspector General corps and officers appointed to conduct Commander Directed Investigations to provide a tangible framework for substantiating allegations. Finally, the model can be used as a self-assessment for leaders, followers, or organizations concerned about toxic or dysfunctional environments.

REFERENCES

Air Force Personnel Center. (2022, March 31). *Military demographics*. https://www.afpc.af.mil/About/Air-Force-Demographics/

Alarcon, G. M., Lyons, J. B., Schlessman, B. R., & Barelka, A. J. (2012). Leadership and coping among Air Force officers. *Military Psychology, 24*(1), 29-47. https//doi.org/10.1080/08995605.2012.639674

Anthony, J. (2019, December 2). In search of a space culture. *The Space Review*. https://www.thespacereview.com/article/3841/1

Army Talent Management Task Force. (2020, October 28). *Army expands command assessment program to senior enlisted leaders.* U.S. Army. https://www.army.mil/article/240344/army_expands_command_assessment_program_to_senior_enlisted_leaders

Aubrey, D. (2012). *The effect of toxic leadership.* [Master's thesis, U.S. Army War College]. Defense Technical Information Center. https://apps.dtic.mil/dtic/tr/fulltext/u2/a560645.pdf

Barling, J., Christie, A., & Turner, N. (2008). Pseudo-transformational leadership: Toward the development and test of a model. *Journal of Business Ethics, 81*(4), 851-856. https://doi.org/10.1007/s10551-007-9552-8

Bass, B. M. (1985). *Leadership and performance beyond expectations.* New York: Free Press.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), 207-218. https//doi.org/10.1037/0021-9010.88.2.207

Bell, R. M. (2020, July). Toxic leadership and followership typologies: A partial replication study with scale refinement. *Integral Leadership Review, 20*(1), 47-57. https://search.ebscohost.com/login.aspx?direct = true&AuthType = ip,shib&db = bth&AN = 145396691&site = eds-live&scope = site

Berdahl, J. A., & Min, J. L. (2012). Prescriptive stereotypes and workplace consequences for East Asians in North America. *Cultural Diversity and Ethnic Minority Psychology, 18*(2), 141-152. http://dx.doi.org/10.1037/a0027692

Berdahl, J., Cooper, M., Glick, P., Livingston, R., & Williams, J. (2018). Work as a masculinity contest. *Journal of Social Issues, 74*(3), 422-448. https//doi.org/10.1111/josi.12289

Berg, P. (2014, September-October). The importance of teaching followership in professional military education. *Military Review*, 65-71. https://content.ebscohost.com/ContentServer.asp?EbscoContent = dGJyMNHX8kSep7c4xNvgOLCmsEqep7VSrqa4TbCWxWXS&ContentCustomer = dGJyMPTX6km549%2BB7LHzi%2BXV34jn&T = P&P = AN&S = R&D = fth&K = 98132640

Bligh, M. C., Kohles, J. C., Pearce, C. L., Justin, J. E., & Stovall, J. F. (2007). When the romance is over: Follower perspectives of aversive leadership. *Applied Psychology, 56*(4), 528-577. https//doi.org/10.1111/j.1464-0597.2007.00303.x

Boger, M. (2016). *Identifying toxic leadership behaviors and tools to facilitate their discovery.* [Master's thesis, Air University]. Defense Technical Information Center. https://apps.dtic.mil/dtic/tr/fulltext/u2/1037499.pdf

Box, J. E. (2012). *Toxic leadership in the military profession.* [Master's thesis, U.S. Army War College]. Defense Technical Information Center. https://apps.dtic.mil/dtic/tr/fulltext/u2/a560886.pdf

Boyd, J. (2010, August). The essence of winning and losing. (C. Spinney, C. Richards, & G. Richards, Eds.). http://pogoarchives.org/m/dni/john_boyd_compendium/essence_of_winning_losing.pdf

Boyd, J. (2018). *A discourse on winning and losing.* (G. T. Hammond, Ed.). Air University Press. https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0151_Boyd_Discourse_Winning_Losing.PDF

Brescoll, V. L., Okimoto, T. G., & Vial, A. C. (2018). You've come a long way...maybe: How moral emotions trigger backlash against women leaders. *Journal of Social Issues, 74*(1), 144-164. https//doi.org/10.1111/josi.12261

Bridge, D. J., & Voss, J. L. (2014). Hippocampal binding of novel information with dominant memory traces can support both memory stability and change. *Journal of Neuroscience, 34*(6), 2203-2213. https://eds.s.ebscohost.com/eds/detail/detail?vid = 7&sid = 359ad30a-49d1-4002-9f8c-34a50dff7a07%40redis&bdata = JkF1dGhUeXBlPWlwLHNoaWImc2l0ZT1lZHMtbGl2ZSZzY29wZT1zaXRl#AN = BACD201400191375&db = bxh

Brown, C. Q. (2020, August 30). *Accelerate change or lose.* Department of the Air Force. https://www.af.mil/Portals/1/documents/csaf/CSAF_22/CSAF_22_Strategic_Appr

oach_Accelerate_Change_or_Lose_31_Aug_2020.pdf#:~:text = ACCELERATE%20CHANGE%20OR%20LOSE%20In%20an%20environment%20that,accelerate%20change%20to%20control%20and%20exploit%20the%20air

Burns, W. A. (2017, July). A descriptive literature review of harmful leadership styles: Definitions, commonalities, measurements, negative impacts, and ways to improve these harmful leadership styles. *Creighton Journal of Interdisciplinary Leadership, 3*(1), 33-52. https://dx.doi.org/10.17062/CJIL.v3i1.53

Byrnes, M. (2020, March 9). Synchronizing change and air force culture: Modernization and the dirty secret of aircrew shortages. *War on the Rocks*. https://warontherocks.com/2020/03/synchronizing-change-and-air-force-culture-modernization-and-the-dirty-secret-of-aircrew-shortages/

Carton, A. M., & Rosette, A. S. (2011). Explaining bias against black leaders: Integrating theory on information processing and goal-based stereotyping. *Academy of Management Journal, 54*(6), 1141-1158. https://doi.org/10.5465/amj.2009.0745

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum Associates.

Crawford, J. A., & Kedler, J.A. (2019). Do we measure leadership effectively? Articulating and evaluating scale development psychometrics for best practice. *The Leadership Quarterly, 30*(1), 133-144. https://doi.org/10.1016/j.leaqua.2018.07.001

Cresswell, J., & Cresswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

Department of the Air Force Inspector General. (2018, Oct). *Holding the Line...on Toxic Leadership.* https://www.afinspectorgeneral.af.mil/Portals/67/documents/Holding%20the%20Line%20Articles/Holding%20the%20Line%20Oct%2018%20(final).pdf?ver = 2018-10-30-124231-697

Department of the Air Force Inspector General. (2020). *Report of inquiry (S8918P) independent racial disparity review.* Department of the Air Force. https://www.af.mil/Portals/1/documents/ig/IRDR.pdf

Department of the Air Force Inspector General. (2021). *Report of inquiry (S8918P) disparity review.* Department of the Air Force. https://www.af.mil/Portals/1/documents/2021SAF/09_Sept/DR_ROI_Baseline.pdf

Department of the Air Force Inspector General. (2021a). *Report of inquiry addendum (S8918P) disparity review.* Department of the Air Force. https://www.af.mil/Portals/1/documents/2021SAF/11_Nov/Disparity_Review_Addendum.pdf

Darouei, M., & Pluut, H. (2018). The paradox of being on the glass cliff: Why do women accept risky leadership positions? *Career Development International, 23*(4), 397-426. https//doi.org/10.1108/CDI-01-2018-0024

Datesman, M., Crandall, J., & Kearney, E. N. (2014). *American ways: An introduction to American culture (*4th ed*.).* Pearson.

De Brigard, F., Hanna, E., St Jacques, P. L., & Schacter, D. L. (2019). How thinking about what could have been affects how we feel about what was. *Cognition and Emotion, 33*(4), 646-659. https://doi.org/10.1080/02699931.2018.1478280

De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88*(4), 741-749. https://doi.org/10.1037/0021-9010.88.4.741.

Defense Equal Opportunity Management Institute. (2021, June 24). *Risk factors: Toxic leadership.* https://www.defenseculture.mil/Assessment-to-Solutions/Factor-Products/Risk-Factors/#toxic-leadership

Department of Defense. (2020). *2020 Demographics: Profile of the Military Community.* Military Once Source. https://download.militaryonesource.mil/12038/MOS/Reports/2020-demographics-report.pdf

Department of the Air Force. (2014). *Air Force Instruction 1-2, Commander's responsibilities.* Air Force E-Publishing. https://static.e-publishing.af.mil/production/1/af_cc/publication/afi1-2/afi1-2.pdf

Department of the Air Force. (2017). *The Airman Handbook.* Air Force E-Publishing. https://www.e-publishing.af.mil/Portals/1/Documents/AFH1.pdf

Department of the Air Force. (2018, December 28). Inspector General Complaints Resolution. https://www.afinspectorgeneral.af.mil/Who-We-Are/Complaints-Resolution-Program-Directorate/

Dobbs, J. M., & Do, J. J. (2019). The impact of perceived toxic leadership on cynicism in officer candidates. *Armed Forces & Society, 45*(1), 3-26. https://doi.org/10.1177/0095327X17747204

Earhart, M. G., & Klein, K. J. (2001). Predicting followers' preferences for charismatic leadership: the influence of follower values and personality. *The Leadership Quarterly, 12*(2), 153-179. https://doi.org/10.1016/S1048-9843(01)00074-1

Eckstein, M. (2018, April 9). *CNO's new Navy leadership training emphasizes character, ethics.* USNI News. https://news.usni.org/2018/04/09/32709

Einarsen, S., Asland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. *The Leadership Quarterly, 18*(3), 207-216. doi:10.1016/j.leaqua.2007.03.002

Ellerman, D. D. (2016). *Effective combat leadership: How do individual, social, and organizational factors in the U.S. Army Reserve cultivate effective women's leadership in dangerous contexts?* (Order No. 10028976) [Doctoral dissertation, Antioch University]. ProQuest Dissertations and Theses Global. https://www.proquest.com/dissertations-theses/effective-combat-leadership-how-do-individual/docview/1773285529/se-2Ennis, G. (2017). What does it take to change this. *Supervision, 78*(10), 15-18.

Fenner, Y., Garland, S. M., Moore, E. E., Jayasinghe, Y., Tabrizi, S. N., Gunasekaran, B., & Wark, J. D. (2012). Web-based recruiting for health research using a social networking site: an exploratory study. *Journal of Medical Internet Research, 14*(1), e20. https//doi.org/10.2196/jmir.1978

Flather, M., Delahunty, N., & Collinson, J. (2006). Generalizing results of randomized trials to clinical practice: reliability and cautions. *Clinical Trials, 3*(6), 508-512. https//doi.org/10.1177/1740774506073464

Fleming, S. M. (2016, March 16). Decision making: Changing our minds about changes of mind. *ELife, 5*. https://doi.org/10.7554/eLife.14790

Follett, M. P. (1949). *The essentials of leadership.* Management Publications Trust.

Frankfort-Nachimas, C., & Leon-Guerrero, A. (2018). *Social Statistics for a Diverse Society* (8th ed.). Sage Publications.

Gallus, J. A., Walsh, B. M., van Driel, M., Gouge, M. C., & Antolic, E. (2013). Intolerable cruelty: A multilevel examination of the impact of toxic leadership on U.S. military units and service members. *Military Psychology, 25*(6), 588-601. https://doi.org/10.1037/mil0000022

Garretson, P. (2019, July 11). Space force's jupiter sized culture problem. *War on the Rocks*. https://warontherocks.com/2019/07/space-forces-jupiter-sized-culture-problem/

Glass, C., & Cook, A. (2020). Performative contortions: How white women and people of colour navigate elite leadership roles. *Gender Work Organizations, 27*(6), 1232-1252. https//doi.org/10.1111/gwao.12463

Gocen, A., & Cen, S. (2021). A validation of servant leadership scale on multinational sample. *Psychological Reports*, *124*(2), 752-770. http://dx.doi.org/10.1177/0033294120957246

Gold, J. I., & Shadlen, M. N. (2007). The neural basis of decision making. *Annual Review of Neuroscience, 30*, 535-574. https://doi.org/10.1146/annurev.neuro.29.051605.113038

Gundemir, S., Homan, A. C., de Dreu, C. K., & van Vugt, M. (2014). Think leader, think white? Capturing and weakening an implicit pro-white leadership bias. *PLoS ONE, 9*(1), e83915. https//doi.org/10.1371/journal.pone.0083915

Haberichter, M. W. (2018). *Toxic leadership in the United States Marine Corps*. [Master's thesis, U.S. Army War College]. U.S. Army War College. https://publications.armywarcollege.edu/pubs/3645.pdf

Harms, P., & Spain, S. M. (2014). Follower perceptions deserve a closer look. *Industrial and Organizational Psychology, 7*(2), 187-191. https//doi.org/10.1111/iops.12130

Headquarters, Department of the Army. (2019). *Army Doctrine Publication 6-22, Leadership and the Profession.* U.S. Army Publications. https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN20039-ADP_6-22-001-WEB-0.pdf

Herbert, J. (2011). The toxic presidency of George W. Bush. *Representation, 47*(3), 265-280. https://doi.org/10.1080/00344893.2011.596428

Higgs, M. J. (2014). *Detached for cause: examining the organizational and cultural influences on the dismissal of surface warfare commanding officers*. [Doctoral dissertation, Valdosta State University]. Vtext Database. https://vtext.valdosta.edu/xmlui/bitstream/handle/10428/1732/higgs-michael_dissertation_access.pdf?sequence = 1&isAllowed = y

Hlad, J. (2020, August 30). Brown: 'accelerate change or lose'. *Air Force Magazine*. https://www.airforcemag.com/brown-accelerate-change-or-lose/

Hofstede Insights. (2020, October). *What about the USA?* https://www.hofstede-insights.com/country-comparison/the-usa/

Hofstede, G. (2001). *Culture's consequences: Comparing values, behavior, institutions, and organizations across nations* (2nd ed.). Sage Publications.

House, R. J., Dorfman, P. W., Javidan, M., Hanges, P. J., & Sully de Luque, M. F. (2014). *Strategic leadership across cultures.* Sage Publications.

Housman, M., & Minor, D. (2015). *Toxic workers.* Harvard Business School Working Paper, No. 16-057. http://nrs.harvard.edu/urn-3:HUL.InstRepos:23481825

Jehn, K. A., Greer, L., Sevine, S., & Szulanski, G. (2008). The effects of conflict types, dimensions, and emergent states on group outcomes. *Group Decision and Negotiation, 17*(6), 465-495. https://doi.org/10.1007/s10726-008-9107-0

Jha, S., & Jha, S. (2015). Leader as anti-hero: decoding nuances of dysfunctional leadership. *Journal of Management and Public Policy, 6*(2), 21-28. https://eds.s.ebscohost.com/eds/pdfviewer/pdfviewer?vid = 7&sid = addc9d84-60d5-4893-8472-9ccab8e77289%40redis

Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness.* Harvard University Press.

Johnson-Laird, P. N. (2010). Mental models and human reasoning. *Proceedings of the National Academy of Sciences of the United States of America*, *107*(43), 18243–18250.

Kahneman, D. (2011). *Thinking, fast and slow.* Farrar, Straus, and Giroux.

Kellerman, B. (2012). *The end of leadership.* Harper Collins.

Kelley, R. (1992). *The power of followership: How to create leaders people want to follow, and followers who lead themselves.* Doubleday.

Kelley, R. E. (1988, November 1). In praise of followers. *Harvard Business Review, 66*(6), 142-148. https://eds.s.ebscohost.com/eds/pdfviewer/pdfviewer?vid = 1&sid = c2ba2594-7542-42c3-bd7b-ba1c177fbf90%40redis

Kets de Vries, M. (2001). *The leadership mystique.* Financial Times Prentice Hall.

Khazaal, Y., van Singer, M., Chatton, A., Achab, S., Zullino, D., Rothen, S., . . . Thorens, G. (2014). Does self-selection affect samples' representativeness in online surveys? An investigation of online video game research. *Journal of Medical Internet Research, 16*(7), e164. https/doi.org/10.2196/jmir.2759

Klein, J. J. (2020, January 20). The creation of a U.S. Space Force: It's only the beginning. *War on the Rocks*. https://warontherocks.com/2020/01/the-creation-of-a-u-s-space-force-its-only-the-end-of-the-beginning/

Klein, M. (2020, November 3). Leadership in the profession of arms syllabus and study guide. U.S. Naval War College. https://usnwc.edu/college-of-naval-warfare/Core-Curriculum/Leadership-in-the-Profession-of-Arms

Koc, Y., Gulseren, D., & Lyubykh, Z. (2021). Masculinity contest culture reduces organizational citizenship behaviors through decreased organizational identification. *Journal of Experimental Psychology: Applied, 27*(2), 408-416. https://doi.org/10.1037/xap0000351

Kulich, C., Lorenzi-Cioldi, F., Iacoviello, V., Faniko, K., & Ryan, M. K. (2015). Signaling change during a crisis: refining conditions for the glass cliff. *Journal of*

Experimental Social Psychology, 61, 96-103. http://dx.doi.org/10.1016/j.jesp.2015.07.002

Laurence, J. H. (2011). Military leadership and the complexity of combat and culture. *Military Psychology, 23*(5), 489-501. https//doi.org/10.1080/08995605.2011.600143

Lee, H. W., Hays, N. A., & Johnson, R. E. (2021). To thine own (empowered) self be true: Aligning social hierarchy motivation and leader behavior. *Journal of Applied Psychology, 106*(7), 1033-1048. https://doi.apa.org/doi/10.1037/apl0000813

Lee, J. L., Nader, K., & Schiller, D. (2017). An update on memory reconsolidation updating. *Trends in Cognitive Science, 21*(7), 531-545. https://doi.org/10.1016/j.tics.2017.04.006

Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science. *Human Relations 1*(1), 1-41.

Likert, R. (1961). *New patterns of management.* McGraw-Hill.

Linzey, J. F. (2015). *Moral leadership.* Resouce Publications. https://eds.p.ebscohost.com/eds/ebookviewer/ebook/bmxlYmtfXzExMzY4NTBfX0FO0?sid = 107337d2-d338-4065-a0d4-fff01129d1d7@redis&vid = 0&format = EK&rid = 1

Lipinska-Grobelny. (2021). Organizational climate and counterproductive work behaviors: The moderating role of gender. *International Journal of Occupational Medicine and Environmental Health, 34*(4), 513-525. https://doi.org/10.13075/ijomeh.1896.01623

Lipman-Blumen, J. (2005). *The allure of toxic leaders.* Oxford University Press.

Lipman-Blumen, J. (2005a, January/February). The allure of toxic leaders: why followers rarely escape their clutches. *Ivey Business Journal 69*(3), 1-8.

Lipman-Blumen, J. (2005b). Toxic leadership: A conceptual framework. In J. Burnois, J. Hamel, S. Roussillon, & J. Scaringella, *Encyclopedia of Executive Governance.* Editions d'Organisation.

Lipman-Blumen, J. (2008). Control myths: How followers unwittingly keep toxic leaders in power. *Organizations and People, 15*(3), 111-120.

Lombrozo, T. (2006, October). The structure and function of explanations. *Trends in Cognitive Science, 10*(10), 464-470. https://doi.org/10.1016/j.tics.2006.08.004

Maccuish, D. A. (2011). Orientation: the key to the OODA loop. *Journal of Defense Resources Management, 2*(2), 29-36. http://journal.dresmara.ro/issues/volume2_issue2/03_maccuish.pdf

Mahyar, N. (2021, September 4). *Mental models, conceptual models, and design.* University of Massachusettes. https://groups.cs.umass.edu/nmahyar/wp-content/uploads/sites/8/2019/03/690A-10-ConceptualModels.pdf

Martinez Jr., B. (2021, July-August). U.S. Army, toxic followership, and the balance of responsibility. *Military Review 101*(4), 100-110. https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2021/Martinez-Toxic-Followership/

Matos, K., O'Neill, O., & Lei, X. (2018). Toxic leadership and the masculinity contest culture: How "win or die" cultures breed abusive leadership. *Journal of Social Issues, 74*(3), 500-528. https//doi.org/10.1111/josi.12284

Military One Source. (2021). *2020 interactive profile of the military community*. https://demographics.militaryonesource.mil/

Milosevic, I., Maric, S., & Loncar, D. (2020). Defeating the toxic boss: The nature of toxic leadership and the role of followers. *Journal of Leadership & Organizational Studies, 27*(2), 117-137. https://doi.org/10.1177/1548051819833374

Moon, K.K., & Christensen, R. K. (2019). Realizing the performance benefits of workforce diversity in the U.S. federal government: The moderating role of diversity climate. *Public Personnel Management, 49*(1), 141-165. https://doi.org/10.1177/0091026019848458

Morgenroth, T., Kirby, T. A., Ryan, M. K., & Sudkamper, A. (2020). The who, when, and shy of the glass cliff phenomenon: a meta-analysis of appointments to precarious leadership positions. *American Psychological Association Psychological Bulletin, 146*(9), 797-829. http://dx.doi.org/10.1037/bul0000234

Moutousi, O., & May, D. (2018). How change-related unethical leadership triggers follower resistance to change: A theoretical account and conceptual model. *Journal of Change Management, 18*(2), 142-161. https://doi.org/10.1080/14697017.2018.1446695

Mullin, R. (2021, December 15). The Space Force's critical lesson for the rest of the military. *War on the Rocks*. https://warontherocks.com/2021/12/the-military-should-develop-talent-not-just-manage-it/

Norman, D. (2013). *The design of everyday things: Revised and expanded edition.* Basic Books.

Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *The Leadership Quarterly, 18*(3), 176-194. https://doi.org/10.1016/j.leaqua.2007.03.001

Pagan, A. (2016). *Annotated bibliography for toxic leadership and related constructs.* Defense Equal Opportunity Management Institute Directorate of Research Development and Strategic Initiatives. https://www.defenseculture.mil/Portals/90/Documents/Research/Publications/ANBIB-Toxic_Leadership_and_Related_Constructs-20191218.pdf

Pelletier, K. L. (2010). Leader toxicity: An empirical investigation of toxic behavior and rhetoric. *Leadership, 6*(4), 373-399. http://dx.doi.org/10.1177/1742715010379308

Peters, S., Kinsey, P., & Malloy, T. E. (2004). Gender and leadership perceptions among African Americans. *Basic and Applied Social Psychology*, 26(1), 93–101. https://doi.org/10.1207/s15324834basp2601_8

Piellusch, M. (2017, August 25). Toxic leadership or tough love: Does the U.S. military know the difference? *The War Room*. https://warroom.armywarcollege.edu/articles/toxic-leadership-tough-love-u-s-military-know-difference/

Pilgrim, E. (2020, August 13). *Army vice chief walks through brigade command program to witness Army's newest assessment tool.* U.S. Army. https://www.army.mil/article/238143/army_vice_chief_walks_through_brigade_command_program_to_witness_armys_newest_assessment_tool

Porath, C. L., & Pearson, C. M. (2010). The cost of bad behavior. *Organziational Dynamics, 39*(1), 64-71. https://doi.org/10.1016/j.orgdyn.2009.10.006

Porter, S. R., Whitcomb, M. E., & Weitzer, W. H. (2004). Multiple surveys of students and survey fatigue. *New Directions for Institutional Research*, *2004*(121), 63–73. https://doi.org/10.1002/ir.101

Pugh, S. D., Dietz, J., Brief, A. P., & Wiley, J. W. (2008). Looking inside and out: The impact of employee and community demographic composition on organizational diversity climate. *American Psychological Association, 93*(6), 1422-1428. https//doi.org/10.1037/a0012696

Redmond, S., Wilcox, S. L., Kim, A., Finney, K., Barr, K., & Hassan, A. M. (2014). A brief introduction to the military workplace culture. *Work, 50*(1), 9-20. https://doi.org/10.3233/WOR-141987

Reed, G. E. (2004). Toxic leadership. *Military Review*, *84*(4), 67–71.

Reed, G. E. (2015). *Tarnished: Toxic leadership in the U.S. military.* Ponomac Books, University of Nebraska Press.

Richter, G. (2018). Antecedents and consequences of leadership styles: Findings from empirical research in multinational headquarters. *Armed Forces & Society, 44*(1), 72-91. https://doi.org/10.1177/0095327X16682787

Riggio, R. (2020). Why followership? *New Directions for Student Leadership* (167), 15-22. https//doi.org/10.1002/yd.20395

Rudestam, K. E., & Newton, R. R. (2007). *Surviving your dissertation: A comprehensive guide to content and process,* (3rd ed). Sage Publications.

Rule, J. N. (2013). *A symbiotic relationship: the OODA loop, intuition, and strategic thought*. [Master's thesis, U.S. Army War College]. Defense Technical Information Center. https://apps.dtic.mil/dtic/tr/fulltext/u2/a590672.pdf

Ryan, M. K., & Haslam, S. A. (2005). The glass cliff: evidence that women are over-represented in precarious leadership positions. *British Journal of Management, 16*(2), 81-90. https//doi.org/10.1111/j.1467-8551.2005.00433.x

Rybacki, M., & Cook, C. (2016). Switching the paradigm from reactive to proactive: Stopping toxic leadership. *Joint Forces Quarterly, 82*(3), 33-39. https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-82/jfq-82.pdf?ver=2016-07-08-153513-167

Schattke, K., & Marion-Jetten, A. S. (2021). Distinguishing the explicit power motives: Relations with dark personality traits, work behavior, and leadership styles. *Zeitschrift für Psychologie*, 1-10. http://dx.doi.org/10.1027/2151-2604/a000481

Schein, E., & Schein, P. (2017). *Organizational culture and leadership* (5th ed). Wiley Publishing.

Schmidle, R. E., & Montgomery, M. (2021). *A report on the fighting culture of the United States Navy surface fleet.* https://www.cotton.senate.gov/imo/media/doc/navy_report.pdf

Schmidt, A. A. (2008). *Development and validation of the toxic leadership scale*. [Master's thesis, The University of Maryland]. University of Maryland. https://drum.lib.umd.edu/bitstream/handle/1903/8176/umi-umd-5358.pdf?sequence = 1&isAllowed = y

Schmidt, A. A. (2014). *An examination of toxic leadership, job outcomes, and the impact of military deployment.* (Order No. 3627674). [Doctoral dissertation, The University of Maryland]. ProQuest Dissertations and Theses Global.

https://www.proquest.com/dissertations-theses/examination-toxic-leadership-job-outcomes-impact/docview/1558874321/se-2

Schneider, B., & Barbera, K. M. (Eds.). (2014). *The Oxford handbook of organizational climate and culture.* Oxford University Press.

Seck, H. H. (2017, November 25). The Marine Corps wants a 'toxic leadership test' to aid promotion decisions. *Task and Purpose*. https://taskandpurpose.com/leadership/marine-corps-toxic-leadership-test/

Secretary of the Air Force. (2018, November 20). *Air Force Instruction 90-201, The Air Force Inspection System*. Department of the Air Force E-Publishing. https://static.e-publishing.af.mil/production/1/saf_ig/publication/afi90-201/afi90-201.pdf

Sendjaya, S., Eva, N., Butar, I. B., Robin, M., & Castles, S. (2017). SLBS-6: Validation of a short form of the servant leadership behavior scale. *Journal of Business Ethics*, 941-956. https//doi.org/10.1007/s10551-017-3594-3

Shirev, E. B., & Levy, D. A. (2016). *Cross-cultural psychology: Critical thinking and contemporary applications.* Taylor & Francis.

Shute, N. (2014, February 5). *Our brains rewrite our memories, putting the present in the past*. NPR. https://www.npr.org/sections/health-shots/2014/02/04/271527934/our-brains-rewrite-our-memories-putting-present-in-the-past

Stanimirović, I. (2020). *Correlation and regression analysis : Applications for industrial organizations.* Arcler Press.

Steele, J. (2011). *Antecedents and consequences of toxic leadership in the U.S. Army: A two-year review and recommended solutions*. Defense Technical Information Center. https://apps.dtic.mil/sti/pdfs/ADA545383.pdf

Stillwell, B. (2016, January 21). 10 legendary heroes of the US Air Force. *We Are the Mighty*. https://www.wearethemighty.com/articles/10-legendary-heroes-us-air-force#

Tepper, B. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*(2), 178-190.

Thomas, W. C. (2018). *The cultural identity of the United States Air Force*. Air University. https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Chronicles/thomas.pdf

Thoroughgood, C. N., Sawyer, K. B., Padilla, A., & Lunsford, L. (2018). Destructive leadership: a critique of leader-centric perspectives toward a more holistic definition. *Journal of Business Ethics 151*(3), 627-649. https://doi.org/10.1007/s10551-016-3257-9

U.S. Air Force. (2022). *Air Force Manual 36-2664 with Guidance Memorandum 2021-02, Personnel Assessment Program.* Department of the Air Force E-Publishing. https://static.e-publishing.af.mil/production/1/af_a1/publication/afman36-2664/dafman36-2664.pdf

Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly, 25*(1), 83-104. http://dx.doi.org/10.1016/j.leaqua.2013.11.007

Vega, G., & Comer, D. R. (2005). Sticks and stones may break your bones, but words can break your spirit: Bullying in the workplace. *Journal of Business Ethics 58*(1/3), 101-109. https//doi.org/10.1007/s10551-005-1422-7

Walker, R. C., & Aritz, J. (2015). Women doing leadership: Leadership styles and organizational culture. *International Journal of Business Communication, 52*(4), 452-478. https//doi.org/10.1177/2329488415598429

Ward, A. K., Beal, D. J., Zyphur, M. J., Zhang, H., & Bobko, P. (2022). Diversity climate, trust, and turnover intentions: A multilevel dynamic system. *Journal of Applied Psychology*, *107*(4), 628–649. https://doi.org/10.1037/apl0000923.supp (Supplemental)

Webster, V., Brough, P., & Daly, K. (2014). Fight, flight or freeze: common responses for follower coping with toxic leadership. *Stress and Health, 32*(4), 346-354. https//doi.org/10.1002/smi.2626

Williams, K. R. (2017). Toxic culture: How the U.S. military enables incivility and what to do about it. *Joint Forces Quarterly, 87*, 57-63.

Williams, K. R. (2019). The cost of tolerating toxic behaviors in the Department of Defense workplace. *Military Review*, *99*(4), 54–67.

Young, I. (2008). *Mental models: Aligning design strategy with human behavior.* Rosenfeld Media.

Yu, A., Matta, F. K., & Cornfield, B. (2018). Is leader-member exchange differentiation beneficial or detrimental for group effectiveness? A meta-analytic investigation and theoretical integration. *Academy of Management Journal, 61*(3), 1158-1188. doi:https://doi.org/10.5465/amj.2016.1212

Zimmerman, S. R., Jackson, K., Lander, N., Roberts, C., Madden, D., & Orrie, R. (2019). *Movement and maneuver: Culture and the competition for influence among the U.S. military services.* Rand Corporation. https://www.rand.org/pubs/research_reports/RR2270.html

APPENDIX A:

Institutional Review Board Approval

Institutional Review Board (IRB)
For the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

Protocol Number: 04260-2022 **Responsible Researcher(s):** Danielle Willis

Supervising Faculty: Drs. Gerald Merwin & Jonathan Krispin

Project Title: *Leadership Perceptions Study.*

INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is **exempt** from Institutional Review Board (IRB) oversight under 45 CFR 46.101(b) of the federal regulations **category 2**. If the nature of the research changes such that exemption criteria no longer apply, please consult with the IRB Administrator (irb@valdosta.edu) before continuing your research study.

ADDITIONAL COMMENTS:

- *Each participant who is selected to receive a gift card must sign for the gift card upon receipt. It is recommended that each participant be provided with their own payment log sheet. Doing so ensures participant confidentiality, by preventing others from reading the names of those who signed the log previously.*
- *As part of the informed consent process, the researcher is required to read aloud the consent statement, confirming participants' understanding, and establishing their willingness to take part in the teleconference. Participants must be offered a copy of the research statement.*
- *The pseudonym list must be kept in a secure file separate from the corresponding name list, payment logs, email addresses, etc.*
- *Upon completion of the research study, collected data (e.g. transcript, payment log, name lists, email lists, etc.) must be securely maintained and accessible only by the researcher for a minimum of three years. At the end of the required time, collected data must be permanently destroyed.*

☒ ***If this box is checked, please submit any documents you revise to the IRB Administrator at irb@valdosta.edu to ensure an updated record of your exemption.***

Elizabeth Ann Olphie *02.14.2022*
Elizabeth Ann Olphie, IRB Administrator

Thank you for submitting an IRB application.
Please direct questions to irb@valdosta.edu or 229-253-2947.

Revised: 06.02.16

APPENDIX B:

Recruiting Materials

Social Media Post:

- Are you a current or former active duty, guard, reserve, or civilian member of the Department of the Air Force?
- Have you experienced toxic leadership in a U.S. Air Force or U.S. Space Force organization and are willing to share your experience?
- I'm conducting doctoral research on the perceptions of leadership in Department of the Air Force Organizations.
- Go to the survey link or scan the QR code: https://valdosta.co1.qualtrics.com/jfe/form/SV_cOSnQW04p2fGX2e

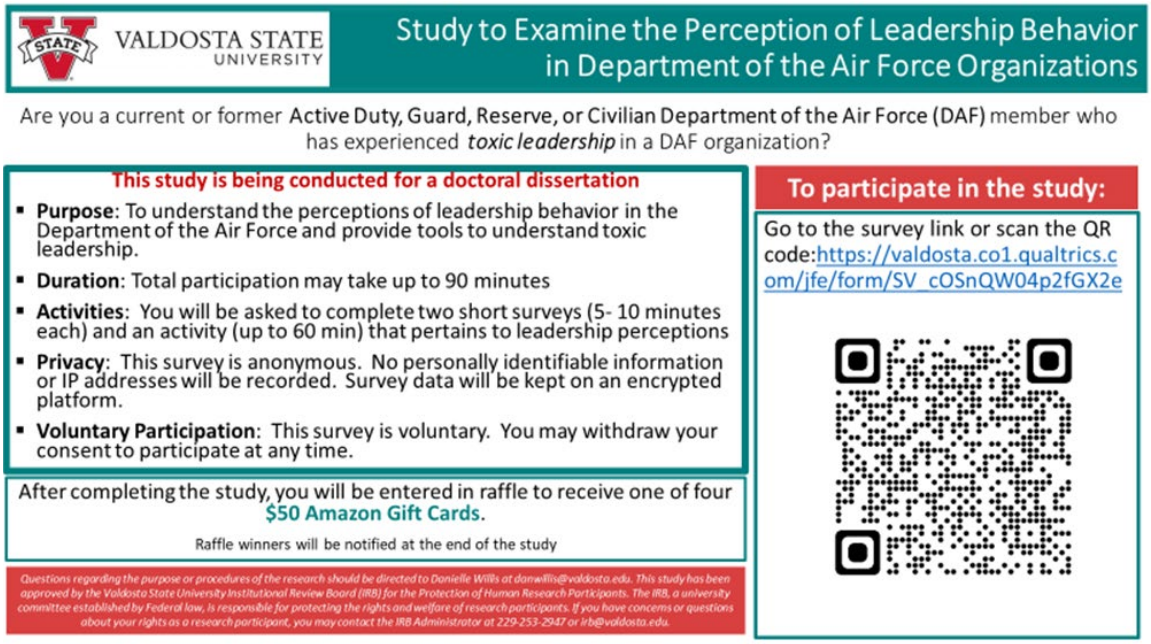
After completing the study, you will be entered in raffle to receive one of four

$50 Amazon Gift Cards.

Raffle winners will be notified at the end of the study

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Recruiting Flyer:



APPENDIX C:

Study Components

Table C1

Questionnaire Organization

Theme	Question	Scale	Pretest Question	Post-test Question
Leader Before the Toxic Leader	Think of the leader/supervisor you had just prior to the toxic leader, whether you were in the same or a different work section. How favorably did you view that leader?	Very Favorably (1) Very Unfavorably (5)*	Q20	
	How long did you serve with the leader/supervisor before the toxic leader?	0-6 months (1) to more than 24 months (5)	Q31	
Organizational Toxicity Definition	A sustained combination of behaviors, environmental factors, and perceptions that erodes trust, communication, and workplace productivity. (1)	Strongly Disagree (1) to Strongly Agree (5)	Q22_1	Q2_1
Toxic Leadership Definition	A sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in follower behavior. (2)	Strongly Disagree (1) to Strongly Agree (5)	Q22_2	Q2_2
Toxic Followership Definition	A sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade	Strongly Disagree (1) to Strongly Agree (5)	Q22_3	Q2_3

Theme	Question	Scale	Pretest Question	Post-test Question
	organizational performance.			
Toxic Environment Definition	A physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership.	Strongly Disagree (1) to Strongly Agree (5)	Q22_4	Q2_4
Abusive Supervision (AS)	Ridicules subordinates	Strongly Disagree (1) to Strongly Agree (5)*	Q23_1	Q3_1
	Holds subordinates responsible for things outside their job descriptions		Q23_2	Q3_2
	Is not considerate about subordinates' commitments outside of work		Q23_3	Q3_3
	Speaks poorly about subordinates to other people in the workplace		Q23_4	Q3_4
	Publicly belittles subordinates		Q23_5	Q3_5
	Reminds subordinates of their past mistakes and failures		Q23_6	N/A
	Tells subordinates they are incompetent		Q23_7	N/A
Authoritarian Leadership (AL)	Controls how subordinates complete their tasks	Strongly Disagree (1) to Strongly Agree (5)	Q24_1	Q4_1
	Invades the privacy of subordinates		Q24_2	Q4_2

Theme	Question	Scale	Pretest Question	Post-test Question
	Does not permit subordinates to approach goals in new ways		Q24_3	Q4_3
	Will ignore ideas that are contrary to his/her own		Q24_4	Q4_4
	Is inflexible when it comes to organizational policies, even in special Circumstances		Q24_5	Q4_5
	Determines all decisions in the unit, whether they are important or not		Q24_6	Q4_6
Narcissism (N)	Has a sense of personal entitlement	Not at all (1) to frequently (5)	Q25_1	Q5_1
	Assumes that he/she is destined to enter the highest ranks of my organization		Q25_2	Q5_2
	Thinks that he/she is more capable than others		Q25_3	Q5_3
	Believes that he/she is an extraordinary person		Q25_4	Q5_4
	Thrives on compliments and personal accolades		Q25_5	Q5_5
Self-Promotion (SP)	Drastically changes his/her demeanor when his/her supervisor is present	Not at all (1) to frequently (5)	Q26_1	Q6_1
	Denies responsibility for mistakes made in his/her unit		Q26_2	Q6_2

Theme	Question	Scale	Pretest Question	Post-test Question
	Will only offer assistance to people who can help him/her get ahead		Q26_3	Q6_3
	Accepts credit for successes that do not belong to him/her		Q26_4	Q6_4
	Acts only in the best interest of his/her next promotion		Q26_5	Q6_5
Unpredictability (U)	Has explosive outbursts	Not at all (1) to frequently (5)	Q27_1	Q7_1
	Allows his/her current mood to define the climate of the workplace		Q27_2	Q7_2
	Expresses anger at subordinates for unknown reasons		Q27_3	Q7_3
	Allows his/her mood to affect his/her vocal tone and volume		Q27_4	Q7_4
	Varies in his/her degree of approachability		Q27_5	Q7_5
	Causes subordinates to try to “read” his/her mood		Q27_6	Q7_6
	Affects the emotions of subordinates when impassioned		Q27_7	Q7_7
Participation in the Study	Changed my perception of toxic leadership	Disagree (1) to Agree (5)		Q8_1
	Gave me tools to evaluate my perception of leadership behavior			Q8_2

Theme	Question	Scale	Pretest Question	Post-test Question
	Helped me pinpoint behaviors that constitute toxic leadership			Q8_3
	Helped me pinpoint the factors that led me to conclude there was toxic leadership			Q8_4
	Made me think there was more toxic leadership in my organization than I originally thought			Q8_5
	Made me think there was less toxic leadership in my organization than I originally thought			Q8_6

APPENDIX D:

Pretest Survey

Informed Consent
You are being asked to participate in a survey research project entitled “Leadership Perceptions,” conducted by Danielle Willis, a student at Valdosta State University. The purpose of the study is to determine whether participation in an activity can influence the perception of leadership behavior in an organization. You will be entered into a raffle to win one of four $50 Amazon gift cards for participating in this research study. Your responses may help us learn more about the perception of toxic leadership in Department of the Air Force Organizations. There are no foreseeable risks involved in participating in this study other than those encountered daily. This survey should take approximately 10 minutes to complete. The survey responses, and your participation, will be kept confidential. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to take the survey, stop responding at any time, or skip any questions you do not want to answer. Participants must be at least 18 years of age to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older. You may print a copy of this statement for your records.

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Page Break

Q1 Thank you for taking the survey on leadership perceptions in the Department of the Air Force.

The survey will begin with some demographic questions and move on to questions about leaders you have encountered in Department of the Air Force organizations. It should take no more than 10 minutes to complete.

Here is your survey ID number. Please save or write it down. You will need it for the exit survey.

${e://Field/New%20Random%20ID}

Q2 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)

Q3 What is your age?

- 20-24 (1)
- 25-29 (2)
- 30-34 (3)
- 35-39 (4)
- 40-44 (5)
- 45-49 (6)
- 50-54 (7)
- 55-59 (8)
- 60 or older (9)

Q4 Are you of Hispanic, Latinx, or Spanish origin?

- Yes (1)
- No (2)

Q5 How would you describe yourself? Please select all that apply.

- [ ] White (1)
- [ ] Black or African American (2)
- [ ] American Indian or Alaska Native (3)
- [ ] Asian (4)
- [ ] Native Hawaiian or Pacific Islander (5)
- [ ] Other (6)

Q6 What is the highest degree or level of school you have completed?

- Less than a high school diploma (1)
- High school degree or equivalent (e.g., GED) (2)
- Some college, no degree (3)
- Associate degree (e.g., AA, AS) (4)
- Bachelor's degree (e.g., BA, BS) (5)
- Master's degree (e.g., MA, MS, MEd) (6)
- Doctorate or professional degree (e.g., MD, DDS, Ph.D.) (7)

Q7 What is your marital status?

- Single (never married) (1)
- Married or in a domestic partnership (2)
- Widowed (3)
- Divorced (4)
- Separated (5)

Q8 What is your Department of the Air Force duty status?

- ○ Active Duty (1)
- ○ Reservist (2)
- ○ National Guard (3)
- ○ Civilian (4)
- ○ Contractor (5)
- ○ Separated (6)
- ○ Retired (7)

Q9 What is your current grade or the highest grade you achieved before separating or retiring?

▼ E-1 (1) ... SES-4 (33)

Q10 How many years of service do you have in the Department of the Air Force?

_____

End of Block: Participant Demographics

Start of Block: Leader Demographics

Q11 Think of a situation where you experienced toxic leadership in a Department of the Air Force organization.

Toxic leadership is defined as the sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in follower behavior.

The leader or supervisor in that situation will be referred to as "the leader" for the rest of the survey.

Answer the remainder of the questions in the survey based on the toxic leader. Some questions may seem repetitive, but it is important that you answer each one.

Q12 What is the gender of the leader?

- Male (1)
- Female (2)
- Other (3)

Q13 What is the approximate age of the leader?

- 20-24 (1)
- 25-29 (2)
- 30-34 (3)
- 35-39 (4)
- 40-44 (5)
- 45-49 (6)
- 50-54 (7)
- 55-59 (8)
- 60 or older (9)

Q14 Is the leader of Hispanic, Latinx, or Spanish origin?

- ○ Yes (1)
- ○ No (2)
- ○ I don't know (3)

Q15 What was the leader's ethnicity? Please select all that apply.

- ☐ White (1)
- ☐ Black or African American (2)
- ☐ American Indian or Alaska Native (3)
- ☐ Asian (4)
- ☐ Native Hawaiian or Pacific Islander (5)
- ☐ Other (6)
- ☐ I don't know (7)

Q16 What is the highest degree or level of school the leader has completed?

- Less than a high school diploma (1)
- High school degree or equivalent (e.g., GED) (2)
- Some college, no degree (3)
- Associate degree (e.g., AA, AS) (4)
- Bachelor's degree (e.g., BA, BS) (5)
- Master's degree (e.g., MA, MS, MEd) (6)
- Doctorate or professional degree (e.g., MD, DDS, Ph.D.) (7)
- I don't know (8)

Q17 What is the leader's marital status?

- Single (never married) (1)
- Married or in a domestic partnership (2)
- Widowed (3)
- Divorced (4)
- Separated (5)
- I don't know (6)

Q18 What was the leader's Department of the Air Force duty status?

- Active Duty (1)
- Reservist (2)
- National Guard (3)
- Civilian (4)
- Contractor (5)
- Separated (6)
- Retired (7)

Q19 What was the leader's grade at the time that you interacted with him/her?

▼ E-1 (1) ... SES-4 (33)

Q20 Think of the leader/supervisor you had just prior to the toxic leader. How favorably did you view that leader?

- Very Unfavorably (1)
- Unfavorably (2)
- Neither Favorably nor Unfavorably (3)
- Favorably (4)
- Very Favorably (5)

Q31 How long did you serve with the leader/supervisor before the toxic leader?

- 0-6 months (1)
- 7 -12 months (2)
- 12-24 months (3)
- More than 24 months (4)

End of Block: Leader Demographics

Start of Block: Definitions

Q22 Please answer the following questions about the organization in your scenario.

In the organization where I experienced toxic leadership, I observed...

	Strongly Disagree (1)	Somewhat Disagree (2)	Neither Agree Nor Disagree (3)	Somewhat Agree (4)	Strongly Agree (5)
A sustained combination of behaviors, environmental factors, and perceptions that erode trust, communication, and workplace productivity. (1)	○	○	○	○	○
A sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in follower behavior. (2)	○	○	○	○	○
A sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade organizational performance. (3)	○	○	○	○	○
A physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership. (4)	○	○	○	○	○

End of Block: Definitions

Start of Block: Leadership Behaviors

Q23 For the situation you experienced, please respond to the following questions about leadership behavior.

The leader...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Ridicules subordinates (1)	○	○	○	○	○
Holds subordinates responsible for things outside their job descriptions (2)	○	○	○	○	○
Is not considerate about subordinates' commitments outside of work (3)	○	○	○	○	○
Speaks poorly about subordinates to other people in the workplace (4)	○	○	○	○	○
Publicly belittles subordinates (5)	○	○	○	○	○
Reminds subordinates of their past mistakes and failures (6)	○	○	○	○	○
Tells subordinates they are incompetent (7)	○	○	○	○	○

Q24 Thinking of the same leader, evaluate the following statements on leadership behavior.

The leader...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Controls how subordinates complete their tasks (1)	○	○	○	○	○
Invades the privacy of subordinates (2)	○	○	○	○	○
Does not permit subordinates to approach goals in new ways (3)	○	○	○	○	○
Will ignore ideas that are contrary to his/her own (4)	○	○	○	○	○
Is inflexible when it comes to organizational policies, even in special circumstances (5)	○	○	○	○	○
Determines all decisions in the unit whether they are important or not (7)	○	○	○	○	○

Q25 How often does/did the leader...

	Not at all (1)	Once in a while (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Has a sense of personal entitlement (1)	○	○	○	○	○
Assumes that he/she is destined to enter the highest ranks of my organization (2)	○	○	○	○	○
Thinks that he/she is more capable than others (3)	○	○	○	○	○
Believes that he/she is an extraordinary person (4)	○	○	○	○	○
Thrives on compliments and personal accolades (5)	○	○	○	○	○

Q26 How often does/did the leader...

	Not at all (1)	Once in a while (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Drastically changes his/her demeanor when his/her supervisor is present (1)	○	○	○	○	○
Denies responsibility for mistakes made in his/her unit (2)	○	○	○	○	○
Will only offer assistance to people who can help him/her get ahead (3)	○	○	○	○	○
Accepts credit for successes that do not belong to him/her (4)	○	○	○	○	○
Acts only in the best interest of his/her next promotion (5)	○	○	○	○	○

Q27 How often does/did the leader....

	Not at all (1)	Once in a while (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Has explosive outbursts (1)	○	○	○	○	○
Allows his/her current mood to define the climate of the workplace (2)	○	○	○	○	○
Expresses anger at subordinates for unknown reasons (3)	○	○	○	○	○
Allows his/her mood to affect his/her vocal tone and volume (4)	○	○	○	○	○
Varies in his/her degree of approachability (5)	○	○	○	○	○
Causes subordinates to try to “read” his/her mood (6)	○	○	○	○	○
Affects the emotions of subordinates when impassioned (7)	○	○	○	○	○

End of Block: Leadership Behaviors

Start of Block: Exit Block

Q28 As a reminder, here is your survey ID number:

${e://Field/New%20Random%20ID}

Please enter your email address to receive instructions for the next portion of the study. Your email address is only used to send you an automated email with instructions for the next portion of the study. It is not stored with your survey answers or used to identify you in any way.

Your survey ID number will also be sent to you. You will need this for the next part of the study.

Click submit to complete the survey.

_____

End of Block: Exit Block

APPENDIX E:

Survey Email Notifications

Control Group Email Notifications

Control Group Initial Email (sent immediately after completing the pretest)

Thank you for participating in the Leadership Perceptions Study!

This is your survey ID. Please ensure you enter it in your exit survey so we can match your responses.
${e://Field/New%20Random%20ID}

For Part 2 of this study, please click on the link to read an article about U.S. Space Force personnel practices. The estimated time to complete this activity is 10 minutes, but you may take as much time as you need to read the article.
The Space Force's Critical Lesson for the Rest of the Military - War on the Rocks

Once you have completed the activity, please click on the link below to access Part 3 of the study.
Leadership Perceptions Exit Survey

Please remember to include your Survey ID at the beginning of the exit survey in Part 3.
${e://Field/New%20Random%20ID}

Thank you,
Danielle Willis

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Control Group Follow-up Emails (sent at 2, 7, and 10 days)

Thanks again for participating in the Leadership Perceptions Study!
If you haven't done Part 2 yet, please follow the instructions in this email to complete the study.

This is your survey ID. Please ensure you enter it in your exit survey so we can match your responses.
${e://Field/New%20Random%20ID}

For Part 2 of this study, please click on the link to read an article about U.S. Space Force personnel practices. The estimated time to complete this activity is 10 minutes, but you

may take as much time as you need to read the article.
The Space Force's Critical Lesson for the Rest of the Military - War on the Rocks

Once you have completed the activity, please click on the link below to access Part 3 of the study.
Leadership Perceptions Exit Survey

Please remember to include your Survey ID at the beginning of the exit survey in Part 3.
${e://Field/New%20Random%20ID}

Thank you,
Danielle Willis

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Experimental Group Email Notifications

Experimental group Initial Email (sent immediately after completing the pretest)

Thank you for participating in the Leadership Perceptions Study!

This is your survey ID: ${e://Field/New%20Random%20ID}. Please ensure you enter it in your exit survey so we can match your responses.

For Part 2 of this study, please watch the 15-minute instructional video found at this link: Leadership Perceptions Study Video

Then, use the worksheet and instructions attached to this email to complete the activity.
Leadership Perceptions Study Worksheet.pdf
Leadership Perception Study Activity Instructions.pdf

Once you have completed the activity, please click on the link below to access Part 3 of the study.
Leadership Perceptions Study Exit Survey

Please remember to include your Survey ID at the beginning of the exit survey in Part 3.
${e://Field/New%20Random%20ID}

Thank you,

Danielle Willis

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Experimental group Follow-up Emails (sent at 2, 7, and 10-days)

Thank you again for participating in the Leadership Perceptions Study! Your input is extremely valuable. Please take the time to complete all portions of the study.

This is your survey ID: ${e://Field/New%20Random%20ID}. Please ensure you enter it in your exit survey so we can match your responses.

For Part 2 of this study, please watch the 15-minute instructional video found at this link: Leadership Perceptions Study Video

Then, use the worksheet and instructions attached to this email to complete the activity.
Leadership Perceptions Study Worksheet.pdf
Leadership Perception Study Activity Instructions.pdf

Once you have completed the activity, please click on the link below to access Part 3 of the study.
Leadership Perceptions Study Exit Survey

Please remember to include your Survey ID at the beginning of the exit survey in Part 3.
${e://Field/New%20Random%20ID}

Thank you,
Danielle Willis

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

APPENDIX F:

Control Group Materials

THE SPACE FORCE'S CRITICAL LESSON FOR THE REST OF THE MILITARY

REAGAN MULLIN
DECEMBER 15, 2021
COMMENTARY

Do you think telling NASA astronauts that they are in the top third, middle third, or bottom third of their peers in respect to their leadership ability will dramatically increase their motivation to be better teammates or develop professionally?

It doesn't take a rocket scientist to figure out that rack-and-stacking rocket scientists using a single metric (leadership) is an ineffective method for talent management. This is why NASA employs a talent marketplace model similar to the Air Force, and the rest of the Department of Defense should follow suit and also revise their performance rating systems if they hope to achieve the same levels of performance, engagement, and employee satisfaction as NASA.

The recently released document, *The Guardian Ideal*, will serve as the Space Force's guidance for talent management and development. The basic premises contained in the document provide a vision for shifting from the current

military model, which mirrors the best civilian practices from the 1980s, to a new military model, which mirrors the best modern civilian practices. These methods include flexible career paths, incentives for developing new skills, and career advancement for members with exceptional technical, as well as leadership ability. The continual feedback-collection model proposed by the Space Force will also reduce the administrative burden on supervisors, imposed by annual appraisals, while simultaneously providing more frequent, accurate, and timely communication with team members.

The vision articulated by the Space Force should be adopted by the entirety of the Department of Defense. The military should recruit Americans who have aspirations outside of a traditional linear two-to four-decade military career. The National Defense Authorization Act authorizes modifications to the military's current up-or-out system, and the Space Force is aiming far above the other services in its vision to maximize personnel development.

The Space Force's approach to personnel management will be a test case for the other services and for the Department of Defense as a whole. The Marine Corps, for instance, released a new document on talent management that shows tremendous promise and aligns with the desires of all service branches to employ the talent marketplace model. Senior military leaders should allocate resources towards development by educating and empowering members with the maximum ability to drive their own personal and professional development to meet the military's needs.

If more resources were shifted from management activities to development activities, then the Defense Department would not have to work so hard to get the right person to the right place at the right time, since the military would have many more qualified people to backfill any position. After all, if there is only one perfect person for the job and that person leaves, then that organization is in deep trouble. The department can look to some civilian companies (e.g., WD-40 Multi-Use Product) that employ a technology driven talent development and team performance assessment system as a model to be copied and modified for use in the Department of Defense. The steps taken by the Space Force hold a lot of promise and could make concrete, demonstrable improvements in the performance of the U.S. military going forward.

Guardian Ideal

The Space Force has largely borrowed the talent development model utilized by WD-40 that is documented in the book *Helping People Win at Work*, written by Ken Blanchard and WD-40 chief executive officer Garry Ridge. This new model includes: team-centric assessments (e.g., team members provide feedback and assess each other based on a member's contributions to the team's mission) rather than solely supervisor assessments, career progression that does not follow a rigid path and timeline, and a focus on

developing resilient people who quickly recover from failures and setbacks. The Space Force's vision contained in *The Guardian Ideal* is to develop an inclusive culture that encourages cooperation over competition, but it has several significant barriers to overcome.

The current military officer promotion model is governed by the Defense Officer Personnel Management Act that was created in 1980 to modernize management practices and correct promotion problems following World War II. The Air Force and other military branches currently use a "rack-and-stack" system, pioneered by General Electric's chief executive officer Jack Welch in the 1980s, which ranks peers on a bell curve from high to low performers to determine which to promote based on the Defense Officer Personnel Management Act thresholds.

The Defense Officer Personnel Management Act was effective at creating stable promotion timelines and uniform promotion rates. However, it led to high turnover, frequent moves, and shorter military careers, even for members with specialty skills critical to the organizations they were being forced to leave. The rigid hierarchical promotion model may have been appropriate for developing leaders to command conscripted and untrained troops in a large-scale ground conflict, but the reality of strategic competition today requires highly specialized teams of professionals that the talent management systems should help develop.

The proposed Space Force talent development system will incorporate work-life balance, resiliency, training, education, and individualized development. Instead of rigidly defined career fields, Space Force positions will be codified with desired skills and experience to help members identify the service's evolving needs and identify how they can personally develop to meet them. The Space Force will use existing or develop new assessments that accurately measure skill levels. An Enterprise Talent Management Office will continually review and update position information to reflect changing requirements.

The most effective job matching will occur when every member in the process can see both the job requirements and their own assessed capabilities, then apply for jobs that they both desire and are qualified to perform. Talent marketplaces allow for the wisdom of crowds to be effective in that well- informed individuals should be able to make better decisions on their own behalf and on behalf of their organization than a specialized team of experts can make with a strong bias toward supporting organizational needs over the developmental desires of the members.

Accurate job requirements and validated member capabilities will allow for a regulated market approach to job matching. This will increase hiring transparency and effectiveness by enabling Space Force members to see the job requirements for a desired position and seek developmental opportunities, either

internal or external to the Space Force, to ensure they are qualified. In other words, if people know the job requirements and know their own capabilities, then they can make well-informed decisions about the next job they should pursue to get to where they want to be and where the organization needs them to be. In addition, algorithms (similar to Amazon or Facebook recommendations) can be employed in a talent marketplace model to help guide members towards relevant jobs, based on their assessed skills and desired future goals.

Official performance assessments will shift the focus from individual-based accomplishments to an individual's contribution to the team. On average, diverse teams outperform their less diverse counterparts by at least 25 percent, so members will be deliberately placed to bolster diverse, multidisciplinary teams, based on each member's assessed abilities. Individual performance will be evaluated by fellow teammates, based on a member's contribution in achieving the mission, with team leaders achieving slightly greater recognition, based on their additional supervisory responsibilities and expectations.

The Space Force hopes to replace the annual performance appraisal system with an ongoing collection of 360-degree feedback from teammates (supervisors, peers, and subordinates). This would update a real-time rolling average to assess promotion readiness based on a combination of current performance within the team, situational decision-making, and other behavioral components that can all be consolidated into something similar to a three-year average that falls within the 6-10 scale (e.g., 10.0 superior, 8.0 slightly above average, 6.5 well below average, etc.) currently used by officer promotion boards.

Member performance will be evaluated by teammates with respect to expertly developed value statements that will be aggregated to provide a more holistic assessment of member performance. This continual collection model will free supervisors from the administrative burdens inherent in annual appraisal systems and increase the frequency and quality of feedback provided to members to encourage constant development. Limiting the performance data time frame to a few years, versus a full career, will better indicate significant increases or decreases in performance and incentivize Space Force members to take smart risks and learn from mistakes, since failures will not follow them forever. In other industries, this type of appraisal has produced superior results and higher workforce satisfaction.

The Space Force's proposed performance assessment system will consolidate the feedback data from teammates using a standardized web-based system that will be debriefed by a coach. Developmental feedback will focus on acquiring and strengthening skills and encouraging personal and professional growth. Coaching and mentoring programs will be central to sharing perspectives and insights, and reverse mentoring programs will ensure senior leaders gain insights from junior and underrepresented demographics.

A blend of different assessments that measure current performance within a team, applicable skills, and aptitude to determine future potential will help match the best qualified (versus the best mentored or most well-known) members to the right jobs at the right time in the Space Force. Better assessments of member potential should also reduce many of the insidious biases that have led to diversity disparities within the military today, while increasing the transparency within the personnel system and providing more accurate and timely performance feedback to members to encourage their development. The final and most complex step to address will be revising the rigid, complex, and slow hiring and transferring systems that are a barrier to acquiring and retaining talent.

The talent management systems should be flexible enough to support shifting mission requirements. Regulations need to be modified to enable smooth and timely transitions between full-time and part-time employment and capitalize on the ability to bring members into the service at the appropriate grade for their skill set. The Space Force specifically lays this out as a requirement for civilian hiring practices. It would be invaluable if the military regulations were also revised to ease the transition between active duty, guard, and reserves, with the ability to hire civilian technical specialists into an equivalent military rank, similar to the way that doctors and lawyers are currently brought into the military today.

All the U.S. military branches have recently expressed a desire and taken action to reform their personnel management systems. The Marine Corps *Talent Management 2030* released in November 2021 plans to adopt the talent marketplace model currently employed by the Air Force. The goal of Marine Corps *Talent Management 2030* will be to better align the talents of individual Marines with the needs of the service to maximize the performance of both, while also incorporating feedback to help highlight any toxic traits from peers and subordinates that may not have been apparent to supervisors. Other proposed Marine changes are an increased focus on retention, robust screening for member interests, correlated data-driven job matching, a revised waiver process, and explicit exclusion of applicants "previously convicted of sexual assault offenses or sexual related crimes and offenses, domestic violence, or hate crimes, effective immediately." The fact that the Navy and Army are also shifting to talent marketplace solutions indicates that all services acknowledge that members would perform better if they had increased control over their personal and professional development.

The Air Force's talent marketplace application within MyVector already employs a bidding and matching system for available jobs. Every company grade officer and field grade officer position in the Air Force (with the exception of colonels for some reason) uses the talent marketplace system for job matching. Every job that a service member could possibly fill — including in other services, other governmental opportunities, and other industries — should be advertised on this secure yet transparent system. Members could see what is available,

while hiring authorities could see the full slate of members to select from and use algorithms to help them determine the right person to fill the job. This is the means for how "[w]e will make targeted, disciplined increases in personnel and platforms to meet key capability and capacity needs."

In addition to job matching, systems such as MyVector should also encourage members to develop personally and professionally by providing mobile access (via a personal cellphone app and personal computer in additional to government issued phones and computers) to developmental opportunities that align with each member's goals and the military's needs. If the military truly values professional military education, college education, computer coding ability, foreign language proficiency, professional certifications, and other technical skills, then these resources should be available virtually to every member, all the time. To instill the habit of lifelong learning, the military needs to provide consistent and easy access to educational resources and encourage development throughout every phase of life. The education attained through talent management and development platforms can be fed into the algorithms to improve job matching recommendations in real time.

The main impediments to developing talent in the military are budget and bureaucracy. Bureaucracies inherently resist change. In order to achieve the vision articulated in the 2018 *National Military Strategy* of "a Joint Force capable of defending the homeland and projecting power globally, now and into the future," the military should deliberately change today, rather than when forced by a peer competitor tomorrow.

While the budget for the Department of Defense and the personnel it employs is substantial, the portion of that budget allocated to personnel issues is principally distributed through paychecks and retirement benefits, with minimal relative investment in improving the actual systems that manage and develop personnel. If servicemembers and their units really are the "beating heart" of the services, then the money required to fund the coding efforts to transform the personnel system should be allocated today, since the long-term investment will result in massive dividends in both performance and retention.

If the money spent assessing military command candidates or retaining tactical experts were instead allocated towards developing all members though the use of their own teammates, then programs such as the Army's Battalion Commander Assessment Program or aviation bonuses could be rendered unnecessary. If the annual fuel budget of a single transport aircraft were instead allocated to reforming the personnel systems, then the environment both outside and inside of the Department of Defense buildings would improve.

The Space Force's talent management and development vision should not be limited to the Space Force, but adopted as the vision for all military branches. "[I]nclusive teams, mission-focused and populated by bold, innovative, and

empowered people" should be the heartbeat of the Department of Defense, not just the Space Force. Support from Congress and senior military leaders will be crucial to enable it. However, the ultimate success or failure of these initiatives will be based on whether each servicemember acknowledges the looming threats to our country's security and proactively embraces the necessary change before we all lose.

Conclusion

The Department of Defense should focus on talent development rather than talent management in order to reap the performance from the personnel necessary to maintain the advantage in strategic competition. The Space Force's vision expressed in The Guardian Ideal describes a modern model that follows civilian best practices that have been shown to greatly increase organizational, team, and individual performance.

To achieve the desired personnel performance, the focus needs to shift from solely developing future senior leaders to developing the total force, and the technology exists to accomplish this lofty goal today. The reality is that there are no late bloomers, only risk-averse gardeners. The effective application of technology can help incentivize members to meet the requirements that the services actually value and need. This will help right the wrongs of poor personnel management that has resulted in retention issues and enabled peer competitors to close the performance gap with the U.S. military over the last few decades.

Lt. Col. Reagan Mullin is a Colonel Assignments Officer at Headquarters Air Force. Previously, he was the Chief of Officer Assignments for the Air Force Special Operation Command A1 Personnel Directorate. Mullin is a special operations MC-130J and PC-12 Instructor Pilot with 3,000 flying hours supporting numerous contingency operations throughout Europe, Asia, South America, and Africa.

The views expressed are those of the author and do not reflect the official policy or position of the U.S. Air Force, Department of Defense or the US Government

APPENDIX G:

Experimental Group Materials

Experimental Group Video Script

Welcome to Part 2 of the Leadership Perceptions Study. You will be asked to watch this video and complete an activity in this part of the study.

Slide 2

You are being asked to participate in an activity as part of a research study entitled **"Leadership Perceptions Study,"** which is being conducted by Danielle Willis, a student at Valdosta State University**. The purpose of the study is to determine whether participation in an activity can influence the perception of leadership behavior in an organization. You will be entered into a raffle to win one of four $50 Amazon gift cards for participating in this research study. Your responses may help us learn more about the perception of toxic leadership in Department of the Air Force Organizations**. There are no foreseeable risks involved in participating in this study other than those encountered daily. Participation should take approximately **60 minutes**. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to participate, stop responding at any time, or skip any questions you do not want to answer. You must be at least 18 years of age to participate. Your participation in this activity will serve as your voluntary agreement to participate in this research study and your certification that you are 18 years of age or older.

Slide 3

This activity is designed to help you understand the combination of behaviors and circumstances that made you feel like your workplace was a toxic environment. It will help you map your thought process and conduct a root cause analysis. Before you start, there are a few concepts we would like you to be familiar with.

Slide 4

When humans experience a difference between their expectations for a situation and their actual experiences, their brains will try to make sense of the mismatch through reasoning—to fill in with a story of why there is a disconnect.

Because it is often difficult to process every piece of information to make an informed decision, humans often rely on mental shortcuts or rules of thumb called heuristics. The availability heuristic is where people weigh their judgments about a situation based on their recent experiences.

For example, if you are related to several middle-aged men who have had heart attacks, when asked about the prevalence of heart attacks in that age group, you may estimate the rate is higher than it is. Heuristics can help you make quick judgments but are not necessarily the best way to make decisions.

Closely related to heuristics is the concept of bias. While not all biases come from heuristics, the use of heuristics can cause a systematic error in decision-making that leads to bias.

A structured process of deliberate reasoning and critical thinking is more effective in reducing errors in interpretation.

Slide 5

This brings us to toxic leadership and how we understand it.

Toxic leadership includes a leadership style or behaviors that degrade a follower's trust and confidence in a leader, causing followers to change how they act at work. Toxic behaviors can range from yelling at people in the workplace to neglecting organizational goals to just appearing to put themselves first, with little regard for the unit members.

It's not just leaders that can be toxic. Sometimes followers resist leaders and organizational change, degrading overall unit performance. Toxic follower behaviors can include undermining a leader's decisions or authority, slowing, stopping work, or waiting for a leader to change out.

Sometimes the work environment is toxic because rules and regulations inhibit leadership decisions or empower workers. An organizational culture or climate that values hyper-competition and putting work first may contribute to the feeling of a toxic environment.

Toxic leadership is in the eye of the beholder. Most toxic leaders and toxic followers do not intend to be toxic and are often unaware that their behaviors are perceived as such. In fact, what is seen as toxic by one follower could be seen as heroic by another.

Slide 6

To understand how it all fits together, it is critical to recognize that leadership is not merely the actions of a leader; it is the relationship between the leader, the follower, and the environment in which they operate. This relationship can be visualized as a triangle of overlapping circles called the Venn diagram. Researchers Padilla, Hogan, and Kaiser found that in a toxic triangle, the relationship is between destructive leaders, susceptible followers, and a conducive environment. Rybacki and Cook used the same concept to describe a transformational organization with values-based leadership, capable followers, and a positive environment. Today, you are asked to use a triangle to describe your experience with leadership in your workplace. You will be asked to perform a force field analysis on the organizational system in the workplace.

Slide 7

A force field analysis is an activity designed to identify and analyze the influence of outside forces on an organization or a system. It was developed by psychologist Kurt Lewin in the 1940s and has been used by businesses for decades as a tool to systematically analyze the factors that help or hinder change.

Slide 8

To put it all together, we merge the organizational triangle with a force field analysis. Acting upon the triangle is constructive and destructive forces. Constructive forces will push the leadership system toward positive outcomes and a positive state. Destructive forces will push the system toward a toxic state.

The magnitude of the force will determine how far the system is pushed toward one side or the other. A magnitude is a number you assign to the factor on a scale of 1-10 based on how much you think it impacts the organization. Constructive forces get a positive magnitude, and destructive forces get a negative magnitude.

As you go through the activity, remember there is no right or wrong answer. You are evaluating how you see the organization and feel about it. Two people in the same work section could complete this activity and come to different conclusions. Now it's time to examine some things that might be factors for the environment, leaders, and followers.

Slide 9

Environmental Factors

National culture sets the baseline for the environment. You may see some conflict if you come from a different national culture from the one you work in. American culture values independence, equality, and the belief that hard work, grit, and discipline can overcome obstacles. Americans are primed for action. In American organizations place less importance on hierarchy.

American military culture is characterized by its organizational hierarchy, common mental framework, and adherence to rules. Military personnel and their families show higher resilience than their civilian counterparts.

In the **Air Force**, most Air Force members see themselves as technicians first, then military members. This worldview leads to lower unit cohesion than other military branches. On the other hand, focusing on technology and individual contributions allows innovation to become a central theme in Air Force culture.

One type of organizational culture in the military is the **masculinity contest culture**. Four traits characterize this type of culture: showing no weakness in the workplace, valorizing strength and stamina, putting work first, and hyper-competition. In

a masculinity contest culture, men and women must play “the game” to survive and adhere to the pre-defined roles and organizational structure.

Organizational climate, known as command climate in the military, deals with the meaning attached to workplace policies, practices, and behaviors. Climate can also be expressed as morale, or how members of an organization feel about their workplace.

Diversity climate is the way the workplace recognizes and appreciates individual differences. In a favorable diversity climate, members of different demographic groups are seen as equal contributors to the mission.

When **resources** such as manpower, funding, and equipment are insufficient to accomplish the mission, leaders and followers are forced to choose how to implement policies and achieve outcomes.

Unstable conditions in an organization can lead to the perception of **threat**. Whether a country facing a threat of war or a military organization facing the threat of budget and manpower cuts, people who feel that their livelihood is at stake are more likely to gravitate towards strong and assertive leadership.

The shared experience of perceived threat can also bond people together to overcome a common enemy, as often happens in combat. Those can be some of the strongest bonds.

An organization's physical environment, including the base you’re stationed at, or the quality of the building you work in, can also impact how you feel about your work environment.

Ensuring a system of **checks and balances** in the organization is also key to a healthy environment. Without checks and balances, power is more likely to be abused.

Now that we know a little about what might impact the work environment let’s look at what influences a leader’s behavior.

Slide 10

Research on leadership and the organizational system tends to be leader-centric. The “romance of leadership” credits leaders for organizational successes and blames them for organizational failures, even when there is no direct link between behaviors and outcomes.

Because of **bias, demographic factors** such as age, gender, race, and sexual orientation can impact the perception that leaders are toxic if they act outside the stereotypical behaviors of their demographic category.

Those that do not fit the perception of effective leadership, particularly women or people of color, experience increased scrutiny of their actions, gestures, speech, and deportment. They often change their behavior to fit into the organization's mold and gain more respect and status as leaders.

There is also a concept called the **Glass Cliff** in which women and people of color are shown to be more likely to be put in charge of struggling organizations. When they succeed, the rewards are high, but if they fail, it tends to reinforce the biases and stereotypes about the leadership displayed by those in minority groups.

A leader's **professional qualifications** can also be a factor. For example, a leader brought in from outside an organization can either be perceived as innovative and a change agent or as unqualified because they have not had the same background and experience. Think about how that might play out in your Air Force unit. Are we willing to accept leaders from different Air Force Specialty Codes, or do we discount them as "unqualified"?

Ultimately **leadership style** can impact the perception of leader behavior in the organizational system. Although there are many leadership style theories, we will focus on transactional and transformational leadership.

Transactional leadership is a reactive style that focuses on results. On the other hand, **transformational leadership** is proactive and emphasizes motivation and empowerment at the individual level.

More than one leadership style can be effective in a military setting—there is no right answer. Transactional leadership clarifies each person's role, while the transformational style adds a layer of mutual trust and respect.

Researchers for the GLOBE project found that some leadership traits are universally positive in society, no matter the national culture. Likewise, some are seen as universally negative. However, there is a long list of culturally contingent traits. For example, compassion may be seen as a positive trait in one culture but a sign of weakness in another.

Charisma is a tricky leadership trait because it is associated with very positive and destructive leadership. Charismatic leadership entails using charm, attractiveness, and communication to influence subordinate behaviors by tolerating risk, articulating a vision, and valuing the collective. Charismatic leaders inspire those who follow them. However, charismatic leaders may abuse power for self-serving needs by exaggerating achievements and covering up mistakes and failures. While not all charismatic leaders are destructive, the most successful destructive leaders have been charismatic. A personal code of ethics distinguishes positive, charismatic leaders from destructive ones.

Leadership behaviors can be interpreted in many different ways. For example, some of the behaviors associated with the transformational leadership style: include sharing risks with followers, questioning assumptions, reframing problems, and understanding an individual's need for growth. Leaders may see themselves providing helpful comments, but viewed through a different lens, the action may be interpreted as "butting in" or micromanaging. If a leader allows a subordinate to take the lead to spur individual growth, that may be interpreted as unresponsiveness and ignoring the team.

Slide 11

Followers have a responsibility to themselves, their leaders, and the organization. **The act of followership is a choice**, not just a byproduct of position

Without followers, there are no leaders. Their **personal beliefs and biases** with respect to age, gender, race, sexual orientation, and other demographic differences can influence their behaviors and assessment of leadership.

Let us look at the **types of followers** typically found in an organization. The classic description of follower types comes from Robert Kelley's 1992 work, *The Power of Followership.*

Those that rank high in critical thinking but low in engagement are **alienated followers**. They often see themselves as mavericks but act as unproductive critical skeptics in an organization. This group may include followers who are under investigation or facing military discipline.

Passive followers lack critical thinking skills and require constant direction. Kelley likens them to a flock of sheep that must be constantly tended. **Conformist followers**, also known as "yes people," are biased toward action but low in critical thinking, instead unquestioningly following a leader's direction.

The **pragmatic followers or survivors** are at the mid-level of engagement and critical thinking. These group members will wait to act based on how they see a situation. They may resist change and are interested in maintaining the status quo—protecting themselves with minimal effort.

Exemplary followers rate high in both critical thinking and engagement. They tend to contribute the most to an organization because they work well with others and strive to achieve organizational goals. Exemplary followers can move smoothly between leadership and followership roles.

Leader-member exchange theory explores the relationships between leaders and followers, a critical step in putting leadership and follower traits into context. While a high-quality leader-member relationship unquestionably increases organizational performance, leaders cannot maintain high-quality relationships with all their subordinates. That can result in the perception that leaders exhibit favoritism.

One way to envision the leader-follower relationship in a follower-centric way is the concept of **organizational citizenship**. Engagement and buy-in to organizational goals result in organizational citizenship when employee action goes beyond the position's requirements and goes the extra mile.

Conflict is a natural by-product of teamwork and can benefit mission or task accomplishment. When conflicts surrounding tasks or processes are mixed up with conflict over social or relationship issues and perceived as a lack of respect for an individual's opinions or abilities, team performance and cohesion are impaired. This is especially true when organizations or teams do not have an open communication style.

Slide 12

Whether the root cause of a toxic feeling in the workplace is leadership behaviors, followership behaviors, the environment, or a combination of all three, toxic leadership is not a single event—anyone can have a bad day. It is the pattern of behaviors over time. The time it takes to develop that pattern is situationally dependent and entirely up to the interpretation of the person at the receiving end of the behavior, whether that is a leader or a follower.

Slide 13

Factors influencing the work environment, leadership, and followership behaviors may become constructive or destructive forces in your force field analysis.

Slide 14

What is next in this study? In your email, there was a force field analysis worksheet and set of instructions, including a list of questions that may help you determine which factors apply to your situation.

Please read the instructions and fill out the worksheet. I will go over the instructions in the next few slides. Once you have completed the worksheet, you will have a chance to share it with the researcher if you choose to do so. Then we will need you for one more quick set of questions—the post-test exit survey. The link and QR code for the survey is located on the worksheet.

Slide 15

This is what the worksheet looks like. As you can see, the diagram of the organizational triangle and force field analysis is in the center. At the top is an area where

you can list factors that influence the environment and add value to make them forces. On the left, you can list leadership forces. On the right, you can list the followership forces.

When you have completed the exercises for all three parts of the organization, add your totals at the bottom. The detailed seven-step process is included in your instruction sheet. Remember, this exercise is designed to help you understand how you perceive the work environment. There are no right or wrong answers & two people looking at the same situation may have two very different perceptions.

Slide 16

Let us get started with the activity! Go to your email and open the force field analysis worksheet and instructions. Complete the worksheet.

When you are done, you will have the opportunity to share your results with the researcher in the exit survey. Your information will help researchers understand the perception of toxic leadership in the Air Force. Sharing your worksheet is not required in the study.

If you do you choose to share, please make sure that no personally identifiable information like names of people, places, organizations, or units are listed. Also, ensure that you do not include any classified information.

Once complete, do not forget to take the exit survey. You will need the study ID sent to you by email so your survey responses can be matched up. Once again, thank you for participating in the Leadership Perceptions Study!

Activity Instructions

Leadership Perceptions Activity

You are being asked to participate in an activity as part of a research study entitled "***Leadership Perceptions Study,***" which is being conducted by ***Danielle Willis,*** a ***student*** at Valdosta State University. **The purpose of the study is to determine whether participation in an activity can influence the perception of leadership behavior in an organization. You will be entered into a raffle to win one of four $50 Amazon gift cards for participating in this research study. Your responses may help us learn more about the perception of toxic leadership in Department of the Air Force Organizations.** There are no foreseeable risks involved in participating in this study other than those encountered daily. Participation should take approximately **60 minutes.** No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to participate, stop responding at any time, or skip any questions you do not want to answer. You must be at least 18 years of age to participate. Your participation in the activity will serve as your voluntary agreement to participate in this research study and your certification that you are 18 years of age or older.

Questions regarding the purpose or procedures of the research should be directed to ***Danielle Willis*** at ***danwillis@valdosta.edu***. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Thank you for participating in the leadership perceptions study. In this portion of the study, you will be asked to look closer at the toxic leadership situation you used to answer the questions in the pretest.

Please read the background information and instructions, complete your worksheet based on the toxic leadership situation you experienced, and answer questions on the pretest survey.

Once you have completed the activity, you can choose to share it with the researcher in the exit survey. Be sure not to include any names, personally identifiable information, or classified information on the worksheet.

The estimated time to complete this activity is **60 minutes**, which includes watching a 15-minute video, but you may take as much time as you need. Once you are done, please click on the following link or scan the QR code on the worksheet to go to the posttest survey page: https://valdosta.co1.qualtrics.com/jfe/form/SV_5nGHfsSViiryJFk. You will need your study participant ID for the posttest survey. The ID number was emailed to you.

To evaluate whether toxic leadership exists in an organization, perform a force field analysis on the leadership, followership, and the environment. Because everyone experiences the workplace environment in their own way, there is no right or wrong answer. The goal of this exercise is to articulate the factors influencing workplace cohesion as clearly as possible.

Using the same toxic situation you used as the basis for the pretest survey, conduct a force field analysis of the work environment. A list of suggested questions is included in this packet as a starting point for brainstorming. You may use all, none, or some of the questions as you complete the exercise. You may add your own questions at any time.

Step 1: Using your own experience or the suggested list of questions, brainstorm all the ***environmental*** factors that may have impacted the organization in which you worked, including those that lead to the perception of toxic leadership in the workplace. Write the factors in the tables provided below. These become the forces that act upon the environmental portion of the triangle.

Step 2: Assess the strength of each force, assigning a value from 1-10 for each based on how strongly you feel the factor impacted the environment. Negative forces receive a negative value, and positive forces receive a positive value. For example, the most negative factor would receive a score of -10, and the most positive factor would receive a score of +10. A score of zero indicates a neutral effect on the organizational environment. In this step, you may consider things such as processes, budgets, culture, command climate, organizational change, and the physical work environment.

Step 3: Add up the values you assigned to the environmental forces. This gives you a score for your perception of the work environment.

Step 4: Repeat the process for factors that describe or impact ***leader behavior***. In this step, you may consider things such as the leadership style, communication style, demographics, rank, years of experience, and background. Again, there is no right or wrong answer. Just describe the leader as you experience him or her.

Step 5: Repeat the process for factors impacting ***follower (employee) behavior*** or perception. For follower behavior, you may look at the factors that impact how you feel or act at work and your perception of your peers' actions, including connection to the leader and the values of the organization, willingness to change, and whether unit members are facing discipline for violating rules or the Uniform Code of Military Justice (UCMJ).

Step 6: Add up all the values in all three categories to determine an overall score. An overall negative score indicates the tendency of the organization to be toxic. An overall positive score indicates a productive environment.

Step 7: Review the forces you identified to see if you discovered factors that influenced your organization that you had not considered before the activity. Consider how you might increase the driving forces on the organization and reduce the restraining forces.

Factors to Consider when Describing the Situation in your Organization

In the video you watched for this activity, we described several types of factors that might influence the organization. A recap of those factors is shown in the diagram below. Remember, when you list a factor that impacts the organization, give it a positive or negative numerical value from 1-10 to describe how much you think it impacted the situation.

The questions below may you more precisely describe the environment, leader, and followers in the organization. You may use some, all, or none of these questions when describing the toxic leadership experience. Again, give each factor a numerical value between 1 and 10 to describe how much you feel it weighs on the organization.

Environment:

- Is there a strong, positive culture in the organization?
- Do people in the organization feel like they are valued members of high-performing teams?
- Is there a common vision of the future shared by unit members?
- Do people feel like they have to "play the game" to fit in?
- Is the organization struggling?
- Is there an internal or external mandate for change? If so, is that viewed positively or negatively in the organization?
- Is there a disagreement between leaders and followers about whether change needs to occur?
- Has it been a long time since the organization has changed?
- Does the organization feel like it is under constant change?
- Is there a crisis that needs to be managed?

- Do the unit members/employees seem to be divided in support of the leader?
- Are Air Force Instructions (AFIs), policies, and laws applied selectively, or is there an apparent attempt to apply fairly and universally across the organization with clearly explained and transparent exceptions?
- Are there staff or bureaucratic processes in opposition to the leader's decisions or objectives within the organization?
- Are there staff or bureaucratic processes outside the organization that hinder organizational objectives?
- Does the organization have adequate resources to achieve objectives? (Budget, manning, manpower authorizations, equipment, training opportunities)
- Is there a perceived threat that may warrant unpopular or controversial decisions (i.e., 9/11—difficult consequences to move the organization through a crisis)?
- Are any factors associated with the unit's location (geography, local community, unit buildings, base housing, dormitories, cost of living)?
- Are there any unit policies that impact morale (positively or negatively)?
- Are there checks and balances in place?
- Is there an external threat to the organization?

Leadership:

- Is the leader someone you want to follow?
- Does the leader seem to favor some employees, units, or sections over others?
- Is there a pattern for apparent favoritism?
    - Is it rooted in stated organizational priorities?
- Is the leader transparent about the views of others and dissenting opinions and information when making or announcing decisions?
- Is the leader aware that his/her decisions may not be well-received?
    - Are mitigation or communication measures taken for unpopular decisions?
- Does the leader have the same background/training/experience (insider) as the organization, or are they outsiders with a different perspective?
- Does the leader aspire for further promotion or leadership?
- Is the leader a woman or minority who has been put in charge of a struggling organization or section?
- Has the leader followed processes or procedures in decision making or "taken risk" to operate outside of them?
- Does the leader interfere with subordinates' ability to get work done?
- Has the leader imposed seemingly unreasonable restrictions on reporting, information, or processes?
- Does it feel like the leader "micromanages"?
- Do leadership decisions follow a pattern of priorities, or do they seem to swing from one extreme to another?
    - Are decisions often reversed when challenged or presented with new evidence?
- Does the leader appear to create a favorable impression up and out while interfering with employee performance down and in?

    - Does data or project progress seem to be exaggerated to create a rosy picture outside the organization?
- Does the leader admit errors and accept responsibility?
- Does the leader stand up for the organization to higher headquarters?
- Does the leader look to accomplish organizational objectives through subordinates or despite subordinates?
- Does the leader solicit feedback and make changes?
- Does the leader react negatively to criticism?
- Does the leader yell at subordinates or react emotionally in public situations?
- Does the leader use his or her power to intimidate others?

Followership

- Have followers requested "strong leadership"?
- Is there a difference in demographics in the unit between unit members/followers and the leader?
- Have followers limited the information or delayed information to the leader to influence policy decisions?
- Do followers feel powerless in their organization?
- Are followers afraid of losing their jobs or unfavorable performance reports?
- Has the follower received a less than favorable performance report or disciplinary action?
- Are followers frustrated with attempts to change the status quo?
- Does there feel like an in-crowd and out crowd?
- Have followers been removed from projects or work centers for disagreeing with leadership decisions?
- Have followers instituted workarounds to avoid interaction with the leader?
- Have followers purposely cultivated relationships with those close to the leader to influence policies or decisions?
- Have followers shown a decrease in performance?
- Have followers employed avoidance tactics to avoid interacting with the leader?
- Do followers feel like they have power, or are they powerless to respond, keeping the toxic leader in place longer?
- Have followers sought emotional support to deal with stressors at work?
- Have followers sought Mental Health assistance to deal with stressors at work?

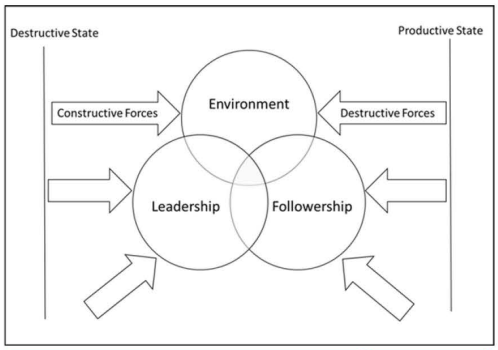
Activity Worksheet

VALDOSTA STATE UNIVERSITY

Leadership Perceptions Study
Force Field Analysis Worksheet

Environmental Forces	Score (+/-)	Environmental Forces	Score (+/-)
National Culture		Threats	
Military and Air Force Culture		Physical Attributes	
Command Climate		Checks and Balances	
Diversity Climate			
Resourcing and Requirements		**Total**	

Leadership Forces	Score (+/-)
Demographics	
The Glass Cliff	
Leadership Style	
Leadership Traits	
Leadership Behaviors	
Coping Behaviors	
Motivation	
Total	



Factor	Score
Environment	
Leadership	
Followership	
Total	

Followership Forces	Score (+/-)
Personal Beliefs/Bias	
Coping Behaviors	
Types of Followers	
Leader Member Exchange	
Organizational Citizenship	
Conflict in the Workplace	
Total	

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

When you have completed your worksheet, click the link or scan the QR code to take the exit survey.

https://valdosta.co1.qualtrics.com/jfe/form/

APPENDIX H:

Posttest Survey

You are being asked to participate in a survey research project entitled “Leadership Perceptions,” conducted by Danielle Willis, a student at Valdosta State University. The purpose of the study is to determine whether participation in an activity can influence the perception of leadership behavior in an organization. You may enter a raffle to win one of four $50 Amazon gift cards for participating in this research study. Your responses may help us learn more about the perception of toxic leadership in Department of the Air Force Organizations. There are no foreseeable risks involved in participating in this study other than those encountered daily. This survey should take approximately 10 minutes to complete. The survey responses, and your participation, will be kept confidential. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to take the survey, stop responding at any time, or skip any questions you do not want to answer. Participants must be at least 18 years of age to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older. You may print a copy of this statement for your records.

Questions regarding the purpose or procedures of the research should be directed to Danielle Willis at danwillis@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee, established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Q1 Thank you for taking the post-activity survey on leadership perceptions in the Department of the Air Force. Please recall the toxic leadership situation you described in the initial survey for the study and answer all the questions in this survey based on the SAME situation you used in the initial responses. This survey should take approximately 5 minutes to complete.

To begin, please enter the Survey ID provided to you in your pre-study survey.

_____

Q2 Please answer the following questions about the organization in your scenario.

In the organization where I experienced toxic leadership, I observed...

	Disagree (1)	Somewhat Disagree (2)	Neither Agree Nor Disagree (3)	Somewhat Agree (4)	Agree (5)
A sustained combination of behaviors, environmental factors, and perceptions that erode trust, communication, and workplace productivity. (1)	○	○	○	○	○
A sustained pattern of observed and perceived counterproductive behaviors by leaders that degrade followers' trust and confidence, leading to an adverse change in follower behavior. (2)	○	○	○	○	○
A sustained pattern of observed and perceived behaviors by followers that inhibit leader influence and degrade organizational performance. (3)	○	○	○	○	○
A physical or cultural domain in which organizational constraints contribute to observed or perceived toxic leadership or toxic followership. (4)	○	○	○	○	○

Q3 For the situation you experienced, please respond to the following questions about leadership behavior.

The leader...

	Disagree (1)	Slightly Disagree (2)	Neither Agree nor Disagree (3)	Slightly Agree (4)	Agree (5)
Ridicules subordinates (1)	○	○	○	○	○
Holds subordinates responsible for things outside their job descriptions (2)	○	○	○	○	○
Is not considerate about subordinates' commitments outside of work (3)	○	○	○	○	○
Is not considerate about subordinates' commitments outside of work (4)	○	○	○	○	○
Speaks poorly about subordinates to other people in the workplace (5)	○	○	○	○	○
Publicly belittles subordinates (6)	○	○	○	○	○

Q4 Thinking of the same leader, evaluate the following statements on leadership behavior.

The leader...

	Disagree (1)	Slightly Disagree (2)	Neither Agree nor Disagree (3)	Slightly Agree (4)	Agree (5)
Controls how subordinates complete their tasks (1)	○	○	○	○	○
Invades the privacy of subordinates (2)	○	○	○	○	○
Does not permit subordinates to approach goals in new ways (3)	○	○	○	○	○
Will ignore ideas that are contrary to his/her own (4)	○	○	○	○	○
Is inflexible when it comes to organizational policies, even in special circumstances (5)	○	○	○	○	○
Determines all decisions in the unit whether they are important or not (6)	○	○	○	○	○

Q5 How often does/did the leader...

	Not at all (1)	Rarely (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Has a sense of personal entitlement (1)	○	○	○	○	○
Assumes that he/she is destined to enter the highest ranks of my organization (2)	○	○	○	○	○
Thinks that he/she is more capable than others (3)	○	○	○	○	○
Believes that he/she is an extraordinary person (4)	○	○	○	○	○
Thrives on compliments and personal accolades (5)	○	○	○	○	○

Q6 How often does/did the leader...

	Not at all (1)	Rarely (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Drastically changes his/her demeanor when his/her supervisor is present (1)	○	○	○	○	○
Denies responsibility for mistakes made in his/her unit (2)	○	○	○	○	○
Will only offer assistance to people who can help him/her get ahead (3)	○	○	○	○	○
Accepts credit for successes that do not belong to him/her (4)	○	○	○	○	○
Acts only in the best interest of his/her next promotion (5)	○	○	○	○	○

Q7 How often does/did the leader....

	Not at all (1)	Rarely (2)	Sometimes (3)	Fairly Often (4)	Frequently (5)
Has explosive outbursts (1)	○	○	○	○	○
Allows his/her current mood to define the climate of the workplace (2)	○	○	○	○	○
Expresses anger at subordinates for unknown reasons (3)	○	○	○	○	○
Allows his/her mood to affect his/her vocal tone and volume (4)	○	○	○	○	○
Varies in his/her degree of approachability (5)	○	○	○	○	○
Causes subordinates to try to “read” his/her mood (6)	○	○	○	○	○
Affects the emotions of subordinates when impassioned (7)	○	○	○	○	○

End of Block: Default Question Block

Start of Block: Activity

Q8 Participation in this study

	Disagree (1)	Slightly Disagree (2)	Neither Agree nor Disagree (3)	Slightly Agree (4)	Agree (5)
Changed my perception of toxic leadership (1)	○	○	○	○	○
Gave me tools to evaluate my perception of leadership behavior (2)	○	○	○	○	○
Helped me pinpoint behaviors that constitute toxic leadership (3)	○	○	○	○	○
Helped me pinpoint the factors that led me to conclude there was toxic leadership (4)	○	○	○	○	○
Made me think there was more toxic leadership in my organization than I originally thought (5)	○	○	○	○	○
Made me think there was less toxic leadership in my organization than I originally thought (6)	○	○	○	○	○

End of Block: Activity