EFFECTS OF CHARACTER DEVELOPMENT ON FOURTH-CLASS CADETS

AT THE UNITED STATES AIR FORCE ACADEMY

By

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In an effort to enhance character development of fourth-class (freshman) cadets at the United States Air Force Academy (USAFA), the Center for Character and Leadership Development (CCLD) implemented the VECTOR seminar during academic year 2002-2003 and the Mosaic Program during academic year 2011-2012. Once the two programs were established, fourth-class cadets were given the option to attend either the VECTOR seminar or Mosaic Program. In January 2013, the Class of 2016 fourth-class cadets’ identification with the set of 11 virtues was measured using an inventory assessment administered pre-test in August 2012 and post-test in January 2013. The 11 virtues of interest were mapped to each of the three Air Force core values: integrity first, service before self, and excellence in all we do. This mixed methods study compared USAFA fourth-class cadets who participated in the VECTOR seminar with USAFA fourth-class cadets who participated in the Mosaic Program with respect to experiencing an increased ability to identify with the set of 11 virtues in comparison. The methodology was to conduct a quantitative assessment of the pre-test and post-test data from the Class of 2016 fourth-class cadets and a qualitative assessment of focus group data from the Class of 2017 fourth-class cadets. The results of this study add to previous research on core values, virtues, leadership, and character development. These findings also add some substantiation to the USAFA Conceptual Framework: Developing Leaders of Character and the Center for Creative Leadership (CCL) Coaching Framework. Finally, this study
identified three central themes of the VECTOR seminar: dynamic lead facilitator, experienced table facilitators, and opportunity to meet other classmates, and highlight the three central themes of the Mosaic Program: engaged one-on-one relationship, conscious moment of decision, and long term program. The quantitative results were mixed with respect to fourth-class cadets who participated in the VECTOR seminar or Mosaic Program; however, the qualitative findings of this paper were positive and supported the hypothesis that both fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experienced an increased ability to identify with the virtues. All research was conducted in accordance with Title 32 Code of Federal Regulations, Part 219.101(b)(2).

Keywords: cadets, character development, cognitive coaching, core values, virtues, United States Air Force Academy
DEDICATION

To my beloved children Brittney Marie, Grayson Lane, and Micah Gregory for their support of my career and educational endeavors.

To the staff at the U.S. Air Force Academy and the Center for Character and Leadership Development for their support and commitment to developing leaders of character.
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This journey of faith would not have been possible without Almighty God’s faithful provision as I walk the road less traveled.

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CHAPTER ONE

INTRODUCTION

On September 18, the National Security Act of 1947 established the United States Air Force as a separate military service from the United States Army. One year later in 1948, the Air Force appointed the Stearns-Eisenhower Board to study the United States Military Academy (established 1802) and United States Naval Academy (established 1850) in order to better understand options for creating an Air Force Academy. Seven years afterward, the United States Air Force Academy (USAFA) was established on April 1, 1954, in order to train the next generation of Air Force leadership. Once founded, USAFA launched efforts to mirror the honor code and character development system implemented at West Point to include the initiation of a cadet committee to administer the code, establishing a toleration clause, handling cheating scandals, and the involvement of legal representation and constitutional rights (Betros, 2012). On August 1, 1993, the USAFA Superintendent created the Center for Character Development (CCD) comprised of the Character and Leadership Education Division, Honor Division, Excellence Division, and the Association of Graduates Visiting Scholar to further develop the character development system at USAFA (Commandant of the Cadet Wing, USAFA, 2007). In 2010, the CCD expanded the focus to include leadership and was consequently renamed as the Center for Character and Leadership Development (CCLD) to be consistent with the USAFA Mission: To educate, train and inspire men and women to become officers of character motivated to lead the United States Air Force in Service to our Nation.
The Air Force Academy’s purpose is developing women and men to lead as officers in the United States Air Force. USAFA focuses its efforts on producing Leaders of Character—officers who, above all, exemplify the Air Force’s core values of Integrity First, Service Before Self and Excellence In All We Do. Building on the foundation of integrity, USAFA forges cadets, through academic, military and athletic training, into resilient, innovative airmen, who understand and appreciate the full spectrum application of airpower in air, space and cyberspace and are able to operate and lead in the most challenging environments.

(United States Air Force Academy Strategic Plan 2015, p. 3)

**Context**

In an effort to enhance character development of fourth-class (freshman) cadets at USAFA, the CCLD implemented the 8-hour Vital Effective Character Through Observation and Reflection (VECTOR) seminar during academic year 2002-2003 and the five-week Mosaic Program during academic year 2011-2012, which consisted of three elements: Character Mosaic Inventory (Appendix A), Character Mosaic Report (Appendix B), and Mosaic Program Personal Coaching Training: Serving as a Personal Coach for Your Fourth-Class Cadets (CCLD, 2013; Appendix C). The seven objectives of the VECTOR seminar for fourth-class cadets were as follows:

1. Demonstrate self-awareness of their aspirations and personal identity.
2. Recall what they learned in Basic Cadet Training Introduction to Living Honorably in the Profession of Arms.
3. Articulate the importance of developing their character and leadership identity.
4. Demonstrate familiarity with the tenets of the awareness, reasoning, decision and action model.

5. Share their perspectives on how the virtues embodied in the Air Force Core Values play out in their personal experiences.

6. Create a plan for strengthening a virtue of their choice during the next 30 days.

7. Commit to developing their character on a daily basis (Appendix D).

In order to accomplish these objectives, the Program Director (lead facilitator) recruited and trained table facilitators to guide the fourth-class cadets through the VECTOR seminar. The ratio of table facilitators to fourth-class cadets was one-to-five. Likewise, the three objectives of the Mosaic Program for fourth-class cadets were as follows:

1. Develop a new virtuous habit through determining the one virtue to strengthen.

2. Create a behavior strategy for practicing a new behavior.

3. Be accountable for accurately reporting the success or failure of one's practice attempts.

In order to bring about these objectives, the Program Director recruited and trained coaches to guide the fourth-class cadets through the Mosaic Program. In this regard, coaching was distinct from mentoring as the former was focused on the cadet gaining strength in a particular self-selected virtue whereas the latter was focused on the cadet conforming to an identity predetermined by the institution.

Once the two programs were established, fourth-class cadets were given the option to attend either the VECTOR seminar or Mosaic Program as part of their
mandatory curriculum during their first year at USAFA. In this regard, there were 976 fourth-class cadets in the Class of 2016 and 1,158 cadets in the Class of 2017. In order to graduate with a Bachelor of Science degree from USAFA, fourth-class cadets must have enrolled in either the VECTOR seminar or Mosaic Program utilizing Cvent, a web-based application that provided email invitations, online event registration, eMarketing, and data analysis. With respect to the overview of these character development programs, the VECTOR seminar was an interactive seminar that focuses on virtues, personal leadership growth, and self-reflection. During the 8 hour seminar, the program topics addressed include establishing purpose, developing vision, assessing personal values, and acknowledging influence (CCLD, 2015). With respect to the Mosaic Program, coaching was structured around focused conversations and asking questions that prompt the cadets to think and come up with their own answers with respect to virtues to be developed based on Air Force Core Values. Personal coaches adhered to prescribed Standards of Ethical Conduct and utilized the Center for Creative Leadership (CCL) assess-challenge-support model, “supervising the assessment, challenging the participant in a manner that encourages the stretch needed for development, and then supporting the participant to insure positive change” (CCLD, 2015, p. 7). In accordance with the CCLD training manual, the Mosaic Program required each prospective coach to invest a minimum of 6 hours into training and preparation to include attending a two hour workshop (“How to Conduct Personal Coaching”), devoting one hour for reading the training manual, successfully completing the review test, and participating in a two hour practice session with another trainee. Once these requirements were satisfied, each prospective coach was
required to demonstrate proficiency of coaching skills during a one hour timeframe with a master instructor (CCLD, 2014).

As part of the Mosaic Program, the fourth-class cadets’ identification with the set of 11 virtues was measured using a longitudinal inventory assessment administered pre-test in August 2012 and post-test in January 2013. The 11 virtues of interest were mapped to each of the three Air Force core values: Integrity First, Service Before Self, and Excellence In All We Do (CCLD, 2013). More specifically, Integrity first was mapped to the virtues of courage, honesty, accountability, fairness, and humility. Service Before Self was mapped to the virtues of duty, care for others, self-control, and respect for human dignity. Excellence In All We Do was mapped to the virtues of attention to detail and excellence. After completing the inventory assessment, fourth-class cadets received a report in which their self-assessment of their ability to identify with the 11 virtues was detailed for use during the character coaching portion of the Mosaic Program.

**Purpose Statement**

The purpose of this research was to determine if USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program exhibited changes in the ability to identify with the 11 virtues. The research methodology was two-fold:

1. Conduct a quantitative assessment of the pre-test and post-test inventory data from the USAFA Class of 2016 fourth-class cadets who elected to participate in either the VECTOR seminar or Mosaic Program after the pre-test and prior to the post-test.
2. Conduct a qualitative assessment of focus group data from the USAFA Class of 2017 fourth-class cadets who elected to participate in either the VECTOR seminar or Mosaic Program after the pre-test and prior to the post-test.

**Problem Statement**

Since establishing the 8-hour VECTOR seminar and five-week Mosaic Program, CCLD has not quantitatively and qualitatively measured the results of either program to determine how fourth-class cadets were affected positively, affected negatively, or remained the same (no change) with respect to the 11 virtues. In this regard, the purpose of the research was to compare USAFA fourth-class cadets’ that participated in the VECTOR seminar with USAFA fourth-class cadets’ that participated in the Mosaic Program. The hypothesis for the research was that USAFA Class of 2016 fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experienced an increased ability to identify with the 11 virtues.

**Research Significance**

This study gave both quantitative and qualitative results to USAFA and CCLD senior leadership in order to determine how fourth-class cadets were affected positively, affected negatively, or remained the same (no change) with respect to the 11 virtues after attending the VECTOR seminar or Mosaic Program. Consequently, this study created a baseline for examining character development of fourth-class cadets and created a template for researching the results of CCLD programs for third-class (sophomore), second-class (junior), and first-class cadets (senior). In this regard, findings from this study enhanced the CCLD’s Conceptual Framework for developing leaders of character.
and benefited USAFA in its pursuit of character education in order to commission a leader of character after four years of undergraduate training.

**Research Questions**

This study used the CCLD’s Conceptual Framework for Developing Leaders of Character and the CCL Coaching Framework as the lens through which to view the results. Specifically, this study addressed the following three research questions:

1. To what degree did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experience a change in ability to identify with the 11 virtues?
2. How did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program compare with one another with respect to experiencing a change in ability to identify with the set of 11 virtues?
3. What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of 11 virtues?

**Theoretical Framework**

The Air Force Core Values, CCLD Conceptual Framework for Developing Leaders of Character, and CCL Coaching Framework provided the primary focus for this study.

**Air Force Core Values**

The United States Air Force is grounded in a shared commitment to three core values: Integrity First, Service Before Self, and Excellence In All We Do. Consequently, all Air Force core competencies and distinctive capabilities are based on these three core
Values, “They are the common bond among all comrades in arms, and they are the glue that unifies the Force and ties us to the great warriors and public servants of the past” (The Little Blue Book, 1997, p. i).

Values represent enduring, guiding principles for which we as individuals or organizations stand. “Core” values are so fundamental that they define our very identity. The United States Air Force has clearly defined its identity by these three simple values: Integrity First, Service Before Self, and Excellence In All We Do. For those of us who join this proud community of Airmen—whether officer, enlisted, civilian, Active, Guard, or Reserve—being a part of the Air Force family requires we commit to living these values, on and off duty. This is the expectation of our profession, and is the standard against which our fellow service members and the American public hold us. The Air Force Professional is a trusted servant of our Nation who adheres to the highest standards of character, courage and competence. How we act represents to countless others the collective identity of the United States Air Force. (America’s Air Force: A profession of arms, 2015, p. 8)

Indeed, the core values flow directly from the top echelons of Air Force senior leadership down to the most junior airman, ensuring a culture of responsible choices. The core values are overlapping, mutually reinforcing, and consistent with one another (Figure 1).
Figure 1. United States Air Force Core Values.

As Secretary of the Air Force Sheila Widnall stated:

Core values make the military what it is; without them, we cannot succeed. They are the values that instill confidence, earn lasting respect, and create willing followers. They are the values that anchor resolve in the most difficult situations. They are the values that buttress mental and physical courage when we enter combat. In essence, they are the three pillars of professionalism that provide the foundation for military leadership at every level. (The Little Blue Book, 1997, p. 2)
CCLD Conceptual Framework

As the core values permeate every aspect of the Air Force, they are a cornerstone of USAFA’s character training model. In 2015, the Superintendent reaffirmed seven strategic goals that reflected the vision of USAFA and supported the Air Force’s 2008 strategic goals and objectives. The first strategic goal was focused on character and leadership development:

Goal 1: Focus institutional efforts on character and leadership development. All cadet activities and institutional assessments will enhance and integrate character and leadership development within USAFA’s focused, immersive environment. (United States Air Force, 2015, p. 8)

The objectives further clarified the role of CCLD in meeting Goal 1 as follows:

Objective 3: Establish the Center for Character and Leadership Development (CCLD) as the primary agent to integrate Character and Leadership Development (C&LD) throughout USAFA and use it to advance the understanding and development of Leaders of Character in the cadet wing, the base, the Air Force and the Nation. (United States Air Force, 2015, p. 8)

According to Avolio and Gardner (2005) there is a growing recognition among scholars and practitioners that authentic leadership development strategy is relevant in these challenging times. More specifically, their research indicated there are numerous overlapping components when comparing authentic leadership development theory with transformational leadership, charismatic leadership, servant leadership, and spiritual leadership (Avolio & Gardner, 2005).
The USAFA conceptual framework begins with the end in mind of producing a leader of character. A leader of character is not rank or position dependent; rather, it is a constant mindset. The USAFA definition of a leader of character involved three requirements: lives honorably, lifts others, and elevates performance (Figure 2, CCLD, 2012). Although the virtues transcend the entire framework, emphasis for fourth-class cadets attending the VECTOR seminar and Mosaic Program primarily highlighted the lives honorably requirement of a leader of character.

Figure 2. USAFA Conceptual Framework: Lives Honorably, Lifts Others, and Elevates Performance.

First of all, the conceptual framework defined three essential elements for becoming such a leader of character: own, engage, and practice (CCLD, 2011). The
individual wanting to develop as a leader of character must begin by owning the identity and responsibility to continually strive for personal development. The primary theoretical foundation came from Bandura’s (1997) notion of self-efficacy with respect to an individual’s belief about their capacity to perform:

People’s beliefs about their efficacy influence how they construe situations and the types of anticipatory scenarios and visualized futures they construct. Those who have a high sense of efficacy view situations as presenting realizable opportunities. They visualize success scenarios that provide positive guides for performance. (p. 116)

In other words, leaders of character must believe they can change in order to change. According to Bearwald (2011), a coaching relationship is more than just sharing a recipe for success. Rather, a coaching relationship ensures the leader of character is focused on reflecting, exploring, analyzing, and digging deep in order to “evoke changes in behavior that improve performance” (p. 1).

The second element in the framework was to engage in a purposeful experience—“a practice that researchers confirm predicts growth and development, especially among college-age students” (CCLD, 2011, p. 18). Within the USAFA framework, engagement had three vital parts:

1. Assess the strengths and opportunities to grow.
2. Challenge to strengthen a specific virtue or competency.
3. Support through setbacks and hold accountable towards development.
In this regard, Ting and Scisco (2006) highlighted that “coaches use approaches anchored in the behavioral sciences and defined by psychological and counseling practices” in order to help adults choose to learn when and what they want (p. i).

Based on Rest’s Four-Component Model, the third element in the framework was to practice habits of thoughts and actions (CCLD, 2013, p. 2). Specifically, the model identified four elements of ethical action as the product of four psychological subprocesses: moral sensitivity (recognition), moral judgment (reasoning), moral motivation, and moral character (Johnson, 2007). Rest (1984) clarified the four major inner processes as follows:

1. Interpreting the situation in terms of recognizing what actions are possible for the actor and how each course of action affects all the parties involved.
2. Figuring out what one ought to do, applying moral ideals to the situation to determine the moral course of action.
3. Choosing among moral and nonmoral values to decide what one actually intends to do.
4. Executing and implementing what one actually intends to do. (as cited by Kurtines & Gewirtz, 1984, p. 26)

Consistent with Rest’s theoretical framework, USAFA’s Conceptual Framework emphasized four parts:

1. Awareness in order to recognize the moment for enacting the virtuous behavior.
2. Reasoning in order to determine the best course of action consistent with one’s commitments.
3. Deciding in order to make an internal commitment to a course of action.

4. Acting in order to enact the intended virtuous behavior. (Figure 3; CCLD, 2011, p. 24)

![The ARDA Model](image)

**Figure 3. Awareness, Reasoning, Decision, and Action (ARDA) Model.**

The framework enables the leader of character to wrestle with moral dilemmas and make choices where there are equally strong moral arguments (CCLD, 2013, p. 2). Kohlberg (1981) asserted the domain of morality encompasses more than just moral reasoning, “The student of morality is concerned not only with moral reasoning but also with moral action—the process by which people arrive at moral decisions and take action
on the basis of those decisions” (p. 35). Kidder (2003) labeled these choices right versus right decision making:

Ethical issues also emerge when two of our core values come into conflict with each other. When one of our values raises powerful moral arguments for one course of action, while another value raises equally powerful arguments for an opposite course, we find we can’t do both. Yet we must act. In such cases, ethics is a matter of right versus right. (p. 86)

Kidder (2003) also clarified the most common struggle in humanity’s ethical dilemmas fits into four paradigms:

1. Truth versus loyalty.
2. Individual versus community.
3. Short term versus long term.
4. Justice versus mercy. (p. 89)

Finally, a leader of character lives honorably, lifts others, and elevates performance. With respect to living honorably, a leader of character consistently practices the virtues embodied in the Air Force core values: courage, honesty, accountability, fairness, humility, duty, care for others, self-control, respect for human dignity, attention to detail, and excellence (Figure 4; ACES Cadet Assessment Package AY 2013-14, 2014).
In addition to living an honorable life, a leader of character is concerned with others and works to lift them to their best possible selves. USAFA desires that all graduates would be leaders who lift others and build leaders. A leader of character owns the responsibility to lift the passions, strengths, and abilities of their people. Not only does a leader of character challenge others to put forth their best efforts, but also
encourages, teaches, and models to others in order to ensure they become all they can be in life (Figure 5; ACES Cadet Assessment Package AY 2013-14, 2014).

Moreover, a leader of character helps the organization to elevate performance toward a common and noble purpose. A leader of character does not accept mediocrity within the organization and challenges the status quo at every opportunity. USAFA expects graduates to have a relentless desire to make things better, lean forward, and work hard to
always elevate performance (Figure 6; ACES Cadet Assessment Package AY 2013-14, 2014).

CCL Coaching Framework

Consistent with the CCLD Conceptual Framework, this study also utilized the CCL (2007) Framework for Coaching as the lens through which to view the results (Figure 7).
According to Frankovelgia and Riddle (2010), “Leadership coaching uses the relationship between the coach and coachee as a platform for questioning assumptions, stimulating reflection, creating or expanding options, and growing perspectives” (p. 126). The CCL Coaching framework had three key aspects:

1. The relationship—the context within which the coaching occurs.
2. Assessment, challenge, and support—the core elements that drive leader development.
3. Results—the visible outcomes that coaching focuses on achieving. (p. 127) Trust is built through an “openness and willingness to engage in the relationship and through mutual commitment and respect” (p. 127). Assessment provides information with respect to the coachee’s strengths, limitations, challenges, and opportunities. Challenges create disequilibrium—“an imbalance between current skills and demands that calls for people to move out of their comfort zones” (p. 128). Support can be provided in a number of different means depending on the desire of the coachee with respect to behavior and performance. With respect to results, “Desired outcomes need to be defined at the onset of the coaching relationship and evaluated periodically over the course of the coaching engagement” (p. 129).

Frankovelgia and Riddle (2010) noted that the CCL Coaching Framework is “complemented by six principles for helping leaders develop clarity of purpose, balance reflection with action, and highlight accountability” (p. 129).

1. Principle 1: Create a Learning Environment. “The coach is responsible for creating an environment where the coachee feels safe to take risks, experiment with new ideas, reflect on experience, and practice new skills.”

2. Principle 2: Ensure the Coachee’s Ownership. “The coaching experience is for and about the person being coached.”

3. Principle 3: Facilitate and Collaborate. “Sustainable coaching improvements are made through partnering, collaborating, reflecting, and inquiring, as opposed to providing solutions.”

4. Principle 4: Advocate Self-Awareness. “A prerequisite for developing as a leader is to know one’s strengths and development areas.”
5. Principle 5: Promote Sustainable Learning from Experience. “The key element of this principle is helping the coachee move from awareness to action in order to sustain learning.”

6. Principle 6: Model What You Coach. “Coaches must master and consistently exhibit emotional competencies such as self-awareness, self-management, social awareness, and social skills and must be able to comment on these attributes as they are playing out” (p. 130-131).

**Definition of Terms**

This research recognized that other distinguished scholars and philosophers have developed a list of virtues crucial to character development most notably Aristotle (courage, temperance, liberality, proper pride, good temper, ready wit, modesty, and justice), Plato (prudence, courage, temperance, and justice), and Aquinas (faith, hope, and love) (as cited by Pfaff, 2003). In order to establish clarity and maintain consistency with Air Force terminology, however, the concepts of leadership, character, core values, and virtues were defined for the purpose of this research by the Air Force’s *The Little Blue Book* (1997), *United States Air Force Academy Strategic Plan* (2015), and *America's Air Force: A Profession of Arms* (2015).

**Leadership**

Although there were numerous commendable definitions of leadership to include “motivating people to change” (Fry, 2003, p. 697), “effect on followers and achievement of goals” (Reave, 2005, p. 657), “multi-disciplinary, involving not only those disciplines of sociology, psychology and technology, but that of spirituality as well” (Burke, 1996, p. 16), and understanding the basic need that “people have to be part of a community at
work” (Duchon & Plowman, 2005, p. 815), this paper employed the definition of leadership found in *The Handbook of Leadership: Theory, Research, and Managerial Applications* which is most consistent with Air Force practice and application:

Leadership is an interaction between two or more members of a group that often involves structuring or restructuring of the situation and the perceptions and expectations of the members. Leaders are agents of change—persons whose acts affect other people more than other people’s acts affect them. Leadership occurs when one group member modifies the motivation or competencies of others in the group. (Bass, 1990, p. 19)

**Character**

As this research was conducted at USAFA, this paper elected to use the CCLD (1994) definition of character, “The sum of those qualities of moral excellence, which stimulates a person to do the right thing, which is manifested through right and proper actions, despite internal or external pressures to the contrary” (p. 10). Moreover, consistent with the CCLD White Papers, character had three interrelated parts: moral knowing, moral feeling, and moral behavior.

Good character consists of knowing the good, desiring the good, and doing the good—habits of the mind, habits of the heart, and habits of action. All three are necessary for leading a moral life; all three make up moral maturity. When we think about the kind of character we want for our cadets, it’s clear that we want them to be able to judge what is right, care deeply about what is right, and then do what they believe to be right—even in the face of pressure from without and temptation from within. (CCLD, 1994, p. 16)
Integrity First (Core Value)

The core value of integrity first required “the willingness to do what is right even when no one is looking. It is the moral compass, the inner voice, the voice of self-control and the basis for the trust imperative in today's military” and included the virtues of courage, honesty, accountability, fairness, and humility (The Air Force Little Blue Book, 1997, p. 1). Integrity “drives us to do what is right even when no one is looking. The moral compass and the basis for the trust imperative in today’s military” (United States Air Force Academy Strategic Plan 2015, p. 4).

Integrity is simply doing the right thing, all the time, whether everyone is watching or no one is watching. It is the compass that keeps us on the right path when we are confronted with ethical challenges and personal temptations, and it is the foundation upon which trust is built. An individual realizes integrity when thoughts and actions align with what he or she knows to be right. (United States Air Force, 2015, p. 6)

Service Before Self (Core Value)

The core value of Service Before Self ensured “that professional duties take precedence over personal desires” and includes the virtues of duty, cares for others, self-control, and respect for human dignity (The Air Force Little Blue Book, 1997, p. 2). Service Before Self “makes us realize that professional duties take precedence over personal desires” (United States Air Force Academy Strategic Plan 2015, p. 4).

Service Before Self tells us that professional duties take precedence over personal desires. The call to serve is a call to live according to a higher standard. It is not just a job; it is a commitment that takes energy, dedication, and sacrifice. We do
not “work” in the Air Force; we serve in the Air Force. A heart and mindset for service allows us to embrace expectations and requirements not levied on the American public or other professions. (United States Air Force, 2015, p. 7)

**Excellence In All We Do (Core Value)**

The core value of Excellence In All We Do “directs us to develop a sustained passion for continuous improvement and innovation that will propel the Air Force into a long-term, upward spiral of accomplishment and performance” and included the virtues of attention to detail and excellence (The Air Force Little Blue Book, 1997, p. 3). Excellence In All We Do “inspires us to develop a sustained passion for innovation, continuous improvement and superior performance at the personal, unit and institutional levels (United States Air Force Academy Strategic Plan 2015, p. 4).

Excellence In All We Do does not mean that we demand perfection in everything from everyone. Instead, this value directs us to continuously advance our craft and increase our knowledge as Airmen. We must have a passion for continuous improvement and innovation that propels America’s Air Force in quantum leaps towards accomplishment and performance. (United States Air Force, 2015, p. 8)

**Courage (Virtue)**

The virtue of courage ensures “a person of integrity possesses moral courage and does what is right even if the personal cost is high” (The Air Force Little Blue Book, 1997, p. 1) and “stands up for beliefs, even if suffers consequences” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Courage is not the absence of fear, but doing the right thing despite the fear.
Courage empowers us to take necessary personal or professional risks, make decisions that may be unpopular, and admit to our mistakes; having the courage to take these actions is crucial for the mission, the Air Force, and the Nation. (United States Air Force, 2015, p. 6)

**Honesty (Virtue)**

With respect to the virtue of honesty,

The hallmark of the military professional because in the military, our word must be our bond. We don't pencil-whip training reports, we don't cover up tech data violations, we don't falsify documents and we don't write misleading operational readiness messages. The bottom line is: We don't lie, and we can't justify any deviation. (The Air Force Little Blue Book, 1997, p. 1)

The virtue of honesty requires one “tells the truth” and “promises can be trusted” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Honesty is the hallmark of integrity. As public servants, we are trusted agents. Honesty requires us to evaluate our performance against standards, and to conscientiously and accurately report findings. It drives us to advance our skills and credentials through our own effort. The service member’s word must be unquestionable. This is the only way to preserve the trust we hold so dear with each other and with the population we serve. (United States Air Force, 2015, p. 6)

**Accountability (Virtue)**

The virtue of accountability ensures that “no person of integrity tries to shift the blame to others or take credit for the work of others” (The Air Force Little Blue Book,
Accountability is responsibility with an audience. That audience may be the American people, our units, our supervisors, our fellow Airmen, our families, our loved ones, and even ourselves. Accountable individuals maintain transparency, seek honest and constructive feedback, and take ownership of the outcomes of their actions and decisions. They are responsible to themselves and others and refrain from actions which discredit themselves or our service. (United States Air Force, 2015, p. 6)

**Fairness (Virtue)**

The virtue of fairness requires equal treatment, that one “treats everyone fairly” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

The Code of Conduct outlines basic responsibilities and obligations of members of the U.S. Armed Forces. All members are expected to measure up to the standards described in the Code of Conduct. Although developed for POWs, the spirit and intent are applicable to service members subject to other hostile detention. Such service members should consistently conduct themselves in a manner that brings credit to them and their country. (United States Air Force, 2015, p. 9)

**Humility (Virtue)**

With respect to the virtue of humility, “A person of integrity grasps and is sobered by the awesome task of defending the Constitution of the United States of America” (The
Humility “does not brag or act arrogant” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Respect in the Profession of Arms goes beyond professional courtesy. It means accepting others for whom they are, embracing a heightened personal sense of humility and fostering an environment of inclusiveness in which every Airman is able and eager to offer their skills, abilities and ideas. It means treating the equipment and resources in our possession with care, understanding and embracing the power of diversity and holding those who mistreat others accountable. More than anything, we must respect the humbling mission placed in our hands by the American people, and the impact our weapons and our actions can have around the globe. (United States Air Force, 2015, p. 4)

**Duty (Virtue)**

The virtue of duty insists one “follows through with plans” and “adheres to standards” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Duty is the obligation to perform what is required for the mission. While our responsibilities are determined by the law, the Department of Defense, and Air Force instructions, directives, and guidance, our sense of duty is a personal one and bound by the oath of service we took as individuals. Duty sometimes calls for sacrifice in ways no other profession has or will. Airmen who truly embody Service Before Self consistently choose to make necessary sacrifices to accomplish the mission, and in doing so, we honor those who made the ultimate sacrifice. (United States Air Force, 2015, p. 7)
Care for Others (Virtue)

The virtue of care for others asks one to be “kind and caring toward others” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Loyalty is an internal commitment to the success and preservation of something bigger than ourselves. Our loyalty is to the Nation first, the values and commitments of our Air Force second, and finally to the men and women with whom we serve. Loyalty to our leaders requires us to trust, follow, and execute their decisions, even when we disagree. We offer alternative solutions and innovative ideas most effectively through the chain of command. Ultimately, loyalty is demonstrated by helping each other act with honor. (United States Air Force, 2015, p. 7)

Self-Control (Virtue)

With respect to the virtue of self-control, “Professionals cannot indulge themselves in self-pity, discouragement, anger, frustration or defeatism. They have a fundamental moral obligation to the persons they lead to strike a tone of confidence and forward-looking optimism” (The Air Force Little Blue Book, 1997, p. 2). Self-control “exercises control over harmful temptations” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Discipline is an individual commitment to uphold the highest of personal and professional standards. Airmen commit to a life of discipline and self-control. We demonstrate it in attitude, work ethic, and effort directed at continuous improvement, whether it be pursuing professional military education or nurturing ourselves physically, intellectually, emotionally, or spiritually. Each Airman
represents the entire Air Force. Our appearance, actions, and words shape the culture of the Air Force and the reputation of the entire military profession.

(United States Air Force, 2015, p. 5)

**Respect for Human Dignity (Virtue)**

The virtue of respect for human dignity expects “we must always act in the certain knowledge that all persons possess a fundamental worth as human beings” (The Air Force Little Blue Book, 1997, p. 2). Respect for human dignity always “respects differences in others” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

Respect is at the root of the Profession of Arms and bonds every Airman who voluntarily serves. Respect is the feeling of esteem or deference for a person or other entity, but in the Air Force it takes on a greater meaning and importance. Respect is the lifeblood of our profession. Without it, we simply cannot stand strong in the defense of our nation. Mutual respect strengthens our team and eliminates seams that reveal a weakness in the force. Respect is treating others with dignity and valuing them as individuals. We must always act knowing that all Airmen possess fundamental worth as human beings. We must treat others with the utmost dignity and respect, understanding that our diversity is a great source of strength. (United States Air Force, 2015, p. 4, 5)

**Attention to Detail (Virtue)**

The virtue of attention to detail “notices imperfections” (ACES Cadet Assessment Packet AY 2013-14, p. 2).

We share the common attributes of character, courage and competence. We qualify as professionals through intensive training, education and practical
experience. As professionals, we are defined by our strength of character, a lifelong commitment to core values and a dedication to maintain our professional abilities through continuous improvement, individually and institutionally.

(United States Air Force, 2015, p. 10)

**Excellence (Virtue)**

With respect to the virtue of excellence, external operations, pertains to the way in which we treat the world around us as we conduct our operations. In peacetime, for example, we must be sensitive to the rules governing environmental pollution, and in wartime we are required to obey the laws of war.

(The Air Force Little Blue Book, 1997, p. 4)

Likewise, excellence of internal operations “pertains to the way we do business internal to the Air Force from the unit level to Air Force Headquarters. It involves respect on the unit level and a total commitment to maximizing the Air Force team effort” (The Air Force Little Blue Book, 1997, p. 4).

Mission focus encompasses operations, product and resources excellence. The complex undertaking of the Air Force mission requires us to harness the ingenuity, expertise, and elbow grease of all Airmen. We approach it with the mindset of stewardship, initiative, improvement, pride, and a continued commitment to anticipate and embrace change. Our work areas, our processes, and our interpersonal interactions must be undeniably professional and positive. Our people are the platform for delivering innovative ideas, strategies, and technologies to the fight. (United States Air Force, 2015, p. 5)
Dissertation Structure

This introduction presented the context and overall purpose for this study, as well as presented the research questions, theoretical framework, and definitions of key terms. Chapter 2 presents a literature review of research conducted on character development with particular focus on cognitive coaching. Chapter 3 highlights the research design and methodology for this study. Chapters 4 and 5 depict the quantitative and qualitative portions of the study, respectively. Chapter 6 states the findings, implications, and recommendations for future research.
CHAPTER TWO
LITERATURE REVIEW

According to Chickering (2010), colleges and universities “failed to graduate citizens who have attained the levels of cognitive, moral, intellectual, and ethical development required to address complex national and global problems” (p. 57). Furthermore, Chickering contended that “concern for cognitive and moral development, character development, and social responsibility has dropped away. The larger issues of interdependence, identity, purpose, meaning, and integrity have been eclipsed by short-term goals oriented toward securing a well-paying job upon graduation” (p. 58). Morrill (1981) warned of this trend nearly 40 years ago noting that the emphasis on moral education is waning, “Although there are obvious exceptions, the major trends in higher education in recent decades have diminished dramatically the force and relevance, the purposes and the plausibility, of moral education” (p. 2). Lickona (1991) blamed the decline on pluralism which caused school neutrality on the subject of values, “In a society where people held different values, it seemed impossible to get agreement on which ones should be taught in our public schools” (p. 3).

Phenix (1961) argued education is a necessary human endeavor, “In the democratic commonwealth, therefore, education should be universal, socially oriented, aimed at the development of mature judgment, and cognizant of individual differences” (p 35). Kohlberg and Hersh (1977) asserted, “Whether we like it or not schooling is a moral enterprise. Values issues abound in the content and process of teaching” (p. 53). Sizer and Sizer (1970) concluded, “There is not ‘morality-free’ school, no valueless teaching. Any interpersonal experience contains a moral element, virtually by definition,
and a classroom is no exception” (p. 4). In light of these failures, this research concurred with Humphrey’s (2012) assessment that student character development is “an important goal for higher education” and needs to be pursued at our colleges and universities (p. 436). As Purpel and Ryan (1976) observed, since the days of Socrates the realm of education has maintained the “bedrock assumption that moral reasoning can be successfully taught and, indeed, that the development of moral reasoning is perhaps the most legitimate aim of education” (p. 311). In light of these assertions, Gilligan’s (1981) caution is still worthy of note some four decades later, “It is important, however, to establish at the outset that while moral and intellectual development are necessarily conjoined, they do not inevitably proceed hand in hand” (p. 139). In other words, character development must be intentional.

**Character Development**

This pursuit of character development is consistent with the writings of Helea (2006), “While studies of character development have shaped understandings of character formation over the past century, core philosophical understandings of character have retained a foundational influence” (p. 76). Acknowledging character development was a strong concern for student development in American higher education, Bok (2008), President of Harvard University, captured the essence of the need for character development without returning to the institutions of the early years by asserting modern day colleges “have a responsibility to contribute in any way they can to the moral development of students” (p. 230). This perspective is congruent with Bonfiglio’s (2011) conclusion on character development, “As I see it, education, and especially higher education, is unmistakably a moral endeavor” (p. 32). In this regard, the goal of engaging
in character development is reinforced by the USAFA vision: The Air Force’s premier institution for developing Leaders of Character, “The United States Air Force Academy is a world-class institution providing an immersive, comprehensive developmental experience to produce the world’s most innovative, resilient and committed airpower Leaders of Character” (United States Air Force Academy Strategic Plan 2015, p. 3). Consequently, CCLD enjoyed strong institutional commitment to professional development necessary “to improve student learning and student character development” (Humphreys, 2012, p. 445). As Power (1991) concluded in his research on moral authority, “Schools must both bear tradition and stimulate critical inquiry if our society is to flourish as a democracy” (p. 331).

**Moral Judgment**

According to Gilligan (1981), one must begin with Piaget’s research in order to best understand the stages of moral development and determine the nature of children’s practice and consciousness of rules, “The empirical study of moral development began with Piaget, whose interest in the different logic of children’s thinking led him to observe the moral judgments that they made” (p. 141). Rest (1979) concurred noting, “Jean Piaget and Lawrence Kohlberg have been most influential in shaping research on moral judgment (p. 4). In this regard, Rich and DeVitas (1985) asserted the two researchers share common schema and structures.

Piaget’s stage theory assumes that cognitive and moral development proceeds hand-in-hand. He further claims that the cognitive schema and structures he describes are (a) innate; (b) invariant; (c) hierarchical; and (d) culturally universal. All these postulates are carried over into Kohlberg’s research. (p. 46)
Piaget (1965) personally questioned hundreds of children ages 4 through 13 from the Geneva and Neuchatel schools and observed them play the game of marbles in order to “establish what was meant by respect for rules from the child’s point of view,” determine the ideas formed by children with respect to adult moral rules, and “examine the notions that arose out of the relations in which the children stood to each other” with justice as a special theme (p. 7). More specifically, with respect to game rules, Piaget identified and studied the practice of rules and the consciousness of rules, “the idea which children of different ages form of the character of these game rules, whether of something obligatory and sacred or of something subject to their own choice, whether of heteronomy or autonomy” (p. 15). Piaget (1965) contended that the comparison of children from the Geneva and Neuchatel schools playing the game of marbles would help determine the relationship between “the practice and consciousness of rules” in order to define the “psychological nature of moral realities” (p. 15). Piaget’s observations were specifically focused on two aspects of interaction such as,

(1) how the individuals adapt themselves to these rules, i.e., how they observe rules at each age and level of mental development; (2) how far they become conscious of rules, in other words, what types of obligation result (always according to the children’s ages) from the increasing ascendancy exercised by rules. (p. 24)

Rest (1979) noted that Piaget’s “cognitive developmental approach provided a way to study subjective values in their own right” (p. 4). In other words, Piaget sought to explain why children saw the world as they did and valued certain things from this very individual point of view.
Based on his research with children, Piaget (1965) concluded, “Our study of the rules of a game led us to the conclusion that there exist two types of respect, and consequently two moralities—a morality of constraint or of heteronomy, and a morality of cooperation or of autonomy” (p. 197). After continuing his research with this line of reasoning, Piaget concluded that although both types of respect appear in all ages of children, the latter type tended to be “more predominate over the first” (p. 227). In this regard, according to Bohannan (1960) Durkheim dissented by declaring that society was the only source of morality, “The social organization is the matrix of the conscience and the experience which shapes it representations. The conscience collective is a reading or a folk system of the morphology, the characteristic events, and the cultural idiom of social groups” (p. 82). In direct contrast, Piaget believed that Durkheim’s sociological explanation of behavior among children compromised “morality by identifying it with reasons of state, with accepted opinions, or with collective conservatism; in a word, with everything the greatest reformers have attacked in the name of conscience” (p. 344). To be sure, Piaget maintained his conviction with respect to moral conduct that one must choose between the consciences of individuals and the morality of society. Whereas Piaget advocated the former, Durkheim clearly favored the latter. In his essay on the first two elements of morality, Durkheim (1961) further clarified the relationship between good and duty with respect to society, “Because society is beyond us, it commands us; on the other hand, being superior to everything in us, it permeates us. Because it constitutes part of us, it draws us with the special attraction that inspires us toward moral ends” (p. 98). As Wallwork (1972) would later assert, “Durkheimian sociology is inseparable from, even a by-product of, his moral philosophy” (p. vii).
According to Purpel and Ryan (1976), “Piaget, through close observation of children, found stages of moral thought. At various stages of development, the thought of children possesses specific characteristic. ...children sequentially move through clear and distinct stages of thought process” (p. 173). Rest (1979) concluded that Piaget’s research was significant in several regards.

1. He defined the problem area and the theoretical construct of moral judgment. Before Piaget, a psychological construct called “moral judgment” did not exist, nor were psychologists involved in identifying the basic social structures underlying people’s judgments, or describing how these structures successively develop.

2. Piaget introduced methods for studying a subject’s moral judgment. Most characteristic is the presentation of an episode or story to the person to evoke discussion and an explanation of the subject’s views. An important part of his work also involved the observation of children’s game behavior.

3. Piaget identified a dozen specific features in children’s moral thinking for making inferences about their underlying thought structure. The features include “immanent justice,” “intentionality,” “relativism of perspective,” etc. Also, Piaget gave an extensively argued rationale in each case for the younger child’s thinking being more primitive than the older child’s.

4. Piaget provided some empirical data in support of his theory, almost exclusively the numbers of subjects at different ages whose responses were scored as different types. (p. 5-6)
Although Piaget’s work was groundbreaking tracing the development of children’s moral judgments from the pre-school years through middle childhood, the field of inquiry was wide open for additional research in the study of morality. In this regard, Kohlberg’s studies started the second phase in moral judgment research, “His (Piaget’s) research, however, was taken up by Lawrence Kohlberg, who focused specifically on adolescent moral judgment, choosing a sample of eighty-four boys aged 10 to 16 and following their development at three-year intervals” (Gilligan, 1981, p. 140).

Purpel and Ryan (1976) highlighted “Kohlberg built upon the basic insights of Jean Piaget, the Swiss psychologist, and on the educational views of John Dewey” (p. 173). In particular, the authors took note of the fact that Kohlberg “paid particular attention to the form of their answers rather than how they decided on a particular moral dilemma” (p. 174). Kohlberg (1987) explained the differing views in terms of the interpersonal dyad, “Morality is what comes out of two persons in a relationship, the view of Piaget. A second is my own, Piagetian at core: Morality is constructed through social interaction, but not necessarily in terms of the interpersonal dyad” (as cited by Kurtines & Gewirtz, p. 104). Rich and DeVitas (1985) further highlighted the differences between the two researchers noting Kohlberg focused on the principle of justice whereas Piaget concentrated on the simple virtues and vices, “Kohlberg has sought to overcome the deficiencies of Piaget’s research by using a much larger sample that is more broadly based socially and is composed of equal proportions of popular and socially isolated children” (p. 87). Rest (1979) concurred with both assessments noting that Kohlberg soon departed from Piaget’s research by gathering data from older subjects, ages 10 through 16, and utilizing “complex moral dilemmas and interviewed them about what they
thought should be done and why” (p. 8). As a result, Kohlberg expanded Piaget’s two stages of moral judgment to six distinct stages of moral judgment. Gibbs (2003) noted, “In effect, Kohlberg overhauled and added to Piaget’s phases using an adaptation of Deweyan views” (p. 61). Gilligan (1981) concurred noting Kohlberg “constructed moral dilemmas that placed socially accepted values in conflict—for example, the value of life versus the value of property, the value of obedience versus that of keeping promises, respect for the individual versus concern for group welfare” (p. 142).

**Stages**

Building on the work of Piaget, Kohlberg (1984) postulated a six-stage sequential typology of moral rules, beginning with punishment-based obedience, evolving through opportunistic self-interest, approval-seeking conformity, respect for authority, contractual legalistic observance, and culminating in principled morality based on standards of justice. His research contended that character development has moral stages that are grouped into three major levels. Kohlberg further stated that changes in the standards of moral reasoning are produced by cognitive conflict arising from exposure to higher levels of moral reasoning within the six moral stages, with stages 1 and 2 making up the preconventional level, stages 3 and 4 comprising the conventional level, and stages 5 and 6 representing the postconventional level as follows:

1. **Stage 1**—Heteronomous Morality. Doesn’t consider the interests of others or recognize that they differ from actors; doesn’t relate two points of view.

2. **Stage 2**—Individualism, Instrumental Purpose, and Exchange. Aware that everybody has his own interest to pursue and these conflict, so that right is relative (in the concrete individualistic sense).
3. Stage 3—Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity. Aware of shared feelings, agreements, and expectations which take primacy over individual interests. Relates points of view through the Golden Rule, putting yourself in the other person’s shoes.

4. Stage 4—Social System and Conscience. Takes the point of view of the system that defines roles and rules. Considers individual relations in terms of place in the system.

5. Stage 5—Social Contract or Utility and Individual Rights. Perspective of a rational individual aware of values and rights prior to social attachments and contracts. Integrates perspectives by formal mechanisms of agreement, contract, objective impartiality, and due process.

6. Stage 6—Universal Ethical Principles. Perspective of a moral point of view from which social arrangements derive. Perspective is that of any rational individual recognizing the nature of morality or the fact that persons are ends in themselves and must be treated as such. (p. 174-176)

According to Bandura (1991), these stages were an extension of Piaget’s work and expanded the cognitive structural theory of morality. Furthermore, according to Rest and Narvaez (1991), “the six orientations are said to be developmentally ordered such that the first orientation shows up early in a person’s development while the other orientations show up afterwards, in the order described by the theory” (p. 233). Gilligan (1981) observed each of the stages reflected growth in the moral ability to take the perspective of the other person, “Each successive stage represented a hierarchical reorganization of the
moral concepts of the preceding stage, leading to a more differentiated and complex understanding of the dilemma itself and hence a more just resolution” (p. 142).

Simple Stage Model

While serving with Kohlberg at the Harvard School of Education’s Center for Moral Education, Rest (1979) also continued to build upon Piaget’s earlier two-stage model and expanded upon work in the second phase in moral judgment research. Concerning this research, Rest constructed the simple stage model with the three primary assumptions.

1. A majority of an individual’s spontaneous reasoning can be classified at a single stage (or at most two adjacent stages).

2. Movement in time is always from the individual’s major stage to the next stage in the sequence. Each new stage is a reconstruction or transformation of the prior stage.

3. Each stage is described in terms of formal structures or reasoning, not in terms of the content of judgments and values such structures generate. (p. x-xi)

After departing Harvard to serve at the University of Minnesota, Rest began to question the simple stage model and related assumptions. Accordingly he challenged the simple stage model with respect to three major discrepancies.

1. The notion that a person either ‘has’ or has not a stage is wrong. The manifestation of a certain thought organization is not an ‘all-or-nothing’ matter.
2. Developmental assessment is probabilistic” because “not enough study has been done to identify all the relevant factors and to what degree they affect the subject’s particular cognitive organization.

3. The notion of step by step development through the stages is severely challenged by research in cognitive development. It is difficult to consider a subject at a single step at any particular time, when such striking stage mixtures occur, owing to content and performance factors and to different levels of structure development. (p. 63-64)

This journey of inquiry ultimately led Rest (1979) to develop the groundbreaking Defining Issues Test (DIT) with established detailed guidelines that do not rely on a single test instance (or on responses) to one moral dilemma story, build in some diversity of the test stimuli by using a variety of kinds of dilemmas, and standardize test stimuli, test administration and setting, and scoring procedures. More specifically, DIT was constructed to address four major sets of decisions.

1. What features of thinking are to be used in characterizing someone’s moral judgment?
2. What information-collecting procedure (or task) will be used?
3. Once data have been collected from a particular subject, then how does one use this information to index the subject’s development?
4. How does one validate a test of moral judgment? (p. 75-76)

In this regard, Rest (1979) constructed a straightforward, multiple-choice recognition test of moral development to assess moral judgment in research operations. As a result, his DIT research substantiated the basic tenants of the cognitive developmental approach
“(1) that moral judgment is developmental, (2) that it is primarily governed by cognitive processes, and (3) that it has a role in real life decision-making” (p. 247). Furthermore, Rest’s research produced some surprising findings to include the following:

- In adults, years of education were much more predictive of moral judgment scores than age.
- Subjects from the conservative South and from conservative religious groups have lower DIT scores than subjects from other regions or who are affiliated with more liberal religious groups.
- There are no consistent sex differences on the DIT.
- Adults seem to plateau in moral judgment development after leaving school.
- The DIT is no more highly correlated with verbal subtests than with nonverbal subtests on general aptitude tests.
- The moral judgments that subjects produce on the Kohlberg interview are consistently scored at lower stages than the stages of items picked on the DIT.
- Many political attitude and personality tests have nonsignificant correlations with the DIT, attributable at least in part to the lack of any logical relationship between the DIT and the other variable.
- Some educational interventions seem capable of facilitating development, but movement is not great in any study. (p. 251)

**Process and Principles**

With respect to process, Kohlberg (1981) stated that “moral education is the leading of people upward, not the putting into the mind of knowledge that was not there before” (p. xxix). According to McLean, Ellrod, Schindler, and Mann (1986) character
guides our actions in a reasonably preset way, “It is made up of dispositions or ‘habits’ which can be changed, but which, while they last, cause us to tend toward certain goals or to act in certain ways” (p. 142). Furthermore, McLean et al., contended that “moral education as character development is not only compatible with, but closely related to, the notion of a free and rational agent cause” (p. 150). These views were consistent with Sichel’s (1988) argument that “though a relatively settled aspect of moral agency, character is amenable to change when such change is required, for example, because of particular types of moral dilemmas or because the moral agent self-consciously rejects certain aspects of present character” (p. 83).

Based on comments made at Nanyang University during the Service and Character Education Conference in 2011 by the Minister of Education of Singapore, Mr. Heng Swee Keat, there were four outcomes consistent with USAFA’s conceptual framework relating to character building.

Character building starts from “knowing thyself”—building self-awareness and self-management, to enable the individual to achieve his or her full potential.

Building on this, to “knowing others”—to be socially aware and to interact well with others, and nurture positive relationships. In dealing with others, we need to focus on “doing the right things”—to apply moral reasoning and take responsibility in decision making, and have the integrity to stand by our values.

Finally, in the face of individual, community or national challenges, individuals need to “demonstrate resilience.” (Shumer, Lam & Laabs, 2012, p. 430)

In addition to USAFA’s conceptual framework, these four outcomes were consistent with the Army’s Leadership Model: Be-Know-Do.
- **BE** – This is all about your character as a leader and is foundational to your ability to lead. It gives you the courage to do what is right regardless of the circumstances or the consequences.

- **KNOW** – This is about the knowledge and skill sets you need to be competent as a leader and cover four areas: Interpersonal skills, Conceptual skills, Technical skills, Tactical skills.

- **DO** – Leaders act. They bring together everything they are, everything they believe, and everything they know how to do to provide purpose, direction, and motivation. This involves the following three leader actions: Influencing, Operating, Improving. (Allen, 2011, p. 1)

According to research by the Character Education Partnership, there were eleven principles of effective character education to include promoting core ethical and performance values, utilizing a proactive approach to character development, providing students with opportunities for moral action, fostering shared leadership and long-range support of the character education, engaging community partners in the character-building effort, and regularly assessing both culture and climate (Character Education Partnership, 2014). In this regard, Chickering and Havighurst (1981) contended people grow through life experiences, “The glue that holds our ethical system together, formerly laid on by authorities, peers, or social reference groups, begins to be supplied from our own cognitions and developing convictions” (p. 33).

**Criterion and Means**

Finally, Kuh (1998) asserted that in order to create a learning environment that promotes character development, colleges and universities must meet six criterion.
1. Emphasize character development in the institution's mission. Character-building colleges have an institutional mission that explicitly underscores the importance of character development. To have the desired effect on character development, institutional leaders must clarify what they mean by character in their context, why it is important, and how it fits with the institution's heritage and the curriculum.

2. Adopt a holistic talent development philosophy. The talent development view holds that the primary purpose of an institution of higher education is to help students develop to their full potential. Policies and practices at institutions with a talent development philosophy recognize that learning takes place in a variety of venues, inside and outside the classroom, on and off campus. Faculty, staff, and students share the belief that there are no limits to the human capacity to expand one's mind.

3. Recruit new faculty and staff who are committed to the personal development of their students. Institutions that leave a distinctive imprint on their students' values are typically blessed with people who persuasively articulate the institution's mission and commitment to character development.

4. Periodically audit institutional policies and practices to ensure they are consistent with the institution's commitment to character development. Existing structures, such as residence halls, and socialization processes, such as new student orientation and academic advising, need to be reviewed on a regular basis to determine their contribution to character development.
5. Assess the impact of students' experiences on their character development.

One way to ensure that students are engaging in activities that foster character development is to systematically gather information about students' expectations and their activities. What do students expect college to be like? How do they think they will spend their time? And what do they actually do after they arrive during the early weeks, the first year, and in later years?

6. Cultivate a character-building culture. As with other outcomes of college, character development is a product of thousands of encounters over an extended period of time with peers and faculty who model desired attitudes and values. This combination of influences is commonly called institutional culture, all the things people take for granted about their college, including how people behave and what is important and unimportant. (p. 21-23)

Rest and Narvaez (1991) maintained different students learn through different means, “moral judgment is stimulated in different people by different activities. What is favorable for growth in one person may not work for another. In fact, combinations of activities may spur development in some individuals, rather than a single activity” (p. 237). Indeed, the authors concluded “that one of the influences of the college experience is that it provides general intellectual stimulation that causes students to overhaul and rethink the basic ways in which they make moral judgments” (p. 239). Gilligan (1981) was in agreement concluding, “Since moral development depends on a continuing interplay of thought and experience, the vast extension of knowledge inherent in college education can provide a powerful stimulus to development” (p. 156). Consistent with USAFA’s Conceptual Framework ARDA model, Rest and Narvaez (1991) noted that
moral sensitivity “involves being aware that there is a moral problem,” moral judgment “concerns the process by which a person selects one course of action as the morally best course of action,” moral motivation “concerns the processes whereby a person prioritizes moral values such that other personal values do not preempt or compromise what the moral line of action should be,” and moral character “concerns those processes by which a person persists in pursuing the moral course of action (p. 243).

Research

Evans, Forney, Guido, Patton, and Renn (2010) asserted Kohlberg, Rest, and Gilligan are leading researchers on moral theory with respect to college student development.

Kohlberg

Hayes (1994) asserted Kohlberg’s “developmental psychology has profoundly changed how we think about moral development” (p. 267). As previously noted, Kohlberg put forward a six-stage invariant sequential typology of moral rules maintaining that character development has moral stages grouped into three major levels: Level I (preconventional), Level II (conventional), and Level III (postconventional). According to Kohlberg and Hersh (1977) moral behavior should be viewed through the lens of what is right. Colby, Kohlberg, and Kauffman (2010) summarized Kohlberg’s research approach of focusing on the process of how individuals make moral judgments versus the content of their decision, “Kohlberg saw such judgments as having three qualities: an emphasis on value rather than fact, an effect on a person or persons, and a requirement that action be taken” (as cited by Evans et al, p. 101). Stated another way, Kohlberg (1981) was concerned with the process of morality. Walsh (2000) underscored
that Kohlberg “insisted on using empirical data and thus created a framework for looking for universal qualities of moral judgment” (p. 37). Based his review of 45 cross-cultural studies of moral reasoning, Snarey (1985) “identified a basic stage trend but also the cultural specificity of Kohlberg’s highest stages (p. 443). Furthermore, Snarey’s (1985) assessment of findings from 75 cross-cultural studies conducted in 23 countries established multi-method convergence “for common moral values, basic moral judgment stage development, and related social perspective-taking across cultural groups” (p. 404). Consequently, Snary accepted in principle the viability of Kohlberg’s search for universal morality as well as his cognitive developmental approach.

Although acknowledging that Kohlberg’s characterization of moral development has been subject to criticism, Boom, Wouters, and Keller (2006) contended it would be premature to replace his theories based on their application of Rasch analysis which provided support for upward development, “Our results supported Kohlberg’s characterization of stage development and the cross-cultural stability of Dawson’s findings that were exclusively based on US samples” (p. 213).

Rest

Evans et al. (2010) noted that Rest extended Kohlberg’s notion of moral development by underscoring moral behavior is made up of moral sensitivity, moral motivation, and moral action, “Rest asserted that an understanding or moral behavior requires investigating each component and the interaction among components” (p. 100). With respect to moral sensitivity, Robertson et al. (2007) conducted research with respect to the ability to detect and evaluate moral issues. The team utilized functional magnetic resonance imaging (fMRI) and contextually standardized, real life moral issues in order
to demonstrate that “sensitivity to moral issues is associated with activation of the polar medial prefrontal cortex, dorsal posterior cingulate cortex, and posterior superior temporal sulcus (STS)” (p. 755). Robertson et al. (2007) concluded “moral sensitivity is related to access to knowledge unique to one’s self, supported by autobiographical memory retrieval and social perspective taking” (p. 755). As a result, Robertson et al. asserted outcomes from research support Rest’s component of moral sensitivity, “These results suggest a role for access to self-histories and identities and social perspectives in sensitivity to moral issues, and provide neural representations of the subcomponent process of moral sensitivity originally proposed by Rest” (p. 755). Likewise, Lieber (2008) conducted research with respect to Rest’s Defining Issues Test. Specifically, the study employed an online version of the test with six ethical dilemmas accompanied by 12 statements in order to gather data on the ethical decision-making process patterns of 113 public relations practitioners based in the United States. The study confirmed Rest’s framework revealing ethical reasoning appears to build in tandem with job tenure and that “a duty to society rationale is, in fact, a part of everyday public relations” (p. 249).

**Gilligan**

Walsh (2000) maintained Gilligan was unsettled after teaching Kohlberg’s course on moral and political choice. It would become a life-changing event for Gilligan and focused her research in a new direction, “In Gilligan's view, Kohlberg's theory of moral development became ‘fossilized’ and out of touch with a reality that includes the voices of women and people of color” (p. 39). According to Gilligan (1993), men and women differed in perspective and response with respect to Kohlberg’s three major levels of moral development, “This shift in perspective toward increasingly differentiated,
comprehensive, and reflective forms of thought appears in women’s responses to both actual and hypothetical dilemmas” (p. 72). Consequently, Gilligan (1993) maintained that the “construction of the moral problem as a problem of care and responsibility in relationships rather than as one of rights and rules ties the development of their moral thinking to changes in their understanding of responsibility and relationships” (p. 73).

According to Meagher (1990), Gilligan found that a different developmental schema does exist, “The central characters of Gilligan's story are the female research subjects of her empirical work. These characters represent those voices that were not heard in Kohlberg's studies” (p. 63). Evans et al. (2010) cited Gilligan’s theory of the different moral orientations of women and men characterizing her as “one of the first to recognize and document what she perceived as two different moral orientations: care and justice” (p. 100). Sherblom (2008) commended Gilligan’s empirical research, “claims regarding gender difference in use of justice and care reasoning, gender bias claims regarding early forms of Kohlberg’s scoring manual and claims regarding the centrality of cultural conceptions of masculinity and femininity to moral psychology have all been established” (p. 1).

Furthermore, Gump, Baker, and Roll (2000) conducted research with a sample size of 40 Mexican Americans and 40 Anglo Americans with an equal number of females and males in each group with ages ranging from 18 to 25 years (M = 18.9, SD = 1.3). The results indicated that Gilligan’s Moral Justification Scale shows promise as an easily administered, objectively scored measure of Gilligan’s constructs of care and justice. Specifically,
The scale consists of six vignettes, of which two are justice oriented, two are care oriented, and two are mixed, incorporating both orientations. Construct validity was evaluated by expert judges and, overall, was high. Cronbach's alpha was .75 for the Care subscale and .64 for the Justice subscale, indicating adequate internal consistency. Split-half reliabilities were as follows: Care, r = .72, p < .01, and Justice, r = .60, p < .05. Regarding test-retest reliability (approximately two weeks), r = .61, p < .05, for Care; r = .69, p < .05, for Justice. Neither subscale correlated significantly with the Marlowe-Crowne Social Desirability Scale. (p. 67)

Finally, Robertson et al. (2007) also assessed Gilligan’s assertion that women and men have different moral orientations based on care and justice. Specifically, the researchers assessed whether sensitivity to rule-based (justice) moral issues versus social situational (care) moral issues is connected with dissociable neural processing events, “Sensitivity to justice issues was associated with greater activation of the left intraparietal sulcus, whereas sensitivity to care issues was associated with greater activation of the ventral posterior cingulate cortex, ventromedial and dorsolateral prefrontal cortex, and thalamus” (p. 755). In other words, the results supported differing neural information processing for the interpretive recognition of justice and care moral issues.

**Coaching**

There were four distinct models of coaching to consider when establishing a program for character development: peer coaching, student-focused coaching, blended coaching, and cognitive coaching (Baker, 2010, p. 16).
Peer Coaching

With respect to peer coaching, this model was developed in the 1980s, focusing on coaching as a form of staff development. Within this model, there were three distinct venues to approach peer coaching:

1. Technical coaching which helps teachers fine tune their previous skills, learn new skills, and transfer their training to the classroom.
2. Collegial coaching which helps teachers work collaboratively to refine their skills, improve collegiality, increase dialogue, and think more deeply about their work.
3. Challenge coaching which helps groups of teachers work together to resolve persistent problems in design or delivery. (Ackland, 1991, p. 24)

McDermott (2011) defined a coach as “someone who works with you collaboratively, through a solution-focused systematic process, to help you achieve your goals and improve your skills to perform better in the future” (para. 1). In the peer coaching process, “professionals, managers, and executives, who may or may not work together, come together and form a trusting environment to help one another in supporting and facilitating self-directed learning” as each person alternates between playing the role of peer coach and peer client (McDermott, 2011, para. 2). According to Knight (2009), the theoretical framework for this approach viewed “coaching as a partnership between coaches and teachers” and is grounded in seven principles “derived from research and theoretical writing in a variety of fields, including adult education, cultural anthropology, leadership, organizational theory” (p. 31). McDermott further clarified that peer coaching “primarily relies on two or more people providing one another with both emotional
support and a structured process for self-discovery, rather than problem-solving advice” (para. 3). Consequently, Fillman (2005) recommended participants continually observe and confer with each other with respect to using new teaching strategies, then provide the follow-up that is necessary for teacher development. In this regard, peer coaching is based on the principles of adult and action learning.

1. People learn best when they direct their own learning toward the challenges they are currently facing.

2. People learn best from others whom they respect and who are willing to support them… not necessarily from outside experts.

3. People who have a vested interest in a problem are in the best position to actually solve the problem. However, their emotional investment may prevent them from objectively perceiving both the issues and their options for action.

4. People can learn how to learn by developing the skills of inquiry, being open to new information, taking action, and reflecting on the process. (McDermott, 2011, para. 3)

Thalluri, O’Flaherty, and Shepherd (2014) conducted a study to (1) determine whether participation in a peer coaching via Study Buddy Support (SBS) improves pass rates of at-risk students and (2) examine the advantages peer coaching over other models of seniors tutoring juniors. Specifically, the research utilized bachelor of Nursing and Midwifery students based on their performance as at risk (Buddies) or high achievers (Buddy Leaders). Quantitative results indicated that those involved with SBS achieved a seventy-two percent pass rate compared to only forty-nine percent of those not participating. Additionally, the study “suggests that the advantages of the SBS scheme
may persist beyond first year and may further strengthen retention in later years” (p. 1). In order to be successful, however, Brandt (1987) emphasized training must be constant, “you start with lots of training—and you continue the training” (p. 2).

**Student-Focused Coaching**

Concerning student-focused coaching, Denton, Swanson, and Mathes (2007) contended that the key component in this model of instructional coaching is the use of student assessment data which supports a “collaborative problem-solving process to modify instructional strategies with the goal of enhanced student outcomes” (p. 569). The researchers defined this approach as “a model of instructional coaching incorporating the problem-solving emphasis of collaborative consultation with a focus on the use of student assessment and observation data for decision-making” (p. 572). Based on their research of interactions between instructional coaches and intervention teachers related to student assessment, Denton et al. (2007) concluded student-focused coaching is effective, “Examinations of practices common to schools in which most students become successful readers despite challenging circumstances have established the importance of strong instructional leadership and of a collaborative school culture” (p. 588). Mohlman (1982) came to the same conclusion after examining the five major components of teacher training common to most in service programs (presentation of theory, demonstration or modeling of skills, practice in simulated or classroom settings, feedback, and coaching). After dividing junior high school teachers of English and math for low-achieving students into three groups, Mohlman’s research concluded student focused coaching was effective, especially if the activity included peer observation (p. 1).
**Blended Coaching**

In the blended coaching model, coaches “draw upon a number of coaching approaches, moving quickly and flexibly through them as required during the course of their coaching session” (Bloom, Castagna, Moir, & Warren, 2005, p. 54). This model allowed the coach to fluctuate between being reflective and asking questions (cognitive coaching), with being more directive and sharing new knowledge (instructional coaching), and with examining decisions and using the supervision process (facilitative coaching). According to Bloom et al. (2005) blended coaching has positively impacted school districts across the nation, “research shows conclusively that principals and other school leaders are essential to school improvement, and that these individuals benefit from the intensive, contextualized support that a coach or mentor can provide” (p. 1).

Consistent with these assertions, Kissane-Long (2012) conducted qualitative research on how a mentor-coaching model could impact mid-career principals in the refinement of supervision skills. The study utilized five mentor coach principals using blended coaching strategies to mentor and coach ten mid-career principals. As a result of analyzing data collected from journals, interviews, focus groups, questionnaires and open-ended surveys, Kissane-Long concluded the mentor coach principals positively impacted the mid-career principals, “Mentor-coach and developing principals perceived that active listening, asking probing questions, providing immediate actionable feedback to teachers, following the conventions of the clinical supervision model, establishing a focused lens for lesson observation, and developing trusting relationships are integral elements” (p. 1).
Cognitive Coaching

At USAFA the Mosaic Program utilized the fourth model of cognitive coaching which is structured around focused conversations. In other words, the coach did not give direction and advice. Instead, the coach asked questions that prompt the participants to think and come up with their own answers. In this regard, most definitions of cognitive coaching included numerous key elements which reinforce the relationship of equal partnership between coach and student. According to Garmston (1993), cognitive coaching is a process during which the student explores the thinking behind their practices, “Each person seems to maintain a cognitive map, only partially conscious. In cognitive coaching, questions asked by the coach reveal to the (student) areas of that map that may not be complete or consciously developed” (p. 57). As a result, when students think out loud their decisions gain clarity and increased awareness.

Relationship

Knight (2009) held that “cognitive coaches engage in dialogical conversations with teachers and others, observe them while working, and then use powerful questions, rapport building, and communication skills to empower those they coach to reflect deeply on their practices” (p. 18). More specifically, he maintained the relationship between coach and student is “dialogical with reflective conversation grounded in partnership, nonevaluative versus judgmental, and facilitated through respectful and confidential communication with thought-provoking, open-ended questions and encouraging, practical observations” (p. 19). This is consistent with the views of Cavanagh and Palmer (2006) that affirmed cognitive coaching employs “cognitive behavioural therapy’s theory and techniques to enhance performance within non-clinical populations” (as cited by...
Spaten & Hansen, 2009, p. 104). Palmer and Gyllensten (2008) added that cognitive coaching is “based on the idea that meta-cognition, that is, being aware of one's own thinking and behaviour patterns, may result in more flexible and self-confident patterns as well as empower the students’ self-esteem” (as cited by Spaten & Hansen, 2009, p. 104). Furthermore, Oestrich and Johansen (2005) highlighted that “cognitive coaching aims to stimulate and develop a person’s thoughts, emotions, and behaviours and offer methods and strategies that the person can use when the coach is no longer around” (as cited by Gyllensten, Palmer, Nilsson, Regnér, & Frodi, 2010, p. 98). Gyllensten et al. (2010) further noted that cognitive coaching focuses on thoughts and images to help the student reach their goals versus a behavioral technique that focuses on emotions or physiology. Palmer, Cooper, and Thomas (2003) stated this technique helps identify cognitive distortions and thinking errors by helping students modify cognitions and revise unhelpful thinking (as cited by Gyllensten et al., 2010, p. 104). Uzzat (1998) best summarized these contentions defining cognitive coaching as “an effective means of developing sound professional relationships that lead to enhanced professional performance” (p. 11)

**Training and Expertise**

With respect to training coaches, Carrol (2007) identified six critical factors to success:

1. Establish trusting relationships and open communication.
2. Understand adult learners.
3. Continually updating knowledge about subject content and instructional best practices.
4. Master the art of coaching.
5. Link student work to data and assessments.

6. Network with others who do the same. (p. 47)

Likewise, based on his interview with Robert Garmston, professor for the School of Education at California State University, Sacramento, California, Sparks (1990) identified three core beliefs that support cognitive coaching: all people are capable of change and can grow cognitively, decision-making skills—thought processes—drive the overt skills, and an enlightened coach can significantly enhance a student’s cognitive processes. He framed these core beliefs within the attitudes or predispositions necessary to be successful: an attitude of tentativeness (having knowledge but no certainty) and trusting that people have the inner resources to achieve excellence.

While there is agreement that coaches need formal training, leading authorities hold differing perspectives with respect to the requirement for expertise when defining cognitive coaching. Knight (2009) argued that “coaches need to have a deep understanding of the practices or content knowledge they share with teachers as well as the coaching practices and communication skills that are necessary for effective coaching” (p. 20). Costa and Garmston (1994) concurred contending that “technical expertise is less important than the ability to empower people to improve,” whereas Neubert and Bratton disagreed maintaining “the coach should be more knowledgeable in the practices being learned” than the person being peer-coached (as cited by Batt, 2010, p. 999).

Hart (1990) researched a pilot program exploring the application of reflective practice to educational administration. Utilizing six coaches who were practicing school administrators selected from the faculty of the Department of Educational Administration
at the University of Utah, the study focused on school problems rather than on traditional subjects of study via cognitive coaching of graduate students. The author’s findings indicated the importance of coaching expertise in reflective and inductive questioning. “The coach identified by students as least helpful overall was the most directive about what should be done from the first session, asked the fewest questions, and provided no conceptual or research guidance” (p. 15). Furthermore, according to Killion (2009) research conducted on coach and client interactions revealed “coaches who have specific role expectations devote more time to those clearly defined roles” (p. 21). On the other hand, the research also suggested problems may arise when coaches do not have adequate skills and clear role expectations, “They might not spend enough time in any one role to develop and refine the skills of coaching. They may not know how to assess teachers’ needs and then prioritize their work to align with those needs” (p. 22).

**Application and Competencies**

According to Frankovelgia and Riddle (2010), there were five prototypical approaches to coaching as “each stage represents a step toward broader integration and more comprehensive use of coaching for organizational impact” (p. 134) as follows:

1. **Stage 1: Ad hoc coaching.** In this stage, some managers and executives make use of formal coaching, but it is an individual decision to engage a coach and typically the coach is an external professional.

2. **Stage 2: Organizational coaching.** At this stage, the organization has created standards and policies to govern the use of coaching in the organization. Coaching is seen primarily as a service provided by professional coaches who are external to the organization.
3. **Stage 3: Extended coaching.** Internal staff are typically trained or certified to do some professional coaching. Coaching skills are seen as important for managers, and training programs for their development are available. Formal coaching is part of the leader development system at certain levels in the organization or transition points in the leader’s career.

4. **Stage 4: Coaching culture.** Individuals at all levels of the organization are expected to engage in coaching behaviors.

5. **Stage 5: Coaching as a driver of business strategy.** Coaching is explicitly used as an accelerator of the organizational changes needed to adapt to emerging industrial and market trends. (p. 134-135)

Frankovelgia and Riddle (2010) further highlighted that “successful use of a pool of external professional coaches starts with proper selection of the coaches” (p. 136). The organization sets out a list of ten coaching competencies.

1. **Interpersonal Skills.** Exhibits understanding of the coachee’s perspective and is nonjudgmental of his or her views and actions.

2. **Presence and credibility.** Communicates effectively with the coachee and is listened to because the content is meaningful and presentation is persuasive.

3. **Values and character.** Behaves in ways consistent with established ethical guidelines and policies.

4. **Flexibility and versatility.** Works effectively with a broad range of managers and executives.

5. **Maturity and stability.** Admits to shortcomings and is open to feedback about coaching skills.
6. Interviewing and questioning skills. Asks questions that stimulate the coachee’s thinking and development.

7. Business and content knowledge. Understands business concepts and language and is up-to-date on business issues.

8. Organizational knowledge. Understands organizational structures, processes, and dynamics.

9. Change management. Has a commonsense, practical understanding of the behavioral change process.

10. Relationship management. Is well prepared for and manages coaching sessions effectively. (p. 137-138)

Furthermore, based on research in the schools, districts, and state agencies in more than 35 states, Knight (2009) contended that there are a number of factors critical for coaching success.

- Focus and continuity. Coaches will find a better setting for professional learning if districts have a sustained focus on a few high-leverage strategies.

- A learning-friendly culture. Teachers are more likely to experiment and learn when they feel respected and free to take risks.

- Principal support. Principals need to support their coaches through attendance, observation, conversation, and shared vision.

- Clear roles. Principals respectfully hold teachers accountable, and coaches provide sufficient support for teacher professional learning.
- Protect the coaching relationship. Coaching works best when teachers are collaborating with a coach because they want to, not because they are forced to.

- Time. “The single most powerful way to increase the effectiveness of coaches is to ensure that they have sufficient time for coaching.

- Continuous learning. Coaches and administrators should ‘walk the talk’ when it comes to professional learning by continuously improving their own professional practice. (p. 19-20)

In this regard, Killion (2009) highlighted that conclusion of research on coach and client interactions, “When coaches choose roles and allocate their time and services to those that have the greatest potential for impacting teaching and student learning, the value of coaching and coaches will be unquestioned” (p. 28).

**Principles and Outcomes**

According to Kise (2009) coaching is an idea, whose time has finally come, “School districts, as complex organizations with very challenging goals, benefit by providing and implementing programs for their district leaders that offer one-on-one coaching and means for leaders to adopt a coaching style of leadership” (p. 190). In this regard, Ting and Scisco (2006) emphasized coaches primarily utilize six parallel principles when meeting with a client: create a safe and challenging environment, work with the learner’s agenda, facilitate and collaborate, advocate self-awareness, promote sustainable learning from experience, and model what you coach. In other words, the focus of coaching is on the desired behavioral change.
Additionally, Edwards (2001) identified nine anticipated positive outcomes from cognitive coaching with respect to the teaching profession.

1. Increase in student test scores and other benefits to students.
2. Growth in teacher efficacy.
3. Increase in reflective and complex thinking among teachers.
4. Increase in teacher satisfaction with career and position.
5. Increase in professional climate at schools.
6. Increase in teacher collaboration.
7. Increase in professional assistance to teachers.
8. Increase in personal benefits to teachers.
9. Benefit to people in fields other than teaching. (as cited by Knight, 2009, p. 20)

Finally, Edwards, Green, Lyons, Rogers, and Swords (1998) participated in a 3-year grant to train 36 coaches in order to provide teachers with support and feedback in implementing standards-based education. More specifically, the study examined the relationship between aspects of training in cognitive coaching and nonverbal classroom management. The outcome of the research indicated that “the interventions of Cognitive Coaching and monthly Dialogue Groups resulted in increases in Teaching Efficacy and School Culture for participants. Teachers in the treatment group also showed more favorable attitudes toward teaching as a career” (p. 24).

**Research**

**Cognitive Coaching**

According to Passmore and Gibbes (2007) “research data, both published in peer reviewed journals and unpublished studies conducted in university settings, is
beginning to build a wider literature base of evidence about the impact of coaching and its potential to assist individuals in the workplace” (p. 118). Cornett and Knight (2009) concurred noting, “Since it was first developed in the 1980s, cognitive coaching has been the subject of numerous research studies” (p. 199). In this regard, Edwards and Newton (1995) examined the relationship between cognitive coaching training and practice on teacher efficacy. The research utilized 143 participants in two groups which received training (intervention) and the control group which received no training. With respect to the Efficacy Scale, “In 12 possible comparisons with the control group, all but one shows that those who were trained in Cognitive Coaching had higher efficacy scores” (p. 17). Furthermore, participants receiving cognitive coaching training expressed more positive feelings about all aspects of their experience as teachers than those who did not. In other words, the research indicated that training resulted in a positive impact. These results are supportive of the view that Cognitive Coaching positively impacts teacher efficacy and that those who afforded themselves the opportunity to participate in Cognitive Coaching training were more satisfied and less dissatisfied with teaching and their careers” (p. 23). Consistent with these findings, research conducted by Green, Oades, and Grant (2006) also revealed complementary positive outcomes based on a 10-week study of participants randomly selected to participate in a life coaching group programme ($n = 28$) or a waitlist control group ($n = 28$), “Participation in the life coaching group programme was associated with significant increases in goal striving, well-being and hope, with gains maintained up to 30 weeks later on some variables” (p. 142). Finally, Edwards (2015) synthesized the results of almost two hundred research projects on cognitive coaching of teachers ranging in experience from novice to veteran. Based on the analysis, studies
from researchers revealed numerous positive outcomes within kindergarten, elementary, middle school, high school, and universities.

1. Based on thirty-nine studies, cognitive coaching was linked with increased student test scores and other benefits for students.

2. Based on twelve studies, teachers and administrators grew in efficacy.

3. Based on forty-one studies, cognitive coaching impacted thinking, causing teachers and administrators to be more reflective and to think in more complex ways.

4. Based on eleven studies, teachers were more satisfied with their positions and with their choice of teaching as a profession.

5. Based on ten studies, school cultures became more professional.

6. Based on ten studies, teachers collaborated more.

7. Based on thirty-four studies, cognitive coaching benefited teachers professionally.

8. Based on seven studies, cognitive coaching benefited teachers personally.

9. Based on two studies, cognitive coaching benefited administrators.

10. Based on two studies, cognitive coaching benefited people in fields other than teaching. (p. 2-32)

Passmore and Fillery-Travis (2011) concluded “coaching research is likely to continue to grow over the coming decade, and this growth offers an opportunity for the research–practitioner partnership to be strengthened and maintained” (p. 70).
Research Gap

Although I found sources of literature on moral development and cognitive coaching within a higher education context, there was little to no available academic application at a military service academy such as USAFA. Despite the fact that each military service within the Department of Defense has core values—United States Army (Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, Personal Courage), United States Navy and Marine Corps (Honor, Courage, Commitment), and United States Coast Guard (Honor, Respect, Devotion to Duty)—I was also unable to find any corresponding research with respect to military service academies. Therefore, I contacted the United States Military Academy (USMA), United States Naval Academy (USNA), and United States Coast Guard Academy (USCGA) in order to garner information about research done on character development and cognitive coaching. As a result, I confirmed that there is no current academic qualitative and quantitative (mixed methods) studies on character development and cognitive coaching within a higher education context at the military service academies. Therefore, this study sought to address this specific gap on character development and cognitive coaching through the examination of fourth-class cadet experiences in the VECtor seminar and Mosaic Program at USAFA. The next chapter will highlight the research design and methodology used in this study. The CCLD Conceptual Framework for Developing Leaders of Character and CCL Coaching Framework provided the primary framework for this study’s research design, methodology, and analysis.
CHAPTER THREE

METHODOLOGY

This mixed methods study utilized a sequential design of collecting and analyzing the quantitative and qualitative data. The intent was to triangulate the two data sets integrating the findings into mutually reinforcing ideas, “seeking convergence and corroboration of results from different methods and designs” (Johnson & Onwuegbuzie, 2004, p. 22) in order to develop a fuller picture of the VECTOR seminar and Mosaic Program to confirmation and validation. The research methodology was two-fold: conduct a quantitative assessment of the pre-test and post-test data from the USAFA Class of 2016 fourth-class (freshmen) cadets and conduct a qualitative assessment of focus group data from the USAFA Class of 2017 fourth-class (freshmen) cadets. The research was convergent in design and assumed the quantitative and qualitative data would be complimentary aligning with the original objective to determine how USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program were affected positively, affected negatively, or remained the same (no change) with respect to the 11 virtues. As Patton (2015) highlighted, “While the quantitative/experimental approach is largely hypothetical-deductive and the qualitative/naturalistic approach is largely inductive, a mixed-methods study can include elements of both strategies” (p. 64). Consistent with this research design, Patton (2015) affirmed it is instructive to compare the open-ended questionnaire results from the focus groups (qualitative) with cadet responses to the closed-ended questionnaire results from the pre- and post-test surveys (quantitative). As Morgan (1993) noted,
Group interview would avail the researcher of the opinions of a large number of subjects in a relatively easy-to-access fashion; it thus would complement any other method being used. It would, on one side, “triangulate” the data of formal methodological techniques by adding to them the human element of the voices of multiple subjects. (p. 24)

Finally, Bamberger, Rugh, and Mabry (2012) contended that “mixed-methods designs generally produce more comprehensive coverage and more valid findings than either QUANT (quantitative) or QUAL (qualitative) alone” (p. 320). In this regard, this study first reviewed the quantitative research then afterwards the qualitative research to determine the extent to which the data sets mutually “support existing general conceptualizations, explanations, results, and/or theories” (Patton, 2015, p. 541).

**Research Questions**

This mixed methods study addressed three research questions as follows:

1. To what degree did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experience a change in ability to identify with the 11 virtues?

2. How did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program compare with one another with respect to experiencing a change in ability to identify with the set of 11 virtues?

3. What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of 11 virtues?

Moreover, this study compared the results garnered from the quantitative survey responses with the qualitative focus groups in order to inform USAFA leadership on how
to proceed with the VECTOR seminar and the Mosaic Program while utilizing CCLD’s Conceptual Framework for Developing Leaders of Character and CCL Coaching Framework.

**Research Approach and Philosophy**

The research methodology was two-fold using quantitative data from the USAFA Class of 2016 fourth-class cadets (freshmen) and qualitative data from the USAFA Class of 2017 fourth-class cadets (freshmen) as follows:

1. Utilizing SPSS predictive analytics software and interactive LISREL scientific software, a quantitative assessment was conducted utilizing archived data sets from the pre-test and post-test results of fourth-class cadets from the USAFA Class of 2016 who participated in the VECTOR seminar or Mosaic Program during academic year 2012-2013.

2. Utilizing the QSR Nvivo 10 software, a qualitative assessment was conducted utilizing new data collected from focus groups of fourth-class cadets from the USAFA Class of 2017 who elected to participate in the VECTOR seminar or Mosaic Program during academic year 2013-2014.

The quantitative study utilized USAFA Class of 2016 archival pre-test and post-test inventory data in de-identified format collected from the inventory assessment administered by the CCLD during homework assignments given to fourth-class cadets in the Character and Leadership 101 course in August 2012 and January 2013, respectively. With respect to these data, Group 1 (VECTOR seminar) and Group 2 (Mosaic Program) were exposed to the treatment in the second timeframe (post-test), but not in the first
timeframe (pre-test), while Group 3 (Control Group) was not exposed to the treatment. The quantitative data set was complete and did not require imputation.

The qualitative study utilized focus groups from the USAFA Class of 2017 instead of participant observation and individual interviews. According to Morgan (1997), focus groups allow the researcher to access forms of data much more easily than the other two methods,

The main advantage of focus groups in comparison to participant observation is the opportunity to observe a large amount of interaction on a topic in a limited period of time based on the researcher’s ability to assemble and direct the focus group sessions. (p. 8)

The general design for the qualitative portion of this study was a bounded, within-site case study. According to Creswell (2013),

Case study research is a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case themes. (p. 97)

Additionally, Yin (2014) argued for a twofold definition of a case study. He contended the first part of a case study begins with an empirical inquiry that: “(a) investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when (b) the boundaries between phenomenon and context may not be clearly evident” (p.15). Furthermore, Yin (2014) stated the second part of a case study addresses methodological characteristics while accomplishing the following:
copes with the technically distinctive situation in which there will be many of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior develop of theoretical propositions to guide data collection and analysis. (p. 16)

**USAFA Entry Standards for Cadets**

Although cadets enter USAFA with a variety of different backgrounds and ethnicities from across the globe, in order to be eligible for admission all applicants must have met the following requirements:

- a United States citizen,
- unmarried with no dependents,
- of good moral character, and
- at least 17, but less than 23 years of age by July 1 of the year they enter USAFA. (USAFA Publication, 2012, p. 2)

Also, in order to be “competitive for an Academy appointment,” all applicants were encouraged to complete the following high school courses at a minimum:

- four years of English (with a college prep class in writing),
- four years of college-prep math (strong background in geometry, algebra, trigonometry and pre-calculus),
- four years of lab science (should include biology, chemistry and physics),
- three years of social studies (to include a course in U.S. history), and
- two years of a foreign language. (USAFA Publication, 2012, p. 2)
Furthermore, all applicants were given the typical profile of the previous year’s applicants that successfully entered USAFA as follows:

- GPA mean 3.83,
- ACT English mean 30,
- ACT Reading mean 30,
- ACT Math mean 30,
- ACT Science Reasoning mean 30,
- SAT Verbal mean 642,
- SAT Math mean 669,
- 2 minutes to complete basketball throw, maximum 102 feet (men) / 66 feet (women),
- 2 minutes to complete cadence pull-ups, maximum 18 (men) / 7 (women),
- 2 minutes to complete shuttle run, maximum 7.8 seconds (men) / 8.6 seconds (women),
- 2 minutes to complete modified sit-ups, maximum 95 (men) / 95 (women),
- 2 minutes to complete push-ups, maximum 75 (men) / 50 (women),
- 1 mile run maximum 5:20 minutes (men) / 6:00 minutes (women),
- President/Vice President of Class or Student Body 16%,
- Valedictorian/Salutatorian 11%,
- Top 10% of High School Class 52%,
- Athletic Letter Awards 80%,
- Boys/Girls State or Nation 11%,
- National Honor Society 63%, and
Finally, all fourth-class cadets involved in this study completed the 6-week basic cadet training in the summer and were then randomly assigned to squadrons in the cadet wing in the fall semester with identical privileges (few) and restrictions (many) based on USAFA guidance. For example, fourth-class cadets were allowed to travel the campus without an escort; however, they were restricted to specific stairwells and not allowed to use the elevators. With respect to changes in maturity, this research acknowledged civilian university students become more mature and knowledgeable, but that the progression lasts many years as a gradual and incremental process (Arnett, 1994; Pascarella & Terenzini, 2005). Therefore, the differences between the fourth-class cadets within the treatment group and non-treatment group were considered minimal with respect to developmental change and maturation during this timeframe due to the unique shared experience of fourth-class cadets within a closed educational system.

**Quantitative Data Sample**

The quantitative research utilized three complete matched data sets that did not require transformation as follows:

1. VECTOR Seminar \( (n = 105) \): Consisted of 105 USAFA fourth-class cadets from the Class of 2016 who completed the pre-test, VECTOR seminar, then the post-test. The survey participation rate was 11% of the 976 fourth-class cadets with 11,340 observations \((105\text{ cadets} \times 54\text{ inventory questions} \times 2\text{ inventory surveys})\).

2. Mosaic Program \( (n = 105) \): Consisted of 105 USAFA fourth-class cadets from the Class of 2016 who completed the pre-test, Mosaic Program, and then the
post-test. The survey participation rate was 11% of the 976 fourth-class cadets with 11,340 observations (105 cadets x 54 inventory questions x 2 inventory surveys).

3. Control Group (n = 105): Consisted of 105 USAFA fourth-class cadets from the Class of 2016 who completed only the pre-test and post-test (i.e., never completed the VECTOR seminar or Mosaic Program). The survey participation rate was 11% of the 976 fourth-class cadets with 11,340 observations (105 cadets x 54 inventory questions x 2 inventory surveys).

**Power Analysis**

With respect to analysis, the minimum sample size per group of fourth-class cadets was 64 for the paired samples \( t \)-test in accordance with simple power analysis based on anticipated effect size (Cohen’s \( d \)) of 0.5, desired statistical power level of 0.8, and probability level of 0.05 as the normal significance level standard of professional precision "for more rigorous evaluation studies" (Bamberger et al., 2012, p. 390; Soper, 2015). Furthermore, with respect to statistical power analysis, Cohen (1992) highlighted .80 is the convention for desired power and noted,

The importance of power analysis arises from the fact that most empirical research in the social and behavioral sciences proceeds by formulating and testing \( H_0 \) (null hypothesis) that the investigators hope to reject as a means of establishing facts about the phenomena under study. (p. 98)

In this regard, only the virtue of excellence yielded a good result (> .80). All 10 other virtues (courage, honesty, accountability, fairness, humility, duty, care for others, self-
control, respect for human dignity, and attention to detail) and the overall mean of the 11 virtues did not achieve good results (< .80) (see Table 1).

Table 1

*Power Analysis*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>courage</td>
<td>.271</td>
</tr>
<tr>
<td>honesty</td>
<td>.338</td>
</tr>
<tr>
<td>accountability</td>
<td>.078</td>
</tr>
<tr>
<td>fairness</td>
<td>.386</td>
</tr>
<tr>
<td>humility</td>
<td>.713</td>
</tr>
<tr>
<td>duty</td>
<td>.525</td>
</tr>
<tr>
<td>care for others</td>
<td>.195</td>
</tr>
<tr>
<td>self-control</td>
<td>.247</td>
</tr>
<tr>
<td>respect for human dignity</td>
<td>.723</td>
</tr>
<tr>
<td>attention to detail</td>
<td>.094</td>
</tr>
<tr>
<td>excellence</td>
<td>.831</td>
</tr>
<tr>
<td>mean</td>
<td>.588</td>
</tr>
</tbody>
</table>

*N = 315*

*Approach to Analysis*

The research utilized SPSS predictive analytics software to analyze the data set. More specifically, the research conducted a paired samples *t*-test analysis to test for statistical significance of the respective gains with respect to pre- and post-test within each data set, VECTOR seminar and Mosaic Program. Additionally, the research utilized the one factor analysis of variance (ANOVA) as a regression model for longitudinal panel data collected at different points in time to observe differences between the means of three variables in the fourth-class cadet population groups (VECTOR seminar, Mosaic Program, and Control Group). Although there were an equal number of fourth-class cadets in each population group, Edwards (1985) acknowledged “it is not necessary to have an equal number of subjects assigned to each treatment” (p. 77).
**Survey**

As part of the VECTOR seminar and Mosaic Program, the fourth-class cadets’ identification with the set of 11 virtues was measured using the inventory assessment administered via an on-line website, Survey Monkey. The Character Mosaic Inventory survey on the three Core Values with respect to the 11 virtues was comprised of 54 questions broken out as follows:

1. **Integrity First (Core Value): Courage (virtue), questions #1, #12, #23, #34, #44, and #50 as follows:**
   - I have taken frequent stands in the face of strong opposition.
   - I stand up for my beliefs, even if it is an unpopular opinion.
   - I must stand up for what I believe, even if there are negative results.
   - Even when I know I will receive backlash, I say what I stand for.
   - I always stand up for my beliefs.
   - I always speak up in protest when I hear someone say mean things.

2. **Integrity First (Core Value): Honesty (virtue), questions #2, #13, #24, and #35 as follows:**
   - My promises can be trusted.
   - I tell the truth.
   - I do what I say I’m going to do.
   - I believe honesty is the basis for trust.

3. **Integrity First (Core Value): Accountability (virtue), questions #3, #14, #25, and #36 as follows:**
   - I always initiate confessing my mistakes.
• I always admit when I am wrong.

• I admit mistakes when they are made.

• I hold myself accountable for whatever mistakes I have made.

4. Integrity First (Core Value): Fairness (virtue), questions #4, #15, #26, #37, #45, and #51 as follows:

• Even if I do not like someone, I treat her/him fairly.

• I believe it is worth listening to everyone’s opinions.

• I believe that everyone should have a say.

• Everyone’s rights are equally important to me.

• I treat all people equally regardless of who they might be.

• I give everyone a chance.

5. Integrity First (Core Value): Humility (virtue), questions #5, #16, #27, #38, #46, and #52 as follows:

• I am always humble about the good things that have happened to me.

• I do not act as if I am a special person.

• I never brag about my accomplishments

• I have been told that modesty is one of my most notable characteristics.

• No one would ever describe me as arrogant.

• People are drawn to me because I am humble.

6. Service Before Self (Core Value): Duty (virtue), questions #6, #17, #28, and #39 as follows:

• I carry out my plans.

• I make plans and stick to them.
- When I make plans, I am certain to make them work.
- I follow through with my plans.

7. Service Before Self (Core Value): Care for Others (virtue), questions #7, #18, #29, #40, #47, and #53 as follows:
   - I really enjoy doing small favors for friends.
   - I go out of my way to cheer up people who appear down.
   - I love to make other people happy.
   - It is important to me to maintain harmony within my group.
   - I am as excited about the good fortune of others as I am about my own.
   - I enjoy being kind to others.

8. Service Before Self (Core Value): Self-Control (virtue), questions #8, #19, #30, #41, and #48 as follows:
   - I have an exceptionally high level of self-control over attractive (but harmful) impulses.
   - When I am tempted to do something pleasurable that I know is wrong, I always resist the temptation.
   - I always exercise self-control over inappropriate desires.
   - I always turn away from temptations that are harmful to me.
   - I easily resist temptations.

9. Service Before Self (Core Value): Respect for Human Dignity (virtue), questions #9, #20, #31, #42, #49, and #54 as follows:
   - I can accept a lot of different perspectives from others.
   - I understand people who think differently than me.
• I have a high tolerance of those whose views differ from mine.
• People who have ideas that are different than mine annoy me.
• I accept people as they are.
• I can always see the world from someone else’s perspective.

10. Excellence in All We Do (Core Value): Attention to Detail (virtue), questions #10, #21, and #32 as follows:
• I have an eye for detail.
• I pay attention to details.
• I pay too little attention to details.

11. Excellence in All We Do (Core Value): Excellence (virtue), questions #11, #22, #33, and #43 as follows:
• I want everything to add up perfectly.
• I dislike imperfect work.
• I am exacting in my work.
• I demand quality

Administration

In the fall 2012 semester, the survey was administered to fourth-class cadets \( n = 315 \) in the month of August. In the spring 2013 semester, the survey was administered to the same fourth-class cadets \( n = 315 \) in the month of January. Cadet responses were measured using a 5-point Likert scale ranging from one to five with possible answers coded as follows:
• "very much unlike me" (coded as 1),
• “unlike me” (coded as 2),
• “neutral” (coded as 3),
• “like me” (coded as 4), and
• "very much like me" (codes as 5).

Validity and Reliability

Rosebush (2011) conducted various analyses to measure the reliability and validity of an instrument that would measure the 11 virtues. More specifically, 46 survey questions were analyzed for convergent and discriminant validity by conducting exploratory factor analyses and confirmatory factor analysis. As a result, the original nine virtues—courage, accountability, humility, duty, care for others, self-control, respect for human dignity, attention to detail, and excellence—factor solution satisfied all tests of assumptions, demonstrated sufficient reliability (alpha values ranging from 0.81 to 0.93), fulfilled numerous prescribed levels demanded of the confirmatory factor analysis, and provided evidence of both convergent and discriminant validity for the virtues. Next, in order to reflect all 11 virtues, Rosebush added the scales of fairness and honesty which created a revised instrument containing 11 virtues and 54 survey questions. This study utilized the revised instrument and applied it to altogether different fourth-class cadets (respondents) at USAFA. In order to determine if the constructs were consistent with the revised instrument, the research utilized SPSS predictive analytics software to conduct an exploratory factor analysis (EFA) on the pre-test results \( (n = 315) \) to identify the underlying relationships between measured variables and interactive LISREL scientific software to conduct a confirmatory factor analysis (CFA) on the post-test results \( (n = 315) \) to test how well the measured variables represent the number of constructs.
With respect to reliability, Carmines and Zeller (1979) highlighted that Cronbach’s Alpha was introduced by Kuder and Richardson in 1937 as a generalization of a coefficient utilized to estimate the reliability of scales composed of dichotomously-scored items, “an estimate of the expected correlation between one test and a hypothetical alternative from containing the same number of items” (p. 48). In this regard, none of the 11 virtues yielded very good (> .90) reliability results; however, 9 of the 11 virtues (courage, accountability, fairness, humility, duty, care for others, self-control, respect for human dignity, and attention to detail) yielded good results (> .80), and excellence yielded acceptable results (> .70). Only honesty yielded low results (< .70) (see Table 2).

Table 2

*Cronbach’s Alpha for Inventory Questions (11 Virtues)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>courage</td>
<td>.86</td>
</tr>
<tr>
<td>honesty</td>
<td>.64</td>
</tr>
<tr>
<td>accountability</td>
<td>.80</td>
</tr>
<tr>
<td>fairness</td>
<td>.80</td>
</tr>
<tr>
<td>humility</td>
<td>.84</td>
</tr>
<tr>
<td>duty</td>
<td>.87</td>
</tr>
<tr>
<td>care for others</td>
<td>.81</td>
</tr>
<tr>
<td>self-control</td>
<td>.87</td>
</tr>
<tr>
<td>respect for human dignity</td>
<td>.86</td>
</tr>
<tr>
<td>attention to detail</td>
<td>.84</td>
</tr>
<tr>
<td>excellence</td>
<td>.77</td>
</tr>
</tbody>
</table>

*N = 315*

Furthermore, in addition to validity and reliability, the study addressed trustworthiness and credibility by randomly selecting fourth-class cadets from USAFA Class of 2017 and restricting participation in the VECTOR seminar and Mosaic Program focus groups.
Qualitative Data Sample

The sampling strategy employed involved sending a memorandum via email to 100 randomly selected cadets from USAFA Class of 2017 fourth-class cadets who participated in the VECTOR seminar and Mosaic Program during the academic year 2013-2014 requesting their voluntary participation in the study. The memorandum explained the purpose of the focus groups and informed cadets that the researcher would be analyzing the program. Additionally, the memorandum specified that participation was not mandatory and that no penalty would be incurred if cadets chose not to participate in the study. With respect to both the VECTOR seminar and Mosaic Program, the response rate was only 9% so the two focus group sizes for the each of the programs were five cadets and four cadets. More specifically, the VECTOR seminar focus groups consisted of 9 cadets’ total with 6 male Caucasians, 1 male African-American, and 2 female Caucasians. Likewise, the Mosaic Program focus groups consisted of 9 cadets’ total with 5 male Caucasians, 3 female Caucasians, and 1 female African-American. Bamberger et al. (2012) validated the focus group sizes, “because QUAL (qualitative) sampling has different objectives from QUANT (quantitative), it is usually not possible to estimate the required sample size with the same degree of statistical exactitude” (p. 53). In fact, according to Krueger (2009),

Focus groups are typically composed of 5 to 10 people, but the size can range from as few as 4 to as many as 12. The group must be small enough for everyone to have opportunity to share insights and yet large enough to provide diversity of perceptions. (p. 6)
No substantial risks, physical, social, or otherwise, were associated with this study. The primary risk associated with this study was breach of confidentiality, which was effectively mitigated by coding USAFA Class of 2017 fourth-class cadet’s identifiable information as “Cadet #1” through “Cadet #9.” The focus groups did not include any sensitive questions regarding member sexuality, sexual preference, identity, orientation, race, ethnicity, or religious diversity opinions. All the focus groups were characterized by homogeneity, but with adequate diversity among fourth-class cadets to allow for differing viewpoints (Krueger, 2009).

**Focus Groups**

Based on CCLD’s Conceptual Framework for Developing Leaders of Character and CCL Coaching Framework, the one-hour focus groups utilized the following 5 questions in order to address the third research question: What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of 11 virtues?

1. Did you successfully complete the VECTOR seminar or Mosaic Program?
2. How (to what extent) do you feel you made progress on the virtue you selected over the course of the program?
3. How would you rate/rank the following 11 virtues with respect to importance to your core values?
   - Courage: Stands up for beliefs, even if suffers consequences
   - Honesty: Tells the truth; promises can be trusted
   - Accountability: Initiates admitting mistakes
_____ Fairness: Treats everyone fairly
_____ Humility: Does not brag or act arrogant
_____ Duty: Follows through with plans
_____ Care for Others: Kind & caring toward others
_____ Self-control: Exercises control over harmful temptations
_____ Respect for Human Dignity: Respects the differences in others
_____ Attention to Detail: Notices imperfections
_____ Excellence: Ensures excellent quality

4. What was the most beneficial aspect about the VECTOR seminar or Mosaic Program?

5. Is there anything else you would like to share that we haven’t discussed?

Approach to Analysis

After conducting the focus groups for the VECTOR seminar and Mosaic Program, the data were manually transcribed, the recorded transcriptions reviewed, and potential codes highlighted. Once complete with this initial review, the qualitative research continued by utilizing the QSR Nvivo 10 software to refine the initial coding to determine potential themes for the VECTOR seminar and Mosaic Program, respectively. Specifically, the strategy utilized an eight step approach with the QSR Nvivo 10 software was as follows:

1. Loaded the transcribed focus group data into the software and query for word frequency in order to refine the initial coding.
2. Used the refined codes, conduct a text search query for specific words identified in previous query.
3. Used the specific words, generate word tree diagrams to review and analyze.
4. Used the specific codes, generate word tree diagrams to review and analyze.
5. Based on the word tree diagrams, used the specific words to produce word clouds to review and analyze.
6. Determined potential themes for the VECTOR seminar and Mosaic Program.
7. To ensure objectivity, conducted member check with each potential theme with the fourth-class cadets.
8. Manually reviewed transcripts to determine if the fourth-class cadets’ wording validated the potential themes.

**Limitations**

As with all studies, this research had the limitation of time and data in that I could not collect or measure everything. Furthermore, this study had the distinct limitation of selection bias as cadets self-selected for the VECTOR seminar or Mosaic Program. Only 60% (695 cadets) and 40% (463 cadets) of the fourth-class cadets from USAFA Class of 2017 participated in the VECTOR seminar and Mosaic Program, respectively. Therefore, this study did not utilize a simple random sample. In this regard, a randomized trial would best determine baseline information on program effectiveness. Additionally, there was an issue of fidelity due to the fact that the CCLD has not established mandatory facilitator training with standardized requirements with respect to interaction between facilitators and cadets. Finally, there were limitations with respect to the focus groups as follows:

- rigorous academic schedules reduced the number of volunteer fourth-class cadets to participate in the focus groups,
numerous intercollegiate and intramural athletic requirements reduced the number of volunteer fourth-class cadets to participate in the focus groups,

inclement winter weather conditions which reduced the number of volunteer fourth-class cadets to participate in the focus groups, and

self-selection bias as the fourth-class cadets from USAFA Class of 2017 was given the opportunity to accept or decline the invitation to participate in the focus groups.

Additionally, Morgan (1997) contended focus groups have limitations when compared to participant observation and individual interviews. With respect to the former, focus groups “are (a) limited to verbal behavior, (b) consist only of interaction in discussion groups, and (c) are created and managed by the researcher” (p. 8). With respect to the latter, focus groups “(a) require greater attention to the role of the moderator and (b) provide less depth and detail about the opinions and experiences of any given participant” (p. 10). Despite these limitations, Morgan (1997) argued that a self-contained focus group such as the one used in this research allows flexibility, produces independent results, and reveals “aspects of experiences and perspectives that would be not as accessible without group interaction” (p. 20).

**Personal Bias**

With respect to personal bias, I acknowledge that I was born and raised in the Air Force culture, educated in Department of Defense schools (USAFA Class of 1982, Air War College Class of 2000, National Defense University Class of 2006), have formerly served as an Air Force Reserve Officer Training Corps Commandant of Cadets (1999-2002) and Squadron Officer School Platform Instructor (1995-1996), and currently serve
as the CCLD’s Academy Character Enrichment Seminar Program Director. Undeniably, all but nine months of my adult life have been in service to our nation in conjunction with serving in the Air Force as an active duty officer (30 years) and civilian servant (three years). In this regard, I am naturally inclined to hope for favorable results in the VECTOR seminar and Mosaic Program that would paint a positive picture of character development at USAFA. Therefore, in order to mitigate any bias I continually and intentionally engaged our UCCS professors, USAFA faculty and cadets, and student peers with respect to peer review and external review. Additionally, during the qualitative coding process I verified results with peers and re-coded accordingly.
CHAPTER FOUR

QUANTITATIVE RESULTS

This portion of the study addressed the following quantitative research questions:

1. To what degree did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experience a change in ability to identify with the 11 virtues?

2. How did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program compare with one another with respect to experiencing a change in ability to identify with the set of 11 virtues?

The subsequent factor analysis resulted in the rejection of two of the virtues (honesty and fairness). Therefore, the number of virtues measured in the two research questions was nine versus eleven. The hypothesis for the research was that USAFA Class of 2016 fourth-class cadets who participated in the VECTOR seminar or Mosaic Program both experienced an increased ability to identify with the nine virtues.

Analysis

As previously noted, the research utilized SPSS predictive analytics software and interactive LISREL scientific software to analyze the data set as follows:

1. VECTOR Seminar (n = 105): Consisted of 105 USAFA Fourth-Class Cadets from the Class of 2016 who completed the pre-test, VECTOR seminar, then the post-test.

2. Mosaic Program (n = 105): Consisted of 105 USAFA Fourth-Class Cadets from the Class of 2016 who completed the pre-test, Mosaic Program, and then the post-test.
3. Control Group \((n = 105)\): Consisted of 105 USAFA Fourth-Class Cadets from the Class of 2016 who completed only the pre-test and post-test (i.e., never completed the Mosaic Program or VECTOR seminar).

**Validity and Reliability**

According to Long (1983), “Factor analysis is a statistical procedure for uncovering a (usually) smaller number of latent variables by studying the covariation among a set of observed variables” (p. 11). As this study utilized a revised instrument and applied it to altogether different group of fourth-class cadets (respondents) at USAFA, the research conducted an exploratory factor analysis (EFA) on the pre-test results \((n = 315)\) to identify the underlying relationships between measured variables and a confirmatory factor analysis (CFA) with the parsimonious model on the post-test results \((n = 315)\) to determine how well the measured variables represent the number of constructs. For the EFA the research utilized a principal axis factoring analysis to identify the correlated constructs with a direct oblimin (oblique) rotation based on eigenvalues greater than one (Kaiser, 1958). Based on the first EFA, a decision was made to delete nine questions with factor loadings less than 0.400 as follows: question #2 (honesty virtue, factor loading .242), question #13 (honesty virtue, factor loading .327), question #15 (fairness virtue, factor loading .304), question #24 (honesty virtue, factor loading .127), question #26 (fairness virtue, factor loading .303), question #35 (honesty virtue, factor loading .132), question #37 (fairness virtue, factor loading .318), question #50 (courage virtue, factor loading .337), and question #51 (fairness virtue, factor loading .119). Based on the second EFA, a decision was made to delete three additional questions with factor loadings less than 0.400 as follows: question #4 (fairness virtue, factor
loading .245), question #45 (fairness virtue, factor loading .369), and question #47 (care for others virtue, factor loading .380). Consequently, the virtues of honesty and fairness were eliminated from the analysis. The results of the EFA confirmed the validity of original nine virtues (courage, accountability, humility, duty, care for others, self-control, respect for human dignity, attention to detail, and excellence) and 42 survey questions. In other words, the constructs were not consistent with the revised instrument containing the new virtues of honesty and fairness. Based on the final EFA, the mean communalities for the 42 survey questions was 0.647 (> 0.50) and the total variance explained by nine components was 64.7 percent. Additionally, the scree plot “big gap” or “elbow” confirmed nine components (Zhu & Ghodsi, 2006; Figure 8).

![Figure 8. Scree Plot](image)
Finally, based on the 42 survey questions, the pattern matrix produced components that matched the remaining nine virtues as follows: courage five of five components (100%), accountability four of four components (100%), humility six of six components (100%), duty four of four components (100%), care for others five of five components (100%), self-control five of five components (100%), respect for human dignity six of six components (100%), attention to detail three of three components (100%), and excellence four of four components (100%) (see Table 3).

Table 3

*Exploratory Factor Analysis Results*

<table>
<thead>
<tr>
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<tbody>
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<tr>
<td>Question #1</td>
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<td>Question #12</td>
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<td>.749</td>
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<td>Question #34</td>
<td>.820</td>
</tr>
<tr>
<td>Question #44</td>
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<td>.711</td>
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<td>Question #38</td>
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<td>Question #46</td>
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<td>Question #52</td>
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<td>duty ($\alpha = .87$)</td>
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<td>Question #39</td>
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<td>care for others ($\alpha = .80$)</td>
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<td>Question #7</td>
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<tr>
<td>Question #18</td>
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</table>
Likewise, the results of the CFA indicated the overall factor structure is an adequate fit (Long, 1983; Figure 9). In order to determine the absolute measure of fit, the analysis utilized the Root Mean Square Error of Approximation (RMSEA) “as a measure of the discrepancy per degree of freedom for the model” with a 90 percent confidence interval of 0.101 to 0.108 and the Standardized Root Mean Square Residual (SRMR), “defined as the standardized difference between the observed correlation and the predicted correlation” (Browne & Cudek, 1993, p. 144; Kenny, 2015, p. 3). The results were an RMSEA value of 0.104 and SRMR value of 0.0760 which indicate a marginal fit (\(>0.10\)) and good fit (\(<0.08\)) respectively (Kenny, 2015).
Figure 9. CFA Factor Structure.
With respect to Cronbach’s alpha for the final constructs in the CFA, none of the nine virtues yielded excellent reliability results (> .90); however, seven of the nine virtues (courage, accountability, humility, duty, self-control, respect for human dignity, and attention to detail) yielded good reliability (> .80) and care for others and excellence yielded acceptable reliability (> .70) (see Table 4).

Table 4

*Cronbach’s Alpha for CFA*

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<td>care for others</td>
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</tr>
<tr>
<td>self-control</td>
<td>.88</td>
</tr>
<tr>
<td>respect for human dignity</td>
<td>.82</td>
</tr>
<tr>
<td>attention to detail</td>
<td>.84</td>
</tr>
<tr>
<td>excellence</td>
<td>.78</td>
</tr>
</tbody>
</table>

\( N = 315 \)

**Limitations**

Based on the factor analysis, there were several limitations with respect to reliability. First, based on multiple EFA results, the total variance explained by nine components was lower than desirable at 64.7 percent. Second, based on the CFA results, the RMSEA and SRMR goodness of fit statistics were marginal, the former at just below the threshold and the latter at just above the threshold. Finally, none of the final constructs yielded excellent Cronbach’s alpha results. Based on these results, the factor analysis indicates the nine factor model is identifiable, but not the most reliable.
Descriptive Statistics

The descriptive statistics for the data sets are presented in Tables 5 and 6. From a purely descriptive perspective, with respect to attending the VECTOR seminar, eight of the nine virtues and the overall mean of nine virtues showed an increase from pre-test ($Time_1$) to post-test ($Time_2$) as follows: courage, accountability, humility, care for others, self-control, respect for human dignity, attention to detail, and excellence. Only the virtue of duty did not change from pre-test ($Time_1$) to post-test ($Time_2$) (see Table 5). Regarding the Mosaic Program, eight of the nine virtues and the overall mean of the nine virtues showed an increase from pre-test ($Time_1$) to post-test ($Time_2$) as follows: courage, accountability, humility, duty, self-control, respect for human dignity, attention to detail, and excellence. Only the virtue of care for others showed a decrease from pre-test ($Time_1$) to post-test ($Time_2$) (see Table 5). Finally, with respect to the control group, four of the nine virtues and the overall mean of the nine virtues showed an increase from pre-test ($Time_1$) to post-test ($Time_2$) as follows: courage, accountability, duty, and attention to detail. Five virtues showed a decrease from pre-test ($Time_1$) to post-test ($Time_2$) as follows: humility, care for others, self-control, respect for human dignity, and excellence (see Table 6).
Table 5

*Descriptives for VECTOR Seminar and Mosaic Program Inventory Questions*

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<th>Variables</th>
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<td></td>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>$SD_1$</td>
<td>$\bar{x}_2$</td>
<td>$SD_2$</td>
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<td>$\bar{x}_1$</td>
<td>$SD_1$</td>
<td>$\bar{x}_2$</td>
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<td>.57</td>
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<td>-13</td>
<td>3.86</td>
<td>.61</td>
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<td>.69</td>
<td>3.84</td>
<td>.56</td>
<td>-17</td>
<td>3.78</td>
<td>.68</td>
<td>3.86</td>
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<td>duty</td>
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<td>.61</td>
<td>3.87</td>
<td>.62</td>
<td>00</td>
<td>3.84</td>
<td>.63</td>
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<td>4.18</td>
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<td>3.87</td>
<td>.61</td>
<td>-12</td>
<td>3.76</td>
<td>.67</td>
<td>3.86</td>
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<td>.83</td>
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<td>.76</td>
<td>-34</td>
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<td>.82</td>
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<tr>
<td>excellence</td>
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<td>3.87</td>
<td>.61</td>
<td>-06</td>
<td>3.86</td>
<td>.61</td>
<td>4.11</td>
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<td>-11</td>
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</table>

N = 210; Time 1 = Survey August 2012; Time 2 = Survey January 2013

Table 6

*Descriptives for Control Group Inventory Questions*

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<th></th>
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<tbody>
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<td>Time 1</td>
<td>Time 2</td>
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</tr>
<tr>
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<td>$\bar{x}_1$</td>
<td>$SD_1$</td>
<td>$\bar{x}_2$</td>
<td>$SD_2$</td>
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<td>$\bar{x}_1$</td>
<td>$SD_1$</td>
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<td>.58</td>
<td>-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>account</td>
<td>3.81</td>
<td>.62</td>
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<tr>
<td>humility</td>
<td>3.77</td>
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<td>3.64</td>
<td>.66</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>duty</td>
<td>3.81</td>
<td>.66</td>
<td>3.87</td>
<td>.65</td>
<td>-06</td>
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<td></td>
</tr>
<tr>
<td>care</td>
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<td>4.08</td>
<td>.52</td>
<td>01</td>
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<td></td>
</tr>
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<td>self-control</td>
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</tr>
<tr>
<td>respect</td>
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<td>.67</td>
<td>3.67</td>
<td>.57</td>
<td>01</td>
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<td></td>
</tr>
<tr>
<td>attention</td>
<td>3.66</td>
<td>.76</td>
<td>3.84</td>
<td>.74</td>
<td>-18</td>
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<td></td>
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<tr>
<td>excellence</td>
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<td>.68</td>
<td>3.89</td>
<td>.62</td>
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<tr>
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<td>3.88</td>
<td>.35</td>
<td>-01</td>
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<td></td>
</tr>
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</table>

N = 105; Time 1 = Survey August 2012; Time 2 = Survey January 2013

**Paired Samples t-test**

The one factor ANOVA comparing the pre-test scores between VECTOR seminar, Mosaic Program, and the control group determined there was no statistical
significance on the pre-test \((Time_1)\) scores for the virtues. In other words, the groups started at statistically equivalent places (see Table 7). Next the analysis tested for statistical significance of the respective gains with respect to pre-test \((Time_1)\) and post-test \((Time_2)\) within each group: VECTOR seminar, Mosaic Program, and the control group. In this regard, the paired samples \(t\)-test analysis determined if there was a statistically significant difference between pre-test \((Time_1)\) to post-test \((Time_2)\) for fourth-class cadets. For VECTOR seminar participants, differences for one variable and the overall mean of the nine virtues were statistically significant: attention to detail \((\bar{x} = -.34, sd = 1.13, t = -3.06, p = .003)\) and the overall mean of the nine virtues \((\bar{x} = -.11, sd = 0.49, t = -2.31, p = .023)\) (see Table 8). With respect to practical significance, the intervention had a small effect size for the virtue of humility (Cohen’s \(d = 0.33\)) and the overall mean of the nine virtues (Cohen’s \(d = 0.20\)) (see Table 10). For the Mosaic Program, differences on four variables and the overall mean of the nine virtues were statistically significant: duty \((\bar{x} = -.21, sd = 0.79, t = -2.73, p = .007)\), self-control \((\bar{x} = -.26, sd = 1.07, t = -2.51, p = .014)\), attention to detail \((\bar{x} = -.29, sd = 1.26, t = -2.36, p = .020)\), excellence \((\bar{x} = -.25, sd = 0.83, t = -3.12, p = .002)\), and the overall mean of the nine virtues \((\bar{x} = -.14, sd = 0.47, t = -3.00, p = .003)\) (see Table 8). With respect to practical significance, the intervention had a small effect size for humility (Cohen’s \(d = 0.23\)), self-control (Cohen’s \(d = 0.28\)), excellence (Cohen’s \(d = 0.29\)), and the overall mean of the nine virtues (Cohen’s \(d = 0.27\)) (see Table 10). Finally, for the control group, differences on the variables and the overall mean of the nine virtues were not statistically significant, however, with respect to practical significance there was small effect size for
humility (Cohen’s $d = 0.20$) and attention to detail (Cohen’s $d = 0.24$) (see Tables 9 and 10).

Table 7

One Factor ANOVA for Pre-Test Inventory Questions

<table>
<thead>
<tr>
<th>Variables</th>
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<th>$F$</th>
<th>$p$</th>
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</thead>
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<tr>
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<td>1.152</td>
<td>.317</td>
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<td>.292</td>
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$N = 315$; MST = Mean Square Treatment (Mean Square between groups value)

Table 8

Paired Samples t-test for VECTOR Seminar & Mosaic Program Inventory Questions

<table>
<thead>
<tr>
<th>Variables</th>
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<th>Mosaic Coaching</th>
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<tr>
<td>mean</td>
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$N = 105$; $df = 104$ degrees of freedom
Table 9

Paired Samples t-test for Control Group Inventory Questions

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<tr>
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$N = 105; df = 104$ degrees of freedom

Table 10

Cohen’s $d$ and Effect-size $r$ Paired Samples t-test Inventory Questions

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</table>

$d = 0.2$ small effect size, $d = 0.5$ medium effect size, and $d = 0.8$ large effect size.

**One Factor ANOVA**

As the original hypothesis posited the group mean differences for the VECTOR seminar and Mosaic Program would be greater than the control group mean difference, the research utilized the first differencing analysis for longitudinal panel data collected at two different points in time to observe differences between the means of the three groups.
The hypothesis was that the VECTOR seminar and Mosaic Program mean differences should have a larger negative difference score than the control group. In this regard, the one factor analysis of variance (ANOVA) on the difference scores comparing the three groups determined there is no statistically significant difference between fourth-class cadets who completed the VECTOR seminar, Mosaic Program, and the control group (see Table 11). With respect to practical significance, between the VECTOR seminar and the Mosaic Program the intervention had a small effect size for the following virtues: duty (Cohen’s $d = 0.24$) and excellence (Cohen’s $d = 0.22$) (see Table 12). Additionally, between the VECTOR seminar and the control group the intervention had a small effect size for the following virtues: humility (Cohen’s $d = 0.33$) and the overall mean of the nine virtues (Cohen’s $d = 0.20$) (see Table 13). Finally, between the Mosaic Program and the control group the intervention had a small effect size for the following virtues: humility (Cohen’s $d = 0.23$), self-control (Cohen’s $d = 0.28$), excellence (Cohen’s $d = 0.29$), and the overall mean of the nine virtues (Cohen’s $d = 0.27$) (see Table 14).

Table 11

<table>
<thead>
<tr>
<th>Variables</th>
<th>MST</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>courage</td>
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<td>.426</td>
<td>.653</td>
</tr>
<tr>
<td>account</td>
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<td>.236</td>
<td>.790</td>
</tr>
<tr>
<td>humility</td>
<td>2.311</td>
<td>2.955</td>
<td>.054</td>
</tr>
<tr>
<td>duty</td>
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<td>1.580</td>
<td>.208</td>
</tr>
<tr>
<td>care</td>
<td>.591</td>
<td>1.012</td>
<td>.365</td>
</tr>
<tr>
<td>self-control</td>
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<td>2.276</td>
<td>.104</td>
</tr>
<tr>
<td>respect</td>
<td>.514</td>
<td>.652</td>
<td>.522</td>
</tr>
<tr>
<td>attention</td>
<td>.672</td>
<td>.502</td>
<td>.606</td>
</tr>
<tr>
<td>excellence</td>
<td>2.048</td>
<td>2.506</td>
<td>.083</td>
</tr>
<tr>
<td>mean</td>
<td>.462</td>
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<td>.144</td>
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</tbody>
</table>

N = 315; MST = Mean Square Treatment (Mean Square between groups value)
Table 12

Cohen’s $d$ and Effect-size $r$ Difference Scores VECTOR & Mosaic Program

<table>
<thead>
<tr>
<th>Variables</th>
<th>VECTOR</th>
<th>Mosaic Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}_D$</td>
<td>$SD_\text{DIFF}$</td>
</tr>
<tr>
<td>courage</td>
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<td>.84</td>
</tr>
<tr>
<td>account</td>
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<td>.83</td>
</tr>
<tr>
<td>humility</td>
<td>-.17</td>
<td>.90</td>
</tr>
<tr>
<td>duty</td>
<td>.00</td>
<td>.93</td>
</tr>
<tr>
<td>care</td>
<td>-.11</td>
<td>.79</td>
</tr>
<tr>
<td>self-control</td>
<td>-.08</td>
<td>.89</td>
</tr>
<tr>
<td>respect</td>
<td>-.12</td>
<td>.87</td>
</tr>
<tr>
<td>attention</td>
<td>-.34</td>
<td>1.13</td>
</tr>
<tr>
<td>excellence</td>
<td>-.06</td>
<td>.87</td>
</tr>
<tr>
<td>mean</td>
<td>-.11</td>
<td>.49</td>
</tr>
</tbody>
</table>

$d = 0.2$ small effect size, $d = 0.5$ medium effect size, and $d = 0.8$ large effect size.

Table 13

Cohen’s $d$ and Effect-size $r$ Difference Scores VECTOR & Control Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>VECTOR</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}_D$</td>
<td>$SD_\text{DIFF}$</td>
</tr>
<tr>
<td>courage</td>
<td>-.12</td>
<td>.84</td>
</tr>
<tr>
<td>account</td>
<td>-.13</td>
<td>.83</td>
</tr>
<tr>
<td>humility</td>
<td>-.17</td>
<td>.90</td>
</tr>
<tr>
<td>duty</td>
<td>.00</td>
<td>.93</td>
</tr>
<tr>
<td>care</td>
<td>-.11</td>
<td>.79</td>
</tr>
<tr>
<td>self-control</td>
<td>-.08</td>
<td>.89</td>
</tr>
<tr>
<td>respect</td>
<td>-.12</td>
<td>.87</td>
</tr>
<tr>
<td>attention</td>
<td>-.34</td>
<td>1.13</td>
</tr>
<tr>
<td>excellence</td>
<td>-.06</td>
<td>.87</td>
</tr>
<tr>
<td>mean</td>
<td>-.11</td>
<td>.49</td>
</tr>
</tbody>
</table>

$d = 0.2$ small effect size, $d = 0.5$ medium effect size, and $d = 0.8$ large effect size.
Table 14

*Cohen’s d and Effect-size r Difference Scores Mosaic Program & Control Group*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mosaic Program</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
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<td>$\bar{x}_{DIFF}$</td>
<td>$SD_{DIFF}$</td>
</tr>
<tr>
<td>courage</td>
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<td>.81</td>
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<td>account</td>
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<td>.85</td>
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<tr>
<td>humility</td>
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<td>duty</td>
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<td>.79</td>
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<td>care</td>
<td>.02</td>
<td>.77</td>
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<td>self-control</td>
<td>-.26</td>
<td>1.07</td>
</tr>
<tr>
<td>respect</td>
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<td>.92</td>
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<tr>
<td>attention</td>
<td>-.29</td>
<td>1.26</td>
</tr>
<tr>
<td>excellence</td>
<td>-.25</td>
<td>.83</td>
</tr>
<tr>
<td>mean</td>
<td>-.14</td>
<td>.47</td>
</tr>
</tbody>
</table>

$d = 0.2$ small effect size, $d = 0.5$ medium effect size, and $d = 0.8$ large effect size.

**Discussion**

Overall, the quantitative results indicated mixed results with respect to fourth-class cadets who participated in the VECTOR seminar or Mosaic Program in experiencing a change in ability to identify with the set of nine virtues when compared to the control group.

**Descriptive Statistics**

Based on the descriptive statistics, fourth-class cadets who attend VECTOR seminar or Mosaic Program experienced an increased ability to identify with the set of nine virtues when compared to the control group.

**Paired Samples $t$-test Analysis**

The paired samples $t$-test analysis determined a small measure of statistical significance difference between pre-test ($Time_1$) and post-test ($Time_2$) for fourth-class cadets who completed the VECTOR seminar and the Mosaic Program with respect to experiencing an increased ability to identify with the set of nine virtues. Regarding the
VECTOR seminar, one variable and the overall mean of the nine virtues were statistically significant indicating fourth-class cadets experienced an increased ability to identify with the set of nine virtues. Concerning the Mosaic Program, four variables and the overall mean of the nine virtues were statistically significant in predicting if fourth-class cadets experienced an increased ability to identify with the set of nine virtues. With respect to the control group, differences on the variables and the overall mean of the nine virtues were not statistically significant. Finally, variables for the VECTOR seminar, Mosaic Program, and the control group had a small effect size and demonstrated low practical significance.

**One Factor ANOVA**

The one factor ANOVA on the difference scores comparing the three groups determined there is no statistically significant difference between fourth-class cadets who completed the VECTOR seminar, Mosaic Program, and the control group with respect to experiencing an increased ability to identify with the set of nine virtues. With respect to practical significance, however, variables for the VECTOR seminar, Mosaic Program, and the control group had a small effect size and demonstrated low practical significance.

Clearly the quantitative outcomes were mixed with respect to supporting the hypothesis that USAFA Class of 2016 fourth-class cadets who participated in the VECTOR seminar or Mosaic Program both experienced an increased ability to identify with the nine virtues. The paired samples t-test analysis determined a small measure of statistical significance, whereas the one factor ANOVA on the difference scores revealed no statistically significant difference. Moreover, the VECTOR seminar, Mosaic Program, and the control group all demonstrated low practical significance. Therefore, the
qualitative research will deepen the understanding of the quantitative results with respect to the VECTOR seminar and Mosaic Program.
CHAPTER FIVE

QUALITATIVE RESULTS

This portion of the study addressed the following qualitative research question:

1. What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of nine virtues?

Query Results

After conducting the focus groups, the transcripts were transcribed and entered into QSR Nvivo 10 software to help determine potential themes for the VECTOR seminar and Mosaic Program. Specifically, I loaded the transcribed focus group data into the software and began to query for word frequency which led to almost 100 word frequency counts for each program. With respect to the VECTOR seminar, the three highest word frequency counts for VECTOR seminar were “Chief” (0.71% weighted percentage), “person” (0.66% weighted percentage), and “stories” (0.21% weighted percentage). In connection with the Mosaic Program, the three highest word frequency counts were “coach” (0.93% weighted percentage), “know” (1.03% weighted percentage), and “program” (1.04% weighted percentage). In addition to word frequency, I utilized the QSR Nvivo 10 software to conduct a text search query for the VECTOR seminar and Mosaic Program, respectively. In this regard, the following word frequency counts resulted in numerous references as follows:

- VECTOR seminar—“Chief” resulted in 46 references (1.12% coverage),
- VECTOR seminar—“people” resulted in 36 references (0.94% coverage),
- VECTOR seminar—“mentor” resulted in 12 references (0.32% coverage).
• Mosaic Program—“coach” resulted in 33 references (0.56% coverage),
• Mosaic Program—“know” resulted in 44 references (0.68% coverage), and
• Mosaic Program—“program” resulted in 22 references (0.41% coverage).

Finally, while in the Nvivo text search query, I reviewed and analyzed the word trees for the VECTOR seminar and Mosaic Program (Appendices E-J).

Coding

Once the query results were concluded, I began the process of manual coding of the focus group data. In this regard, I purposely read the transcripts a number of times writing notes in the margins regarding anything significant or interesting in order to give meaning of what was said during the discussions. More specifically, I read through the focus group data numerous times to develop initial codes and assign a code to each unit of data, then adjusted and read through the focus group data again in winnowing the codes. During this course of action, I tried to determine codes for the “context and description of the codes” as well as look for patterns and themes, both similar and different (Creswell, 2013, p. 209). Throughout the process, I experienced firsthand the difficulty highlighted by Stalp and Grant (2001) with respect to making systematic links between evidence and analysis, “phenomena are not always clearly bounded and classifiable into mutually exclusive categories in the manner presumed in many quantitative approaches. Rather, phenomena can be multi-layered and have variable meanings” (p. 211). In this regard, deeply held convictions and personal experience guided my ability to code consistently (Seltzer-Kelly, Westwood, & Pena-Guzman, 2012). The initial round of manual coding yielded 75 codes for the VECTOR seminar and 89 codes for the Mosaic Program, respectively. By winnowing down the codes, I was
able to collapse and decrease the number and discard excess codes for each program. After several iterations of review, the final round of manual coding produced 13 codes for the VECTOR seminar and 12 codes for the Mosaic Program which were conceptually grouped into three themes for each program, respectively.

Once I had established the final codes for the VECTOR seminar and Mosaic Program, I generated word clouds which highlighted the cadet words that appeared most frequently and gave a visual impression of potential themes. After studying and pairing the words that appeared most frequently, I narrowed down the highlighted cadet words into another set of more refined word clouds. At this point, the themes started to appear much more clearly and I once again narrowed down the highlighted cadet words in order to create three distinct word clouds as potential themes for each program respectively (Figures 10-15). It was interesting to note that in comparison to the word clouds, the word trees confirmed the same three themes, but reversed the order of the second and third themes for the Mosaic Program. In this regard, it was important to member check the results and review the cadet wording to determine the prioritization of the three themes.

The two focus groups of fourth-class cadets from USAFA Class of 2017 were both complimentary and expansive as themes naturally emerged from the cadet’s explanations to help build a theory illuminating the USAFA Class of 2017 fourth-class cadet perspective regarding the VECTOR seminar and Mosaic Program. More specifically, through in vivo coding three themes became apparent in both programs. With respect to the VECTOR seminar themes were:
1. Dynamic lead facilitator,
2. Experienced table facilitators, and
3. Opportunity to meet other classmates.

Conversely, the Mosaic Program themes were:
1. Engaged one-on-one relationship,
2. Conscious moment of decision, and
3. Long term program.

Based on the focus group answers and subsequent discussions, this was a transformative process and saturation was quickly reached in all four focus groups which were mutually reinforcing with respect to themes in the VECTOR seminar and Mosaic Program, respectively. In this regard, statistical analysis of the results proved beneficial in searching for trends, relationships, and themes using qualitative focus group data.

According to Morgan (1997), “The most basic method for determining what the participants think is important is to ask them!” (p. 62). In this regard, survey question 4 (“What was the most beneficial aspect about the VECTOR seminar or Mosaic Program?”) allowed the cadets the opportunity to clearly articulate what they thought was the most beneficial aspect about the VECTOR seminar and Mosaic Program, respectively.

**VECTOR Seminar Themes**

With respect to the VECTOR seminar, the primary influences that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of nine virtues were dynamic lead facilitator, experienced table facilitators, and opportunity to meet other classmates.
By far and away, the dynamic lead facilitator was the most mentioned aspect of the VECTOR Seminar. More specifically, Chief Master Sergeant (retired) Bob Vasquez was a unanimous selection by all nine cadets from both focus groups as the best part of the program. The cadets were all very positive about Chief Vasquez and clearly considered him to be the most beneficial aspect of the VECTOR seminar. Over and over again, the cadets highlighted that VECTOR was synonymous with Chief Vasquez. One cadet went as far as to emphatically state, “Chief Vasquez was outstanding, a great instructor, motivational. It seems like Chief Vasquez is the program.” But he was not the only cadet to feel this way as others noted the importance of this one man’s influence concluding that “Chief Vasquez is certainly the heart of the program. I believe it could continue on with other leadership if need be, but that would be because of the hard work
and dedication he (Chief Vasquez) has put into it.” Still another cadet commented that Chief Vasquez “made that program. It’s his baby.”

As justification for this overwhelming sentiment, the cadets underscored Chief Vasquez as a highly motivated course director. Adjectives such as “outstanding,” “great,” “motivational,” “gung ho,” and “charismatic” were common place among the focus groups with cadets continually nodding their heads in agreement as classmates commended the dynamic lead facilitator. One cadet highlighted Chief Vasquez unique abilities to include the entire audience in the discussion surrounding virtues emphasizing that “even if someone is like really shy and doesn’t talk much” Chief Vasquez was somehow able to enable them to “come out and talk about maybe what they thought was the most important virtue or what they need to improve on.” In other words, his charisma “really just pulls you in and or influences the cadets to try harder.” Another cadet chimed in that Chief Vasquez “really wants to see you succeed and that shines through during VECTOR.” With a smile, one cadet concluded Chief Vasquez “leaves it all out on the table for you. He really loves it here. He loves cadets.” And the love affair was mutual as virtually every cadet in the focus groups clearly stated his/her affection for Chief Vasquez.

Three simple words summarized the feelings of the cadets, “I love Chief.” And he loved the cadets and they knew it. As cadets elaborated on the reason for these strong feelings, it became obvious that respect was a key ingredient to the success of the VECTOR seminar. As one cadet noted, “You know, I honestly guarantee every single one of us listened to every single word he said just because we know like how much he cares for us.” His classmate signaled his concurrence with a smile, and then concluded,
“we just generally have a respect for him. He just has this aura around him.” Clearly the dynamic lead facilitator offered by the VECTOR Seminar allowed fourth-class cadets to experience an increased ability to identify with the set of 11 virtues.

**VECTOR Seminar Theme 2 – Experienced Table Facilitators**

![Figure 11. Word Cloud – VECTOR Seminar Themes 2.](image)

As with the dynamic lead facilitator, the experienced table facilitators were selected by seven of the nine cadets as a primary theme for the VECTOR seminar. Within each focus group, the cadets acknowledged their appreciation for an experienced table facilitator regardless of gender, rank, or branch of service. The focus groups highlighted how much they enjoyed hearing their stories, “his stories and the people he interacts with just blew me away.” Another cadet stated, the stories brought clarity and “really helped me realize what service was.” It was clear most cadets built a good relationship with their facilitators, “My mentor was active duty Air Force. Pretty cool getting to talk to him in the first place because he had some pretty neat stories about all the places he had been in
his career.” Even though cadets built rapport with the facilitator assigned to their specific table, it was equally clear that they were afforded and welcomed the opportunity to meet with facilitators at other tables,

Going around and having the different officers there to talk to and you know to hear their side of the story from not being a cadet to being an officer, being on the other side of things. It really inspires you to want to stay here and really strive to, not be a cadet anymore and realize what you are training for, that you are training to be an officer.

Clearly it was an enjoyable experience for the cadets, “I really enjoyed being able to talk to the higher ranking officers and enlisted.” In this regard, one of the greatest benefits of hearing stories from seasoned veterans was to be able to better understand future expectations of serving on active duty. As one cadet noted, “I think that what’s really the most powerful thing is just really getting to talk with him about being out in the operational air force and seeing what the impact of all the things have that happened to him.” Other cadets chimed in with comments that the facilitators “could relate it back to duty” and that it was “really helpful to have somebody to look up to and to know a person who lived a bit longer so they really knew what they were talking about.” As one cadet shared, “they (table facilitators) were sharing stories and that really helped me realize like what was service is, like what caring for others is, and like the duty that I believe I have for that.” One cadet was in awe, “Like the fact that the only person he answers to is a four-star general was, I was like wow, okay (laughter).” One cadet best summarized the group sentiment, “I found it beneficial to actually talk to people who have made it a career in the Armed Forces.” As with the dynamic lead facilitator, the mention of
experienced table facilitators indicated fourth-class cadets were experiencing an increased ability to identify with the set of 11 virtues.

**VECTOR Seminar Theme 3 – Opportunity to Meet Other Classmates**

![Figure 12. Word Cloud – VECTOR Seminar Themes 3.](image)

Finally, with respect to the one-day VECTOR Seminar, six of the nine cadets mentioned the fact that they appreciated the opportunity to meet other classmates as a primary theme for the VECTOR seminar. This was especially important to the cadets as they were basically confined to one squadron during the first year and talking outside of their individual rooms was discouraged until privileges were earned during recognition mid-way in the Spring Semester. As one cadet highlighted,

You don’t get the opportunity to meet new people because you are a fourth-class cadet. So I found it beneficial to meet other people and sort of kind of delve into these virtues, characteristics, with other people from around the country.
Therefore, it became clear very early on in the focus groups that the opportunity to meet other classmates was greatly appreciated. As one cadet noted, there is a big difference associated with leaving a small high school to attend a military academy.

They’re not like guys I used to go to high school with. Now I am having to deal with them. I have to respect people of different religions I didn’t interact with normally. I am having to respect different political views that I didn’t interact with daily.

The next cadet quickly chimed in that the social aspect was most welcome and they enjoyed meeting their classmates from other squadrons, “That was probably a better part of VECTOR. To hear other peoples’ opinions instead of just the people you have already grown used to.” Indeed, as another cadet voiced, the social interaction with new classmates was validating.

It was really cool because some people will go you know through all the way up until they get here not hearing other people’s views when it comes to these virtues or simple morals. And getting to hear other peoples points of view and either saying, ‘oh yeah, that matches up with mine.

The cadet continued to comment noting the importance of talking with a classmate rather than a mentor, “I thought interacting with classmates as thoughts are going on or I may need to rethink this (the virtue). You are talking with people at your same level.”

Perhaps one cadet summarized the experience best,

Yeah, I thought interacting with classmates was really cool because some people will go you know through all the way up until they get here not hearing other people’s views when it comes to these virtues or simple morals. And getting to
hear other peoples points of view and either saying ‘oh yeah, that matches up with mine’ as thoughts are going on or I may need to rethink this. That’s pretty cool coming from a classmate rather than someone that is older than you that is just trying to put something in your head you know. You’re talking with people at your same level and you can choose to change or stick with whatever is in your head.

Unmistakably, the opportunity to meet other classmates in the VECTOR Seminar enabled fourth-class cadets to experience an increased ability to identify with the set of 11 virtues.

**Member Checking and Cadet Wording**

To verify and validate the findings, each of the three themes—dynamic lead facilitator, experienced table facilitators, and opportunity to meet other classmates—was member checked by each fourth-class cadet from the USAFA Class of 2017. This activity also helped to establish objectivity, reliability, and trustworthiness as well as corroborate or contradict what I heard during the focus group discussions. As a result, all three themes were unanimously validated by member checking (Table 15) and each theme was directly supported by cadet wording in the following percentages: theme 1 (100%), theme 2 (78%), and theme 3 (66%) (Table 16).
Table 15

Focus Group Themes in VECTOR Seminar: Member Checking & Cadet Wording - Class of 2017

<table>
<thead>
<tr>
<th></th>
<th>Member Checked</th>
<th>Cadet Wording</th>
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</thead>
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<td></td>
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<td>Yes</td>
</tr>
<tr>
<td>Cadet #2MC</td>
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</tr>
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<td>Cadet #9MC</td>
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</tbody>
</table>

T1 = Theme 1; T2 = Theme 2; T3 = Theme 3; F = Female; M = Male; C = Caucasian; A = African-American

Table 16

Cadet Wording in Support of Focus Group Themes in VECTOR Seminar - Class of 2017

<table>
<thead>
<tr>
<th></th>
<th>Cadet Words in Support of Theme</th>
</tr>
</thead>
<tbody>
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</tr>
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<td>Chief Vasquez</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadet #3MC</td>
<td>Chief (2x)</td>
</tr>
</tbody>
</table>
Mosaic Program Themes

With respect to the Mosaic Program, the primary influences that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify others' opinions.
with the set of nine virtues were engaged one-on-one relationship, conscious moment of decision, and long term program.

**Mosaic Program Theme 1 – Engaged One-on-One Relationship**

Figure 13. Word Cloud - Mosaic Program Theme 1.

By far, this was the most mentioned aspect of the Mosaic Program. It was a unanimous selection by all nine cadets as the best part of the Mosaic Program. The cadets were all very positive about the one-on-one relationship with their coaches and considered it as the most beneficial aspect of the program. With respect to the one-on-one relationship, the cadets saw this as the most important reason why they choose the Mosaic Program over the 8-hour VECTOR seminar. Over and over again, the cadets highlighted the one-on-one relationship with their coach, regardless of gender, rank, or branch of service. One cadet highlighted “actually sitting down and talking to a person” was the most effective portion of the coaching experience and was very helpful to their personal growth as a leader as it allowed them to “kind of discuss it and get their (the
coach’s) point of view on it as opposed to just what goes on in (their) own head.” As a result, the cadet stated the relationship gave them “more confidence” and helped them “identify times” that were crucial to their personal growth.

Additionally, there were numerous unexpected benefits of having a personal relationship with a coach. One of these benefits was an extended dialogue between the two parties. One cadet noted the benefit of follow-on discussions around the same topic made the experience “more applicable to everyday life and extended the virtue beyond that one incident.” Other cadets chimed in on this aspect stating it was a mutually beneficial experience as “we learned from each other’s experiences” and often times that “led to other discussions around the same topic, you know. It was often that branched off conversation that still pertained to what you were doing.” Two cadets highlighted the importance of “getting feedback” in order to gain perspective on their particular situation and figure out techniques utilized in the cadet wing, “I think meeting with a mentor was really beneficial. Just talking to somebody and discussing it. E-mail is one thing or like just writing something down like that does a little bit, but getting feedback is really important.”

Finally, the aspect of empathy clearly emerged between the coach and cadet. In other words, the coaches were able to understand the feelings of the cadets and identified with the difficulties of the first year at a military academy. One cadet emphasized this point stating, “We really just kind of clicked and she could relate to my experiences especially in her career.” In this regard, another cadet reiterated their coach “shared some of the same experiences” and was able to completely relate with them as a freshman cadet. Based on the comments, this aspect of empathy seemed equally true for the other
cadets as the group shared that the coaches understood their feelings. Perhaps one cadet summed it up best, “It was definitely great having my coach, he helped me out.” Clearly the engaged one-on-one relationship offered by the Mosaic Program allowed fourth-class cadets to experience an increased ability to identify with the set of 11 virtues.

**Mosaic Program Theme 2 – Conscious Moment of Decision**

![Figure 14. Word Cloud - Mosaic Program Theme 2.](image)

In addition to the engaged one-on-one relationship, seven of the nine cadets selected the conscious moment of decision as a major theme in the Mosaic Program. Within each focus group, the cadets acknowledged that they were much more aware of a conscious moment of decision in their lives because of the Mosaic Program. Indeed, the focus group comments affirmed one of the primary benefits of the program is that individuals become much more aware of situations once they have been coached and mentored through the process of making decisions in everyday situations. In the words of
one cadet, they were “realizing when those decisions were presented and where I had a choice versus doing something that I shouldn’t or something that I should.” In this regard, it was a gradual learning process that occurred over time from week to week in the mosaic program. As one cadet stated, they “improved as the coaching went along” and began to change from being unaware to “consciously thinking about” the situations as they naturally arose around them each day. Another cadet echoed the same sentiment and acknowledged, “I could recognize like hey I’m trying to better myself and how could I do (act) because the situation arose and I recognized that the situation where I was just like this isn’t a bad decision.”

One aspect of the program especially reinforced the conscious moment of decision, accountability. For one cadet this was life changing as they admitted for the first time they “held myself accountable” for their actions instead of just doing the same thing over and over again. Clearly accountability was reinforced by the weekly one-on-one meetings with the coaches. As one cadet stated “going to character coaching each week like made me focus on that and like made me more aware of where and when a situation was happening.” In other words, the cadet was becoming more cognizant of their choices and adjusting accordingly towards the virtue. It was interesting to hear the cadet stated that “actually exercising most of the values was not a big issue,” but that being conscious of the virtues presented a challenge, “actually making note of those decisions and stuff, um, was, um, I guess the hardest part for me.”

Finally, and perhaps most importantly, the cadets commented that “consciousness” was important in order to realize when ethical “decisions were presented” to them each day during life in the cadet wing. All cadets agreed that
“consciously thinking” and being “more cognizant” helped them to focus and become more “aware of where and when a situation was happening.” As a result, the cadets were better equipped and more able to enact the virtue within them that best fit the circumstances. As one cadet summarized, after completing the Mosaic Program, “I would think about it as soon as it happened and then try to counteract that. I was cognizant.” As with the engaged one-on-one relationship, the conscious moment of decision indicated fourth-class cadets experienced an increased ability to identify with the set of 11 virtues.

**Mosaic Program Theme 3 – Long Term Program**

![Word Cloud](image)

*Figure 15. Word Cloud - Mosaic Program Theme 3*

Finally, with respect to the length of the program, once again the same seven of nine cadets appreciated the continuum of time span as a theme for the Mosaic Program which allowed flexibility and reflection. In other words, the cadets were thankful they chose a long-term program over the one-day seminar alternative. As one cadet shared, “I
like the coaching experience because it was spread out you really had time to see yourself grow in whatever virtue you were studying.” The cadet further noted the one-on-one contact with their coach over time was beneficial as they were “specifically focused on helping you and aiding you in any way they could” by establishing a personal connection. Another cadet echoed the same sentiment noting that the length of the program allowed for more reflection and focused effort towards the virtues. The cadet concluded, “I really agree with the program spread out over time rather than just the one single day” as it was very valuable and indispensable for growth in the virtues. Indeed, most all of the cadets agreed with this observation on reflection with one cadet summarizing the benefit quite nicely, “I am glad it was over a period of time so we could continue to meet and remind ourselves like what we were working on and why we were working on that.”

Furthermore, one of the unexpected benefits of a long term program was that it allowed flexibility for the cadets to determine where and when they were to meet with their coaches. As one cadet stated, “it was really flexible” which they mentioned was truly “beneficial,” especially in light of the jam packed academic, athletic, and military event filled schedules throughout the four years of a military academy. Indeed, this flexibility was very much appreciated by the cadets and allowed them time to better reflect upon their situation and “apply more to your life and not forget so much” during the five-week process. On a final note, it was interesting to listen to a minority of the group explain why they preferred the 5-week Mosaic Program to the 7-hour VECTOR seminar. One cadet reflected, “Maybe a day can help, but it is not going to be something that is going to significantly change making you do it.” Another cadet was more candid and commented,
I really agree with the spread out over time rather than just the one single day. I mean, we’re cadets. We look at things in terms of time (laughter). If I am going there and it’s just one day long and I never have to repeat it again. Well I’m gone. I can forget about it and I can go right back out. But if it’s spread out over time and you are speaking with somebody about it, you actually have to think about it, and put some effort in and I feel like that sticks with you a lot more.

Unmistakably, the longer term nature of the Mosaic Program from the perspective of the fourth-class cadets enabled them to experience an increased ability to identify with the set of 11 virtues.

**Member Checking and Cadet Wording**

To verify and validate the findings, each of the themes—engaged one-on-one relationship, conscious moment of decision, and long term program—was member checked by each fourth-class cadet from the USAFA Class of 2017. This activity also helped to establish objectivity, reliability, and trustworthiness as well as corroborate or contradict what I heard during the focus group discussions. As a result, all three themes were unanimously validated by member checking (Table 17) and each theme was directly supported by cadet wording in the following percentages: theme 1 (100%), theme 2 (100%), and theme 3 (78%) (Table 18).
Table 17

*Focus Group Themes in Mosaic Program: Member Checking & Cadet Wording - Class of 2017*

<table>
<thead>
<tr>
<th>Cadet #</th>
<th>Member Checked</th>
<th>Cadet Wording</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1  T2  T3</td>
<td>T1  T2  T3</td>
</tr>
<tr>
<td>#1FC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes No</td>
</tr>
<tr>
<td>#2MC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#3FC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#4MC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes No</td>
</tr>
<tr>
<td>#5MC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#6MC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#7FA</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#8MC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
<tr>
<td>#9FC</td>
<td>Yes Yes Yes</td>
<td>Yes Yes Yes</td>
</tr>
</tbody>
</table>

*T1 = Theme 1; T2 = Theme 2; T3 = Theme 3; F = Female; M = Male; C = Caucasian; A = African-American*

Table 18

*Cadet Wording in Support of Focus Group Themes in Mosaic Program - Class of 2017*

<table>
<thead>
<tr>
<th>Cadet #</th>
<th>Cadet Words in Support of Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theme 1</td>
</tr>
<tr>
<td>#1FC</td>
<td>coach</td>
</tr>
<tr>
<td></td>
<td>talking to a person</td>
</tr>
<tr>
<td></td>
<td>decisions</td>
</tr>
<tr>
<td></td>
<td>making note</td>
</tr>
<tr>
<td>#2MC</td>
<td>coaching</td>
</tr>
<tr>
<td>Cadet</td>
<td>Feedback</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>#3FC</td>
<td>coach</td>
</tr>
<tr>
<td></td>
<td>mentor</td>
</tr>
<tr>
<td></td>
<td>talking to a person</td>
</tr>
<tr>
<td></td>
<td>face-to-face</td>
</tr>
<tr>
<td></td>
<td>feedback</td>
</tr>
<tr>
<td>#4MC</td>
<td>coach (3x)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>#5MC</td>
<td>coach (3x)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>one-on-one</td>
</tr>
<tr>
<td>#6MC</td>
<td>one-on-one (2x)</td>
</tr>
<tr>
<td></td>
<td>coach (4x)</td>
</tr>
<tr>
<td></td>
<td>coaches (3x)</td>
</tr>
<tr>
<td>#7FA</td>
<td>coaching</td>
</tr>
<tr>
<td></td>
<td>coach (2x)</td>
</tr>
<tr>
<td></td>
<td>coaches</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>#8MC</td>
<td>one-on-one (2x)</td>
</tr>
<tr>
<td>#9FC</td>
<td>coach</td>
</tr>
<tr>
<td></td>
<td>mentor</td>
</tr>
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</table>
The qualitative outcomes confirmed the positive portions of the quantitative findings as well as enriched and informed the previous quantitative analysis. In this regard, the qualitative data supported the hypothesis that USAFA Class of 2016 fourth-class cadets who participated in the VECTOR seminar or Mosaic Program both experienced an increased ability to identify with the nine virtues. Although question 5 ("Is there anything else you would like to share that we haven’t discussed?") allowed for criticism, the other four focus group questions elicited positive responses by design. As a result, both sets of focus group comments were consistently positive and emphasized the fact that the cadets appreciated the opportunity to select either the VECTOR seminar or Mosaic Program based on their preferences for learning (group versus one-on-one).

Consequently, the research identified the primary influences that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of nine virtues. With respect to the VECTOR seminar, the significant influences were dynamic lead facilitator, experienced table facilitators, and opportunity to meet other classmates. Regarding the Mosaic Program, the noteworthy influences were engaged one-on-one relationship, conscious moment of decision, and long term program. The next chapter includes a discussion with respect to the quantitative, qualitative, and collective results. Finally, the chapter presents implications, conclusions, and recommendations for future research.
CHAPTER SIX
CONCLUSION

The objective of this mixed methods research was to determine if USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program were affected positively, affected negatively, or remained the same (no change) with respect to the nine virtues. Consequently, the fourth-class cadets’ identification with the set of virtues was measured using a longitudinal inventory assessment administered pre-test in August 2012 and post-test in January 2013. The virtues of interest were mapped to each of the three Air Force core values (CCLD, 2013). The research methodology was to conduct a quantitative assessment of the pre-test and post-test inventory data from the USAFA Class of 2016 fourth-class cadets and a qualitative assessment of focus group data from the USAFA Class of 2017 fourth-class cadets. Furthermore, this study used the CCLD’s Conceptual Framework for Developing Leaders of Character and the CCL Coaching Framework as the lens through which to view the results. In this regard, the research questions were as follows:

1. To what degree did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experience a change in ability to identify with the nine virtues?

2. How did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program compare with one another with respect to experiencing a change in ability to identify with the set of nine virtues?
3. What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of nine virtues?

Quantitative Findings

Research Question #1: To what degree did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experience a change in ability to identify with the nine virtues?

The quantitative results were mixed with respect to fourth-class cadets who participated in the VECTOR seminar or Mosaic Program experiencing a positive change in ability to identify with the set of nine virtues. Specifically, the paired samples $t$-test analysis determined there is a statistically significant difference between pre-test ($Time_1$) and post-test ($Time_2$) for fourth-class cadets who completed the VECTOR seminar and the Mosaic Program. Regarding the VECTOR seminar, the virtue of attention to detail and the overall mean of the nine virtues were statistically significant in predicting if fourth-class cadets experienced an increased ability to identify with the set of nine virtues. Concerning the Mosaic Program, the virtues of duty, self-control, attention to detail, and excellence plus the overall mean of the nine virtues were statistically significant in predicting if fourth-class cadets experienced an increased ability to identify with the set of nine virtues. Variables for both the VECTOR seminar and the Mosaic Program had a small effect size and demonstrated low practical significance. In contrast, the one factor ANOVA on the difference scores comparing the three groups determined there is no statistical significant difference between fourth-class cadets who completed the VECTOR seminar, Mosaic Program, and the control group with respect to
experiencing an increased ability to identify with the set of nine virtues. Variables for the VECTOR seminar, Mosaic Program, and the control group all had a small effect size and demonstrated low practical significance.

Research Question #2: How did USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program compare with one another with respect to experiencing a change in ability to identify with the set of nine virtues?

The paired samples $t$-test analysis determined there is a statistically significant difference between pre-test ($Time_1$) and post-test ($Time_2$) for fourth-class cadets who completed the VECTOR seminar and the Mosaic Program. More precisely, the quantitative results indicated that fourth-class cadets who participated in the Mosaic Program experienced a more positive change in ability to identify with the set of nine virtues compared to fourth-class cadets who participated in the VECTOR seminar. While the overall mean of nine virtues was statistically significant for both programs, on the whole the Mosaic Program measured more positive than the VECTOR seminar with four times the number of virtues recording as statistically significant. Specifically, the virtues of duty, self-control, attention to detail, and excellence recorded as statistically significant for the Mosaic Program whereas only the virtue of attention to detail recorded as statistically significant for the VECTOR seminar. Conversely, the one factor ANOVA on the difference scores comparing the three groups determined there is no statistical significant difference between fourth-class cadets who completed the VECTOR seminar, Mosaic Program, and the control group with respect to experiencing an increased ability to identify with the set of nine virtues. Furthermore, variables for the VECTOR seminar,
Mosaic Program, and the control group all had a small effect size and demonstrated low practical significance.

Qualitative Findings

Research Question #3: What were the primary influences of the VECTOR seminar or Mosaic Program that impacted USAFA fourth-class cadets with respect to experiencing a change in ability to identify with the set of nine virtues?

The themes of the VECTOR seminar and Mosaic Program revealed six distinct influences upon the fourth-class cadets with respect to experiencing a positive change in ability to identify with the set of nine virtues. With respect to the VECTOR seminar, the significant influences were as follows:

- Dynamic lead facilitator,
- Experienced table facilitators, and
- Opportunity to meet other classmates.

Regarding Mosaic Program, the noteworthy influences were as follows:

- Engaged one-on-one relationship,
- Conscious moment of decision, and
- Long term program.

VECTOR Seminar

With respect to the VECTOR seminar, these findings added to earlier research on character development with respect to improving student learning (Humphreys, 2012), exposing cadets to higher levels of moral reasoning (Bandura, 1991), and utilizing combinations of activities (Rest & Narvaez, 1991). Additionally, the results were consistent with USAFA’s conceptual framework relating to character building: knowing
thyself, knowing others, doing the right things, and demonstrating resilience (Shumer, Lam & Laabs, 2012). Finally, the research highlighted three distinctive themes. Theme one—dynamic lead facilitator—guaranteed a process that leads people upward (Kohlberg, 1981) by utilizing a proactive approach to character development (Character Education Partnership, 2014). Moreover, theme two—experienced table facilitators—afforded students opportunities for moral action and fostered shared leadership (Character Education Partnership, 2014) while ensuring USAFA recruited new faculty and staff that are committed to the personal development of their students (Kuh, 1998). Finally, theme three—opportunity to meet other classmates—recognized the notion of a free and rational agent cause” (McLean, et al., 1986) and facilitated mutual interpersonal relationships (Kohlberg, 1984).

Mosaic Program

As previously noted, the Mosaic Program utilized the model of cognitive coaching structured around focused conversations (Baker, 2010). In this regard, these findings added to previous research on cognitive coaching (Bearwald, 2011; Cavanagh & Palmer, 2006; Cooper & Thomas, 2003; Costa & Garmston, 2010; Hart, 1990; Oestrich & Johansen, 2005; Palmer, Cooper & Thomas, 2003). More specifically, the research highlighted three distinctive themes. Theme one—engaged one-on-one relationship—was consistent with establish trusting relationships and open communication (Carrol, 2007), engaging in dialogical conversations and building rapport through respectful communication with thought-provoking, open-ended questions, and encouraging, practical observations (Knight, 2009), enhancing a student’s cognitive processes (Sparks, 1990), creating a learning environment (Frankovelgia & Riddle, 2010), developing
Leaders of Character through engaging professional coaching relationships (CCLD, 2013), and providing purposeful experiences emphasized in USAFA Conceptual Framework: Developing Leaders of Character (CCLD, 2011). Furthermore, theme two—conscious moment of decision—correlated with increased self-awareness (Edwards, 2001; Edwards, 2015; Garmston, 1993; Frankovelgia & Riddle, 2010; Spaten, 2009; Ting & Sisco, 2006), identified cognitive distortions and thinking errors in order to modify unhelpful thinking (Gyllensten, 2010), enhanced cognitive processes (Sparks, 1990), increased in reflective and complex thinking among teachers (Edwards, 2001, as cited by Knight, 2009), awareness of one's own thinking and behaviour patterns (Palmer and Gyllensten, 2008, as cited by Spaten, 2009), and the theoretical constructs of Mosaic Coaching at USAFA’s Center for Character and Leadership Development. Finally, theme three—long term program—was in harmony with investing time into preparation and training over an extended timeframe (Killion, 2009; Knight, 2009; CCLD, 2014), promoting a sustainable learning experience (Frankovelgia & Riddle, 2010), and also reinforced the USAFA Conceptual Framework: Developing Leaders of Character and directly corresponds to the awareness piece of practicing habits of thought and action (CCLD, 2011).

**Collective Findings**

The results of this study added to previous research on core values and virtues (ACES Cadet Assessment Package, AY 2013-14; America’s Air Force: A profession of arms, 2015; United States Air Force, 1997; United States Air Force, 2015) as well as leadership as a multi-disciplinary interaction between members of a group motivating people to change (Bass, 1990; Burke, 1996; Fry, 2003), the basic need for individuals to
be part of a community (Duchon & Plowman, 2005; Reave, 2005), and character as foundational to the ability to lead (Allen, 2011).

Additionally, the findings of this paper highlighted the aforementioned studies on character development with respect to levels of moral development (Bandura, 1991; Chickering & Havighurst, 1981; Kohlberg, 1984; Rest, 1979; Rich & DeVitas, 1985; Sichel, 1988), the importance of creating a learning environment that promotes character development in higher education as a moral endeavor (Bok, 2008; Bonfiglio, 2011; Character Education Partnership, 2014; Helea, 2006; Humphreys, 2012; Kuh, 1998; Power, 1991; Wallwork, 1972), and that moral reasoning can be successfully taught and different students learn through different means (Kohlberg, 1987; McLean, Ellrod, Schindler & Mann, 1986; Rest & Narvaez, 1991; Purpel & Ryan, 1976; Shumer, Lam & Laabs, 2012).

These findings also add some substantiation to the USAFA Conceptual Framework: Developing Leaders of Character (CCLD, 1994; CCLD, 2011; CCLD, 2012; CCLD, 2013) and CCL Coaching Framework (Frankovelgia & Riddle, 2010; The Handbook of Leadership Development, 2010) with respect to producing leaders of character (United States Air Force, 2015). In this regard, the results of this study validated the notion of self-efficacy with respect to an individual’s belief about their capacity to perform (Bandura, 1997), the model’s four elements of ethical action as the product of moral sensitivity, motivation, and character (Johnson, 2007), the processes of interpretation, reasoning, choosing, and execution (Rest, 1984), and right versus right decision making when two core values come into conflict (Kidder, 2003).
Finally, the quantitative findings of this paper were mixed whereas the qualitative findings were positive with respect to supporting the hypothesis that USAFA Class of 2016 fourth-class cadets who participated in the VECTOR seminar or Mosaic Program both experienced an increased ability to identify with the nine virtues.

**Implications**

In 2014, former Secretary of Defense Chuck Hagel set forth an initiative focusing on military professionalism within the Department of Defense. As a result, the Air Force Chief of Staff began plans for the Profession of Arms Center of Excellence (PACE) which included participation by CCLD senior leadership. During a ceremony on March 2, 2015, General Robin Rand, Commander of Air Education and Training Command, formally recognized the establishment of PACE at Joint Base San Antonio-Randolph. Given the importance of Character Development and renewed emphasis on Core Values, this research has direct impact upon and implications beyond CCLD Leadership and USAFA for Air Force Leadership as primary stakeholders. Specifically, this study addressed a gap in character development and cognitive coaching at the service academies by highlighting three central themes of the VECTOR seminar at USAFA—dynamic lead facilitator, experienced table facilitators, and opportunity to meet other classmates—and underscoring the three central themes of the Mosaic Program at USAFA—engaged one-on-one relationship, conscious moment of decision, and long term program.

Furthermore, the United States Air Force’s Jeanne M. Holm Center for Officer Accessions and Citizen Development, United States Military Academy (Army), United States Naval Academy, United States Coast Guard Academy, and the United States
Merchant Marine Academy would certainly benefit from the results of this study. Finally, as this study involves multiple interventions (VECTOR seminar and Mosaic Program) within a specific environment (USAFA), the results have implications and relevance beyond a service academy. In this regard, this study has implications for the institution of higher education with respect to interventions within a particular student setting. While the study of character development with respect to the measurement of a subjective topic such as virtues is difficult, especially in the quantitative domain, this research has a much broader purpose compared to a program evaluation in that the results and findings serve the primary and secondary stakeholders as well as help society at large better understand interventions with respect to specific objectives (Cronbach et al., 1980).

Finally, it is important to acknowledge that as short-term interventions both the VECTOR seminar and Mosaic Program have limitations to influence change in cadets with respect to experiencing an increased ability to identify with the nine virtues. In this regard, long-term, multiple interventions would be the preferred methodology in order to influence change. Additionally, measuring change with respect to subjective virtues is difficult. As such the issue of fidelity in the VECTOR seminar and Mosaic Program interventions is important. Therefore, the CCLD should make every effort to standardize the interaction between facilitators and cadets increasing conformity within the VECTOR seminar and Mosaic Program to ensure all cadets experience these programs similarly.

**Recommended Future Research**

On the basis of the findings presented in this study, there are six recommendations for future research as follows:
1. In order to control for self-selection bias, the CCLD should randomly assign fourth-class cadets for the VECTOR seminar and Mosaic Program. A randomized trial would counteract most of the limitations of this study and determine baseline information on program effectiveness.

2. In order to ensure fidelity of the VECTOR seminar and Mosaic Program, the CCLD should establish mandatory facilitator training which includes educational theory, numerous practicums, and debriefing evaluations whereby the participants experience the concepts through real, program-based activities. This adjustment should standardize the interaction between facilitators and cadets increasing conformity within CCLD programs to ensure all cadets experience these programs similarly.

3. As previously noted, the one factor ANOVA on the difference scores comparing the three groups determined there is no statistical significant difference between fourth-class cadets who completed the VECTOR seminar, Mosaic Program, and the control group with respect to experiencing an increased ability to identify with the set of nine virtues despite the positive findings of the focus group. Therefore, the CCLD may consider revising the curriculum for the VECTOR seminar and Mosaic Program as character development courses for fourth-class (freshman) cadets and conduct additional research accordingly to determine effectiveness and the continuance of these programs.

4. Based on the mixed-methods model employed on the VECTOR seminar and Mosaic Program, the CCLD ought to collect data and conduct
research on the third-class (sophomore), second-class (junior), and first-class cadets (senior) character development programs in order to determine effectiveness against the respective course objectives and goals.

5. Although the quantitative and qualitative findings of this paper were mixed with respect to supporting the hypothesis that fourth-class cadets who participated in the VECTOR seminar or Mosaic Program both experienced an increased ability to identify with the nine virtues, the CCLD should forward the findings presented in this study to the Service Academy Consortium for Character Assessment for review in order for the service academies to collaborate for assessing character development for future commissioned officers in the Department of Defense.

6. The CCLD should partner with the Air Staff Personnel and Manpower directorate at the Pentagon to determine the next step to extend this research with respect to measuring behavior of USAFA graduates as commissioned officers with respect to character development. These opportunities to measure behavior could be constructed at the specific grade levels of officers beginning at Second Lieutenant and progressing through the ranks of general officer.

Conclusions

This study addressed the specific gap of current academic, mixed methods studies on character development and cognitive coaching within a higher education context at the military service academies through the examination of fourth-class cadet experiences in the VECTOR seminar and Mosaic Program at USAFA. Specifically, this research
determined USAFA fourth-class cadets who participated in the VECTOR seminar or Mosaic Program exhibited slight changes in the ability to identify with the nine virtues. Furthermore, this study gives both quantitative and qualitative results to USAFA and CCLD senior leadership in order to determine how fourth-class cadets were affected positively, affected negatively, or remained the same (no change) with respect to the nine virtues after attending the VECTOR seminar or Mosaic Program. Consequently, this study created a baseline for examining character development of fourth-class cadets and created a template for researching the results of CCLD programs for third-class (sophomore), second-class (junior), and first-class cadets (senior). Furthermore, findings from this study facilitated a better understanding of the CCLD’s Conceptual Framework for developing leaders of character and benefitted USAFA in its pursuit of character education in order to commission a leader of character after four years of undergraduate training. In this regard, the CCLD should partner with the Pentagon senior leadership to determine the next step to extend this research with respect to measuring behavior of USAFA graduates as commissioned officers with respect to character development. Finally, despite the limitations with short-term interventions to influence change and difficulty in ensuring fidelity within the process of measuring change, the collective results of this study support the notion that character and leadership development can be taught. Therefore, character and leadership development should be pursued extending this research beyond the CCLD within a higher education context.
References


doi.org/10.1016%2Fj.leaqua.2005.07.008


抄retrieved from Air Force Representative to the SECDEF Senior Advisor for Military Professionalism.


Appendix A

Character Mosaic Inventory

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very much unlike me</th>
<th>Unlike me</th>
<th>Neutral</th>
<th>Like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have taken frequent stands in the face of strong opposition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. My promises can be trusted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I always initiate confessing my mistakes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Even if I do not like someone, I treat her/him fairly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>5. I am always humble about the good things that have happened to me.</td>
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<td>6. I carry out my plans.</td>
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<td>7. I really enjoy doing small favors for friends.</td>
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<td>8. I have an exceptionally high level of self-control over attractive (but harmful) impulses.</td>
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<td>9. I can accept a lot of different perspectives from others.</td>
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<td>10. I have an eye for detail.</td>
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<td>11. I want everything to add up perfectly.</td>
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<td>12. I stand up for my beliefs, even if it is an unpopular opinion.</td>
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<td>13. I tell the truth.</td>
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<td>15. I believe it is worth listening to everyone's opinions.</td>
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<td>16. I do not act as if I am a special person.</td>
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<td>17. I make plans and stick to them.</td>
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<td>18. I go out of my way to cheer up people who appear down.</td>
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<td>19. When I am tempted to do something pleasurable that I know is wrong, I always resist the temptation.</td>
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### CMI_C2016_Fall_T1

Please be honest and accurate in how you see yourself, using the following scale.

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<thead>
<tr>
<th></th>
<th>Very much unlike me</th>
<th>Unlike me</th>
<th>Neutral</th>
<th>Like me</th>
<th>Very much like me</th>
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<tr>
<td>20. I understand people who think differently than me.</td>
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<td>21. I pay attention to details.</td>
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<td>22. I dislike imperfect work.</td>
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<td>23. I must stand up for what I believe, even if there are negative results.</td>
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<td>24. I do what I say I'm going to do.</td>
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<td>25. I admit mistakes when they are made.</td>
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<td>26. I believe that everyone should have a say.</td>
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<td>27. I never brag about my accomplishments.</td>
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<td>28. When I make plans, I am certain to make them work.</td>
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<td>29. I love to make other people happy.</td>
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<td>30. I always exercise self-control over inappropriate desires.</td>
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<td>31. I have a high tolerance of those whose views differ from mine.</td>
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<td>32. I pay too little attention to details.</td>
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<td>33. I am exacting in my work.</td>
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<td>34. Even when I know I will receive backlash, I say what I stand for.</td>
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<td>35. I believe honesty is the basis for trust.</td>
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<td>36. I hold myself accountable for whatever mistakes I have made.</td>
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<td>37. Everyone's rights are equally important to me.</td>
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<td>38. I have been told that modesty is one of my most notable characteristics.</td>
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</tbody>
</table>
Please be honest and accurate in how you see yourself, using the following scale.

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<th>Neutral</th>
<th>Like me</th>
<th>Very much like me</th>
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<tbody>
<tr>
<td>39</td>
<td>I follow through with my plans.</td>
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<td>40</td>
<td>It is important to me to maintain harmony within my group.</td>
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<td>41</td>
<td>I always turn away from temptations that are harmful to me.</td>
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<td>42</td>
<td>People who have ideas that are different than mine annoy me.</td>
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<td>43</td>
<td>I demand quality.</td>
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<td>44</td>
<td>I always stand up for my beliefs.</td>
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<td>45</td>
<td>I treat all people equally regardless of who they might be.</td>
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<td>46</td>
<td>No one would ever describe me as arrogant.</td>
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<td>47</td>
<td>I am as excited about the good fortune of others as I am about my own.</td>
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<td>48</td>
<td>I easily resist temptations.</td>
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<td>49</td>
<td>I accept people as they are.</td>
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<td>50</td>
<td>I always speak up in protest when I hear someone say mean things.</td>
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<td>51</td>
<td>I give everyone a chance.</td>
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<td>52</td>
<td>People are drawn to me because I am humble.</td>
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<td>53</td>
<td>I enjoy being kind to others.</td>
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<tr>
<td>54</td>
<td>I can always see the world from someone else's perspective.</td>
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Appendix B

Character Mosaic Report

THE CHARACTER MOSAIC REPORT

NOTE: Save this as a document

Description of the 11 Virtues

1. Honesty
   - Tells the truth, the whole truth, and nothing but the truth

2. Courage
   - Stands up for beliefs, even if suffers consequences

3. Accountability
   - Initiates admitting mistakes

4. Fairness
   - Treats everyone with equity

5. Humility
   - Does not brag about accomplishments

6. Duty
   - Completes all lawful assignments on time

7. Care for Others
   - Sacrifices self for others’ needs

8. Self-control
   - Exercises control over harmful temptations

9. Respect for Human Dignity
   - Shows respect to people whose perspectives are different

10. Attention to Detail
    - Notices imperfections

11. Excellence
    - Ensures excellent work
Average Score of Your Virtues
(Reflecting your average score on the items within each virtue)

- Honesty: Very Strong
- Courage: Very Strong
- Accountability: Strong
- Fairness: Strong
- Humility: Strong
- Duty: Very Strong
- Care for Others: Strong
- Self-control: Strong
- Respect for Human Dignity: Strong
- Attention to Detail: Strong
- Excellence: Strong

Your 3 Highest Ranked Virtues
(Reflecting the rank order that you provided; #1 is your highest ranked virtue)
1. Courage
2. Humility
3. Duty

Your 3 Lowest Ranked Virtues
(Reflecting the rank order that you provided; #1 is your lowest ranked virtue)
1. Respect for Human Dignity
2. Honesty
3. Accountability
Your Responses on the 11 Virtues

1. **Honesty:** Tells the truth, the whole truth, and nothing but the truth
   - I tell the truth, the whole truth, and nothing but the truth.
     - Like me
   - I do not exaggerate the truth.
     - Very much like me
   - I do not distort or embellish the truth.
     - Very much like me

2. **Courage:** Stands up for beliefs, even if suffers consequences
   - I stand up for my beliefs.
     - Very much like me
   - I stand up for what I believe, even if there are negative consequences.
     - Very much like me
   - Even when I know I will receive backlash, I say what I stand for.
     - Very much like me

3. **Accountability:** Initiates admitting mistakes
   - I initiate admitting when I am wrong.
     - Like me
   - I initiate confessing my mistakes.
     - Like me
   - I initiate admitting mistakes when they are made.
     - Like me

4. **Fairness:** Treats everyone with equity
   - I believe that everyone should have a say.
     - Like me
   - Everyone’s rights are equally important to me.
     - Somewhat more like me than unlike me
   - I treat all people with the same equity, regardless of who they might be.
     - Like me

5. **Humility:** Does not brag about accomplishments
   - I am humble about my accomplishments.
     - Very much like me
   - I do not brag about my accomplishments.
     - Very much like me
   - While I may not agree, people consistently tell me that I am humble.
     - Unlike me

6. **Duty:** Follows through with plans
   - I ensure that all tasksing assigned to me are completed on time.
     - Very much like me
   - When I am given a lawful assignment, I complete it by the deadline.
     - Very much like me
   - I fulfill the lawful directives that I am given.
     - Very much like me
7. Care for Others: Sacrifices for others’ needs
   • I sacrifice my time to assist others who seek my help.
     > Like me
   • I initiate helping others, even without their specific request.
     > Like me
   • I prioritize the needs of others ahead of my own.
     > Like me

8. Self-control: Exercises control over harmful temptations
   • When I am tempted to do something pleasurable that I know is wrong, I resist the temptation.
     > Unlike me
   • I exercise self-control over inappropriate desires.
     > Very much like me
   • I turn away from temptations that are harmful to me.
     > Very much like me

9. Respect for Human Dignity: Shows respect to people whose perspectives are different
   • I show respect to people who have perspectives that are very different than mine.
     > Somewhat more like me than unlike me
   • I treat respectfully those whose views annoy me.
     > Like me
   • I show respect to people who think quite differently than I do.
     > Like me

10. Attention to Detail: Notices imperfections
    • I have an eye for detail.
      > Like me
    • I pay attention to details.
      > Like me
    • I notice imperfections.
      > Like me

11. Excellence: Ensures excellent work
    • I want everything to add up perfectly.
      > Somewhat more like me than unlike me
    • I dislike imperfect work.
      > Like me
    • I am exacting in my work.
      > Like me
Appendix C

Mosaic Program Personal Coaching Training

Personal Coaching Training
Serving as a Personal Coach for your Fourth-class Cadets

7 August 2014
(0930 – 1130)
Squadron SARs
UNITED STATES AIR FORCE ACADEMY
Center for Character and Leadership Development

Personal Coaching Training
How to Conduct Personal Coaching

7 August 2014
(0930 – 1130 in Squadron SARs)

INSTRUCTORS: Ms. Erzen (initial briefing); Squadron AOC, AMT, Sq Commander (if possible)
TEACHING METHOD: Large Group Discussion, Small Group Training
TIME SLATED FOR TRAINING: 2 Hours (0930 – 1130)
AUDIENCES/AUDIENCES: Slides w/Review & Coaching Process; Strategy Session Sheet Handouts
AUDIENCE PREPARATION: Attended Ms. Erzen’s briefing (0800 - 0900, F-1); read Personal Coaching Manual

INSTRUCTOR PREPARATION: AOCs/AMTs have all been trained to serve as a coach; therefore, they just need to review these materials. They will be prepared to engage with and help 3-degrees learn and practice the basic Coaching Skills. AOCs/AMT(s) will also be prepared to facilitate discussion on the Personal Coaching process. Squadron Commanders’ presence will help them become familiar with the Coaching that will be taking place in their squadrons and will serve as a powerful presence for their 3-degrees.

REQUIRED MATERIALS: AOC, AMT and Sq CC each bring a copy of the Personal Coaching Manual for reference. Activity materials: Room set up that is ready to accommodate the 3-degrees breaking up into groups of 3 cadets to practice the Personal Coaching skills.

3-DEG ROLES:
- Cadet who is Coaching – Using Coaching Skills to help Coachee to complete a Strategy Plan
- Cadet receiving Coaching – Have a real Developmental Need that they would like to strengthen; real Reason; come up with real Action and Awareness Moment (no role play!)
- Cadet observing Coaching – Watch for Coaching Skills the Coach is executing well; where he/she might benefit from your observation; learn from what you observe

LESSON OBJECTIVES:

1. Lead facilitator will present the three basic Coaching Skills – Open-ended questions, Intuitive listening, acknowledging & validating. MA$$ BRIEFING
   (IC – Develops Set$ of USAFA Outcomes – Effectively Communicate, Coach Others to Develop and Achieve Personal Objectives)

2. Lead facilitator will discuss why Personal Coaching is one tool cadets will use in their role as Third-class Supervisor. MA$$ BRIEFING and FOLLOW-ON TRAINING
   (IC – Develops Set$ of USAFA Outcomes – Effectively Communicate, Coach Others to Develop and Achieve Personal Objectives)

3. Third-class Cadets will demonstrate the skills they will use when conducting personal Coaching with their assigned Fourth-class Cadet (s). FOLLOW-ON TRAINING
   (IC – Develops Set$ of USAFA Outcomes – Effectively Communicate, Coach Others to Develop and Achieve Personal Objectives)
STRATEGY

This lesson is designed to take the 3-deg's from their Personal Coaching mass briefing (where they will be introduced to Personal Coaching – “what, why and how”) and give them the opportunity to ask detailed questions/have deeper discussions on Personal Coaching. It will also give them the opportunity to practice the Coaching Skills they will use while having access to the individualized assistance of the qualified AOC & AMT. Cadet Squadron Commander’s (Sq CC) presence will help the Sq CCs learn more about what their 3-degs will be doing in the squadron since the Sq CC will be responsible for the 3-degs conducting the Personal Coaching effectively. This will also expose the Sq CC to the Coaching Skills they will encounter in Organizational Coaching. The outcome of this lesson will be 3-degs who understand and have practiced Personal Coaching so they can provide “Gold Standard” Coaching to their 4-degs. The expectation is that each 3-deg will demonstrate proficiency in the three basic Coaching Skills; mastery of the skills will come with practice.

LESSON OUTLINE

- Welcome (~5 min)
- AOC/AMT review the main points from Ms. Erzen’s briefing with cadets (~10 min)
- AOC/AMT hand a Strategy Session Sheet to each 3-deg (~5 min)
- AOC/AMT split 3-degs into groups of 3 (Cadets 1, 2 and 3); display Personal Coaching Process on screen (~5 min)
  - Define 3-deg roles for the training
- AOC/AMT instruct Cadet 1 to conduct a Personal Coaching session with Cadet 2 (~20 min)
  - Cadet 3 will be observing the Coaching process b/w Cadets 1 & 2
  - AOC/AMT will walk around observing and providing feedback throughout
- AOC/AMT instruct Cadet 2 to conduct a Personal Coaching session with Cadet 3 (~20 min)
  - Cadet 1 will be observing the Coaching process b/w Cadets 2 & 3
  - AOC/AMT will walk around observing and providing feedback throughout
- AOC/AMT instruct Cadet 3 to conduct a Personal Coaching session with Cadet 1 (~20 min)
  - Cadet 2 will be observing the Coaching process b/w Cadets 3 & 1
  - AOC/AMT will walk around observing and providing feedback throughout
- AOC/AMT discuss Coaching process/answer any questions 3-degs have (~20 min)
- Wrap-up (~10 min)
Welcome: Welcome 3-Degs and let them know that the following two hours will consist of discussion (answering their questions), practicing the Coaching Skills and wrapping up with questions/discussion. (~ 5 min)

(Lesson Objective #1: Lead facilitator will present the three basic Coaching Skills – Open-ended questions, Intuitive listening, acknowledging & validating.)

(Lesson Objective #2: Lead facilitator will discuss why Personal Coaching is one tool they will use in their role as Third-class Supervisor.)

1. Coaching Process Review/Discussion: Review Personal Coaching process. Emphasize to 3-Degs the importance of the Personal Coaching process (what, why, how); discuss any questions or concerns they have with Personal Coaching. (~ 15 min)

(Lesson Objective #3: Third-class Cadets will demonstrate the skills they will use when conducting Personal Coaching with their assigned Fourth-class Cadet(s).

1. Cadets will practice Personal Coaching with each other (~ 65 min)

* AOCI/AMT will hand out Personal Coaching Strategy Session Sheet to each 3-Deg
* AOCI/AMT will display Personal Coaching Process on screen
* AOCI/AMT will separate Cadets into teams of three. Within the teams of three will be Cadet 1, Cadet 2 and Cadet 3
* AOCI/AMT will define Cadet Roles for the Practice Session (~ 5 min)

Segment 1: Cadet 1 in each group will practice a Personal Coaching Strategy Session with Cadet 2. AOCI/AMT(s) will walk around, observing and offering feedback to each group (~ 20 min)

Segment 2: Cadet 2 in each group will practice a Personal Coaching Strategy Session with Cadet 3. AOCI/AMT(s) will walk around, observing and offering feedback to each group (~ 20 min)

Segment 3: Cadet 3 in each group will practice a Personal Coaching Strategy Session with Cadet 1. AOCI/AMT(s) will walk around, observing and offering feedback to each group (~ 20 min)

2. Put small groups back into the large group and facilitate discussion on the Personal Coaching Process (questions, concerns, etc.) (~ 20 min)

3. Once AOCI/AMT/Sq CC are confident Lesson Objectives are complete, wrap-up and release the 3-Degs. (~ 5 min)
# Teaching Outline

<table>
<thead>
<tr>
<th>Topic</th>
<th>Personal Notes</th>
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<tbody>
<tr>
<td>AOCA/AMT Welcome 3-Days</td>
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<tr>
<td>Personal Coaching Review</td>
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<tr>
<td>3-Days Practice Personal Coaching Strategy Session</td>
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<tr>
<td>Post-practice Personal Coaching Review/Discussion</td>
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<tr>
<td>Wrap-Up/Release 3-Days</td>
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</tbody>
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**Personal Coaching Areas (Developmental Needs that 4-deg will choose from)**

1. Academic  
2. Military  
3. Physical Fitness  
4. Family  
5. Social
Facilitator,

Thanks for volunteering to help the USAFA Center for Character and Leadership Development produce Leaders of Character. We couldn’t accomplish our mission without you.

Today, you’ll sit with a group of Four Degrees (Freshmen), the best and brightest youngster in the world. They’re excited about being here and are like sponges, soaking in all that you say. Part of your job is to follow the Lead Facilitator. What we’ve provided here is a map of where the Lead Facilitator will take the group.

If you have any questions or the Lead Facilitator confuses you in any way, please ask for clarification. We want to make you look as smart as we think we are. There may be some vernacular that you’re not used to or aware of. When that becomes the case, ask the Lead Facilitator or even the Four Degrees. They always enjoy being smarter than we are, which they often are, especially about the terms they use as part of their daily language.

Of special note: We will provide lunch. Chic-fil-A will cater for us. There may be a Four Degree at your table who doesn’t eat chicken or fried food, etc. We probably won’t catch that since lunch becomes a bit chaotic. If you notice a Four Degree at your table with no food in front of him/her, please ask her/him why she/his isn’t eating. If the answer is that they don’t eat what we’ve provided, please let the Lead Facilitator know. We’ll take them next door to Subway and buy them what they will/can eat. We want to ensure everyone is fed, so please help us with this issue.

The general purpose of the workshop is to equip the Four Degrees with the tools they need to empower themselves to become Leaders of Character. Your guidance is
invaluable to achieving that purpose. As Peter Drucker said, “The best way to predict the future is to create it.” That’s what you’ll be doing at VECTOR!

Again, thank you for serving with us!

Have fun and make this a GREAT day!

Agenda

Breakfast snacks will be served at 0730. The workshop will start at approximately 0800.

The discussions/exercises Small Group Facilitators will lead are denoted by titles in CAPS AND UNDERLINED. Times in ( ) are approximate. Don’t worry about them too much. They’re there to help you time your discussions.

PLEASE DON’T PASS OUT ANY MATERIALS UNTIL THE LEAD FACILITATOR ASKS YOU TO!

The Cadets may keep all of the materials we provide.

0730 – The LEAD FACILITATOR provides Safety Briefing/Rules of Engagement – Breakfast snacks/drinks

(Lesson Objective #1 – Using shared reflection, Cadets will demonstrate self-awareness of their aspirations and personal identity.)

0800 - “Dream” video (Index cards will be provided for Cadets to capture their thoughts as they watch the video.) The clip is an inspirational look at the importance of having a dream and pursuing it.

0805 – Reflection - Since this workshop is called Vital Effective Character Through Observation and Reflection, the workshop will start with having Cadets reflect on what they saw in the video. The Lead Facilitator will tell them that for the next 4 minutes there
is to be NO TALKING, just reflecting. They may not remain seated they may stand near their seats, but will be encouraged to move somewhere away from the tables.

0810 - REFLECTION SHARING/DREAM CAPTURING - The Lead Facilitator will bring Cadets back to the tables where they will share their reflections and capture their dreams on MySite. The Lead Facilitator will provide instructions.

0825 - LEAD FACILITATOR defines/describes what a Leader of Character is, according to CCLD Framework

0835 - DUE NORTH exercise – Lead Facilitator will lead this

0845 - VECTOR! vector (Workshop Overview – Learning Objectives)

Reflect on their aspirations and personal identity (LO #1)

Review Basic Cadet Training (BCT) Living Honorably (LO #2)

Discover who they are (LO #3)

Discuss the ARDA Model (LO #4)

Discuss the Virtues embodied by our Air Force Core Values (LO #5)

Develop a plan for strengthening a virtue they select (LO #6)

Assess the application of the ARDA Model through a video case study (LO #7)

Make a personal commitment to developing their character (LO #8)

0850 - Table Facilitator Introductions - Table Facilitators introduce themselves to the entire room. We want to make this an informal event, but don’t want to lose the military decorum. Here’s what we’d like: (I will provide you a reminder card (Facilitator Introduction Guide) to help keep you on vector.
Name & Rank

Home town & Alma Mater

Family?

What do you do?

Since we’ll be talking a lot about Personal Identity, please share a thought or word that might depict YOUR character-based Personal Identity.

Each facilitator will have about a minute, so please be prepared.

0905 – Break

(Lesson Objective # 2 – Cadets will recall what they learned in Basic Cadet Training’s (BCT) Introduction to Living Honorably in the Profession of Arms (ILHPA))

0915 – The Lead Facilitator will remind Cadets what they should have learned in the ILHPA lessons during BCT.

ILHPA Highlight video (5 min)

Hula Hoop Exercise (10 min)

Gifts/Barriers Exercise (10 min)

WHAT DID YOU LEARN AT ILHPA DISCUSSION (10 MIN)

PERSONAL IDENTITY MAP (PIM) (15 MIN) - During BCT the cadets filled out a PIM. They will have received their PIM as they entered the room. Have them share their thoughts on their Personal Identity, especially their CORE. The Lead Facilitator will set up the discussion.

Priming Questions:

Does your PIM reflect who you were before coming to USAFA?

How has your core changed in the time that you’ve been at USAFA?
Your cadets were instructed to fill out their PIM as per the following:

The OUTER RING represents how others see you. You may not necessarily characterize yourself in these ways, but others have expectations of you in these characteristics.

The MIDDLE RING represents how you see yourself. These are characteristics that you have developed over time. Some of them may be very important to you; others may be falling to the wayside. In any case, these are characteristics that you have spent time developing during your lifetime.

The INNER RING represents your core identity, or traits that you hold most dear and make you unique as an individual.
(Lesson Objective #3: Cadets will articulate the importance of developing their own character and leadership identity)

1015 - VISION EXERCISE - The Lead Facilitator will encourage the Cadets to consider what they’ll be like in 2018 as they prepare to graduate from USAFA. You will have been given a pouch with some materials in them. WHEN THE LEAD FACILITATOR ASKS YOU TO, have your cadets remove their shoulder boards and replace them with those from the pouch. Encourage them to help each other.

Inside the pouch there will be some CADET VISION CARDS. Please pass those out WHEN THE LEAD FACILITATOR ASKS YOU TO.

The date is 10 May 2018. Each Cadet will fill out a Cadet Vision Card that indicates information including name, cadet rank, cadet wing position, GPA, MPA, PEA, and accomplishments.

When the Lead Facilitator cues you, Cadets will introduce themselves to you based on their card. The idea here is that they are introducing themselves as they will be in 2018. Please keep them in role.

After they’ve introduced themselves, the Lead Facilitator will prompt them to answer “what characteristics they would have to embody to be what they’ve written down” and ask them to write down those CHARACTERistics on the back of their cards as they share their answers with the group.

Name: __________________
Date: 10 May 2018
Cadet Rank: ______________________

Wing Position: ____________________

GPA: _____  MPA: _____  PEA: _____

Accomplishments:
_____________________________________________________________

If you can SEE it, you can BE it!

(Back)

FIRSTIE CHARACTERistics

1035 – The LEAD FACILITATOR returns Cadets to Four-Degree Status – The Lead Facilitator will instruct Cadets on how to capture what they just discussed on MySite.

1045 - Break

1055 – SMALL GROUP DISCUSSION/ASSESSMENT - This discussion will be based on the assessment question the Lead Facilitator asks using the clickers: “Who is responsible for my character and leadership development while at USAFA?” Response options are:

I’m completely responsible.

USAFA is completely responsible.

Mostly me, USAFA some.

Mostly USAFA, some me.

Both equally responsible.
Lead Facilitator will show responses.

Start discussion around personal leadership/ownership; some Cadets might think they have no choice (they are told that they now value the AF Core Values and the Honor Oath). The ‘P’ in the PITO Leadership Model we use (Personal, Interpersonal, Team, & Organizational) outlines responsibilities that include: Master primary Responsibilities, Skills and Knowledge; build personal awareness of strengths, developmental needs and impact on others; hone followership abilities; set the example; prepare to develop and practice Wingman leadership. Our Conceptual Framework explains “Own” as the pursuit of your identity; this is comprised of your attitude & effort, your duty, your commitments, your role in development. Consider touching on any, or all, of these points during your discussion.

(Lesson Objective #4: Cadets will demonstrate familiarity with the tenets of the ARDA Model by discussing how it plays out in their daily lives.)

1105 - “Choices” video – the clip is a humorous statement about what leaders do; that is, make choices/decisions

The Lead Facilitator will introduce Cadets to the ARDA Model below.

**TABLE DISCUSSION** – Discuss how the model plays out in their daily lives.
The ARDA Model

**Awareness** - The capacity to scan, spot/recognize, identify, interpret or “diagnose” whether a situation is a leadership or ethical “moment”...often by imagining the implications of current scenarios and of possible future scenarios...awareness includes the capacity for self-understanding, empathy and perspective-taking skills

**Reasoning** - The capacity to reason about the best course of action, based on past experiences, self-reflection, as well as your obligations, values, ideals and commitments.

**Deciding** - The capacity to connect your “reasons” to your self-identity and commitments.

**Acting** - The capacity to act in ways that align with your commitments, values, and beliefs, including developing the “habits” of courage and self-discipline to resist the “decision-action” gap.

The Lead Facilitator will emphasize that for the rest of the workshop we’ll be using this model, fulfilling the “practice” part of the Framework for Developing Leaders of Character discussed at the beginning of the day.
1130 – LUNCH

(Lesson Objective #5: Cadets will share their perspectives on how the virtues embodied in the Air Force Core Values play out in their personal experiences)

1200 - SMALL GROUP “STATIONS” EXERCISE

Poster boards of each of the eleven virtues will be placed throughout the room. As a small group facilitator, you’ll lead the discussion of one virtue of your choice or expertise. The virtue discussion you will lead will be determined at the morning huddle with the Lead Facilitator.

The cadets will be asked to go to the virtue they are most interested in. (The Lead Facilitator will have a backup plan in case all of the cadets choose one particular virtue.)

The poster looks like the sample below. During BCT we showed the cadets a picture of a bull’s eye with “Living Honorably” at the center. This exercise and poster are an extension of that depiction and notion; that we want to aim for the bull’s eye, the center, THEIR center.

Please follow this process in discussing your virtue:
1. Start at the center (like a mosaic). Define the virtue as per the following working definitions. Share your perspective/description/story of that virtue.

Courage: stands up for beliefs, even if suffers consequences
mental or moral strength to venture, persevere, and withstand danger, fear, or difficulty

Honesty: tells the truth; promises can be trusted
adherence to the facts, implies a refusal to lie, steal, or deceive in any way

Accountability: initiates admiting mistakes
an obligation or willingness to accept responsibility or to account for one's actions

Fairness: treats everyone fairly
marked by impartiality and honesty: free from self-interest, prejudice, or favoritism

Humility: does not brag or act arrogant
the quality or state of not thinking you are better than other people

Duty: follows through with plans; adheres to standards
obligatory tasks, conduct, service, or functions that arise from one's position

Care for Others: kind & caring toward others
to feel interest or concern

Self-control: exercises control over harmful temptations
restraint exercised over one's own impulses, emotions, or desires

Respect for Human Dignity: respects differences in others

Respect: high or special regard

Attention to Detail: notices imperfections

Meticulous: marked by extreme or excessive care in the consideration or treatment of details
Excellence: ensures excellent quality
Excellent: very good of its kind: eminently good

2. Move to the outer circle and ask: “How does the virtue show up in your life here at USAFA?” Cadets should be doing the talking. We want to hear THEIR perspectives.

3. Next, move to the Blue Circle and ask: “What causes you to do what you do, for that virtue to show up?” We’re looking for the WHY. Again, seek the Cadets’ perspective.

4. Now move to the Red Circle and ask: “What are some barriers/challenges that keep you from achieving mastery of that virtue? How do you break through those barriers?” We’re looking for THEIR perspectives.

After approximately 13 minutes, The Lead Facilitator will give you a 2-minute warning so that you can finish your conversation, then will ask Cadets to move on to another virtue of their interest and the process will begin again.

At the end of the exercise, the Lead Facilitator will reconvene the entire group and debrief the exercise.

1250 - Break

1300 – The Lead Facilitator will ask you to summarize, in one minute or less, your virtue then show a video or share a thought depicting your virtue.

Courage: “The Blind Side” video

Honesty: “Two & a half Men” video

Accountability: “Navy Captain Scott Waddle” video

Fairness: “Monkeys” video

Humility: “Arlington” video
Duty: Tomb of the Unknowns photo/USAF Firing Squad @ Arlington video

Care for Others: “Veggie Soup” video

Self-control: facilitator story

Respect for Human Dignity: “What would you do?” video

Attention to Detail: “What’s different about these pictures?”

Excellence: “Airman’s Creed” video

Please encourage the Cadets to join in with the Airman’s Creed. You may do that by joining in yourself.

1340 – ASSESSMENT - The Lead Facilitator will ask Cadets to answer the question, “The virtue that is most important to me is…” and gather responses using the clickers. The Lead Facilitator will show the responses.

1345 – “Like a Mosaic” video – The clip describes the tenets of a mosaic

TABLE DISCUSSION - Each cadet should have brought their Mosaic Instrument with them. The Lead Facilitator will provide an overview of what it assessed then pass it on to the Small Group Facilitators to discuss more deeply and personally, what the instrument says they said about themselves.

(A sample Mosaic Instrument will be provided to you for your perusal and understanding of what it looks like and what it assessed.)

(Lesson Objective #6: Cadets will create a plan for strengthening a virtue of their choice during the next 30 days)

1400 – VIRTUE CAPTURE DISK EXERCISE

The Lead Facilitator will provide you wooden disks and will ask you to pass them out to the Cadets at your table. Cadets are to select a virtue they want to strengthen in the next
30 days. Have them write that virtue on the disk. Once they’ve chosen a Virtue ask them to devise a plan to practice and apply it on a daily basis. Have some Cadets share their plan with the rest of the group. Remind them of the Gap between Decision and Action in the ARDA Model: we often know what to do but chose not to do it.

1410 - ASSESSMENT - The Lead Facilitator will ask Cadets to complete the following statement using the clickers to gather responses: “The virtue I’ve chosen to strengthen is”

The Lead Facilitator will show responses.

(Lesson Objective #7: Using a case study, cadets will demonstrate a basic understanding of the ARDA Model to the Group Facilitator’s satisfaction)

1415 - “Naval Academy Cheating” video – interviews with four Midshipmen of Class of 94 who cheated on a EE exam and were expelled

SMALL GROUP DISCUSSION – Discuss how what happened in the video relates to the ARDA Model.

Priming Question:

If those Midshipmen had used the ARDA Model, is it possible they might have made different choices?

FACILITATOR: Based on the discussion, please assess at what level the Cadets at your table understood the ARDA Model. Use a scale from 1-5. 1 being “Had no clue” and 5 being “Absolutely knows it.” You’ll be provided a score sheet prior to the discussion.

(Lesson Objective #8: Cadets will commit to developing their character on a daily basis.)

1435 – The Lead Facilitator will ask you to hand out the Character Commitment Cards and inspire the Cadets to make the commitment on the card and to sign it. Please collect
the cards and put them in the envelope provided. Someone will collect them from you for laminating.

CLOSING

1440 - VECTOR! Check (Lead Facilitator) - Did we:

Reflect on their aspirations and personal identity (LO #1)

Review Basic Cadet Training (BCT) Living Honorably (LO #2)

Discover who they are (LO #3)

Discuss the ARDA Model (LO #4)

Discuss the Virtues embodied by our Air Force Core Values (LO #5)

Develop a plan for strengthening a virtue they select (LO #6)

Assess the application of the ARDA Model through a video case study (LO #7)

Make a personal commitment to developing their character (LO #8)

RETURN COMMITMENT CARDS TO CADETS

1450 – The Lead Facilitator will assign homework (Read the book/ submit and essay/ Virtues Strengthening Plan)

1455 – The Lead Facilitator thanks Small Group Facilitators/closing remarks

Third Verse/Only the Beginning” video

1459  Dismiss

As always, Facilitator, thanks for helping us produce future leaders of character! If we, the USAFA Center for Character and Leadership Development, can help you in any way, please let us know.

¡ALL IN! bob vásquez
Appendix E

Word Tree - VECTOR Seminar Theme 1

Text Search Query - Results Preview

Chief

Vasquez

did a good job
made that program. It's
He should up to
Like most permanent party

Chief Vasquez
gave us a lot
certainly the heart
in charge of
so charismatic. He
the program. He's
specifically is really good

was. He is the Command
was sitting with a retired
we go, if we know

Um

a lot of experience.
about Chief Vasquez? C2Q5:

a little more real. C1Q5:

comment a little bit
about
The thing I like
are so used to seeing
at the Academy. And what
Chief and everybody just loves
everyone respects as much as
had class in those and
hard to be negative around
inspiring. So I thought
He (try and grow. C7Q6:

instructor, motivational. It seems like
is the stories. I had
next year. C5Q5: I think
of the mentors was a
to me. C3Q5: I love
us do not. But he's
was. He is the Command
would always come out to

And that's what I like
LIQ6: Any other thoughts? C2Q6:
My squadron, back when we
and everybody just loves Chief,
at Air Force Space Command,
Master Sergeant.
So, um, being
McIntyre, I believe his name

would always come out to
Appendix F

Word Tree - VECTOR Seminar Theme 2

Text Search Query - Results Preview

(laughter). Also, um, having a duty experiences. Because like them share their experiences.

My an AMT as my table can improve and your getting to talk with.

I really, especially by I really liked having probably, I don't know, to discuss things with that.

at least mine did, I believe he was the I mean mine was a Like each table had a my table. He did the table really sticks your table helped you so he kind of harped was active duty Air that we had at our was active duty air force.
Appendix G

Word Tree - VECTOR Seminar Theme 3

Text Search Query - Results Preview
Appendix I

Word Tree – Mosaic Program Theme 2

Text Search Query - Results Preview

feel by myself like gotta be careful what this is going to help
um, actually making note of when you write something out
you have a strong sense your, I guess lack of
And so you get to I, um, I ranked care
It was often that branched
are you available at this any thing, but we learned from
him better because he was hard it is to
I meant to come
if it was the same it is dealing with integrity, kind of making note of
have some situation where like not do
realizing when

some of the keys to that I couldn't have addressed
they gave you a window
this is gonna be kinda
we took a survey on
Appendix J

Word Tree – Mosaic Program Theme 1

Text Search Query - Results Preview

Cadet 2: It's a good
complete the Character Mosaic by being in your opinion should Attachment 3 LI: Okay. Attachment 4 I would change most beneficial aspect all freshmen participate in and just the, and least how I used little bit, but because any other benefits get something out over the course the attitudes towards the whole was a notion that which I learned in this

program

Cadet: Yeah, I liked
4: I mean, ah.
Um, definitely ways to do
Um, I think
1:
Yes. Cadet 2:
4: I don't know
1, I definitely
Yes. Cadet 6:
9: I liked having
Did anything else jump out
as opposed to a Chik -
Focus Group
#1 April 14,
#2 April 15,
have the ability to allow in general by several cadets,
is not structured. Maybe maturity itself. You know they gave
to my help. My coach was about, ah, (pause) wow,
we have like no idea your alignment with integrity is,
Appendix K

Collaborative Institutional Training Initiative (CITI) Certificate

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)
HUMAN RESEARCH CURRICULUM COMPLETION REPORT
Printed on 01/22/2014

LEARNER
GREGORY TATE (ID: J888863)
gjate3@holme.lore

INSTITUTION
University of Colorado at Colorado Springs
01/21/2017

EXPIRATION DATE

SOCIAL AND BEHAVIORAL RESEARCH
COURSE/STAGE
Basic Course 1
PASSED ON
01/22/2014
REFERENCE ID
12123214

REQUIRED MODULES
DATE COMPLETED
Introduction
01/22/2014
Belmont Report and CITI Course Introduction
01/22/2014
Students in Research
01/22/2014
History and Ethical Principles - SBE
01/22/2014
Defining Research with Human Subjects - SBE
01/22/2014
The Regulations - SBE
01/22/2014
Assessing Risk - SBE
01/22/2014
Informed Consent - SBE
01/22/2014
Privacy and Confidentiality - SBE
01/22/2014
Research with Prisoners - SBE
01/22/2014
Research with Children - SBE
01/22/2014
Research in Public Elementary and Secondary Schools - SBE
01/22/2014
International Research - SBE
01/22/2014
Internet Research - SBE
01/22/2014
Avoiding Group Harms - U.S. Research Perspectives
01/22/2014
Research and HIPAA Privacy Protections
01/22/2014
Vulnerable Subjects - Research Involving Workers/Employees
01/22/2014
Hot Topics
01/22/2014
Conflicts of Interest in Research Involving Human Subjects
01/22/2014
University of Colorado at Colorado Springs
01/22/2014

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid independent learner. False information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Breuer/Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator
Appendix L

USAFA IRB Exemption Approval

MEMORANDUM FOR LT COL KEVIN BASIK
DR. GREGORY TATE

FROM: HQ USAFA/A9N

SUBJECT: Protocol FAC2014025E Exempt Status

1. The HQ USAFA Institutional Review Board considered your request for exempt status for FAC2014025E – Character Coaching at the USAFA. Are we increasing the Fourth-Class Cadet’s Ability to Identify with the 11 Virtues? Your request and any required changes were deemed exempt from IRB oversight in accordance with 32 CFR 219.101, paragraph (b)(2) by the IRB. The IRB agreed that sufficient safeguards were in place to protect research participants. Please note that the USAFA Authorized Institutional Official, HQ USAFA.CV and the Surgeon General’s Research Oversight & Compliance Division, AFMSA/SGE-C review all USAFA IRB actions and may amend this decision or identify additional requirements. The USAFA’s DoD Assurance Number is 50046, expiration date 16 September 2016 our Federalwide Assurance number is FWA00019017, expiration date 20 June 2017.

2. If you are conducting a survey for this study you cannot start this study until you have approval from the Survey Program Manager. The Survey Program Manager will issue a survey control number when the survey is approved. The protocol will be considered closed, but will be retained in USAFA/A9N for 3 years then sent to permanent storage. As the principal investigator on the study, the Surgeon General’s Research Oversight & Compliance Division requires that you retain your data, reports, etc. for 3 years following completion of the study.

3. If any aspect of your research protocol changes, you must notify the IRB Chair or IRB Administrator immediately. We will advise you on whether additional IRB review is required.

4. Please use tracking number FAC2014025E in any correspondence regarding this protocol. If you have any questions or if I can be of further assistance, please don’t hesitate to contact me at 333-6593 or the IRB Chair, Col. Paul Pirog at 333-3680.

GAIL B. ROSADO
HQ USAFA IRB Administrator

Developing Leaders of Character
MEMORANDUM FOR MR. GREGORY TATE  
11 July 2014

FROM: HQ USAFA/A9N

SUBJECT: Protocol FAC20140025E Amendment Approval

1. The HQ USAFA Institutional Review Board (IRB) considered your second amendment request for FAC20140025E, Character Coaching at the USAFA: Are We Increasing the Ability to Identify the 11 Virtues for the inclusion of data from additional subjects from the Vector course. The amendment and any required changes were approved. Please note that the USAFA Authorized Institutional Official, HQ USAFA/CV and the Surgeon General's Research Oversight & Compliance Division, AFMSA/SGE-C review all USAFA IRB actions and may amend this decision or identify additional requirements.

2. If you have any questions or if I can be of further assistance, please don't hesitate to contact me at 333-6593.

LAURA J. NEAL
HQ USAFA IRB Administrator
Appendix N

UCCS IRB Exemption Approval

Thank you for submitting your Request for IRB Review. The protocol identified above has been reviewed according to the policies of this institution and the provisions of applicable federal regulations. The review category is noted above, along with the expiration date, if applicable.

Once human participant research has been approved, it is the Principal Investigator’s (PI) responsibility to report any changes in research activity related to the project:

- The PI must provide the IRB with all protocol and consent form amendments and revisions.
- The IRB must approve these changes prior to implementation.
- All advertisements recruiting study subjects must also receive prior approval by the IRB.
- The PI must promptly inform the IRB of all unanticipated adverse events (within 24 hours). All unanticipated adverse events must be reported to the IRB within 1 week (see 45 CFR 46.103(b)(5)). Failure to comply with these federally mandated responsibilities may result in suspension or termination of the project.
- Notify the IRB when the study is complete.

If you have any questions, please contact Research Compliance Specialist in the Office of Sponsored Programs at 719-255-3903 or irb@uccs.edu.

Thank you for your concern about human subject protection issues, and good luck with your research.

Sincerely yours,

Keith J. Kline, PhD
IRB Co-Chair
Appendix O

UCCS IRB Amendment Approval

University of Colorado
Colorado Springs

Institutional Review Board (IRB) for the Protection of Human Subjects

Date: 5/6/2014

IRB Review

IRB PROTOCOL NO.: 14-191
Protocol Title: Character Coaching at the US Air Force Academy: Are We Increasing the Fourth-Class Cadet's Ability to Identify 11 Virtues?
Principal Investigator: Gregory L. Tate
Faculty Advisor if Applicable: Sylvia Martinez
Application: Report of Change (1)
Type of Review: Exempt Category 2
Risk Level: No more than Minimal Risk
Renewal Review Level (If changed from original approval) if Applicable: N/A No Change
This Protocol involves a Vulnerable Population: N/A (No Vulnerable Population)
Expires: *
*Note, if exempt: If there are no major changes in the research, protocol does not require review on a continuing basis by the IRB. In addition, the protocol may match more than one review category not listed.
Externally funded: ☒ No ☐ Yes
OSP #: Sponsor:

Thank you for submitting your Request for IRB Review of a proposed change to your original IRB protocol. The protocol identified above has been reviewed according to the policies of this institution and the provisions of applicable federal regulations. The review category is noted above, along with the expiration date, if applicable.

You are approved to change your protocol to recruit from fourth class cadets who participated in VECTOR and to conduct focus groups with those who agree to participate in your study.

Once human participant research has been approved, it is the Principal Investigator's (PI) responsibility to report any changes in research activity related to the project:
- The PI must provide the IRB with all protocol and consent form amendments and revisions.
  - The IRB must approve these changes prior to implementation.
- All advertisements recruiting study subjects must be approved prior to publication.
- The PI must promptly inform the IRB of any unanticipated serious adverse events (within 24 hours). All unanticipated adverse events must be reported to the IRB within 1 week (see 45CFR46.104(d)). Failure to comply with these federally mandated regulations may result in suspension or termination of the project.
- Renew study with the IRB prior to expiration.
- Notify the IRB when the study is complete.

If you have any questions, please contact Research Compliance Specialist in the Office of Sponsored Programs at 719-255-3903 or irb@uccs.edu

Thank you for your concern about human subject protection issues, and good luck with your research.

Sincerely yours,
Kelli J. Klebe, PhD

1420 Austin Bluffs Parkway/Colorado Springs, CO 80918
719-255-3321 phone 719-255-3708 fax

Version 2/12/13