

**Emotion, Transformative Learning, and United States Air Force Leader Development**

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## **Dedication**

This study is dedicated to my family and community of supporters. I could not have persevered and completed this study without your support, insights, help, and encouragement along the way. This experience has pushed and changed me as a person, learner, educator, and leader, and I owe it all to you.

To my wife, your love and support have carried me through 26 years of military service with its many challenges, from deployments and missions overseas to the day-to-day stresses of being a Marine and Airman. Thank you for your encouragement when times were tough and for reining me in when my workaholic tendencies went too far. You are the reason I care so much.

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## **Abstract**

Leader development in the Air Force comprises a complex blend of deliberate education, training, and experience shaped by organizational culture and core values. Emotion, a frequently overlooked aspect of these elements and leader development, is often viewed as detracting from logical decision-making and sound leadership. However, emotion touches on every aspect of our lives, from how we experience life, what we learn, our passions and commitment, why we serve, and much more, but it remains underrepresented in leader development literature, particularly in the military context. Bridging the gap from emotion to leader development is experience, which fuels learning and can ultimately lead to transformative learning and leader development. The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers. The research questions that guided this study were: 1) How do Air Force leaders experience leader development? 2) In what ways do Air Force leaders experience emotion in their leader development experiences? 3) What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context? This narrative inquiry focused on the leader development narratives of six retired Air Force commanders geographically separated throughout the United States and Europe. Data was collected through semi-structured interviews and analyzed through a seven-step coding, categorization, and analysis process, producing the four following themes: a) a transformative leadership lab, b) it takes a village, c) holistically nurturing excellence, and d) leadership and military service come at a price. Each theme was described in detail with extensive excerpts from the participant interview transcripts. This study concluded with potential implications for practice and future research in the adult learning, leader development, and professional military education fields.

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## Chapter 1

### Introduction

The United States Air Force broke from the Army and formed an independent military branch in 1947 (*AFDDI-1 Force Development*, 2011). However, the Air Force realized the need for professional education to develop a specialized force of air-minded warfighters as early as the 1920s when the Army created the Air Service combatant arm along with special and general schools for air officers (Finney, 1955). This emphasis on education and training only grew stronger over time. In a 1944 memorandum, General Hap Arnold, “Universally acknowledged as the father of the modern American Air Force” (Coffey, 1982, p. 2), tasked Dr. Von Karman with producing a guide for Army Air Force long-range development. In his memorandum, Arnold said, “I believe the security of the United States of America will continue to rest in part in developments instituted by our educational and professional scientists” (Von Kármán, 1945, p. iii). Though this was mainly in the context of the scientific education and development of air technology, electronics, and atomic energy (Davis, 1997), Arnold saw education and development as keys to innovation and the success of air power. In fact, Arnold was instrumental in the Air Corps Tactical School’s (ACTS) focus on strategic and tactical theories in the 1930s, which would later become doctrine and a record of Air Force best practices (Coffey, 1982). ACTS would become Air University in 1946 and recognized as the center for education, doctrine, and research in the Air Force (Finney, 1955; Manning et al., 2005).

Leader development and leadership in the Air Force are influenced by a complex blend of deliberate education, training, and experience, as well as mentorship, culture, character, and core values (*AETC FY21 Strategic Communication Plan*, 2020; *AFDDI-1 Force Development*, 2011). These elements come together through a career-long continuum of learning that focuses on

individual development through education and training to produce Airmen who are tactically and operationally competent and have the strategic vision to lead and execute missions across the full range of Air Force missions (*An AETC Vision for Learning Transformation*, 2013). Professional Military Education (PME) is a large part of this continuum of learning. It is developmental education carried out through an Airman's career in increments commensurate with rank and responsibility, preparing Airmen for future leadership challenges. According to the Department of the Air Force Policy Directive 36-26 (2022), PME is a subset of developmental education that accomplishes the following:

- 1) Provides the nation with skilled personnel capable of employing in air, space, and cyberspace in a large variety and scale of mission sets
- 2) Provides Air Force personnel with the leadership skills and knowledge to lead effectively and make sound decisions in the challenging national security environment
- 3) Develops warfighters to think and plan strategically and strengthens an Airman's leadership, management, and supervisory skills and abilities

PME focuses on topics such as leadership theory, models, and skills, as well as ethics, critical thinking, effective communication, persuasion methods, experiential learning and leadership practice, airpower history, doctrine, strategy, group problem-solving, conflict management, international security and relations, joint and interservice operations, political-military issues, national instruments of power, and the conduct of war (*Officer Professional Military Education Student Handbook*, 2021; *The Air University Catalog: 2020-2021*, 2020). What is missing from this long list of important elements is what Vogel et al. (2021) refer to as emotion-related theory and development processes due to a bias in cognitive theorizing in the leadership development

field. However, the idea of acknowledging emotion's role in leader and leadership development in the military may pose several challenges.

Richard and Molloy (2020) explain that an emphasis on traditional masculinity in military culture devalues emotion and emotional expression and leads to avoidance. Moreover, Williams (2010) describes emotion as a potential trap within a list of other considerations that must be avoided and compensated for to prevent poor military decision-making outcomes. This devaluation and avoidance of emotion may stifle crucial processes of profound development and learning that occur through critical reflection and transformative learning.

Transformative learning is the process of fundamental change and the transformation of perspective. This process allows leaders to identify and challenge their problematic biases, beliefs, and presuppositions to develop into more inclusive, discriminating, reflective, open, and emotionally able individuals (Mezirow & Taylor, 2009), or in the case of this study, leaders. In a study of school principals in the United States (US), Kim (2020) found that the transformative process enabled the principals to examine and assess their leadership and ultimately change how they viewed themselves and others. She explained that this occurred through Mezirow's transformative learning theory, which involves disorienting dilemmas, emotion, critical reflection, and perspective transformation (Kim, 2020). This process changed how the school principals understood and practiced leadership. However, understanding emotion's influence and applying this understanding to an Air Force or military context with its many nuances and challenges is a gap in the literature. To better understand this context and these nuances and challenges, the background describes Air Force PME, leader and leadership development in the Air Force, the adult learning theory the Air Force relies on for PME, as well as an explanation of the complex relationship between the military and emotion, and Air Force culture.

## **Background of the Study**

To meet the needs of the nation and create the force necessary to defend national interests such as “protect the security of the American people; expand economic prosperity and opportunity; and realize and defend the democratic values at the heart of the American way of life” (Biden-Harris Administration, 2022, p. 7), the United States Air Force trains and educates Airmen with the following priorities (*AETC FY21 Strategic Communication Plan*, 2020):

- Advancing Force Development
- Enhance Lethality and Readiness
- Transform the Way We Learn
- Cultivate an Environment of Excellence

Today, the Air Force uses various Professional Military Education (PME) levels that center on leader development through the cognitive domain, where leadership is taught through theories, models, ethics, and core values in addition to emphasizing important skills and knowledge such as critical thinking, effective communication, airpower history, doctrine, strategy, force employment, international security and relations, joint and interservice operations, political-military issues, national instruments of power, and the conduct of war (*Officer Professional Military Education Student Handbook*, 2020). However, this is only one dimension of learning. Emotion and affect also have a significant role in leadership and development, but first, we need to understand more about this relationship and how it influences the Airman's learning and development. This will help grow our understanding of how Airmen learn and to meet Air Education and Training Command's (AETC) priorities above.

### ***Air Force Professional Military Education***

Training and education in the Air Force can be traced over 20 years before its formal independence from the United States (US) Army in 1947. Air experiences from World War I (WWI) demonstrated the need for properly trained and educated air officers (Finney, 1955). Shortly after WWI in 1920, the Army formed the Air Service as a combatant arm and also established professional education for air officers through special and general schools (Finney, 1955). This stemmed from airpower being a new and cutting-edge concept involving technology, tactics, techniques, procedures, and planning that was outside most traditional warfighters' minds. Among these schools was the establishment of the Air Corps Tactical School (ACTS), which educated air officers on command and staff functions, intelligence, logistics, aviation tactics and techniques, air force theory and employment, and service doctrine (Finney, 1955). ACTS was later redesignated as Air University (AU), which is it still today, and held onto many of its predecessor's purposes and traditions, even going as far as keeping the ACTS motto, *Proficimus More Irretenti*, "We Make Progress Unhindered by Custom" (Finney, 1955, p. vii). Since its establishment, AU has been recognized as the center for education, doctrine, and research (Finney, 1955; Manning et al., 2005).

Through the years, AU developed PME into several schools for officer development: the Air War College for senior officers, the Air Command and Staff College for mid-level officers, and the Squadron Officer School, for junior officers (Manning et al., 2005). These courses taught and still teach topics and skills that prepare officers for command and staff duties (*The Air University Catalog: 2020-2021*, 2020; *The Air University Catalog: For Sessions 1947-1948*, 1948). AU's focus on officer PME includes leadership theories, models, characteristics, core values, critical thinking, effective communication, ethics, persuasion methods, conflict

management, airpower history, military doctrine, general military theory, operational and strategic integrated joint force employment, international security and relations, political-military issues, strategy, instruments of national power, and the conduct of war (*Officer Professional Military Education Student Handbook*, 2021). These topics are taught throughout an Airman's career in various schools commensurate to their rank through what the Air Force calls the continuum of learning. The continuum of learning is described as:

[A] career long process of *individual development* where challenging experiences are combined with education and training through a common taxonomy to produce Airmen who possess the tactical expertise, operational competence, and strategic vision to lead and execute the full spectrum of Air Force missions. (*An AETC Vision for Learning Transformation*, 2013, p. ix)

Here, we see the concept of individual development that enables and fosters the Airmen's growth from occupational practitioners to leaders, which continues today.

**Leader Development, Leadership Development, and the Air Force.** Starting with the distinction between leader development and leadership development is important because these terms have often been used interchangeably throughout the literature (Dalakoura, 2010; Day 2011). However, in 2000, David Day published an article reviewing leadership development and found particular distinctions that emphasized the individual or their capacity to cooperate and work in teams. This is where the difference between *leader development* and *leadership development* became popular in the literature. Day (2000) described leader development as emphasizing "individual-based knowledge, skills, and abilities associated with formal leadership roles" (p. 584). Leadership development emphasizes education on building social capital for

networking, cooperation, interpersonal exchange, commitment, and trust for organizational effectiveness (Day, 2000).

Today, the Air Force's continuum of learning explains development as a career-long, individual-centered process. This falls in line with Day's description of leader development, where the individual is the focus. However, wording in Air Force PME objectives throughout the years paints a more holistic picture. For example, one of the learning outcomes for Squadron Officer School (SOS) in 2020 was "Understand how to build and sustain relationships of trust" (*The Air University Catalog: 2020-2021*, 2020, p. 174). Air Command and Staff School also had the following objective during AU's early days: "To develop understanding and teamwork within the Armed Forces" (*The Air University Catalog: For Sessions 1947-1948*). These are more in line with Day's (2000) description of leadership development, where building social capital and networking are the focus. There are also objectives that focus on developing the individual through self-reflection and meta-cognition, which show that the Air Force sees individual development as a combination of Day's leader development and leadership development. This is clear in the 2015 SOS program description, which states, "SOS emphasizes personal, team, and organizational leadership" (*The Air University Catalog: 2015-2016*, 2015, p. 112).

Since the early 1900s, the literature has explained leadership theory through a collection of traits, behaviors, skills, and techniques, as well as being based on situations, identity, models, authenticity, disposition, relationships, and much more in a sea of ever-growing theories and ideas geared toward understanding what leadership is, how it works, and how best to do it (Avolio & Chan, 2008; Lord & Hall, 2005; Sosik & Jung, 2010). Through a review of Air University Catalogs, Air Force PME follows some of these trends. For example, in 2012, SOS

taught Air Force leadership through the Full-Range Leadership Model (FRLM) (*The Air University Catalog: 2012-2013*, 2012). The FRLM proposes that leaders display various behaviors ranging from passive to active leadership (Sosik & Jung, 2010). By 2020, SOS moved on to teaching leadership through the Meta-Leadership Model, which emphasizes leading and working across organizational and agency lines toward shared goals and purposes (Marcus et al., 2006). Despite these leadership theory changes, the Air Force has consistently used PME to educate its officers on Airpower employment and the challenges of leading in the course's particular era.

**Adult Learning Theory and the Air Force.** Sources linking adult learning theory to Air Force training and PME do not seem to exist at this point. At least not explicitly. However, statements found in Air Force documents do reference learning theory. For example, Air Force document, *An AETC Vision for Learning Transformation* (2013) states, "Air Force learning environments must be shaped by sound learning theory that considers goals and purposes, individual differences, and principles for adult learning" (p. 5). This tells us that the Air Force is aware of adult learning theory and that it shapes PME through particular theory/theories but determining which in particular was a little more challenging to pinpoint. However, themes point to andragogy, self-directed learning, and experiential learning after reviewing education and training related documents throughout Air Force history. For example, in 1943, technical training (training that teaches Airmen their occupational specialties) was taught via lecture and focused on theory (Manning et al., 2005). Graduates were reported as seriously deficient in their skills, and as a result, training and education shifted from lecture to a more practical approach that focused on discussion, hands-on training, and demonstration (Manning et al., 2005). Moreover, in 1951, on-the-job training was formally implemented into jet mechanic training, and

experience was emphasized as a key aspect of vocational development (Manning et al., 2005). In 1989, the Air Force began experimenting with distance learning through teleconferencing technology, allowing Airmen to attend classroom sessions from the Pentagon in Virginia all the way in Texas (Manning et al., 2005). In 1991, distance learning grew to include computerized instruction at local training centers, and by 1998, the Air Force offered approximately 150 courses online, which allowed access anywhere with an internet connection (Manning et al., 2005). Today, associate, bachelor's, and master's degree programs and a wide variety of technical training are offered online at the student's convenience.

*Andragogy and the Air Force.* These overarching themes of practical education focused on discussion, hands-on training, demonstration, and on-the-job training, along with online facilitated and self-paced education, show that the Air Force relies on elements of andragogy. Andragogy assumes adults have a need to know what they are learning and why it is important, have a self-concept of personal responsibility, have levels of experience that they bring into the learning environment, become ready to learn things they need to know for real-life situations, are life and task-centered in their learning, and that the most potent motivators for adults are internal, not external (Knowles et al., 2020). Starting with the need to know and the role of experience, Air Force technical training and PME have moved away from the lecture teaching method and now encourage group discussion. This facilitates the Airmen's need to know why what they are learning about is relevant and important. In particular, this opens the door for discussion on the value of learning a leadership topic, subject, technical skill, etc. Moreover, discussion allows adult learners to share and apply their experiences throughout the course to help others learn while learning from the experiences of others themselves.

The Air Force's early adoption and now prevalent use of online distance education for PME and many other topics provide Airmen with learning opportunities at their convenience. Here, it can be inferred that the Air Force relies on andragogy's assumption that adults have a self-concept that centers on individual responsibility. In fact, *Air Force Doctrine Document 1-1* (2011) states, "All Airmen have a responsibility to take advantage of and enhance their education and training, while the institution is responsible for providing the opportunity for each Airman to do so" (p. 38). By providing convenient learning opportunities that can be accessed anywhere with an internet connection at any time, there is an assumption that Airmen will take these opportunities and, in a larger sense, take responsibility for their own learning and their lives. In fact, this is more than an inference. *An AETC Vision for Learning Transformation* (2013, p. vii), lists the following principles of learning:

1. The Air Force learning environment is adaptable.
2. The learning environment is effective and efficient in meeting validated learning objectives, protecting Airmen's time, and minimizing cost.
3. Technology is leveraged to deliver the most innovative learning environment possible, standardized across the Air Force.
4. Learning is available anytime and anywhere.
5. Students are responsible for their own learning.
6. Instruction is more interactive, self-paced where possible, and appropriate to the desired outcome.

Number Five shows that the Air Force relies on andragogy's assumption of the adult learner's self-concept of responsibility.

Andragogy also assumes that adults become ready to learn what they need to know to cope with real-life situations (Knowles et al., 2015, 2020). Air Force officer PME is designed to prepare Airmen for increased responsibility and their upcoming roles as leaders and staff officers (*The Air University Catalog: 2020-2021*, 2020). In this capacity, officers come ready to learn knowledge and skills at PME that will help them in their current and future roles and situations in the military. Additionally, Air Force technical training teaches Airmen the skills they need to do their jobs. Airmen come to technical training ready to learn the job skills that will prepare them for their new realities as specialists and experts in their careers. This also feeds into an adult learner's life and task-centered orientation to learning and experience as central aspects of learning.

PME uses simulation, team-building, problem-solving activities, and leadership experiential exercises that center on knowledge and skills relevant to the Airmen's career (*The Air University Catalog: 2020-2021*, 2020). Here, andragogy's emphasis on the adult learner's orientation toward life and task-centered learning and the role of experience as a rich resource are front and center. Knowles et al. (2015, 2020) say that experiential techniques such as the ones above and, more specifically, simulation exercises, problem-solving activities, laboratory methods, and peer-helping activities are key aspects of adult education. An Air Force example of this comes from the SOS's use of a simulated experiential exercise called the Mixed Reality Leadership Experience (*SOS Welcome Letter: Class 21D*, 2021). These leadership exercises are geared toward challenges that officers will likely face as they take on more responsibility and move into leadership roles. Once the exercise is complete, the class discusses the event and learns together from the experience. SOS also has many other experiential activities where the officers work together to solve various problems while one of them takes the lead. After each

event, the class discusses the experience, ending with key takeaways and lessons that the class can apply to future lessons and activities. There are many other areas where the Air Force considers the learner's orientation to learning and experience. These are discussed in the section on experiential learning below.

The last assumption for andragogy addresses adult learner motivation, which is influenced by both external motivators like promotion or prestige or internal motivators like quality of life and job satisfaction (Knowles et al., 2015, 2020). This assumption is difficult to explain in relation to PME or technical training because internal motivations are based on what an adult learner values most (Knowles et al., 2015, 2020). So, based on this last assumption, we can assume that Airmen will work hard to learn what they must to realize their internal motivations. If PME instructors can tap into this, their students will buy into learning the material.

***Self-Directed Learning and the Air Force.*** Of self-directed learning's (SDL) elements of personal attributes, process, and context (Hiemstra & Brockett, 2012), the Air Force relies on the personal element that considers learner accountability, responsibility, and autonomy toward an individual's own learning. Air Force online education allows Airmen to pursue education and training at various levels in numerous topics geared toward what they want to learn or need to learn. In this case, Airmen are expected to take the reins and direct their learning toward personal interests and professional goals, and the Air Force provides the means and access to do it.

Online distance education also allows for structure and a path to learning success. This is where the process elements of SDL are important. From the process perspective, learners control their learning through linear, interactive, and instructional models that help them plan, execute, and evaluate their learning (Merriam & Baumgartner, 2020; Merriam & Bierema, 2014). Online

distance education programs can guide learners through their learning with degree programs and course options geared toward their needs and interests. Here, the learner is in control of selecting learning options in line with their desired development vectors. Online distance education provides learners with the path, steps, models, and other tools to accomplish their learning goals.

Finally, SDL's consideration of context is an enabling factor in Air Force distance education. Looking back at AETC's list of learning principles above, we see the Air Force prioritizes learning that values the Airman's time, is adaptable, effective, efficient, innovative, accessible, interactive, and self-paced (*An AETC Vision for Learning Transformation*, 2013). The Air Force relies on Airmen to execute missions with the most sophisticated equipment, tactics, techniques, and procedures. Education has always been the central enabler of all of this. That said, the Air Force has created an environment that encourages learning through access, means, and leadership support, emphasizing continuing education through a continuum of learning throughout an Airman's career. This enables not only personal growth but also organizational success.

### **Experiential Learning and the Air Force**

“All knowing (therefore all learning) begins with experience—not just current, this moment-in-time experience but all our previous experience” (Taylor & Marienau, 2016, p. 38). This statement illustrates the power and value of experience in learning and knowledge. It is also likely why experience is such a prominent aspect of adult learning theories and concepts such as andragogy, transformative learning, self-directed learning, and experiential learning (Andresen et al., 2000; Brockett & Hiemstra, 1991; Knowles, 1975; Knowles et al., 1998, 2015, 2020; Mezirow, 1991b). In fact, in experiential learning, the distinguishing feature is the experience of the learner as central to all teaching and learning considerations (Andresen et al., 2000).

However, trying to pinpoint a universal definition in the literature is difficult. First, experiential learning has several other commonly used terms in the literature, including experience-based learning, experience learning, and learning from experience (Beard & Wilson, 2002; Chan, 2023; Moon, 2013; Ruben, 1999; Swennen, 2020). Second, experiential learning has many different definitions and understandings (Moon, 2013; Steele, 2023). For example, Beard and Wilson (2002) define experiential learning as insights gained through either unconscious or conscious internalization of personally experienced or observed interactions that build on past experiences and knowledge. Chickering (1977) explains that all learning is experiential, and that experiential learning is acquiring knowledge, understanding, or skill through a lived event or events and the effects on the judgments and feelings that come from these experiences. Moreover, Hutton (1990) describes experiential learning as learning rooted in doing and experience that provides illumination, direction, and, ultimately, judgment that can guide choice and action.

Furthermore, Griffin (1992) says the professional ideology of experiential learning centers on empowering individuals and responsibility through their ability to gain control of their learning and their lives. Saddington (1992) adds that experiential learning is a process of reflecting on experience and translating this into concepts that become guidelines for new experiences. Moreover, Merriam and Bierema (2014) break down various aspects of experiential learning from the literature and explain that it represents various conceptualizations regarding experience and learning's relationship, refers to certain instructional strategies and programs designed for authentic and real-life learning, and acknowledge the learner's previous life experiences as a resource for reflection. These definitions and descriptions do not entirely represent the large body of literature on experiential learning but provide an idea of the concept's

complex and varied understandings. From these definitions, experiential learning considers many aspects centering on learning from lived experience. Through these, the learner internalizes, judges, and interprets their experiences to build knowledge and understanding, influencing future actions and interpretations of experiences. Merriam and Brockett (2007) aptly say, “[T]he idea is not merely that the accumulation of experience makes a difference; it is how learners attach meanings to or make sense of their experience that matters” (pp. 152-153). We also find these aspects and themes in other prominent adult learning theories, such as andragogy, self-directed learning, and transformative learning.

As explained in the section on andragogy and the Air Force above, Air Force officer PME extensively uses experience as a learning method. Along with the Mixed Reality Leadership Experience, SOS relies on simulation, guided discussion, group problem-solving, and other experiential activities for leadership, ethics, and team-building throughout the course (*The Air University Catalog: 2020-2021*, 2020). Students take lessons from the classroom and put these into practice in the field and various other locations as a team. During these events, a class member is assigned as the leader, while the others serve as followers. Officer PME is not the only area where experience is emphasized in learning. On-the-job training and simulation have been used throughout Air Force history in a multitude of ways, including flying, parachute jump training, electronic warfare, altitude chamber training, survival, evasion, prisoner resistance training, and aircraft maintenance (Manning,2005). These allow for hands-on experiential learning in a context-rich and situated environment.

### ***Military Culture***

With an understanding of how the Air Force trains and educates its Airmen, it is also important to understand military culture and who this demographic is in order to reach them as

educators. Immordino-Yang (2016) says, “[W]e only think deeply about things we care about” (p. 17) and explains that meaningful and effective learning considers emotion that motivates students, produces deep understanding, and transfers real-world skills. This perspective illustrates the need to find ways to make education relevant and relatable to the student. In other words, learning needs to be made personal, worthwhile, and something the student cares about. Education needs to draw personal connections to the material being taught. That means bringing the subject into the students’ social and contextual worlds. This takes understanding who your students are and what they value to make learning personal and effective. That said, let us start with military culture.

Wilson (2007) defines culture as “the values, norms, and assumptions that guide human action” (p. 14). Kirke (2010) also explains that culture influences the worldviews of the members within the social group in terms of attitudes, expectations, assumptions, norms, and values. The US military has its own cultures and subcultures and falls under the Department of Defense, comprised of the Army, Navy, Marine Corps, Air Force, Space Force, Coast Guard, and National Guard components (*Learn about the US military branches*, 2023; Long, 2016). Moreover, military members work and even live in relative isolation from society, wear distinctive clothing based on military branch and occupation, can be sent anywhere in the world on short notice, jobs may be dangerous and life-threatening, there is the potential for legitimized violence, and work with a diverse population requiring members to be fundamentally nondiscriminatory (Soeters et al., 2006). There is also a cultural distinction between the branches of the military and the various occupations within these branches, not to mention various cultural influences from where units are located throughout the world (Soeters et al., 2006). For example, the dominant culture within the Air Force is pilot-centered; however, non-pilots, such as intelligence officers and

ballistic missile officers, or even pilots within distinct communities, such as fighter pilots and bomber pilots, each have their own sub-cultures (Long, 2016). Furthermore, military hierarchy is heavily emphasized through a rank and chain of command structure that provides the unit with direction, discipline, and control (Soeters et al., 2006). In short, military culture is complex. Still, all share common elements such as a rank-based hierarchy, chain of command, the potential for worldwide deployment, the potential for increased risk, and various other aspects that make serving in the military different from occupations outside of the military.

**Military Culture and Emotion.** In a conversation with Lieutenant Colonel D.A. Clark (personal communication, June 26, 2023), the former Director of Design and Development at the Air Force Global College of Professional Military Education, he said that the military's thoughts on emotion have drastically changed over the last 20 years. In other words, the Air Force and other military branches have grown more accepting that emotion is vital to leadership, learning, development, resiliency, and much more. This is significant not only because leader and leadership development has primarily relied on the cognitive domain but also because military culture with a traditional emphasis on masculinity may have hindered emotion and impacted development through what Vogel et al. (2021) referred to as "emotion and affect-related theory and processes" (p. 15). Richard and Molloy (2020) explain that military culture and ideas on masculinity emphasize avoidance and decreased value of emotion. In this sense, emotion is viewed as a negative influence, something to be suppressed or controlled not only to fit into a culture of masculinity but also to enable rational decision-making. Williams (2010) describes emotion as a potential trap within a list of other considerations that must be avoided and compensated for to prevent poor military decision-making outcomes. Williams (2010) says that when aspects such as subjective assessment, ego, and emotion mix with cognitive processes, it

becomes clear that these are potential traps introduced by intuitive decision-making that need to be avoided and compensated for.

Emotional avoidance, however, did not seem to apply to all emotions in the military. Forbes et al. (2022) explain that anger is considered an approach emotion and serves as a motivator or mobilizer for productive action when facing threats. They go on to say that anger serves as an appropriate expression of emotion and is understandable in certain situations and cases (Forbes et al., 2022). In Forbes et al.'s (2022) statement, anger is used to explain an appropriate reaction in the face of a threat; however, they also explain that it is quite common for anger to become problematic over the life course of veterans and military members. The potential for problematic anger also seems to increase in military communities as a result of deployments, which can lead to aggression and suicidality and interfere with interpersonal relationships and functioning (Forbes et al., 2022).

**Air Force Culture.** As explained above, the dominant culture within the Air Force is pilot-centered; however, non-pilots, such as intelligence officers and ballistic missile officers, or even pilots within distinct communities, such as fighter pilots and bomber pilots, each have their own sub-cultures (Long, 2016). This stems from the early days when the Air Force broke from the Army and formed as an independent military branch in 1947 (*AFDDI-1 Force Development*, 2011). This was necessitated by the need for an airpower-centered function in the military versus aircraft support centered on enabling ground and naval forces. Today, the Air Force provides strategic and tactical airpower, defined as “the ability to project military power through control and exploitation in, from and through the air” (*AFDP-1 The Air Force*, 2021, p. 6). To enable and facilitate airpower, the Air Force operates in the air domain, cyberspace domain, information environment, and the electromagnetic spectrum (*AFDP-1 The Air Force*, 2021). Military

personnel within the Air Force are referred to as Airmen who operate under the core values of integrity first, service before self, and excellence in all we do (*AFDP-1 The Air Force*, 2021). The Air Force is highly technical and technology focused (*AFDDI-1 Force Development*, 2011); training, education, and development are prized, and Airmen are expected to pursue their own learning (*An AETC Vision for Learning Transformation*, 2013); and innovation, change, and transformation are part of the Air Force ethos and stems from the days of Billy Mitchell trying to sell airpower to a narrowminded Army in the early 1900s (*AFDDI-1 Force Development*, 2011; Drew, 1997). General David Allvin, the latest Chief of Staff of the Air Force, builds on this and describes Air Force history as a legacy of adaptation. He says “The Air Force has a rich history of successfully reckoning with transformational change. Since its inception in 1947, it has consistently evolved by reorienting and ‘reoptimizing’ itself to align with dynamically changing demands at key inflection points” (Allvin, 2024, p. 2). Here, we see the makings of Air Force culture, steeped in these ideals, pushing the branch and its Airmen to meet the challenges of tomorrow through innovation and persistent development in all areas.

### **Statement of the Problem**

Leader development and leadership in the United States Air Force are influenced by a complex blend of deliberate education, training, and experience, as well as mentorship, culture, character, and core values (*AETC FY21 Strategic Communication Plan*, 2020; *AFDDI-1 Force Development*, 2011). What is not apparent is the intersection of emotion, these aspects, and leader development. Outside of emotional intelligence, which Salovey and Mayer (1990) explain as the ability to appraise and regulate emotion in oneself and others, emotion’s role and influence in leader development is not often discussed in Air Force Professional Military Education (PME). In fact, emotion is an underrepresented arena in leader development literature (Vogel et

al., 2021), especially in the military context. The literature tells us that emotion can trigger and inform reflection and influence significant change through transformative learning (Dirkx, 2001; Taylor, 2000). The literature also tells us that leader development can occur through transformative learning and aspects of it (Kim, 2020; Sweet, 2022; Sweetman, 2018). However, studies providing direct linkages involving these aspects together are a gap in the literature, especially in the military and Air Force context, as explained in the background section above.

This study sought to address a gap in the literature in understanding the intersection between emotion and leader development and leadership development in the military, particularly in the Air Force context. As explained above, literature in adult learning, leader development, and leadership development establish connections between emotion and transformative learning, as well as transformative learning and leader development and leadership development, which implies a connection between all of these aspects. However, there does not seem to be any research that directly connects and explains the intersection of emotion with leader development and leadership development, let alone in a military or Air Force context. This study hopes to begin addressing this gap in the literature and grow the field's understanding of how emotion influences leader development through transformative learning.

### **Purpose Statement and Research Questions**

The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers.

The research questions that guided this study were:

1. How do Air Force leaders experience leader development?

2. In what ways do Air Force leaders experience emotion in their leader development experiences?
3. What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

### **Significance of the Study**

This study contributes to the adult learning and leadership fields in several ways. First, this study addresses a gap in the literature caused by a bias toward cognitive theorizing that seemingly ignores what Vogel et al. (2021) describes as “emotion and affect-related theory and processes” (p. 15). This is evident in reviewing United States Air Force documents that outline Professional Military Education (PME) curricula for officers. For example, in the *Officer Professional Military Education Student Handbook* (2020), leader and leadership education and development focus on leadership models, skills, and techniques, as well as lessons on values, ethics, critical thinking, communication skills, military and airpower history, problem-solving, teamwork, doctrine, force and joint force employment, and political-military relations. These emphasis items teach Air Force officers about leadership and how to lead in the Air Force. A review of leadership theory since the early 1900s points to a similar emphasis on the cognitive domain with theories that focus on traits, situation-based leadership, skills, styles, authenticity, goal-setting, meta-leadership, and the full-range leadership model that includes aspects from many of these conceptual predecessors (Avolio & Chan, 2008; Lord & Hall, 2005; Marcus et al., 2015; Sosik & Jung, 2010).

Second, this study worked to shed light on how emotion intersects with leader development in an often missed demographic of society, the United States (US) military, and, more specifically, the Air Force through the narratives of retired commanders. This adds another

layer of complexity by including the relationship between emotion and the US military, which may impact important aspects of development brought on by transformative learning, described in the sections above and discussed more in-depth in Chapter 2. Richard and Molloy (2020) explain that an emphasis on traditional masculinity in military culture devalues emotion and emotional expression and leads to avoidance. This devaluation and avoidance of emotion may stifle crucial elements of the transformative learning process, such as self-examination and the accompanying emotions that come with this, as well as critical reflection and assessment of fundamental assumptions (Mezirow, 1991b). Moreover, Williams (2010) describes emotion as a potential trap within a list of other considerations that must be avoided and compensated for to prevent poor military decision-making outcomes. Through the research conducted in this study, the field of adult learning and leadership can grow their understanding of how emotions intersect and influence transformative learning and leader development in an environment that does not altogether embrace emotion.

This study sought to understand leader growth outside of traditional Air Force development that comes from PME. It also builds knowledge based on the leader development experiences and narratives of retired Air Force commanders. Military careers can provide a wealth of experience that fuels significant development in leaders. In particular, adding to how emotion intersects with leader development can provide insights outside of conventional leader development methods that rely on the cognitive domain and theory. Additionally, understanding from this perspective and the focus on emotion and transformative learning towards Air Force leader development can bolster the adult learning and leadership fields at large by countering the predominantly cognitive emphasis of leader development and how it is taught using adult learning theory. Moreover, acknowledging the positive aspects of emotion as it relates to leader

development in a military context may aid a shift away from what Richard and Molloy (2020) describe as an emphasis on traditional masculinity in military culture that devalues emotion and emotional expression and leads to avoidance. This can have implications regarding a change in military culture that allows for emotions other than problematic anger, which Forbes et al. (2022) explain “is common in veteran and military populations” (p. 789). Another implication may be in terms of policy and how leaders are developed in the Air Force, military, and the leadership field at large. This research may ultimately result in including emotion and transformative learning’s role in leader development, thereby expanding application and understanding in both the adult learning and leadership fields.

### **Definition of Terms**

The following terms are used frequently throughout this study and are defined here for clarity and reference.

***Airman:*** “[U]niformed members of the [United States] Air Force (officer or enlisted; regular, Reserve, or Guard) regardless of rank, component, or specialty. Today, Air Force civilians and members of the Civil Air Patrol, when conducting missions as the official Air Force Auxiliary, are incorporated within the broader meaning of the term, Airman” (*AFDP-1 The Air Force*, 2021).

***Cognition:*** Mental processes including memory, attention, problem-solving, thinking, decision-making, reasoning, planning, and other higher-order thought processes (Halpern, 2006; Pessoa, 2008).

***Commander:*** “Special authorities and responsibilities are inherent with command. In addition to leading people to accomplish an assigned mission, commanders have the lawful authority and responsibility to promote and safeguard the morale, physical well-being, and the

general welfare of persons under their command” (Air Force Instruction 1-2, 2014, p. 2). Typical ranks for this position include Major and above.

***Emotion:*** (1) “It is a complex disturbance which includes three main components- namely, subjective affect (which includes the cognitive appraisal), physiological changes related to species-specific forms of mobilization for action, and actions having both instrumental and expressive features” (Lazarus, 1997, p. 71). (2) “Emotions are interpretations of the meaning of feeling. Feelings and impulses become transformed into emotions as we learn how to interpret what they mean in relation to others and to ourselves” (Mezirow, 1991b, p. 22).

***Leader development:*** Focuses on the development of individual human capital through training and education that emphasizes “knowledge, skills, and abilities associated with formal leadership roles” (Day, 2000). According to Day et al. (2009), leader development occurs at three enduring and dynamic levels throughout life: the acquisition of leadership competencies, self-regulation and identity development, and within the domain of adult development.

***Leadership development:*** Emphasizes the development of social capital and resources and focuses on building relationships and networks, instilling trust, respect, and commitment through interpersonal exchange (Day, 2000).

***Professional Military Education:*** “Critical subset of developmental education that: 1) provides the nation with personnel skilled in the employment of air, space, and cyberspace power in the conduct of war, small scale contingencies, deterrence, peacetime operations, and national security; 2) provides Department of the Air Force personnel with the skills and knowledge to make sound decisions in progressively more demanding leadership positions within the national security environment; and 3) develops strategic thinkers, planners, and war fighters. In addition,

programs strengthen the ability and skills of Department of the Air Force personnel to lead, manage, and supervise” (DAFPD 36-26, 2022, p. 13).

***Transformative learning:*** The process of perspective transformation through learning and profoundly shifting taken-for-granted and problematic frames of reference, such as meaning perspectives, habits of mind, and mindsets, to make them more inclusive, permeable, discriminating, reflective, open, emotionally able to change, and better justified (Kitchenham, 2008; Kroth & Cranton, 2014; Mezirow & Associates, 2000; Mezirow, 1978b, 1991b, 1991b, 1997; Mezirow & Taylor, 2009). Transformative learning also involves the following: learning and making meaning from lived experiences; it most often requires critical reflection; usually involves intense and powerful emotional episodes; and is triggered by emotion, which also informs reflection (Brookfield, 2000; Dirkx, 2006; Merriam & Bierema, 2014; Mezirow, 1998; Taylor, 2000).

## **Study Overview**

As previously described in this chapter, this doctoral research focused on emotion, transformative learning, and United States Air Force leader development. Chapter 1 explained the background, problem statement, purpose, research questions, significance of the study, and definitions of important terms used throughout the study. This chapter presented the importance of understanding the intersection between emotion and Air Force leader development, the challenges of researching this demographic, and the questions that drive this study. Chapter 2 centered on the literature in five main areas: adult learners and adult learning theory; transformative learning theory; leadership and development; educational psychology and the relationship between cognition, emotion, and learning; the relationship between transformative learning, leader development, and emotion; and the implications for these areas on Air Force

leaders. These topics stand on their own and come from various fields, but together, they form the basis for understanding how leaders can tap into their emotions to learn and transform. Chapter 3 addressed the methodology of the study. This doctoral research focused on the narratives of retired Air Force commanders and their experiences. Narrative inquiry was used to explore their life and leadership experiences to try and determine the intersection of emotion and leader development in the context of the Air Force. This chapter also provided insights into how the data was coded and analyzed. Chapter 4 presented the findings through themes, categories, and codes using the research participant's stories and narratives collected during the interview process. And finally, Chapter 5 provided a discussion based on the findings and identified and explained implications for practice and policy along with recommendations for future research.

## **Chapter 2**

### **Literature Review**

The United States Air Force has been developing air-minded leaders since the 1920s through general and specialized schools (Finney, 1955). Since then, leadership and development in the Air Force have evolved into a complex blend of education, training, experience, mentorship, culture, character, and core values (*AETC FY21 Strategic Communication Plan, 2020; AFDDI-1 Force Development, 2011*). On the surface, the Air Force has a well-established and effective foundation for building leaders. However, the influence of emotion and its role in leader development is a gap in research that this study aims to begin filling. This study centers on understanding the intersection of emotion and leader development of retired Air Force commanders through their narratives and the lens of transformative learning theory. This chapter reviews literature from several fields to understand how leaders develop in the Air Force and how these concepts relate and influence one another, including adult learning theory, leader development, leadership development, and educational psychology, discussing the relationship between cognition, emotion, and learning. This section examined the history, philosophies, and ideas that inform these concepts to help understand how Airmen learn and develop as leaders in the Air Force.

#### **Adult Learning Theory and Airmen as Adult Learners**

Defining an adult and the various aspects that constitute an adult in the literature can be difficult. For example, Johnstone and Rivera (1965) describe the adult population as 21 or older, married, or holding the role of head of a household. Additionally, a technical report from the United States (US) Department of Education written by Collins et al. (1997) identified adults as people 16 years or older who were not enrolled in elementary or secondary education, were

civilians, and were noninstitutionalized. Another example comes from Tennessee Code § 1-3-105 (n.d.), which defines adults, or the age of majority, as 18 years or older. This can differ from state to state, but adults are generally considered 18 years or older in the US. From these descriptions, being an adult is a matter of biological age, legal age, or a person's societal or familial role. Merriam and Brockett (2007) seem to take these various aspects a step further to provide a comprehensive definition of adult as part of their explanation of adult education, which they described as “activities intentionally designed for the purpose of bringing about learning among those whose age, social roles, or self-perception, define them as adults” (p. 8). Here, adulthood is described as a factor of age, a person's social role, or their self-perception.

Air Force learners fit each of Merriam and Brockett's (2007) descriptions. Airmen must be at least 18 years old (with certain caveats for 17-year-olds such as being emancipated, married, or who receive parental consent), serve to protect the American people and safeguard vital US national interests, and are responsible for their learning, development, and occupational proficiency (*AFDP-1 The Air Force*, 2021, pp. 36–2032; *An AETC Vision for Learning Transformation*, 2013; *Department of the Air Force Instruction 36-2670: Total Force Development*, 2020; *DAFMAN 36-2032*, 2019; *National Security Strategy*, 2022). Here, Airmen fit the description of adults in terms of age, social role as America's protectors and in service to the US public, and self-perception that comes with being responsible for their own learning, development, and job proficiency. Couple the description of adults above with an explanation of what constitutes learning and where adult learning occurs from the literature, and together, the adult learner is a person with a self-perception, age, and/or social role that defines them as an adult, and who participates in 1) acquisition and mastery of a known topic or subject 2) clarification, extension, or process of obtaining meaning from lived experience, or 3) a process

of organized and intentional testing of ideas applied to relevant problems in formal, nonformal, and informal settings (Merriam & Bierema, 2014; Merriam & Brockett, 2007; Smith, 1982).

However, a definition of adult learners is only the starting point of understanding how they learn. Next is where adult learning theory comes in. Merriam et al. (2007) say, “[T]here is no single theory of adult learning. Instead, we have a number of frameworks, or models, each of which contributes something to our understanding of adults as learners” (p. 83). Understanding how adults learn is a fundamental element of teaching Air Force officers to lead. Some of the more significant aspects to consider include understanding what motivates them, their independence and sense of self, how experience influences their learning, what they know, and their development as leaders, their readiness to learn, and the relevance and value of the course material being taught. Theories that help us understand these characteristics are andragogy, transformative learning, experience-based learning, and situated cognition and learning.

### **Andragogy**

In 1967, Knowles was introduced to andragogy by Dusan Savicevic, a Yugoslavian adult educator attending one of Knowles’s Summer sessions at Boston University (Knowles, 1989). This sparked andragogy’s rise in the United States (US) as Knowles went on to publish an Americanized version of the originally European concept of andragogy, which he defined as “the art and science of helping adults learn” (Knowles, 1980, p. 43; Knowles et al., 2015, p. 267, 2020, p. 287). Throughout the years, he revised and developed andragogy with inputs and critiques from fellow educators and theorists in the field and ultimately settled on the following assumptions (Knowles et al., 2020, pp. 43-46):

- Adults need to know why they need to learn something before undertaking to learn it.

- Adults have a self-concept of being responsible for their own decisions, for their own lives.
- Adults come into an educational activity with both a greater volume and a different quality of experience from that of youths.
- Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.
- In contrast to children's and youths' subject-centered orientation to learning, adults are life-centered (task-centered or problem-centered) in their orientation to learning.
- Adults are responsive to some external motivators (e.g., better jobs, promotions, higher salaries, etc.), but the most potent motivators are internal pressures (e.g., the desire for increased job satisfaction, self-esteem, quality of life, etc.).

Understanding andragogy in action, however, involves much more than a list of assumptions. To put the concept into action, (Knowles et al., 1998, 2015, 2020) provide three dimensions and a list of process elements that help teachers enable effective learning (p.79):

1. goals and purposes for learning
2. individual and situational differences
3. andragogy, core adult learning principles

Within these dimensions are various considerations, such as the situation, learner, and subject matter, that influence individual, institutional, and societal growth (Knowles et al., 1998, 2015, 2020). Through these, we can better understand how andragogy considers more than just the adult learner. It also considers the many aspects that impact their learning and how that learning impacts institutions and society and vice versa.

The process elements of andragogy are more like a list of steps teachers need to consider

to reach adult learners and enable their learning. Most of these can be found as early as 1972 with Knowles's paper on *Innovations in Teaching Styles and Approaches Based Upon Adult Learning*. Today, these include the following items and consider both pedagogical and andragogical considerations: how to prepare learners, climate, planning, diagnosis of needs, setting of objectives, designing learning plans, learning activities, and evaluation (Knowles et al., 2015, 2020). These together form a basis for how to reach adult learners by setting the ideal learning environment, developing an effective education program, and meeting students where they are in terms of their needs. It is easy to see why andragogy is so prominent in adult education today through the assumptions, process elements, and an understanding of the various influences on adult learning. It wholly considers and respects the complex nature of adult learners. Altogether, andragogy is a prominent theory in adult learning and has been called "the single most popular idea in the education and training of adults" (Brookfield, 1986, p. 91).

**History.** Knowles (1989) said, "the education of adults was probably the earliest form of systematic education" (p. 60). He took this away from a seminar led by Cyril Houle and provided historical examples of adult educators such as Aristotle, Plato, Socrates, Cicero, and others who recognized the wealth of experience in adults and developed techniques for engaging them in learning (Knowles, 1989). Many years after these ancient teachers taught, Kapp, a German grammar school teacher, introduced the term andragogy in 1833 to explain differences in how he approached teaching his adult students versus his teenage students (Henschke, 2010; Knowles, 1989; Knowles et al., 2015, 2020). Andragogy remained fallow for decades until 1921, when Eugen Rosenstock, a German social scientist, advocated for special teachers, methods, and a philosophy tailored to adult education (Henschke, 2010; Knowles, 1989; Knowles et al., 2015, 2020). Around that time, In 1926, Eduard Lindeman learned about andragogy during a trip to

Germany and was the first to bring this concept to the US through a piece titled *Andragogik: The Method of Teaching Adults* (Henschke, 2010; Knowles et al., 2015, 2020). In this article, he asserted that discussion was the ideal method for teaching adults and that this is different from teaching children (Henschke, 2010). Andragogy would not come up again for another extensive period but seemed to come up in a third wave in European publications in the 1950s (Knowles et al., 2015, 2020). In 1967, Knowles was introduced to andragogy by Dusan Savicevic, a Yugoslavian adult educator, who attended Knowles's Summer session at Boston University (Henschke, 2010; Knowles, 1989; Knowles et al., 2015, 2020). As a result, in 1968, the concept made its way back to the US with Knowles's work *Androgogy, not Pedagogy*, which presented an Americanized version of the theory (Knowles, 1989; Knowles et al., 2015, 2020). Knowles (1970) then provided a full representation of his ideas on andragogy in *The Modern Practice of Adult Education: Andragogy versus Pedagogy*. Here, Knowles (1970) first defines andragogy as "the art and science of helping adults learn" (p.38).

In the 1970s, Knowles began expanding on his ideas for andragogy and the field of adult learning. He grew the distinction between teacher-directed pedagogy and explained that self-directed learning theory is based on andragogy (Henschke, 2010; Knowles, 1975). Since then, Knowles (1972, 1980, 1989) and Knowles et al. (1998, 2015, 2020) have revised and developed andragogy with inputs and critiques from theorists and teachers passionate about education and learning spanning elementary to adult education. Through these contributions and critiques since the 1970s, andragogy has grown to include many different considerations that make up, define, describe, and influence adult learning and education. Some of these refinements include a revised and expanded list of assumptions for pedagogy and andragogy and a list of process elements, explained above, to help put andragogy into practice and understand how the

pedagogical approach differs from the andragogical approach (Knowles et al., 2015, 2020). For example, Knowles (1972) realized that as children matured, andragogical assumptions became more and more relevant to their learning. This was substantiated from the field as teachers in elementary and secondary schools experimented with applying concepts from andragogy into their classrooms found that applying these to youth learning could produce superior results in certain situations (Knowles, 1980). Moreover, Knowles (1980) realized that youths started becoming self-directed in their learning early on as they prepared for social roles which also influenced their readiness to learn to address problems they faced in their daily lives. Today, andragogy stands as one of the major adult learning theories, along with self-directed and transformative learning (Merriam, 2001; Merriam & Bierema, 2014).

**Philosophical and Theoretical Underpinnings.** On digging into the concept, application, and history of andragogy, what underlies its philosophy and mindset? Andragogy aligns with the humanistic, pragmatic, and progressive philosophies (Knowles et al., 2015, 2020; Merriam & Brockett, 2007). The humanistic philosophy aims to foster personal development through self-actualization while emphasizing freedom and dignity (Elias & Merriam, 2005; Knowles, 1989; Knowles et al., 2015, 2020). This underscores the profound respect that Knowles and advocates of andragogy hold for their learners. In this perspective, the essence of learning and education revolves around the student, focusing on their journey towards self-realization and growth. In the context of the pragmatic philosophy, consideration is given to the adult learner's experience and the knowledge gained from their experiences (Knowles et al., 2015, 2020). Merriam and Brockett (2007) also point out that andragogy has progressive roots. Progressive ideals, particularly in adult education, were inspired by major theorists such as Carl Rogers, Cyril Houle, Eduard Lindeman, Paulo Friere, Ralph Tyler, and Malcolm Knowles himself (Elias

& Merriam, 2005). Here, the adult learner's needs and interests, experience, as well as utilitarian goals, and social responsibility through democratic citizenship and civil virtue hold primacy (Elias & Merriam, 2005; Merriam & Brockett, 2007). This section has provided an understanding of andragogy and its various influences. This understanding can help provide a better grasp of adult learners through their characteristics. The following section discusses that aspect.

**Adult Learner Characteristics.** Andragogy makes the distinction between teaching children and adults. These distinctions include roles and responsibilities, developmental stage in the life cycle, life experiences, motivations to learn, orientation to learning, ability to self-reflect, self-developmental factors, a sense of autonomy, and the capacity to self-direct learning and change perspectives (Knowles et al., 2015, 2020; Merriam et al., 2007; Merriam & Bierema, 2014; Smith & Pourchot, 1998). Many of these aspects come together in adult learning theory, particularly Knowles's (1980) andragogy, which he defined as “the art and science of helping adults learn” (p. 43). Andragogy is based on several assumptions that make it distinct from pedagogy, defined as “the art and science of teaching children” (Knowles, 1980, p. 43, 1990, p. 28). Andragogy's assumptions center on the following: the need to know, learners' self-concept, the role of the learners' experiences, readiness to learn, orientation to learning, and motivation (Knowles, 1978, 1980, 1990; Knowles et al., 2015, 2020). Through these assumptions, Knowles (1980, 1990) and Knowles et al. (2015, 2020) explain that adults need to know why they are learning something, have a self-concept of responsibility for their lives and the decisions they make, have more and varied life experiences compared to children, become ready to learn what they need to know to cope with life circumstances and situations, have a life, task, and problem-

centered orientation to learning, and are motivated most by internal pressures such as job satisfaction and fulfillment.

### ***Transformative Learning Theory***

Transformative learning is defined as “learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open, and emotionally able to change” (Mezirow & Taylor, 2009, p. 22). It involves a process of effecting change in a person’s frame of reference (Mezirow, 1997). Through the multiphased transformative learning process listed below and found commonly throughout the literature on transformative learning, people challenge their core beliefs and assumptions, and if the transformative process is successful, they undergo a perspective transformation that can change how the individual sees themselves, others, and the world around them. Transformative learning theory and its concept of perspective transformation center on the idea of “[A] critical dimension of learning in adulthood that enables us to recognize and reassess the structure of assumptions and expectations which frame our thinking, feeling and acting” (Mezirow, 2006, p. 24). Transformative learning takes this overarching concept and explains that people can learn and transform their perspectives, frames of reference, and ways of seeing and understanding the world by identifying and reflecting on problematic beliefs, values, feelings, biases, and assumptions (Mezirow, 1991b). It often starts with a significant and emotional life experience that sparks the first step in the transformative process with what Mezirow calls a disorienting dilemma (Taylor, 2000). Mezirow (1991b, pp. 98–99) lists the following phases that are typical in the transformative learning process:

1. a disorienting dilemma
2. self-examination with feelings of guilt or shame
3. a critical assessment of epistemic, sociocultural, or psychic assumptions

4. recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change
5. exploration of options for new roles, relationships, and actions
6. planning of a course of action
7. acquisition of knowledge and skills for implementing one's plans
8. provisional trying of new roles
9. building of competence and self-confidence in new roles and relationships
10. reintegration into one's life on the basis of conditions dictated by one's new perspective.

Mezirow (1981) also explained that experiences in transformative learning can vary. For example, transformative learning could occur through variations of the 10 phases above or sudden insights from epiphanies. In short, transformative learning is crucial in identifying and transforming problematic and potentially harmful biases, beliefs, values, and assumptions. It involves important elements explained below and also defined in Table 2.1. This table contains elements of transformative learning theory from the literature over the last 30 years of Jack Mezirow's life.

One essential element in transformative learning is critical reflection. This is described as "questioning the integrity of deeply held assumptions and beliefs on prior experience" (Mezirow & Taylor, 2009, p. 7). Mezirow (1991b) also said that all reflection implies a level of critique, but that critical reflection is explicitly reserved for "challenging the validity of presuppositions in prior learning" (p. 12) and is concerned with the why behind what we do and the consequences of what we do. Here, individuals confront the central aspects that make up who they are, how they see and understand the world, what they believe, and what they value. Critical reflection is a required element of transformative learning but does not always lead to perspective

Table 2.1. Elements of Transformative Learning, Work in Progress.

Essential Element	Definitions/Descriptions
Disorienting dilemma	"Inner disequilibrium in which the harmony of the self is disturbed yet the problem is neither understood nor satisfactorily named" (Mezirow, 1991b, p. 103).
Experience	MacKeracher (2012) describes experience as the events that occur in a person's life between birth and death and is influenced by culture, social heritage, "values, beliefs, expectations, aspirations, and thoughts on how one ought to behave.
Development	"Development is a phased and often transformative process of meaning becoming clarified through expanded awareness, critical reflection, validating discourse and reflection action as one moves toward a fuller realization of agency" (Mezirow, 2012, p. 89).
Frame of reference	"Frames of reference are the structures of assumptions through which we understand our experiences. They selectively shape and delimit expectations, perceptions, cognition, and feelings. They set out 'line of action.' Once set, we automatically move from one specific activity (mental or behavioral) to another. We have a strong tendency to reject ideas that fail to fit our preconceptions, labeling those ideas as unworthy of considerations— aberrations, nonsense, irrelevant, weird, or mistaken" (Mezirow, 1997, p. 5).
Psychological premise Distortions	"Produce ways of feeling and acting that cause us pain because they are inconsistent with our self-concept or sense of how we want to be as adults" (Mezirow, 1991b, p. 84).
Meaning perspective	"A personal paradigm involving cognitive, conative, and affective dimensions" (Mezirow, 1985, p. 22).
Emotion	"It is our very emotions and feelings that not only provide the impetus for us to critically reflect, but often provide the gist of which to reflect deeply" (Taylor, 2000, p. 305). For example, Mezirow (2000) describe phase 2 in the 10 phases of transformation as "Self-examination with feelings of fear, anger, guilt, or shame" following the disorienting dilemma (p. 22)
Reflection	"A turning back on experience, can mean many things: simple awareness of an object, event or state, including awareness of a perception, thought, feeling, disposition, intention, action, or of one's habits of doing things. It can also mean letting one's thoughts wander over something, taking something into consideration, or imagining alternatives" (Mezirow, 1998, p. 185).
Premise reflection	"Through premise reflection we can understand how they [our premises] have come to shape the way we feel and act and their consequences...it is a natural form of transformative learning that often occurs in adult life, especially during major life transitions..." (Mezirow, 1991b, p. 84).
Critical reflection	"Refers to questioning the integrity of deeply held assumptions and beliefs on prior experience" (Mezirow & Taylor, 2009, p. 7). Critical reflection is important because it catalyzes transformative learning (Mezirow, 1991a).
• Affective reflectivity	"Refers to our becoming aware of how we feel about the way we are perceiving, thinking, or acting or about our habits of doing so" (Mezirow, 1981, p. 12).

Table 2.1. Continued.

Essential Element	Definitions/Descriptions
<ul style="list-style-type: none"> <li>• Discriminant reflectivity</li> </ul>	<p>“We assess the efficacy of our perceptions, thoughts, actions, and habits of doing things; identify immediate causes; recognize reality contexts (a play, game, dream, or religious, musical, or drug experience, etc.) in which we are functioning and identify our relationships in the situation” (Mezirow, 1981, p. 12).</p>
<ul style="list-style-type: none"> <li>• Judgmental reflectivity</li> </ul>	<p>“Involves making and becoming aware of our value judgments about our perceptions, thoughts, actions and habits in terms of their being liked or disliked, beautiful or ugly, positive or negative” (Mezirow, 1981, p. 12).</p>
<ul style="list-style-type: none"> <li>• Conceptual reflectivity</li> </ul>	<p>“The act of self-reflection which might lead one to question whether good or bad are adequate concepts for understanding or judging” (Mezirow, 1981, p. 13).</p>
<ul style="list-style-type: none"> <li>• Psychic reflectivity</li> </ul>	<p>“Leads one to recognize in oneself the habit of making precipitant judgments about people on the basis of limited information about them (as well as recognizing the interests and anticipations which influence the way we perceive, think or act.)” (Mezirow, 1981, p. 13).</p>
<ul style="list-style-type: none"> <li>• Theoretical reflectivity</li> </ul>	<p>“One becomes aware that the reason for this habit of precipitant judgment or for conceptual inadequacy is a set of taken-for-granted cultural or psychological assumptions which explain personal experience less satisfactorily than another perspective with more functional criteria for seeing, thinking and acting” (Mezirow, 1981, p. 13).</p>
<p>Critical reflection of assumptions</p>	<p>“When the object of critical reflection is an assumption or presupposition” (Mezirow, 1998, p. 186).</p>
<p>Critical self-reflection of assumptions</p>	<p>“Involves critique of a premise upon which the learner has defined a problem (e.g. a woman’s place is in the home)” (Mezirow, 1998, p. 186). This type of critical reflection can spark and enable personal and social transformation (Mezirow, 1998).</p>
<p>Perspective transformation</p>	<p>“The process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting upon these new understandings” (Mezirow, 1991a, p. 14).</p>
<p>Transformative Learning</p>	<p>“The process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action.” (Mezirow &amp; Associates, 2000, p. 8).</p>

transformation (Brookfield, 2000). This depends on a variety of considerations, including an individual's readiness to recognize and challenge their problematic beliefs and assumptions, as well as cultural, societal, and familial influences that might impact the willingness to change and transform.

Mezirow proposed two types of critical reflection: critical reflection of assumptions (CRA) and critical self-reflection of assumptions (CSRA). CRA is a form of critical reflection that centers on one's fundamental assumptions and presuppositions (Mezirow, 1998). CRA enables people to understand why they think, act, and feel the way they do and challenges problematic aspects of their biases and assumptions to allow for transformation. CSRA, on the other hand, involves questioning social, cultural, and learned premises that the person deems problematic (Mezirow, 1998). For example, the idea that the woman's role is to raise children and maintain the household. This social and cultural premise still exists and keeps many women from receiving education in countries like Afghanistan, where the Taliban have banned university and secondary education for female students since their takeover in 2021 (Popalzai & Kottasova, 2022). Mezirow (1998) argued that CRA and CSRA act as the emancipatory aspects of adult learning that free the learner from problematic cultural canon, frames of reference, or paradigms. Perhaps adult learning and transformative learning hold the key to women's rights in Afghanistan.

Along with critical reflection, various aspects of reflectivity hold particular meaning in Mezirow's ideas on reflection. These include affective, discriminant, judgmental, conceptual, psychic, and theoretical reflectivity (Mezirow, 1981). Here, Mezirow breaks down the various levels involved in reflection stemming from consciousness, where we become aware, assess, and judge our emotions, thoughts, actions, perceptions, and habits, and critical consciousness, where

we become aware of and critique our awareness (Mezirow, 1981). Within this paradigm, consciousness involves affective, discriminant, and judgmental reflectivity, while critical consciousness involves conceptual, psychic, and theoretical reflectivity (Mezirow, 1981). This provides an understanding of how one achieves perspective transformation, starting with an awareness of our feelings toward our perceptions, thoughts, and actions. This is followed by an assessment of the efficacy of these perceptions, thoughts, and actions and a value judgment on whether these are positive, negative, liked, or disliked (Mezirow, 1981). Then comes the critical consciousness aspect of reflectivity, where one starts to question whether their judgments of good and bad are adequate, along with the recognition of problematic habits of mind through psychic reflectivity (Mezirow, 1981). Finally, Mezirow (1981) asserts, “Theoretical reflectivity is...the process central to perspective transformation” (p. 13). He explains that theoretical reflectivity involves becoming aware that other perspectives with more functional criteria may be able to explain personal experiences more effectively than previous and potentially problematic taken-for-granted cultural and psychological assumptions (Mezirow, 1981). Through these various levels of reflection that delve into one’s consciousness through awareness, assessment, and judgment, and a thorough critique of these through conceptual, psychic, and theoretical reflectivity, lies the potential for transformation.

Along with critical reflection, there are other essential components of transformative learning. These include the disorienting dilemma that starts the process and accompanying emotions that drive and inform reflection, recognizing meaning and premise perspectives, identifying psychological premise distortions, undergoing perspective transformation, and more described in Table 2.1. Each of these aspects drives an understanding of self, which enables growth and transformation. For example, identifying psychological premise distortions helps

people see disconnects between their self-concept and who they are in reality (Mezirow, 1991b). In other words, they begin to understand the differences between their actions and behaviors compared to who they think they should be or want to be. Emotion also plays a vital role in the transformative process as it spurs and informs reflection and helps the person hone in on the disconnect or disparity between their beliefs, values, and assumptions and the experience that caused them to question these aspects of themselves (Taylor, 2000). Table 2.1 describes many of the concepts from the literature that make up transformative learning theory since its inception. It is a work in progress and will likely continue to grow with time and as concepts and theories develop.

**History.** Mezirow introduced transformative learning theory in 1978 based on findings from a US Department of Education study that examined community college re-entry programs for women nationwide (Mezirow, 1978a); Mezirow, 2006). The study identified perspective transformation as central to personal development within the participants (Mezirow, 1978a). Mezirow's initial conception of transformative learning was inspired by his wife Edee's experiences as a returning student in higher education, as well as ideas such as meaning schemes and perspectives, conscientization, and transformation from theorists and philosophers such as Paulo Freire, Roger Gould, and Thomas Kuhn (Baumgartner, 2012; Kitchenham, 2008; Mezirow & Taylor, 2009).

In the 1980s, Mezirow refined his ideas through shared insights from the field. He used insights from Habermas's technical and dialogic learning domains as well as his ideas on ideal learning conditions and emancipatory learning (Mezirow, 1981a, 1985). Mezirow also expanded reflectivity to include affective, critical, conceptual, and theoretical types (Mezirow, 1981a). He also highlighted various domains where transformative learning can occur (Mezirow, 1981a). In

the 1990s, Mezirow expanded the concept of meaning perspectives and added an explanation for potential distortions, including epistemic, sociolinguistic, and psychological distortions (Mezirow, 1991b). During this time, he also proposed two types of critical reflection, CRA and CSRA, explained earlier (Mezirow, 1998). In the 2000s, Mezirow addressed and acknowledged critiques regarding a lack of understanding of the roles of emotion, affect, intuition, and imagination in transformative learning (Baumgartner, 2012). This has led to ongoing discussions, tensions, and divisions amongst theorists on where transformative learning should apply. For example, Cranton (2012) identifies strains in the field, such as determining boundaries on what constitutes transformative learning and whether transformative learning occurs from the individual, social change, or group and organizational change perspectives. All of these viewpoints and considerations contribute to the overall conversation of transformative learning and call for the theory to grow with the changing contexts of the times. Despite the criticisms, Taylor (2008) says the following about transformative learning, “The growth is so significant that it seems to have replaced andragogy as the dominant educational philosophy of adult education” (p. 12).

**Philosophical and Theoretical Underpinnings.** Cranton and Taylor (2012) point to works by Mezirow, Dirkx, and Brookfield, respectively, to explain that transformative learning relies on constructivist assumptions, can have humanistic goals, and has direct connections to critical theory. These philosophical and theoretical underpinnings enable adaptability and growth with the times while considering both the individual and social aspects of change. This is a large part of why transformative learning has become so popular in adult learning.

Creswell and Creswell Báez (2021) define constructivist as “A paradigm worldview of beliefs that individuals form their own realities” (p. 281). This aligns with Mezirow's (1991b)

explanation of transformative learning and its constructivist assumptions. He says that meaning exists within, not externally, and that meanings attributed to personal experiences are validated through communication and interaction with others (Mezirow, 1991b). This tells us that meaning and reality can differ from person to person and that others can influence who we are and what we believe in terms of values, biases, presuppositions, assumptions, and more. Mezirow (1991b) also points out that transformative learning is not a systematic extension of existing theories such as positivism, humanism, or neo-Marxism but takes ideas from some of these. In other words, transformative learning borrows from and expands on ideas within these traditions but does not necessarily conform to their perspectives.

Transformative learning also leans on humanistic philosophy, which Elias and Merriam (2005) describe in an education and learning context as honoring human dignity, autonomy, and freedom while focusing on the development of the whole person to help students achieve self-actualization. Dirkx (2001) describes an application to transformative learning as soul work, which involves individual growth and considers various selves within. Cranton and Taylor (2012) go on to say that cognitive rational approaches to transformative learning consider personal freedom, autonomy, and choice. Moreover, an observation of Mezirow's transformative learning phases indicates that transformation is a process of personal growth and development. For example, phases two through four involve a self-examination, critical assessment of core assumptions, and recognition of one's discontent, while phases five through ten involve exploring and trying new roles, acquiring new knowledge and skills, developing self-confidence, and reintegrating into one's life with a new perspective (Mezirow, 1991b). All of these show that the humanistic ideals of personal freedom, autonomy, and choice are highly influential to transformative learning.

In the early 1970s, Mezirow grew his understanding of the critical dimension through works from Paulo Friere and Ivan Illich (Mezirow, 1991b). These insights grew his understanding of adult education and the learning process by growing his awareness of the conscientization of the learning process and the influence of entrenched power in community development (Mezirow, 1991b). This helped him to develop his initial conception of transformative learning. Freire (1970) describes conscientization as a deepening awareness of the capacity to transform reality and of the sociocultural influences that shape life and reality. Mezirow goes on to say, “This realization precipitated an absorbing process of transformative learning-learning that changed my meaning perspectives or basic ways of looking at the world that lasted for several years” Mezirow (1991b). Through these insights and realizations, Mezirow expanded on reflection and transformative learning to include critical self-reflection of assumptions (CSRA) or what he also describes as subjective reframing, which “Involves critique of a premise upon which the learner has defined a problem (e.g., a woman’s place is in the home)” (Mezirow, 1998, p. 186). He says this type of critical reflection can result in significant personal and social transformation (Mezirow, 1998). Moreover, Brookfield (2000) says CSRA, more specifically, systematic CSRA, is the closest to his interpretation of critical reflection. Through systematic CSRA, assumptions regarding “economic, ecological, educational, linguistic, political, religious, bureaucratic, or other taken-for-granted cultural systems” are critically reflected on and challenged (Mezirow, 1998, p. 193; Brookfield, 2000). Through this challenge of power structures and application of aspects of critical theory, Brookfield and others have helped grow transformative learning to become more expansive and applicable to our complex social world. Transformative learning can occur through CSRA when uncritically adopted societal and cultural beliefs, values, and biases are questioned as potentially

problematic. In these aspects, transformative learning can occur at the societal level under the influence of a critical social perspective.

### ***Situated Cognition or Situated Learning***

A literature review on situated cognition and situated learning points to several directions on what the terms mean and how they are identified. Jenlink and Austin (2013) point out that situated cognition theory has varied forms, including situated learning, legitimate peripheral participation, and cognitive apprenticeship. They also explain that these concepts share common aspects, including the idea that cognition is situated and that doing and learning are inseparably linked (Jenlink & Austin, 2013). Moreover, Herrington et al. (2014) use situated cognition and situated learning interchangeably throughout their chapter in the *Handbook of Research on Educational Communications and Technology*, and they are not the only ones. An example of the interchangeable and inconsistent use of situated cognition and situated learning in the literature also comes from Nesher (2000). She points to Lave (1988) and Lave and Wenger (1991) as some of the most quoted examples of situated cognition; however, Wilson and Myers (2000) found that Lave's work on situated learning during this time would often deliberately avoid the term situated cognition in favor of situated learning or situated action which leads to a conflict in the literature. I also confirmed this by reviewing these sources. Furthermore, Sawyer and Greeno (2009) said, "...we refer to a situative approach or situative perspective on learning rather than to situated learning or situated cognition" (p. 348). Finally, Wilson and Myers (2000) say that researchers have no consensus on situated cognition, situated action, or situativity and that these terms sometimes denote an array of perspectives.

In addition, Hedegaard (1998) grouped the terms and described "situated learning and cognition" as an approach in her article and described personal experience and cultural

community as parts of the same concepts within this approach. This seems to align with Brown et al.'s (1989) ideas on situated cognition. In their pioneering article on situated cognition, they say that learning and cognition are fundamentally situated. They pair learning and cognition and explain that knowledge is co-produced through activity and that the activity is inseparable from learning and cognition (Brown et al.,1989). Here, Brown et al. (1989) propose the concept of cognitive apprenticeship, which they explain embeds learning in authentic practices and activity while deliberately including social interaction and physical contexts.

However, some literature describes situated cognition and situated learning as distinct from one another. For example, Lave and Wenger (1991) argue that “learning is not merely situated in practice as if it were some independently reifiable process that just happened to be located somewhere; learning is an integral part of generative social practice in the lived-in world” (p. 35). They describe a shift from situated learning to a concept called legitimate peripheral participation and explain that from their perspective, situated learning seemed to be a transitory concept between a perspective that holds cognitive processes, “thus learning,” as primary on one end, and a view that has social practice as the generative and primary focus with learning as a characteristic on the other (Lave & Wenger, 1991, p. 34). Lave and Wenger (1991) go on to explain that learning is integral to social practice in a lived-in world, that learners participate in communities of knowledge and practice and construct identities to fit within these communities, and legitimate peripheral participation centers on engagement in social practice and holds learning as an integral element.

Henning (2004) also discusses the different focuses of situated learning and situated cognition. Here, situated learning locates learning within co-participation and social activity, while situated cognition occurs in any context, particularly focusing on the individual’s cognitive

activity against a backdrop of social considerations, affordances, and constraints (Henning, 2004). Wilson and Myers (2000) seem to follow this understanding with their view of the defining characteristic of situated cognition. They state, “The stand-out characteristic of situated cognition seems to be the placement of individual cognition within the larger physical and social context of interactions and culturally constructed tools and meanings” (Wilson & Myer, 2000, p. 66).

Moreover, Spector et al. (2014) define situated cognition and situated learning separately. They describe situated cognition as a learning approach that stresses context and applicability to the real world and that these impact what is learned. They also propose that learning occurs through problem-solving and task accomplishment within relevant social and physical contexts (Spector et al., 2014). On the other hand, Spector et al. (2014) describe situated learning as centering on the assumption that knowing is inseparable from doing and that knowledge is situated in and bound to environments along with their physical, social, and cultural contexts. They also explain that authentic contexts should be presented to allow learners to actively understand and apply their learning (Spector et al., 2014). Through these last two descriptions, situated cognition is a learning approach steeped in the social, physical, and cultural contexts that are directly relevant to the learner, while situated learning is more of an understanding that doing and knowing go hand-in-hand and that all knowledge is situated and connected to social, physical, and cultural contexts.

Most of the literature reviewed, however, simply mentions and discusses one or the other: situated cognition or situated learning. These explanations provide a similar mix of understandings to the ones provided above. For example, Merriam (1993) calls situated cognition a loose-labeled approach that considers the process of learning in context within an overall

environment containing people, objects, and situations. Steele (2023) broadly describes situated learning as a useful way to consider experiential learning that comes from its consideration of action and interaction in a learning community and other relevant contexts for engineering students. Neshier (2000) uses situated cognition and situated learning interchangeably and describes these as knowledge embedded in context and specific to real-life situations where it can be applied. Merriam and Bierema (2014) say situated cognition is about learning in context and from contextualized experiences where authenticity is key. Furthermore, Steele (2023) describes situated learning through three key parts, “Action and Interaction, Mediation and Participation and Identity” (p. 21). The last example comes from Merriam and Brouckett (2007), who say, “Situated cognition is based on the idea that what we know and the meanings we attach to what we know are socially constructed. Thus, learning and knowing are intimately linked to real-life situations” (p. 156). They also identify the following three key ideas for situated cognition: learning and thinking are social acts, thinking and learning are structured by the situationally provided tools available to the learner, and thinking is influenced by the interaction that takes place between the learner and learning environment (Merriam & Brouckett, 2007).

Through these various descriptions, situated cognition and situated learning highlight the same aspects in relation to knowledge, learning, and context. These aspects include the following (Brown et al., 1989; Henning, 2004; Jenlink & Austin, 2013; Lave & Wenger, 1991; Merriam, 1993; Merriam & Bierema, 2014; Merriam & Brouckett, 2007; Neshier, 2000; Spector et al., 2014; Steele, 2023; Wilson, 1993):

- Cognition, learning, and knowledge are situated in social, physical, and cultural contexts.
- Doing, experience, and learning are inseparable.

- Professional, skilled, and knowledgeable identity development and participation in communities of practice are linked.
- Learning and knowledge are co-produced and integral to social practice and activity.
- Authenticity, applicability, and relevance to the learner's real-life situations and lived-in world are key.

Though there are many similar, if not identical, themes, concepts, and descriptions throughout the literature, the literature is inconsistent on how situated cognition and situated learning are described and whether they are the same concept or distinct from one another. That said, the remainder of this section moves forward with a common understanding of situated cognition and situated learning as *situated cognition and learning*.

**History.** Sawyer and Greeno (2009) assert that situated cognition was first used by Brown, Collins, and Duguid in 1989, and situated learning was introduced by Lave and Wenger in 1991. As previously stated, the literature is divided on whether situated cognition and situated learning are the same or separate concepts, but this is here to show the timeframe for the introductions of the concept(s). With that said, Herrington et al. (2014) also credit Brown et al. (1989) as the first to propose a model of instruction centered on realistic learning contexts, learning by doing, and authenticity in learning with their model of situated cognition. Hedegaard (1998) points to Lave (1988,1991,1992,1996) and Lave and Wenger (1991) as central researchers in the new approach to situated cognition and learning. Jenlink and Austin (2013) support these claims and explain that situated cognition theory, also known as “cognitive apprenticeship, situated learning, and legitimate peripheral participation” (p.185), and its learning implications became a part of contemporary research with Brown et al.'s (1989) article *Situated Cognition and the Culture of Learning*.

Situated cognition and learning also had important contributions from Jean Lave and Lucy Suchman with their melding of anthropology, critical theory, and Vygotsky's sociocultural theory into what we know today as situated cognition, situated action, or situated learning (Wilson & Myers, 2000). Kolb and Kolb (2013) explain that situated learning draws on Vygotsky's theory and ideas of social cognition, social knowledge, and the view that learning is a social transaction. Jenlink and Austin (2013) add that situated cognition draws from historical research and theory on cognition, learning, sociocultural theory, and anthropological studies from prominent theorists such as, Dewey, Vygotsky, Lave, and Wenger. Kirshner and Whitson (1997/2009) build on this and explain that Dewey's ideas in education and philosophy, Vygotsky's sociocultural theory, and Mead and Benedict's insights in anthropology are antecedents and contributors to situated cognition.

Based on these sources, the conception of situated cognition and learning stems from Brown, Collins, Duguid, and Lave and Wenger in the late 1980s and early 1990s, with foundational contributions from the 1920s to early 1980s with Dewey, Vygotsky, and others such as Leont'ev, Luria, Reynolds, Sinatra, Jetton, Bartlett, Mead, and Benedict who built on ideas related to anthropology and sociocultural theory (Jenlink & Austin, 2013; Kirshner & Whitson, 1997/2009; Kolb & Kolb, 2013). Brown et al. (1989) started the conversation on situated cognition, knowledge, and learning by establishing key ideas they garnered from the field. For example, they point out the following: knowledge is situated, learning and knowledge are a product of contextual activity and culture, knowing and doing are inseparable, and knowledge is co-produced (Brown et al., 1989). Lave (1988) and Lave and Wenger (1991) bring in the following aspects to situated cognition and learning: learning is integral to social practice in a lived-in world, learners participate in communities of knowledge and practice and construct

identities to fit within these communities, and legitimate peripheral participation centers on engagement in social practice and holds learning as an integral element.

As situated cognition and learning evolved into the 2000s and 2010s, the literature continued to analyze, apply, and expand these concepts. For example, Hung and Chen (2001) focused on situated cognition by looking deeper into Vygotsky's sociocultural theory and communities of practice and applied this perspective to designing web-based e-learning. Sawyer and Greeno (2009) said that situated learning implied that there was non-situated learning but that learning scientists who focused on the situated persuasion believe, in general, that all learning is situated. As a result, Sawyer and Greeno (2009) branched the concepts and used terms such as the situative approach or situative perspective on learning instead of situated cognition or situated learning. Moreover, Merriam and Brockett (2007) explain that current work on situated cognition during that time focused not only on the learning process but also on educator efforts and methods of improving authenticity and real-life context for the learner through apprenticeships, for example. They also highlighted educator support for learning transfer so learning and knowledge could be applied in various contexts as another focus (Merriam & Brockett, 2007).

Since 2010, the literature has continued to build on and clarify the understanding and practice of situated cognition and learning. For example, Jenlink and Austin (2013) distill the concept by grouping situated learning, cognitive apprenticeship, and legitimate peripheral participation into the common idea of situated cognition theory. Herrington et al. (2014) also group and describe situated cognition and situated learning as a common concept. Merriam and Bierema (2014) expand the application of situated cognition to a practice called cognitive apprenticeship, modeled after craft apprenticeships, which occur both in and out of the

classroom. Steele (2023) seems to take this approach with his application of situated cognition and learning, along with traditional cognitive frameworks employed in a classroom setting in engineering education, for a blended, situation-rich, and authentic learning environment students can expect in the real world. Finally, Kirshner and Whitson (1997/2009) address what they describe as misuse and insufficiencies in the sociocultural and anthropological traditions of situated cognition in the field. They explain that there has been a tendency to locate learning solely in daily experience and the lived-in world that neglects opportunities for situated cognition in schools (Kirshner & Whitson, 1997/2009). This seems to align with Merriam and Bierma (2014) and Steele (2023) who both advocate for a blended approach to learning that capitalizes from both a classroom and real-world learning environment. These examples over the last 30 years show that situated cognition and learning continue to grow as a concept and remains and will remain relevant to the field of adult learning.

**Philosophical and Theoretical Underpinnings.** Pragmatism, anthropology, sociocultural theory, critical theory, and constructivism are major influences on situated cognition and learning (Jenlink & Austin, 2013; Kirshner & Whitson, 1997/2009; Wilson & Myers, 2000). Starting with Dewey's ideas on education and philosophy. Jenlink and Austin (2013) describe Dewey's explanation of experience as the interplay between internal and external conditions. Dewey (1938/1997) wrote, "Any normal experience is an interplay of these two sets of conditions. Taken together, or in their interaction, they form what we call a situation" (p. 42). Jenlink and Austin (2013) identify these two sets of conditions as objective and internal and say this is where traditional education and learning within a situation diverge. Here, the situation, experience, and learning are connected through context involving both objective conditions outside of the learner (external learning environment, real world, etc.) and internal

conditions (biases, prior knowledge, past experiences, etc.) that influence how learners interpret an experience.

Anthropology also had a significant influence on situated cognition and learning (Jenlink & Austin, 2013; Kirshner & Whitson, 1997/2009). Anthropology is the scientific and humanistic study of all humankind, in all places and times, with the overall objective of learning about every aspect of the single organism, the human being (Barnouw, 1971; Nanda & Warms, 2018). This includes how humankind has become what it has become, what it has accomplished, and what its potential is (Barnouw, 1971). Anthropology has provided a way of studying humankind in the context of learning in real-life and the lived-in world. These are aspects that Merriam and Brockett (2007) and Lave and Wenger (1991) described as important parts of situated cognition and learning. More specifically, anthropologists have contributed to situated cognition through their study of everyday individuals in ordinary situations where people learn and succeed outside of school settings (Kirshner & Whitson, 1997/2009).

Lave and Wenger have taken the foundation of anthropology and blended this with ideas from critical theory and Vygotsky's sociocultural theory towards an interest in the cultural construction of meaning (Kirshner & Whitson, 1997/2009; Wilson & Myers, 2000). Kirshner and Whitson (1997/2009) explain this came from early efforts from psychologists, sociologists, and anthropologists who came together to "grapple with the problem of context," which helped provide resources to investigate "the fundamental processes of cognition as social and situated activity" (p. 3) This explanation stems from what Lave (1993/2009) explains as an effort to address what she and Chaiklin called "the context problem" (p. 4). They worked with others in the field who were researching socially situated activity during a two-part conference and

specifically explored “questions about the socially constituted world” and “the context of socially situated activity,” which was often taken for granted (Lave, 1993/2009, p. 4).

Through this work and efforts in the field, the focus was parsed into two agendas: (1) An emphasis on the individual learner to structures and interrelationships within learning activity and (2) Linking communities of practice to social and political analysis (Kirshner & Whitson, 1997/2009). The first is where sociocultural theory comes in. Sociocultural theory provided the basis for understanding learning as a social endeavor rooted in culture. More specifically, Vygotsky’s ideas on the zone of proximal development (ZPD) viewed learning as a social process. The ZPD is “[T]he distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). Here, the learner understands concepts and can problem-solve to a certain level. Beyond that, the learner requires assistance through teaching, coaching, guidance, etc., from a “more capable peer” to move beyond their current level of understanding, task accomplishment, and problem-solving. The second agenda centers on critical anthropology. Here, locally conceived learning activities are linked to broader social and political institutions (Kirshner & Whitson, 1997/2009). Kirshner and Whitson (1997/2009) also say that this occurs by distinguishing arenas and settings from one another while also relating them to each other. Through critical anthropology, learning expands to become socially and politically relevant to the learners’ lived-in world.

The final philosophical influence on situated cognition and learning is constructivism. Duffy and Jonassen (1992) describe constructivism as the idea that there are many meanings, perspectives, understandings, and structures in the world and that people impose meaning on the

world. Henning (2004) explains that situated cognition implies a view toward knowledge as something constructed, can occur in any context, in or out of school, and is related to constructivism. Merriam and Bierema (2014) take this one step further and say, "...situated cognition is solidly anchored in a constructivist learning perspective" (p. 113). This becomes clear when reading Brown et al.'s (1989) foundational work on situated cognition and learning. Their paper discusses the social construction of meaning, purpose, knowledge, and understanding in situated cognition. They also explain that communities of practice are bound by socially constructed webs of belief and culture (Brown et al., 1989). Taken together, situated cognition and learning respect the learners' unique experiences, understandings, and worlds and seek to create authentic learning situations that are relevant and authentic.

### **Educational Psychology and the Cognition, Emotion, and Learning Connection**

Educational psychology is a highly complex subset of psychology and encompasses a massive volume of theory and research (Roehrig, 2003). It also centers on the study of learning and teaching and considers many psychological topics central to education and human social life, such as individual differences, the nature of the subject matter, problem-solving, assessment, transfer, and learner development (Berliner, 2006). In the context of this study, educational psychology plays an important role in understanding adult learning and leader development and was used as a basis for studying these aspects. This section discusses a short history of the field of educational psychology and the concepts of cognition and emotion and their complex relationship, as well as how emotions influence learning, the relationship between emotion and transformative learning, and how these are interrelated and dependent in terms of how adults learn, transform, and develop.

The field of educational psychology owes much of its success to Edward Thorndike, who helped establish it as a scientific field and shaped its character for over 100 years (Mayer, 2003; Winne & Alexander, 2006). He began his career in educational psychology in 1899, served as a faculty member of Columbia University for 40 years, and wrote 508 papers that were published (Gates, 1949). Thorndike's fundamental legacy, through all of this, was his “vision of the role of science in solving educational problems” (Mayer, 2003, p. 151). Needless to say, he was a highly influential thinker and contributor to educational psychology. During that time, the prevailing emphasis was on positivism, or science, as the path to truth (Berliner, 2006; Clifford, 1984). Berliner (2006) also said regarding that time in educational psychology’s history, “The mind and science, not emotion, were to be trusted” (p. 15). From a philosophical point of view, positivism looks at knowledge as something obtained through scientific observation and objective facts (Elias & Merriam, 2005). This had an influence on how Thorndike saw and understood educational psychology. For example, Thorndike (1912) wrote, “No response of any human being occurs without some possibly discoverable cause, and no human situation exists whose effect could not with sufficient knowledge be predicted” (p. 60). Here, Thorndike’s thoughts on education and human behavior as predictable and his assertion that desired effects can be produced through general rules and reason show his inclination towards positivism. In short, Thorndike left emotion and affect out of educational psychology in favor of a positivist perspective that saw truth as a product of scientific observation and replicable experimentation. His influence seemed to carry the field of educational psychology in that direction as well. Berliner (2006) states, “Thorndike’s influence promoted an arrogance on the part of educational psychologists, a closed-mindedness to the complexities of the life of the teacher and the power of the social and political influences on the process of schooling” (p. 15). He goes on to say how

Thorndike rebuked sentimentality and worshiped science, detached from feelings (Berliner, 2006).

Educational psychology's early emphasis on positivism also stressed cognition over emotion and affect. In fact, Thorndike seemed to believe that the ideal method for learning to teach was through books and manuals versus experience, which only allows for one dimension of learning. Clifford (1984) points out that by 1914, Thorndike went against his colleagues and recommended schoolbooks and teachers' manuals for his advanced students over the experience that could be gathered during classroom participation and school visits. This seems to relegate learning toward an emphasis on cognition, which is described as memory, attention, thinking, reasoning, decision-making, problem-solving, and higher thought processes (Halpern, 2006; Pessoa, 2008). Cognition serves a central purpose in learning; however, learning to teach, in Thorndike's case, or learning in general, is more effective with a combination of cognition and emotion. This is explained in more depth below.

### ***Cognition and Emotion***

Since the days of Thorndike and positivism's dominance, educational psychology, and many other fields have held the notion that cognition and emotion were distinct from one another. For example, Brand (1985) notes that important literature on cognition hardly mentions emotion. Moreover, Zimmerman and Schunk (2003) explain that theories of cognition and emotion have developed independently and remain fragmented in the field of psychology. Parrott and Schulkin (1993) even go back to the days of antiquity and say that there has been a long tradition of cognition and emotion that has been distinct since the days of Plato. In fact, they use a biological perspective to point out the distinction and physical separation by explaining that cognition is theorized to occur principally in the neocortex and hippocampus, while emotion is

considered a function of the “amygdala, hypothalamus, and the visceral nervous system of the lower brain stem” (Parrott & Schulkin, 1993, pp. 43-44). Though there have been attempts to merge cognition and emotion in the literature in the past, it was not until relatively recently that the interconnected relationship has been generally accepted. Strongman (2003) celebrates the acceptance of emotion and cognition as interrelated and says, “Received wisdom, both of the everyday sort and the academic variety, is at last moving away from the idea that emotion is to be contrasted with reason and then ignored as irrelevant (p. ix).

Along these lines, Cacioppo and Berntson (1999) assert that the affective and cognitive systems work together to appraise stimuli and execute actions while impacting attention, decision-making, learning, and behavior. Moreover, Taylor and Marienau (2022) discuss decision-making and acting on those decisions as impossible without emotions. Additionally, Immordino-Yang (2016) says that the recent neuroscience revolution over the last couple of decades has revealed an interdependent neural process relationship between emotion and cognition. She even goes so far as to declare, “It is literally neurobiologically impossible to build memories, engage complex thoughts, or make meaningful decisions without emotion” (Immordino-Yang, 2016, p. 18). With a connection between cognition and emotion established, what exactly is emotion, and how is it related to cognition?

Emotion in the literature is described and defined in many different ways depending on the context, theory, or philosophy underscoring the concept. For example, Barrett et al. (2016) and Strongman (2003) look at the meaning of emotion from various perspectives and have found that emotion has been described as the following: an internally centered subjective feeling, a motivator, a psychosomatic state involving both evaluation and physiological change, an instinctive process, a visceral bodily reaction, system of means resulting in an end, a transitory

social role, an evaluation of an object, to hold judgment of a situation, interrelated and synchronized changes in organic subsystems, and much more. Flunger and Chanal (2024) bring emotion into the student learning and motivation context and describe it as affective episodes that signal significance in terms of relevance and meaning toward a learner's needs and goals. These descriptions show a complex view of how emotion is understood at various levels, contexts, and perspectives. That said, hot cognition is used from here on to provide a concept for understanding the relationship between cognition and emotion for this study. It puts a formal and academically accepted name to the relationship.

Hot cognition was developed in 1963 by psychologist Robert Abelson, who coined the term to describe affectively laden cognition (Safran & Greenberg, 1982). Brand (1985) also describes hot cognition as “cognition colored by feeling” (p. 5). Interestingly, the literature does not seem to delve much deeper into these descriptions but rather into how emotion impacts cognition in various aspects, and which comes first, cognition or emotion. This sparked a multi-article debate in the *American Psychologist*, with Lazarus and Zajonc taking opposing sides on which facet takes primacy, affect or cognition.

Zajonc (1980, 1981, 1984) says affect precedes cognition and claims that affective reactions are possible without extensive cognitive encoding and that affective reactions to stimuli often come first. He points to empirical evidence throughout to demonstrate these claims. Lazarus (1982, 1984) refutes the evidence and argues that cognition is a prerequisite to affect and regards emotion as a result of conceived or experienced outcomes based on a transaction between the organism and the environment. Here, the fundamental differences between the two psychologists take shape in terms of how they understand the relationship between emotion and cognition philosophically and theoretically, which Lazarus (1984) points out. Lazarus (1984)

identifies Zajonc as a neo-positivist and says he is personally more of a constructivist, which is clear in how they both present their arguments. For example, Zajonc (1980, 1984) points to several studies, one on facial muscle reactions and one on aggression triggered by stimulating the hypothalamus without significant cognitive interaction. Lazarus (1982), on the other hand, relies on a family of emotion-based theories centered on the idea of cognitive appraisal. Here, the person cognitively appraises or assesses the environment and situation and has an emotional reaction based on the interpretation of these. In the end, both seem to concede that at that stage in the 1980s, there was no way of truly proving one way or another without a complete understanding of consciousness or a more developed understanding of theory and knowledge regarding emotion and cognition (Lazarus, 1984; Zajonc, 1984).

Zajonc and Lazarus's back-and-forth is used to illustrate the general consensus that there is an influential connection between cognition and emotion, but to what extent and which takes primacy may be debated. However, more recently, the argument of which precedes which has grown to favor cognition over emotion, which is explained later. Arguments aside, both Zajonc and Lazarus acknowledge a relationship between cognition and emotion and discuss the concept of hot cognition, which is widely accepted in the literature today. Performing a simple search of the term "hot cognition" in the University of Tennessee Library One Search brings up over 3,000 results with many different applications such as hot cognition and gender, politics, mathematical modeling, identity, media, decision making, investigative judgments, motivation, depression, menopause, club drugs, climate change, quantum probability, executive brain function, agriculture, and much more.

With the general understanding that cognition and emotion influence one another and that emotion has many descriptions and definitions depending on the context, theory, and philosophy,

a solid explanation of emotion is necessary for this study before discussing how they relate to learning and transformative learning. Ortony et al. (2022) describe emotions as psychological conditions with different characteristics dependent on how psychological situations are construed. More simply, emotions are psychological conditions that stem from how a situation is interpreted. For example, spotting a bear while hiking in the wilderness might be interpreted as a life-threatening situation and spark the emotion of fear. From this perspective, Ortony et al. (2022) view emotion as a product of cognition through personal interpretation. They also believe that emotions fall into three broad categories based on whether the focus of the emotion is on events, objects, or agents (Ortony et al., 2022). Here, events are gauged in desirability relative to goals, objects are measured against the appeal of personal tastes, and agents are assessed in relation to praiseworthiness towards personal standards, all of which result in various emotions (Ortony et al., 2022). Additionally, Ortony et al. (2022, p. 18) say emotions must have at least the four following characteristics:

- Emotions are about something.
- Emotions are valenced.
- Emotions are present in consciousness.
- Emotions are multi-modal.

Based on these characteristics, emotions are about an event, object, or agent, are valenced, meaning positive or negative, are cognitively driven, and influence bodily reactions, motivation, and behavior. Finally, Ortony et al. (2022) shy from defining specific emotions but rather identify emotion types and specify the characteristics of emotions. For example, joy, distress, happy-for, sorry-for, and resentment are emotion types, and within each of these are collections

of linguistic tokens that describe emotions; please reference Table 2.2 for examples (Ortony et al., 2022).

Ortony et al. (2022), Shipton and Sillince (2013), and many others in the field view emotion as a product of cognition and personal interpretation or appraisal. These views stem from Lazarus's ideas discussed earlier in the chapter, where cognitive appraisal and interpretation of the environment and situation drive an emotional reaction. Lazarus (1982, 1984, 1991b, 1997) describes this as a transaction between the organism (aka the person) and the environment, leading to an interpretation and then an emotion based on that interpretation. Lazarus (1997) expands on this and explains that cognitive appraisal, or how a person evaluates and interprets an experience, produces an emotional response, and the intensity of that response is based on how significant the experience is judged to be in relation to their well-being. For example, an extremely intense form of fear, such as terror, might be felt if a person's life was in imminent danger versus a more minor form of fear, like anxiety, that might come from an annual performance review at work or an exam at school.

Lazarus (1991b, 1997) also breaks cognitive appraisal theory into three primary and three secondary appraisal components that combine to produce the relational meaning behind each emotion. The primary components are made up of "goal relevance, goal congruency or incongruency, and type of ego-involvement," all of which center on the person's motivational stake in the outcome and the stake itself (Lazarus, 1991b, p. 39). Secondary appraisal components are comprised of "blame or credit, coping potential, and future expectations" (Lazarus, 1991b, p. 39). These are influenced by a multitude of factors, including situational demands and constraints, personal goals and beliefs, situated intentions, and opportunities (Lazarus, 1991b, 1997).

Table 2.2. Emotion Types and Associated Linguistic Tokens.

Emotion Type	Linguistic Tokens
Joy	Cheerful, delighted, euphoric, gleeful, glad, pleased, thrilled
Distress	Aghast, dejected, distraught, grief, lonely, shocked, upset
Happy-for	Delighted-for, happy-for, pleased-for
Sorry-for	Compassion, pity, sad-for, sympathy
Resentment	Envy, jealousy, resentment

Relational meaning is a subjective concept that shapes emotion and action (Lazarus, 1997). This centers on how significant the experience is to the person and depends on environmental conditions as well as personal goals and beliefs (Lazarus, 1991b). In short, relational meaning is an interpretation of a situation and environment deemed personally significant and heavily influenced by a person's goals and beliefs. Lazarus (1991a, 1997) also says that emotions are always a response to relational meaning and suggests that emotions are universal relative to their relational meaning. In other words, though appraisals may vary from culture to culture and situations can be interpreted differently, if a situation is considered an insult or something to be appreciated, the universal emotions from all people would be anger or gratefulness, respectively (Lazarus, 1997). With an understanding of what emotions are and the idea that they are cognitively driven, the next section discusses how emotions influence and impact learning.

### ***Emotion and Learning***

Pekrun and Stephens (2012) proclaim, "...emotions are both experienced in academic settings and instrumental for achievement and personal growth" (p. 3). Moreover, Immordino-Yang (2016) explains that complex emotions and feelings such as interest, inspiration, indignation, and compassion relate to our inferences and interpretations of ideas. Renninger et al. (2024) also discuss the benefits of interest and the emotion's positive impacts on attention, engagement, and use of learning strategies. Additionally, Shipton and Sillince (2013) advocate for a view on emotions in organizations as integral to cognitive dynamics that inspire learning and transformation. Furthermore, Pekrun and Linnenbrink-Garcia (2012, 2022) explain that emotions in academic settings profoundly impact student performance and engagement. They go on to say that academic emotions fall into four categories: achievement emotions, epistemic

emotions, topic emotions, and social emotions that affect effort, motivation, concentration, strategies for learning, homework, test taking, and more (Pekrun & Linnenbrink-Garcia, 2012, 2022).

From Ortony et al.'s (2022) explanation of emotion, examples in Table 2.2, and the paragraph above, emotions can influence motivation, behavior, and much more. For instance, Ortony et al. (2022) tie emotion and motivation into their fourth characteristic of emotions, particularly the idea that they are multi-modal and can manifest in varying ways, including motivational-behavioral. Bower (1992) also identified the relationship between emotion and motivation over 30 years ago, which has become solidly established in the literature. In fact, Pekrun and Stephens (2012) acknowledge the profound effects of emotion on motivation in academic settings in their chapter in the *APA Educational Psychology Handbook*, a foundational text in the field. Pekrun and Stephens (2012) provide an example describing how emotions impact students taking an important exam and explain that emotions can affect attention, motivation, and learning strategies, even if the students are unaware. They use hope, fear, and desperation to describe emotions students could feel before taking an exam. In this example, emotions can drive students to focus on the exam material, motivate them to study, and use learning strategies to enable success.

Another way emotions can influence learning is through their ability to remind us of things we have experienced and learned. Bower (1992) uses failed expectations to explain a tendency to revisit and reflect on important aspects of emotional experiences. The emotions bring the experience back to the forefront of our thoughts, where we judge and analyze the failed expectation. We direct our attention toward why we failed and what we can do to be successful in the future, thus driving our focus and, ultimately, our learning. Bower (1992) says this is

because emotional experiences tend to persist and decay slowly in our thoughts, leading to continued reflection or what he calls rehearsal of the event, looking for what caused the emotional arousal. This process drives a connection between emotion and memory.

Bower (1992) points out emotion's ability to control learning and memory retrieval. He said, "as a general principle, events associated with strong emotional reactions tend to be well learned, and usually more so (within limits) the stronger the reaction" (Bower, 1992, p. 15). Bower (1992) uses several examples to illustrate his point, such as the conditioning of emotional reactions from studies involving fear of shock. He refers to Mackintosh (1974), who discusses studies that have used electric shock or puffs of air to the cornea to condition certain behaviors in research animals and human participants. Mackintosh (1974) notes a particular case involving stronger stimuli (shocks and puffs of air) that resulted in markedly better conditioning. In these cases, fear is used to elicit specific behaviors. In other words, pain, discomfort, and fear were used to teach animal and human participants particular conditioned behaviors, and the stronger the pain or discomfort, the greater the fear, and the better the conditioning or learning and memory retrieval. It is also important to note that negative and positive emotions both had the same impacts on memory and learning (Bower, 1992). Many of these ideas have been carried forward to today. Ortony et al. (2022) explain that emotion impacts memory and that emotional experiences seemingly act as signatures for indexing memory. All of this tells us that memories and lessons learned tend to stand out when they are associated with emotion.

Emotions rooted in social and context-based aspects related to each student also influences learning. Immordino-Yang (2016) goes so far to say, "[W]e only think deeply about things we care about" (p. 17). Here, Immordino-Yang (2016) explains that meaningful and effective learning considers emotion that motivates students, produces deep understanding, and

transfers real-world skills. These considerations center on education that is relevant and relatable to the student, making learning personal, worthwhile, and something the student cares about. To get there, education needs to draw emotional and personal connections to the material being taught. That means bringing the subject into the students' social and contextual worlds. This takes an understanding of who your students are and what they value to make learning personal, which brings in the emotional aspect of learning.

### **Emotion and Transformative Learning**

“Transformative learning, especially when it involves subjective reframing, is often an intensely threatening emotional experience...” (Mezirow, 2000, p. 6). Taylor (2000) adds that transformative learning requires more than reason and rationale but also the affective dimension of knowing. Emotion has a significant role in transformative learning. Mezirow (1991b) brings emotion directly into the phases of perspective transformation, particularly phase two, involving “self-examination with feelings of guilt or shame” (p. 98). The person might also feel contentment and hope as they recognize their discontent and explore new options and roles through the transformative process. This is part of Mezirow's (1998) ideas on what he described as an important non-cognitive factor: emotional stamina. Here, emotions accompany and sustain the belief that one has the will and the way to achieve their new goals. Emotion is also directly stated in Mezirow's (2000) definition of transformative learning with the following:

[T]he process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action (pp 7-8).

In these examples, emotion is an essential element of transformation. In perspective transformation, emotion catalyzes, accompanies, enables, and sustains self-examination, assessment, exploration, trying new roles, and building self-confidence. Additionally, emotion directly facilitates change through an open mind and the ability and willingness to grow, which is explained more in the following paragraphs.

Mezirow and Taylor (2009) discuss the theory in an educational context and say students assess their values and worldviews, identify problematic ideas, assumptions, beliefs, and feelings, and critically assess these to transform their perspectives. This process of critical reflection and identifying problematic aspects of the self is, in itself, an emotional experience. For example, Neuman (1996) found that affect, particularly “painful” emotional aspects, often accompanied critical self-reflection and profound transformative learning. Taylor (2000) credits Neuman’s (1996) study and his efforts to highlight the interdependent relationship between affective learning and critical reflection, which Mezirow and others failed to do adequately at that point. Here, Taylor (2000, 2007) describes the relationship between emotion and transformative learning as affective learning and explains this as the role of emotion in the process of perspective transformation. Since then, the literature has embraced and freely acknowledged the interdependent relationship between emotion and transformative learning. All that said, emotion influences transformative learning in several ways; it acts as a trigger, people must be emotionally capable for change to occur, and it impacts how well the experience, reflection, and subsequent transformation will be remembered (Mezirow, 1991b; Mezirow & Taylor, 2009; Taylor, 2000).

Moreover, emotions often prompt critical reflection, a necessary aspect of transformative learning (Brookfield, 2000; MacLeod & Egan, 2009; Taylor, 2000). Taylor (2000) takes this one

step further and says that emotions trigger critical reflection and often provide the “gist” of what to reflect on. Here, emotion guides critical reflection toward the cause of the emotion. This idea aligns with Bower’s (1992) connections between emotion, memory, and learning in that emotional experiences tend to persist and decay slowly, leading to continued reflection and rehearsal of the event, seeking the cause of the emotion. This also falls into the second phase of perspective transformation involving self-examination, where emotions such as guilt or shame prompt a more profound look within and reflection on the particular experience and accompanying emotions. However, emotions are not relegated to the second phase of perspective transformation. Mezirow (1998, p. 190) says the following:

Transformation Theory also recognizes the crucial role past emotional experience plays in learning—sending signals that facilitate our decision making by eliminating some options and highlighting others. Another important non-cognitive factor in transformative learning is the disposition and emotional stamina to believe that one has both the will and the way to reach his or her reflectively redefined goals.

Through these statements, emotions become present in daily life and throughout each phase of perspective transformation in one form or another. For example, phase one, the disorienting dilemma, might trigger shock and confusion. Phase three, where the individual critically assesses their sociocultural assumptions and recognizes discontent in their beliefs or values, might result in distress, fear, frustration, and anger. Finally, in phases four to ten, where the individual realizes others have gone through similar experiences and transformation, they explore options, plan for the future, acquire new knowledge and skills, and try new roles, they might feel hope, confidence, and pride. Mezirow (2009) also acknowledges that transformation is oftentimes

highly emotional and difficult and points to future research to bolster this area of understanding. Perhaps emotions not only trigger and inform the transformative process but also sustain it.

For transformative learning to occur, people must be emotionally able or emotionally capable of change (Mezirow, 2000). Neuman (1996) also explained that critical reflective capacity requires identifying and working through emotions as integral parts of learning from experience. Through both of these ideas, transformative learning requires a readiness to change and the ability to recognize and process emotion. Without the readiness to learn and change, transformation will likely be hampered because the person is not ready to acknowledge and face problematic and potentially harmful aspects of their beliefs, values, biases, and presuppositions. Without the ability to identify and work through emotions, the person will likely stall out in the early phases of perspective transformation because of their inability to follow where their emotions lead them in self-examination. This would prevent the individual from figuring out why they feel what they feel and from determining what aspects of the experience they can learn and grow from. Taylor and Marienau (2022) aptly put it, “Ultimately, being able to change their minds meant seeing themselves and the world around them differently” (p. 724). This can be a tall and emotionally challenging order and out of reach if one is not ready or capable.

Strong emotional experiences tend to stick in peoples’ minds. This concept was discussed earlier with Bower’s (1992) thoughts on emotions, learning, and memory, where he discussed the tendency for experiences and events with strong emotional reactions to be persistent, decay slowly, and be well learned. (Mezirow, 1991b) also made this correlation with emotion and transformative learning and said, “If the emotional stress of a conflict of beliefs causes us to transform a meaning perspective dramatically, that transformation will be remembered. (p. 34). Being that transformative learning is oftentimes an emotional process, it stands to reason that a

transformation of one's perspective will be life-altering and not easily forgotten. Taylor and Marienau (2022) discuss perspective transformation and explain that to undergo the process and change their minds requires seeing the world and themselves differently. In essence, recognizing and facing the problematic aspects within through critical reflection and transforming one's values, beliefs, biases, and presuppositions to fit into how a person now sees and understands the world around them and to become a different version of themselves is a powerful and emotional experience.

### ***Interconnection of Cognition, Emotion, Learning, and Transformation***

The sections above established links between cognition and emotion, emotion and learning, and emotion and transformative learning through the literature. From this, a complex interconnection of concepts that influence, enable, and impact each other has been established. In some cases, one concept cannot exist without the other. This section discusses emotion, cognition, learning, and transformative learning and how they are related and influence one another. These relationships are depicted in Figure 2.1, which is used to explain how these ideas are connected.

Figure 2.1 illustrates the interconnected and influential relationships of cognition, emotion, learning, and transformative learning and the items from this study that feed into it. The arrows show the direction of the various relationships. The arrows that pass through emotion are used to illustrate that emotion touches on and influences the various components. The boxes represent important aspects that influence learning and transformation in Air Force leaders.

The literature today generally accepts that cognition and emotion are interconnected, and most also agree that cognition, at some level, drives emotion, which then impacts cognition in a

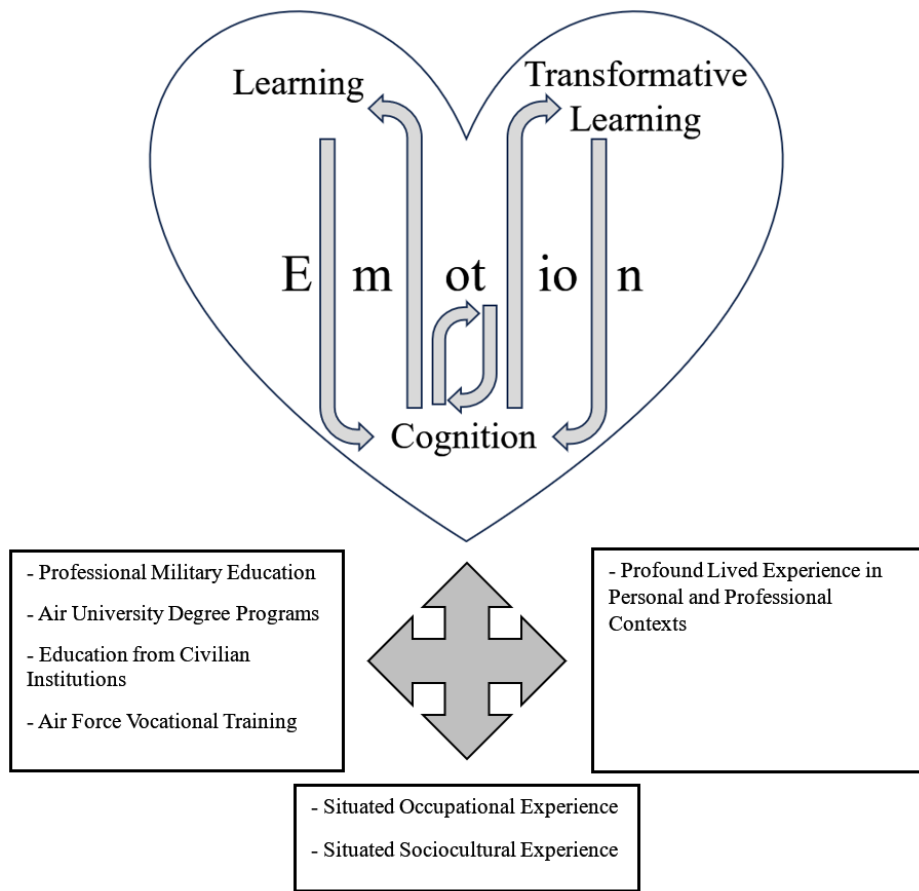


Figure 2.1. Influences and Interconnections of Cognition, Emotion, Learning, and Transformative Learning.

cycle of influence. The literature that favors these perspectives of cognition preceding emotion comes from Lazarus's (1982, 1984, 1991b, 1997) theory of cognitive appraisal and, more recently, from neuroscience and psychological theory points of view as science has advanced and theory has become more flushed out over the last few decades (Immordino-Yang, 2016; Ortony et al., 2022). For example, Ortony et al. (2022) say that emotions stem from cognitive evaluation and appraisal. Immordino-Yang (2016) describes emotion as subjective, cognitive interpretations of an event or situation and the embodied reactions that come with these. She also says that emotions steer thinking like a rudder and that "In general, cognition and emotion are regarded as two interrelated aspects of human functioning" (Immordino-Yang, 2016, p. 36). Lewinski, Fransen, and Tan (2017) describe emotions as elaborate appraisals of a stimulus. Moreover, Okon-Singer et al. (2015) say that territories in the brain and psychological processes traditionally associated with cognition have been found to play a significant role in emotion. All of this tells us that cognition and emotion are closely related and interdependent and that a level of comprehension is necessary to trigger emotion, which influences cognition. This interdependent and co-influential relationship is depicted in Figure 2.1, with the shorter curved arrows pointing to each other between cognition and emotion. Figure 2.1 also depicts how learning and transformative learning occur as a process of cognition flowing through emotion and back again. This illustrates how emotion influences thought as learning and transformative learning are experienced, impacting how one thinks about and understands certain aspects and concepts and even transforms how one thinks about, sees, and understands the world around them.

As we learn and transform, emotion plays a significant role in motivation, interest, attention, learning strategies, memory, and tendency to reflect (Bower, 1992; Harris, 2012;

Immordino-Yang, 2016; Mackintosh, 1974; Ortony et al., 2022). This is because people are motivated to learn about aspects that are deemed important and worthwhile. This applies to both learning in general and transformative learning. Ortony et al. (2022) say that emotional experiences act as signatures for indexing memory. Bower (1992) also explains that emotion has the ability to control learning and memory retrieval. These explanations show that emotion acts as a stamp to help people remember emotionally impactful and often important experiences. Mezirow (1991) also explains that an intellectual or cognitive understanding of why change is required is not enough. It also takes emotional strength and will to push the transformation process forward. These are all aspects of how emotion influences transformative learning. In short, emotion acts as a trigger, impacts memory and reflection, and also speaks to the person's emotional readiness and capability to learn (Mezirow, 1991b; Mezirow & Taylor, 2009).

In Figure 2.1, the three boxes depict various influences that feed into cognition, emotion, learning, and transformative learning. This is not to say that this process has no other influences. In fact, there are many, including intersectionality, positionality, culture, religious faith, familial values, community, sociocultural and societal influences, and much more. Rather, Figure 2.1 is a depiction of the major aspects discussed in Chapters 1 and 2 and how they feed into the learning and transformative process. On the left are deliberate methods of education and development that the Air Force affords Airmen. These include PME, Air University degree programs, which offer a wide variety of degrees ranging from associate degrees to graduate degrees up to the doctoral level, tuition assistance for civilian colleges and universities, and Air Force vocational training (*The Air University Catalog: 2020-2021*, 2020). These are deliberate measures the Air Force takes for leader, professional, and personal development and typically fall into the learning side of Figure 2.1. Here, the Air Force relies on aspects of andragogy, self-directed learning, and

experiential learning as previously discussed in Chapter 1. For example, in 1943, technical training (training that teaches Airmen their occupational specialties) was taught via lecture and focused on theory (Manning et al., 2005). Graduates were reported as seriously deficient in their skills, and as a result, training and education shifted from lecture to a more practical approach that focused on discussion, hands-on training, and demonstration (Manning et al., 2005). In this example, discussion, hands-on training, and demonstration pull from andragogy's assumptions of the need to know, experience, readiness to learn what is required for real-life situations, and the adult learner's life and task orientation to learning (Knowles et al., 2015, 2020).

The center box with situated occupational experience and situated sociocultural experience represents the various experiences working in the Air Force and within specific occupational specialties that influence learning and transformation. The Air Force has a particular culture on its own; however, there are many subcultures within that vary with occupations and even the nuanced variations within these occupations, such as fighter pilots versus bomber pilots (Long, 2016). Working in these situated environments produces experiences that provide a basis for Airmen to learn from and to create a professional, skilled, and knowledgeable identity necessary to thrive and participate credibly in their communities of practice (Lave & Wenger, 1991).

The box on the right was the focus of this study. It looks at the profound lived experiences in personal and professional contexts that lead to transformative learning and leader development. As previously explained in Chapters 1 and 2, Kim (2020) conducted a study of school principals in the United States and found that the transformative process enabled the principals to examine and assess their leadership and ultimately change how they viewed themselves and others. She also explained that this occurred through Mezirow's transformative

learning theory, which involves disorienting dilemmas, emotion, critical reflection, and perspective transformation (Kim, 2020). This process changed how the school principals understood and practiced leadership. Does this also apply to retired Air Force commanders and their development as leaders? Additionally, where does emotion fit in this process, and how do Air Force leaders recognize emotion's role in their development? Do Air Force leaders recognize emotion as a part of their leader development? Suffice it to say, there are many questions in understanding the intersection of emotion, transformative learning, and Air Force leader development. This study builds on the foundations of adult learning and leader development and work toward creating a better understanding of Air Force leader development outside of the cognitive and psychomotor domains that come from traditional classroom learning and on-the-job training.

### **Leadership and Development**

Leadership has varied definitions, descriptions, and theories, which all lend to a complex landscape that can make understanding leadership and how leaders develop confusing. For example, the Air Force has changed and added to its definition of leadership over time. In *Air Force Manual 35-15* (1948), leadership is defined as “the art of influencing people to progress with cooperation and enthusiasm toward the accomplishment of a mission” (p. 4). Additionally, *Air Force Doctrine Publication (AFDP)-1* (2021) defines leadership as “the art and science of motivating, influencing, and directing Airmen to understand and accomplish [Joint Force Commander] JFC objectives” (p. 4). Looking outside of the Air Force, Mott (2006) describes leadership through a collection of qualities, characteristics, actions, and a mindset that centers on improving the medical community and patient care. For example, she says a leader should be visionary, willing to grow and develop, initiate change towards improving patient care and the

community, work to advance the profession, maintain high standards, provide encouragement and reward team efforts, and be aware of personal strengths and weaknesses (Mott, 2006).

Moreover, in a book on libraries and toxic leadership, Ortega (2017) looks into various descriptions of leadership in the literature and ultimately settles on leadership as “whatever the leader of an organization makes it, as long as it has a positive result” (p. 9). Through these examples, leadership is the art and science of influencing, motivating, and directing people toward a common positive goal, driving organizational and self-improvement, high standards, and innovation, and striving to know oneself.

Adding to these various descriptions and understandings of leadership is also the fact that there are many leadership theories. Since the early 1900s, there have been leadership theories that center on traits, skills, styles, and behaviors, as well as psychodynamic theory, situational leadership-oriented theory, leadership identity theory, authentic leadership theory, leader-member exchange theory, and a theory of leadership that covers a range from laissez-faire to contingent reward, to inspiration (Avolio & Chan, 2008; Lord & Hall, 2005; Sosik & Jung, 2010). All of these theories and understandings of leadership in various contexts add to the complex nature of how we understand leadership and perhaps work against establishing an overarching theory of leader development. Adding to this is an overriding emphasis on leader development and leadership development that centers on the cognitive domain, seemingly ignoring emotion’s influence on developing leaders.

In a bibliometric review of the literature on leader and leadership development, Vogel et al. (2021) observed that there was a bias toward cognitive theorizing that seemingly ignored what they described as “emotion and affect-related theory and processes” (p. 15). This lines up with how the Air Force has viewed and practiced leader development, where the cognitive

domain has been predominant. For example, in the *Officer Professional Military Education Student Handbook* (2020) leader and leadership education and development focuses on theories, models, skills, and techniques, as well as values, ethics, critical thinking, communication skills, military and airpower history, problem-solving, teamwork, doctrine, force and joint force employment, political-military relations, and much more. Moreover, Day et al. (2021) point out that competency models for leader development and team-based strategies for leadership development are the predominant methods for development in practice. Furthermore, there have been many leadership theories and approaches to development since the early 1900s, but these are primarily relegated to the cognitive domain. Here is a list of some of the more popular ones over the last century: trait theory, psychodynamic theory, situational leadership-oriented theory, contingency theory, leader-member exchange theory, leadership identity theory, skills theory, style theory, authentic leadership theory, path-goal theory, meta-leadership, and the full range leadership model (Avolio & Chan, 2008; Lord & Hall, 2005; Marcus et al., 2015; Sosik & Jung, 2010). This list shows leader development and leadership development as learned traits, skills, styles, behaviors, and techniques, illustrating a focus on the cognitive domain and the need for a better understanding of the relationship between emotion and leader development.

### ***Leader Development or Leadership Development***

Leader development and leadership development are often used interchangeably in the literature (Dalakoura, 2010). That said, Day (2000) began drawing lines in understanding how leaders develop over 20 years ago with distinctions in leadership theory and concepts from the literature to determine the difference between leader development and leadership development. Moreover, Day's article was the first attempt at distinguishing individual-based leader development versus collective and systems-centered leadership development (Day et al., 2021;

Vogel et al., 2021). Leader development is centered on growing an individual's skills, knowledge, and abilities, while leadership development emphasizes improving relationships, trust, and ultimately, organizational effectiveness (Day et al., 2021; Day and Kragt, 2023). Day also discovered other important elements that explain leader and leadership development, described in Table 2.3 below.

For example, leader development emphasizes individual improvement and grows their capacity in terms of personal knowledge, skills, and abilities (Day, 2000; Day et al., 2009, 2014; Day and Kragt, 2023). The idea here is to understand the self and improve emotional awareness, confidence, self-regulation, and control, as well as the ability to adapt, take initiative, and be resilient (Day, 2000; Day et al., 2009). Day (2011) also explains that leader development unfolds over time and is maximized through experience, feedback, challenge, support, and willingness to learn. Leader development is also thought to develop self-management, social, and work facilitation capabilities that enable leadership values, building effective work groups, communication and management skills, and the capacity to initiate and execute change (Day, 2011). Moreover, the most effective leader development occurs when it is applied specifically to the organization's context (Day, 2011). In other words, this is an investment in human capital focusing on growing the individual's capacity for leadership. On the other hand, leadership development focuses on social structures and processes to improve organizational capacity by training leaders to work together effectively through teamwork, networking, social awareness, a service mentality, and social skills to build corporate bonds, establish trust, enact change, and manage conflict (Day, 2000, 2011; Day & Kragt, 2023). This is referred to as building social capital, which emphasizes improving team and inter-team capacity to work together and better meet the collective objectives of the organization.

Table 2.3. Elements of Leader and Leadership Development.

Essential Elements	Definitions/Descriptions
Leader Development	Focuses on the development of individual human capital through training and education that emphasizes “knowledge, skills, and abilities associated with formal leadership roles” (Day, 2000, p. 584). According to Day et al. (2009), leader development occurs at three enduring and dynamic levels throughout life: the acquisition of leadership competencies, self-regulation, and identity development, and within the domain of adult development.
Leadership Development	Emphasizes the development of social capital and resources and focuses on building relationships and networks, instilling trust, respect, and commitment through interpersonal exchange (Day, 2000).
Human Capital	“Individual knowledge, skills, and abilities” (Day et al., 2009, p. 298).
Social Capital	Social ties, networks, relationships with established trust, and like social norms and values (Tsai & Ghoshal, 1998).
• Structural Dimension	Trusted networks and personal contacts. This dimension includes the Social interaction aspect and the location of personal connections within the social structure hierarchy (Tsai & Ghoshal, 1998).
• Relational Dimension	Aspects within the relationships in the structural dimension such as trust and trustworthiness (Tsai & Ghoshal, 1998).
• Cognitive Dimension	“Embodied in attributes like a shared code or a shared paradigm that facilitates a common understanding of collective goals and proper ways of acting in a social system (Tsai & Ghoshal, 1998, p. 465).

Leader development and leadership development concepts were distinguished in the literature in 2000; however, many in the field develop their leaders very differently. Conger (1993) noted that the practice of leadership development, particularly in corporations, companies, and organizations, was haphazard. Day (2000) also acknowledged this and called for a reversal in this trend. Nine years later, Day et al. (2009) took active steps toward aligning leader development with scientifically sound, research-based principles and practices. They introduced an integrative approach that connected adult development theory, identity and moral development, leadership skills, an understanding of development via experience and reflection, and more, all towards building and advocating for a unified theory of leader development (Day et al., 2009). However, this failed to catch on. Day et al. (2021) still assert that leader and leadership development are haphazard and lack an overarching theoretical model. They argue that leader development today favors competency models and team-based strategies, while some focus development on particular leadership theories (Day et al., 2021). In short, leader development varies and emphasizes different aspects from organization to organization without a unifying theory.

### ***Philosophical and Theoretical Underpinnings***

Positivism dominated the leadership field early on, particularly in the US, since the mid-1900s (Case et al., 2011). Elias and Merriam (2005) describe positivism as acquiring knowledge through scientific observation and measuring facts. This sees truth as objective and reality as singular (Creswell & Creswell Báez, 2021). However, Western society has grown more progressive over the years, which has exposed leadership to post-structuralist and critical philosophies that have provided a new dimension to understanding leadership (Case et al., 2011). Case et al. (2011) explain that the post-structuralist perspective allows us to challenge traditional

heroic leadership narratives in mainstream historical accounts through what is unwritten. Moreover, the critical philosophy enables an understanding of power dynamics in leadership, which helps us understand how leadership impacts the followers, leaders, and the organization itself (Case et al., 2011).

Over ten years ago, Day (2011) identified leader skills, leader identity, and authentic leadership as the main theoretical perspectives underpinning leader development literature, with skills being the dominant focus in practice. In fact, leader skills are still the chief focus today, and leader identity and authentic leadership remain influential (Day & Kragt, 2023). However, there has been new interest over the last 20 years in shared, team-based, and collective approaches to leadership (Lord et al., 2017; Day & Kragt, 2023). The emphasis on leader skills includes improving cognitive, team, socio-emotional, and behavioral skills (Day & Halpin, 2004; Day & Zaccaro, 2004). Theory centering on leader identity focuses on self-awareness, personal identity, and social identity (Hall, 2011; Knippenberg, 2023). These aspects of leader identity look at elements such as the leader's awareness and perception of self and their personal sense of identity, as well as how leaders are perceived by the group or team and their embodiment of the group's identity (Hall, 2011; Knippenberg, 2023). Theories on authentic leadership emphasize a positive form of leadership that centers on ownership of beliefs, values, emotions, and thoughts and acting in accordance with these for transparent leadership linked to a leader's values (Luthans & Avolio, 2003). Finally, the rise in shared and collective leadership is relatively new. Lord et al. (2017) explain that there has been increased emphasis over the last 20 years on shared and collective leadership, but they describe the field's understanding of shared leadership conceptualization, measurement, and practice as rudimentary. Some examples of leadership

theories that acknowledge and consider leadership's interactional and social dynamic include collective, team, shared, distributed, and relational leadership (Acton et al., 2019).

### **Transformative Learning and Leader Development**

To recap, transformative learning stems from the idea that people can learn and transform their perspectives by identifying and reflecting on problematic beliefs, values, feelings, biases, and assumptions (Mezirow, 1991b). This also applies to leader and leadership development. In Kim's (2020) study on American school principals and their experiences of transformative learning and developing as leaders, she found that transformation occurred from experiences both in personal and professional contexts. This led the principals to assess who they were as leaders and ultimately expand their views of themselves and others (Kim, 2020). To illustrate this, Kim (2020) described experiences with a principal who had to deal with a school threat involving a gun and another who dealt with an unstable man formerly involved with a school staff member. In each of these cases, the principals faced fearful and upsetting experiences that pushed them outside of their comfort zones, resulting in disorienting dilemmas, critical reflection, and ultimately transformative learning that changed how they saw themselves and others as well as how they led. Kim (2020) also explained that another principal changed his approach to working with parents and students after having children of his own. In this case, the principal could better relate to the parents and empathize with both the parents and the students, effectively changing how he interacted with them as a leader. These cases of transformative learning happened organically through lived experiences, but transformative learning can also be intentionally fostered in a learning environment.

### ***Transformative Learning and Intentional Leader Development***

Participants enrolled in the Strategic Leadership towards Sustainability (MSLS) Program, an international Master's initiative based in Sweden, experienced a profound shift in their self-perception and worldview (Bryant et al., 2023). This course was deliberately structured to instigate transformation, social engagement, and social learning for sustainability. The MSLS Program provided insights that enabled transformation in participants' perspectives. One student highlighted this and said, “[MSLS] changed my worldview and opinion on what kind of person I wanted to be. How I wanted to change the world positively, using sustainability as a basis” (Bryant et al., 2023, p. 238). In this instance, the student developed a revised self-concept that was driven by a transformed understanding of their role in advancing global sustainability.

Murthy et al. (2011) also designed, developed, and implemented the Ka-Bar course—a 12-week curriculum tailored for the United States Marine Corps (USMC). This course effectively facilitated growth among students in several areas, including self-awareness, building trust, openness, tolerance, supervisory skills, motivation, concern for growth and change, and a heightened commitment to the USMC. One participant underscored the impact of Ka-Bar by stating, “It [Ka-Bar] gave me a chance to effectively reflect on my own leadership strengths and weaknesses and convinced me how important it is to regularly assess my personal growth” (Murthy et al., 2011, p. 33). This highlights the participant's growth in terms of self-awareness and the potential for transformation. Another student said:

I believe we all get in mental ruts and contain ourselves through building mental walls when it comes to our relationships at work. The non-attribution Ka-Bar environment satisfied our need to get out of those environments, reflect on our personal and professional values, and take fresh perspectives back to the workplace (Bryant et al.,

2023, p. 34).

Here, the student talks about reflecting on their values and breaking out of ruts and mental walls. The Ka-Bar course allowed the participant a safe place and the time to critically reflect, enabling transformation, leader, and leadership development.

Leadership courses incorporating specific aspects of transformative learning have also been studied. Lawrence et al. (2018), Sweet (2022), and Sweetman (2018) studied leadership courses that fostered critical reflection, assessment, and self-awareness. They found that leader and leadership development can occur through transformative learning in a classroom with the appropriate material, curriculum, and emphasis through guided critical reflection, assigned readings, peer support, intentional goal setting, and TED Talks (Lawrence et al., 2018; Sweet, 2022; Sweetman, 2018). An example is a statement from a participant who reacted poorly to others. The participant said:

My assumptions. . . were that things happened to me because of other people. If someone were to make me act out of character, I would blame them for making me do that.

Instead, I should have looked within as to why I allowed someone to get me [to] that point of anger. I kept blaming others instead of focusing on what I needed to change (Sweet, 2022, p. 13).

Here, the participant assessed their actions and behavior and critically reflected on the integrity of their internal narrative. Guided critical reflection exercises allowed the participant to assess their values and beliefs and compare these to their conduct and behavior. The result was a change in how the participant saw themselves and others.

### ***Leadership as an Evolutionary and Transformative Journey***

An essential aspect in the literature on transformative learning, leader development, and

leadership development is the idea that leadership is a journey and evolves across an individual's lifespan. In a qualitative study centering on transformative learning in an online leadership course by Sweetman (2018), students consistently characterized their leadership development as an ongoing journey. For example, a participant said that their leadership development was a work in progress and that they had grown closer to becoming the leader they wanted to be (Sweetman, 2018). Another participant similarly expressed that their experience with leadership development was a project in development and that they were only at the beginning (Sweetman, 2018). These perspectives tell us that the process of transformation, leader development, and leadership development is an evolutionary journey.

Furthermore, in a study of developing leaders through critical reflection, Schedlitzki (2019) says that leader and leadership development embody a lifelong apprenticeship and a journey of becoming. She argues that leader and leadership development can be enabled by using learning portfolios as tools for critical reflection in leadership and management apprenticeships, which can lead to reflexive and leadership development practice (Schedlitzki, 2019). This paradigm shift moves beyond leader and leadership development as an acquisition of leadership trends and instead advocates for a model that enables lifelong learning and development. This line of thinking also seems to align with the developmental outlook among participants in Sweetman's (2018) study described above.

### **Chapter Summary**

This chapter reviewed the literature on adult learning theory and adult learners, educational psychology and the connection between cognition, emotion, learning, and transformative learning, as well as leadership and leader development, and a review on studies that linked transformative learning and leader development practice. This has helped provide a

basis for Air Force leader development in its current state and lays the groundwork for research in emotion, transformative learning, and Air Force leader development. Adult learning theory, particularly andragogy, transformative learning, experiential learning, and situated cognition and learning, each play an important role in shaping Air Force leaders through their application in Air Force Professional Military Education (PME), described in Chapter 1. Another crucial element of Air Force leader development is educational psychology and the interconnections of cognition, emotion, and learning. These elements provide an understanding of how emotion influences thought, decision-making, learning, and transformation.

Chapter 2 also explained leadership and development, with an emphasis on leadership as a concept, leader development, and leadership development. Here, leadership is explained from a multitude of diverse perspectives. Leader development and leadership development are no less complex and are often used interchangeably in the literature (Dalakoura, 2010). However, in 2000, Day began drawing lines in understanding how leaders develop through a journal article titled *Leadership Development: A Review in Context*, which has caught on in the leadership field. Today, leader development emphasizes individual improvement and grows leaders' capacity in terms of personal knowledge, skills, and abilities (Day, 2000; Day et al., 2009, 2014; Day and Kragt, 2023). Leadership development, on the other hand, focuses on social structures and processes to improve organizational capacity by training leaders to work together effectively through teamwork, networking, social awareness, a service mentality, and social skills to build corporate bonds, establish trust, enact change, and manage conflict (Day, 2000, 2011; Day & Kragt, 2023).

Finally, the concluding segment of the chapter explored the interconnection between transformative learning and leader development. Research and scholarly articles show that

transformative learning can occur through lived experiences in personal and professional contexts, can be intentionally enhanced in classroom environments, and is a gradual, lifelong development process. Through all of this, we get an understanding of how leaders develop through a complex mix of adult learning theory, educational psychology, experience, and transformation.

## Chapter 3

### Methodology

Over the course of this study, I provided an understanding of the relevant adult learning theories the Air Force employs to deliberately develop its leaders during Professional Military Education (PME) and training. These include andragogy, self-directed learning, experiential learning, and situated cognition and learning. A foundation in educational psychology, specifically the concepts of cognition, emotion, learning, and transformative learning, have also been provided to present an understanding of how emotions influence learning and transformation. Finally, leader development and research evidence tying this to transformative learning have also been provided from the literature to allow for an understanding of how these concepts are connected and related to Air Force leader development.

There is an emphasis on developing Air Force leaders predominately through traditional and collaborative classroom education as well as experience and training through a career-long continuum of learning (*DAFI 36-2670*, 2020). *AFDD 1-1 Force Development* (2011) adds that education enables critical thinking, training provides individual expertise and professional skills, and experience allows for the synthesis of education and training. Outside of emotional intelligence, which Salovey and Mayer (1990) explain as the ability to appraise and regulate emotion in oneself and others, emotion's role and influence in leader development is not discussed in Air Force PME. They also explain that emotional intelligence can help people use their feelings to motivate, plan, and achieve in their lives (Salovey & Mayer, 1990). Along with these benefits, emotion has the potential to enable learning and development. Dirkx (2001) and Taylor (2000) tell us that emotion can trigger and inform reflection and influence significant change through transformative learning. Kim (2020), Sweet (2022), and Sweetman (2018) also

provide research that confirms leader development can and does occur through transformative learning and aspects of it. This implies an important and often neglected connection between emotion and leader development.

The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers.

The research questions that guided this study were:

1. How do Air Force leaders experience leader development?
2. In what ways do Air Force leaders experience emotion in their leader development experiences?
3. What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

This chapter centers on the research aspect of this study and discuss the overarching qualitative research approach, narrative inquiry research methodology, and research trustworthiness.

### **Research Approach**

“Qualitative research is endlessly creative and interpretive” (Denzin & Lincoln, 2005).

This statement gives us a sense of the character of qualitative research as opposed to quantitative research. Quantitative research assumes that cognition and behavior can be generalized, highly predictable, and objective (Johnson & Christensen, 2019). Qualitative research, on the other hand, is open-ended, considers context, and allows for individual nuance and a multitude of diverse understandings (Creswell & Creswell Báez, 2021; Denzin & Lincoln, 2005; Johnson & Christensen, 2019). Though both provide valuable insights, qualitative research lets us see into the complex nature of human understanding and interpretation of lived experiences. This chapter

provides an overview of qualitative research, the research methodology and methods for this study, the influence of subjectivity, and how these apply to this study.

### ***Overview of Qualitative Research***

Denzin and Lincoln (2005) describe qualitative research as a complex, interconnected family of terms, concepts, and assumptions. They go on to list the many perspectives and paradigms that make up qualitative research, such as foundationalism, positivism, post-foundationalism, post-positivism, post-structuralism, interpretivism, constructivism, hermeneutics, feminism, racialized discourse, critical theory, Marxist models, queer theory, and cultural studies (Denzin & Lincoln, 2005). Considering the creative nature of qualitative research, this list is not exhaustive and will continue to grow as new perspectives and concepts develop. Creswell (2015) adds that qualitative research is ideal when topics need to be explored or when variables are unknown. Here we see that qualitative research is geared toward seeking a better understanding. Through this exploration for understanding, qualitative research acknowledges the many varied subjective realities, interpretations, worldviews, and paradigms of the researcher and participants, which is why it is so complex. However, this complexity and nuance touches on aspects of the human experience that cannot be reached through quantitative research. That is why this research type is essential in today's diverse and ever-changing world.

When talking about qualitative research methodologies, it is important to understand where it fits in the overall framework for research. Creswell and Creswell (2018) explain the four big pieces within the research framework: the research approach, philosophical worldview, methodologies, and methods. The research approach is the core of the framework. It consists of the philosophical worldview, methodologies, and methods and is typically categorized as quantitative, qualitative, or mixed-method (Creswell & Creswell, 2018). The research approach

also considers the interactions between the worldview assumptions, the research methodology that fits those assumptions, and how to actually conduct the study through data collection, analysis, interpretation, and validation (Creswell & Creswell, 2018). It is important to consider each piece of the research framework and how they are interrelated to figure out the appropriate way to tackle a study, starting with the philosophical worldview.

The philosophical worldview is described as beliefs, assumptions, and attitudes based on a myriad of influences stemming from discipline orientations, research communities, mentors, advisors, life experiences, and more (Creswell & Creswell, 2018). This colors researchers' beliefs towards their research and their research participants. For example, the constructivist worldview puts participants' perspectives and experiences first and sees reality and truth as co-constructed and subjective (Creswell & Creswell Báez, 2021; Creswell & Creswell, 2018). This worldview acknowledges that people see and understand the world differently and works to capture those unique understandings and perspectives in the research. Conversely, postpositivism is described as deterministic, reductive, deductive, objective, and scientific and believes in a singular objective reality (Creswell & Creswell Báez, 2021; Creswell & Creswell, 2018; Johnson & Christensen, 2019). This worldview seeks to find a universal truth and is popular in quantitative research.

Next is research methodology, which Creswell and Creswell (2018) describe as the “types of inquiry within quantitative, qualitative, and mixed approaches that provide specific direction for procedures in a research study” (p. 11). Each of these methodologies is suited for understanding the subjective and diverse nature of the human experience and can be carried out in many ways using a wide variety of data and sources. Denzin and Lincoln (2005) describe qualitative research as an approach that involves the use and collection of empirical materials,

including case studies, personal experiences, interviews, observations, life stories, artifacts, visual texts that describe routine and significant and meaningful moments in an individual's life, and more. They go on to say that qualitative researchers deploy a wide variety of interpretive practices that are interconnected and provide different ways to make the research subject's worlds visible (Denzin & Lincoln, 2005). Some common examples of qualitative research methodologies include narrative research, phenomenology, grounded theory, ethnographies, and case studies (Creswell & Creswell Báez, 2021; Creswell & Creswell, 2018).

Research methodology is important for research because it provides the researcher with strategies, procedures, and worldview beliefs to appropriately approach and conduct a research study (Creswell & Creswell Báez, 2021; Creswell & Creswell, 2018). For example, say I want to understand a specific high-performing United States Air Force unit's unique culture, behaviors, jargon, camaraderie, and morale. To appropriately conduct this research, I would have to select a proper research methodology that allows me to collect the particular data I need to address the research purpose and answer the research questions. In this case, ethnography would be a good fit. I could rely on methods common to this research methodology, such as participant observation, interviews, and a comprehensive review of the unit's history and heritage, to understand better the unit's culture and what makes it high performing.

However, without a research methodology, researchers will struggle to frame their research, have no established process to guide the study, or have a credible way to construct their thoughts and views on the data they collect. For example, DeMarrais and Lapan (2004) describe methodology as involving how research should proceed and the researcher's assumptions of the nature of reality, knowing, and knowledge. Here we see how methodology helps researchers plan, construct, and conduct their study and how methodology also helps them see how their

worldviews, beliefs, and understanding of reality influence the research process. That said, each research methodology drives particular methods that can vary greatly and impact the study in many ways.

Research methods are distinct from methodology and are best understood as tools, techniques, or ways to gather evidence (DeMarrais & Lapan, 2004). Creswell and Creswell (2018) expand on this and include ways to analyze data, interpret the findings, and validate the results to make research methods not only the tools, techniques, and ways to gather data but also the steps and ways to complete the research. Research methods will vary depending on the research methodology. For example, phenomenology studies a phenomenon amongst a group of participants to understand the essence of their experiences and is typically carried out through one-on-one interviews using open-ended questions (Creswell & Creswell, 2018; Johnson & Christensen, 2019). Here, phenomenology is the research methodology, and interviews are part of the research method.

### ***Goals of Qualitative Research***

The overarching goal and common feature of qualitative research is to develop understanding (Creswell & Creswell Báez, 2021; Johnson & Christensen, 2019). This is achieved by exploring particular people or groups and learning from their unique perspectives and worlds (Johnson & Christensen, 2019). Wertz (2011) describes several methods of performing qualitative research, and the various goals of these include researcher transformation and extending existing knowledge. Denzin and Lincoln (2005) also talk about the use of qualitative research for social justice to give the underrepresented, oppressed, disabled, post-colonial, and others a voice. Moreover, Seidman (2006) discusses equity when describing interview research, another qualitative method, and asserts that “equity must be the goal of every

in-depth interviewing researcher” (p. 110). He goes on to say that by emphasizing equity throughout the interview research process, researchers may be able to promote equity through their participant’s stories (Seidman, 2006).

However, Seale (1999) describes the political, value-laden, and culture-bound positions in qualitative research as potentially problematic in a world with no fixed consensus on goals. He also suggests that researchers provide reflexive accounts of their politics to provide readers with the author’s perspectives and opinions to resolve conflicts of interest (Seale, 1999). Since Seale (1999) wrote this article over 20 years ago, it is now standard practice to provide subjectivity statements that tie the researcher to the topics they are researching and writing about. All of this shows us that qualitative research can have a multitude of goals, but at its core is exploration for understanding. By providing researchers and readers an understanding of a particular topic or perspective, qualitative research enables transformation, acquisition of knowledge, social justice, equity, and potentially much more. The key here is mutual understanding, knowledge, and insight that would otherwise go unknown or unnoticed without qualitative research’s ability to reach these nuanced, subjective, and unique areas of the human experience. In short, understanding the lived experience requires a creative, flexible, and ever-growing type of research that qualitative research methods allow.

### ***Characteristics of Qualitative Research***

Merriam (2009) and Merriam and Tisdell (2016) identify four common characteristics of qualitative research used by most in the field to understand its nature. The first characteristic is obtaining meaning and understanding, which stems from the qualitative researcher’s interest in how people interpret lived experiences, construct their worlds, and the meaning people attribute to their experiences (Johnson & Christensen, 2019; Merriam, 2009; Merriam & Tisdell, 2016).

This is influenced by the philosophical perspectives of constructionism, phenomenology, and symbolic interactionism, which help us understand that qualitative research relies on shared symbols, socially constructed realities, and the essence of experience (Merriam, 2009; Merriam & Tisdell, 2016). The second characteristic, the researcher as the primary instrument, describes the human instrument as the ideal means of data collection and analysis through the researcher's ability to respond, adapt, process information, clarify, explore, check for interpretation accuracy, and expand understanding through non-verbal and verbal communication (Johnson & Christensen, 2019; Lincoln & Guba, 1985; Merriam, 2009; Merriam & Tisdell, 2016; Patton, 2015; Seidman, 2006). Here, the researcher sits at the core of the study from start to finish through data collection, analysis, interpretation, and presentation of the findings.

According to Merriam (2009) and Merriam and Tisdell (2016), the third characteristic is that qualitative research is an inductive process. Through inductive analysis, qualitative researchers build toward theory from the various information collected from interviews, observations, and documents used to form themes, concepts, categories, and hypotheses (Merriam, 2009; Merriam & Tisdell, 2016). Lincoln and Guba (1985) also explain that inductive analysis is more likely to identify multiple realities and mutually shaping influences, helping to build understanding through the data. The fourth and last characteristic from Merriam (2009) and Merriam and Tisdell (2016) is that qualitative research provides a rich description of the researcher's findings about a phenomenon. This can come from interview quotes, documents, field notes, and other data that come together to support interpretations and findings and provide a rich description of the study and understanding of the phenomenon.

Merriam (2009) and Merriam and Tisdell (2016) also identify other characteristics that they explain are more or less common in qualitative research. These characteristics include

emergent and flexible qualitative designs, sampling is typically purposeful and small, and the researcher spends substantial time in contact with the participants in the field or natural settings (Merriam, 2009; Merriam & Tisdell, 2016). Emergent and flexible qualitative designs involve developing research questions and making decisions on data collection and analysis over the course of the study (Hammersley, 2022). This centers on discovery. As more is discovered and understood about the research topic, the researcher can adapt their methodology and methods more appropriately to the study. Small and purposeful sampling is another important characteristic and allows researchers to select “information-rich” participants who are suited for the study based on their particular experiences, knowledge, insights, demographics, etc. (Patton, 2022). For example, this study uses purposeful sampling by selecting retired Air Force commanders with 20 or more years of military service, leadership, and command experience. This population has rare perspectives and insights required for this study of emotion, transformative learning, and United States Air Force leader development. Finally, time in the natural setting explains that in some qualitative research, the researcher spends substantial time with participants in their natural settings (Merriam, 2009; Merriam & Tisdell, 2016). Here, the researcher is often in close contact with participants while collecting data and garnering understanding through observation and, in some cases, participation.

The characteristics above align with an emphasis on exploring and understanding the human experience. The characteristics underscore exploration, participants' views, researcher interpretation, context, and inductive analysis. Each element shows us a general research method that lets the participants lead the researcher to understand an area of interest. Moreover, as the researcher's understanding grows, more questions are likely to develop, explaining the open-ended and contextual nature of qualitative data collection. In qualitative research, the researcher

is considered to be the instrument (Johnson & Christensen, 2019; Lincoln & Guba, 1985; Merriam, 2009; Merriam & Tisdell, 2016; Patton, 2015; Seidman, 2006). The researcher uses open-ended data collection and creative design, which enables them to obtain insights and clarification into new aspects and identify previously unknown variables. The researcher then uses inductive analysis to draw conclusions based on the data collected from the research participants. This is where researcher biases and subjectivity can influence the findings, so it is crucial that these are accounted for and explained in the study.

### ***Theoretical Framework for this Study***

I used transformative learning theory, cognitive appraisal theory, and the concept of leader development to guide this study and interpret the findings. This formed the crux of my theoretical framework and is depicted in Figure 3.1 below. The foundation of Figure 3.1 is cognitive appraisal theory, which explains the relationship between cognition, emotion, and learning. Next is transformative learning, which provides an understanding of learning sparked by significant life experiences. From these rare and transformative episodes, a person undergoes a fundamental change in their biases, beliefs, presuppositions, and values (Mezirow & Associates, 2000; Mezirow, 1991a; Mezirow & Taylor, 2009), which can also influence how they understand the concept of leadership. Finally, there is the concept of leader development, which is described as the development of individual human capital through the acquisition of knowledge, skills, and abilities (Day 2000, 2009). Day (2009) says this occurs at various levels, including the adult development domain.

Each of these aspects enables an understanding of how leaders develop in the Air Force. Cognitive appraisal theory centers on the idea that every emotion is based on how people evaluate the significance of their experience concerning their well-being (Lazarus, 1982, 1997).

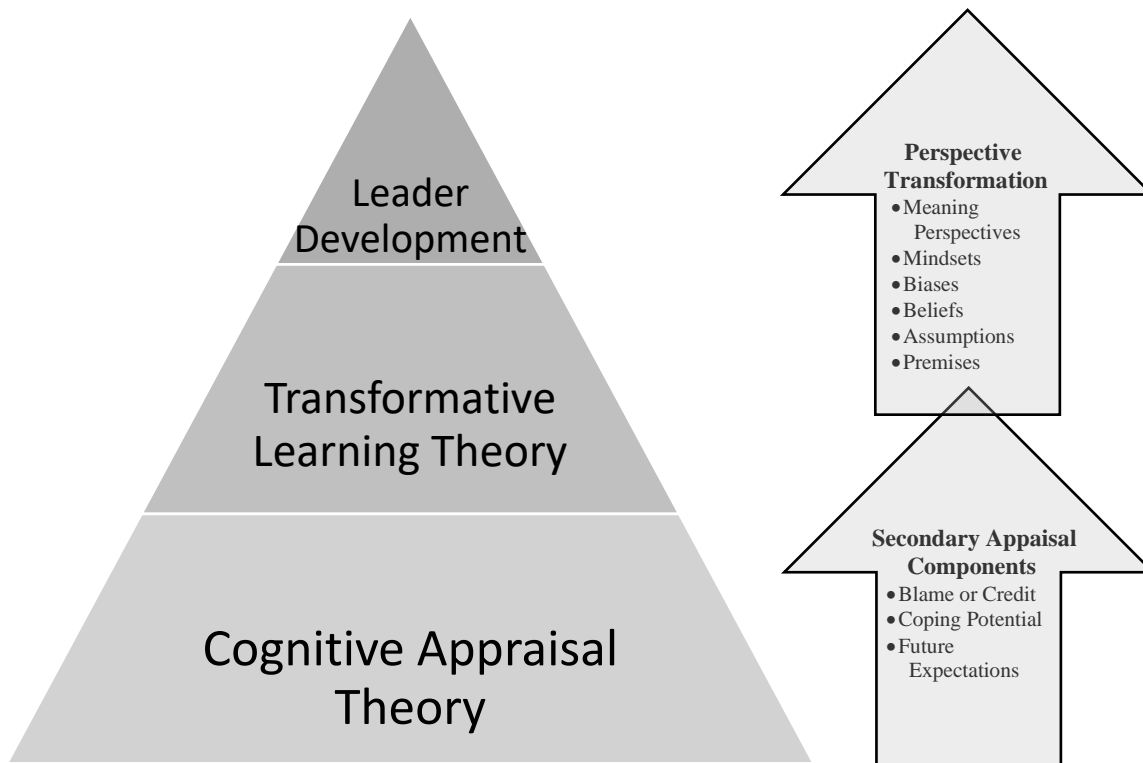


Figure 3.1. Emotion, Transformative Learning, and Air Force Leader Development Theoretical Framework.

Moreover, how people interpret their experiences with respect to their cherished values, commitments, background agendas such as goals and aspirations, and other essential aspects that give their life meaning influence the kinds of emotions experienced and their intensity (Lazarus, 1991b, 1997). Cognitive appraisal theory also provides primary and secondary appraisal components that shed light on aspects that people focus on to appraise their experiences. In particular, secondary appraisal centers on “blame or credit, coping potential, and future expectations” (Lazarus, 1991b, p. 39). This is where cognitive appraisal and transformative learning meet. As the person reflects on their experience, secondary appraisal occurs, sparking emotions and potentially leading to transformative learning.

As explained previously in Chapter 2, emotion is a significant part of transformative learning and often involves intense emotions (Mezirow, 2000). Taylor (2000) even goes so far as to assert that transformative learning requires more than reason and rationale but also the affective or emotional dimension of knowing. Emotion influences transformative learning in several ways; it acts as a trigger, guides and informs reflection, people must be emotionally capable for change to occur, and it impacts how well the experience, reflection, and subsequent transformation will be remembered (Mezirow, 1991b; Mezirow & Taylor, 2009; Taylor, 2000). Here, emotion stemming from cognitive appraisal, particularly secondary appraisal, of significant life experiences can spark the transformative learning process. As the person undergoes perspective transformation, there is the potential for leader development.

Transformative learning involves transforming meaning perspectives, habits of mind, mindsets, biases, and problematic beliefs, values, and premises (Mezirow, 1998, 2000). In doing so, transformative learning has the power to develop leaders. Kim (2020) found this in her study of school principals who underwent transformative learning and leader development as a result of

significant life experiences in both professional and personal contexts. These emotional experiences, followed by secondary appraisal and critical reflection, led to transformative learning and leader development.

Finally, in its straightforward explanation by Day (2000), leader development focuses on the development of individual human capital through training and education. However, he later explains that leader development occurs at three enduring and dynamic levels throughout life: the acquisition of leadership competencies, self-regulation and identity development, and within the domain of adult development (Day et al., 2009). Day et al. (2021) add that a more holistic view of leader development should incorporate adult development theory and many other elements, including time, the role of followers, leadership contexts, culture, and the leadership environment. They even go so far as to say that leader development may possibly traverse the entire lifespan (Day et al., 2021). This paints a much broader picture of leader development outside of the classroom and training environments, emphasizing knowledge, skills, and abilities, as Day (2000) explained years ago. In fact, Day et al. (2021) assert, “Leadership is...the lifeblood nurturing effective families, communities, and societies – in changing the world for the better” (p. 2). These fundamental aspects and considerations of leader development strike at the core of who leaders are as adults in development and undergoing the process of lifelong and adult learning. Through cognitive appraisal theory and transformative learning theory, Air Force leaders have the potential to learn, develop, and transform as leaders. However, to understand how Air Force leaders experience leader development and emotion in this process, I need a methodology that allows participants to share their authentic perspectives and interpretations of their transformative learning and leader development experiences. The following section discusses narrative inquiry.

## *Narrative Inquiry*

Narrative inquiry is a methodology that allows for human-centered research. Clandinin (2013) explains that narrative inquiry examines human lives through a narrative lens, allowing lived experiences to be respected as a form of knowledge and understanding. It acknowledges varied and subjective truths, different interpretations of experiences, and personal realities influenced by culture, worldview, family and religious values, and many other considerations. It has been criticized for being insufficiently scientific and substituting opinion for knowledge (Clandinin, 2007). This stems from narrative inquiry's subjective nature. However, through this subjectivity, narrative inquiry reaches the depths of human understanding and nuance that quantitative approaches cannot touch. DeMarrais and Lapan (2004) put this into perspective and say, "Through narrative inquiry, you gain access to the personal experiences of the storyteller who frames, articulates, and reveals life as experienced in a narrative structure we call story" (p. 105). However, narrative inquiry has important aspects that must be considered in distinction.

The story aspect and the narrative aspect must be considered separately. Mertova and Webster (2020) explain the very nature of story in research as centered on the researcher's desire to probe the human-centered nature of learning along with all of its associated issues, complexity, and nuance for a holistic understanding that transcends traditional methodologies. They go on to say that stories provide a rich framework for researchers to investigate and understand how their participants experience the world (Mertova & Webster, 2020). Dyson (1994) also say the following:

Stories help us construct our selves, who used to be one way and are now another; stories help to make sense of, evaluate, and integrate the tensions inherent in experience, the past

with the present, the fictional with the “real,” the official with the unofficial, the personal with the professional, the canonical with the different or unexpected (p. 242).

Here, stories can be viewed as a way to reflect on our experiences and allows us to build understanding. In other words, the story is the data, and the narrative can be considered an analysis involving the story's interpretation and its context (Patton, 2015). Patton (2015) also explains that the story is what happened, while the narrative is the telling of what occurred, structured and scripted within a particular context, purpose, and meaning. This section builds on these descriptions by discussing what narrative inquiry is, where it comes from, how and why it is used, and the specific methods to conduct narrative inquiry.

Narrative inquiry is often used interchangeably with narrative research in the literature and comes from a rich blend of philosophy, theory, and applications (Clandinin, 2007). It touches on modern and postmodern philosophies and evolved from structuralist and poststructuralist theories (Mertova & Webster, 2020). This complicates trying to pinpoint what narrative inquiry is because some of these philosophies and theories question the notion of truth and knowledge. For example, the postmodern philosophy and poststructuralist theory that influence narrative inquiry are conflicted in the literature and shy away from concrete answers and clear explanations. Clandinin (2007) also describes narrative inquiry as a fluid form of research that is prone to change due to the belief that people are the creators of knowledge. He goes on to say, “narrative inquiry cannot be predicted or defined in the ways that stable forms of inquiry can” (p. 269). However, with all of the ambiguity surrounding narrative inquiry, these fluid notions of truth, knowledge, and understanding allow this methodology to tap into the unique aspects of the human experience that others cannot.

Narrative inquiry is an “amalgam of interdisciplinary lenses, diverse disciplinary approaches, and both traditional and innovative methods all revolving around an interest in biographical particulars as narrated by the one who lives them” (Chase, 2005, p. 651). Narrative inquiry also centers on understanding interpretations of lived experiences within the context of the social milieu (Clandinin, 2007). These nuances within each individual’s interpretations portray the many factors influencing narratives, such as relational realities, how the participant wants to be portrayed, time, place, audience, and even what is said or not said (Daiute, 2014). Through all of this, we see that narratives are as complex as the individuals behind them.

**History of Narrative Inquiry.** Narrative inquiry is rooted in 1960s French structuralists’ theory of narrative or narratology, which is the study of narrative and its structure (Mertova & Webster, 2020). Narratology has had many applications, including in reflective practice and as a form of inquiry, along with studies centering on psychology, sociology, history, case studies, and education (Mertova & Webster, 2020). However, Connelly and Clandinin were the first to coin “narrative inquiry,” which described a growing research methodology that looked at teacher education from a personal storytelling standpoint (Connelly & Clandinin, 1990; Mertova & Webster, 2020). Connelly and Clandinin (1990) argued knowledge of education often comes from stories based on personal experiences.

Over the last few decades, memoirs, blogs, creative nonfiction, podcasts, non-scripted reality shows, and more have brought narrative into popular mainstream culture (Clandinin, 2007). The idea of celebrating and acknowledging personal views on knowledge, truth, and reality is everywhere you look. Clandinin (2007) aptly says, “In essence...social science and public culture are converging on stories” (p. 232). Many now see truth and reality as subjective yet validated through the individual’s interpretations. This is what makes narrative inquiry so

compelling as a research methodology. It can help researchers understand the world through the eyes, minds, and experiences of a diverse world of others from various cultures, beliefs, worldviews, and even realities.

**Why Narrative Inquiry?** Mertova and Webster (2020) describe the following reasons to use narrative: it provides a rich framework to investigate the human experience through stories; is suited for and addresses the subtleties and complexities of the human experience; and allows researchers to focus on significant life events while exploring the implications on life perspectives as a whole. Connelly and Clandinin (1990) also say that the main claim for using narrative is the assertion that “humans are storytelling organisms” who lead storied lives both individually and socially (p. 2). These insights show that narrative inquiry is ideal for understanding how people interpret their experiences through rich and diverse contextual lenses that color how they see and interpret their lives and the world around them. Narrative inquiry enables researchers to partially see through these contextual lenses and into the participant’s experiences, lives, and worlds.

### *Participants of the Study*

Merriam and Tisdell (2016) assert that in qualitative research, small and nonrandom, purposeful samples are selected to garner an in-depth understanding rather than the general truth of the many. Beitin (2012) also says that in qualitative research, interest tends to be on smaller numbers of participants who represent the phenomena being studied. He adds that participants are purposively selected based on their rich knowledge of the research phenomena (Beitin, 2012). Additionally, Magnusson and Marecek (2015) say that it is impossible to identify an appropriate number of participants and that one-size-fits-all ranges should be looked at with skepticism. Patton (2015) also says that there are no specific rules for sample size in qualitative

inquiry. He goes on to recommend specifying a minimum sample size based on the “reasonable coverage of the phenomenon given the purpose of the study and stakeholder interests” (Merriam & Tisdell, 2016; Patton, 2015, p. 475). Additionally, Johnson and Christensen (2019) say that the general rule for qualitative sampling is to provide a large enough sample to achieve saturation where no new or relevant data is emerging. That said, I was able to recruit six participants and saw the same concepts and data repeating throughout the participant interviews, reaching saturation.

Based on these insights and the nature of qualitative research and, more specifically, narrative inquiry for this study, I relied on purposeful sampling or purposive sampling, as it is also called (Patton, 2015). Purposeful sampling allows researchers to select “information-rich” participants who are suited for the study based on their particular experiences, characteristics, knowledge, insights, demographics, etc. (Charmaz, 2011; Johnson & Christensen, 2019; Patton, 2022; Russman, 2022). These criteria are also referred to as inclusion criteria (Johnson & Christensen, 2019). Merriam (2009) and Merriam and Tisdell (2016) also explain that to begin purposive sampling, the researcher must determine the necessary selection criteria for the population to be studied. They also say that the selection or inclusion criteria must reflect the purpose of the study to guide the identification of information-rich participants (Merriam, 2009; Merriam & Tisdell, 2016). For this study of emotion, transformative learning, and Air Force leader development, I started by outlining the desired participant criteria in order to achieve the research purpose. First, and most obviously, they had to have Air Force leadership experience. This can vary greatly as leadership in the Air Force can occur at many levels. However, the designation of commander holds an important distinction. Air Force Instruction 1-2 (2014) says the following about commanders and their conduct:

Special authorities and responsibilities are inherent with command. In addition to leading people to accomplish an assigned mission, commanders have the lawful authority and responsibility to promote and safeguard the morale, physical well-being, and the general welfare of persons under their command (p. 2).

Commander denotes a formal designation and level of responsibility not necessarily inherent in other levels of leadership. This lawful authority and responsibility towards mission accomplishment and the welfare of the people in the unit lends to a great deal of pressure in leadership that can alter the nature, experience, and ethics of leadership. For this reason, I sought out retired Air Force officers who have held the designation of commander. I also chose to study Air Force leader development experiences from retirees because this holds a standard of 20 years of military service to reach the point of retirement. This allowed for a more standard frame of leadership and military experience. This population also had rare perspectives and insights required for this study of emotion, transformative learning, and Air Force leader development due to their longer time span of military leadership experience and particular experiences as Air Force commanders at various levels. The participant's ages ranged from 43-52 years old, and their genders included five males, and one female, from various racial and ethnic groups.

I also reached out to Air Force commanders who I have worked with or met throughout my Air Force career. I did this for several reasons: access, time, and rapport. Obtaining a list of retired Air Force commanders is difficult and is considered controlled unclassified information (CUI), greatly limiting access. This also touches on multiple government organizations such as the Department of Defense, Department of the Air Force, and the Department of Veterans Affairs, each with their own chains of complex bureaucracy that could take years to navigate.

Selecting from a pool of candidates that I know and that meet the selection criteria needed for study enabled access and saved time.

### ***Data Collection***

Dey (2005) explains that data collection is a process that involves selecting what constitutes data, selecting techniques for data collection, and the subsequent products that come from the transcription of notes and recordings. From this, we get research data. To determine what constitutes the research data for this study, I go back to the research purpose and questions that guided this dissertation. The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers. The research questions that guided this study were:

1. How do Air Force leaders experience leader development?
2. In what ways do Air Force leaders experience emotion in their leader development experiences?
3. What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

Here, stories and narratives of profound growth and leader development from retired Air Force commanders was the data I was seeking to collect. To collect this data, this study's main collection method was interviews. Merriam and Tisdell (2016) identify this as a primary source of data in qualitative research.

Magnusson and Marecek (2015) explain that interviews are opportunities to learn something from the participant, so here, the conversation is generally one-sided, focused on the participant, governed by an interview guide, and concentrated on gathering material pertinent to the research purpose and questions. Magnusson and Marecek (2015) also describe the

characteristics of good interview questions as eliciting rich and personalized stories and reflections on lived experiences. However, there are various forms of interview methods that allow researchers to explore their topics. Roulston (2012) lists several of these, including biographic interviews, focus groups, narrative methods, oral history, and photo elicitation, each with particular applications. Flick (2014) also lists several interview forms, including focused, expert, episodic, elite, and narrative interviews. Morse (2012) adds some distinction to this list and includes structured and unstructured, and semi-structured interviews. This study relied on semi-structured interviews which Morse (2012) explains is used when the researcher is familiar with the topic and can distinguish what is pertinent to the research questions but does not necessarily know nor can they anticipate all of the responses. Morse (2012) also describes semi-structured interviews as using a question stem to guide the interview where the participants can respond freely. Moreover, the researcher may ask pre-planned probing questions or questions that might arise. She also explains that questions are typically asked in the same order, and that semi-structured interviews may be conducted in a variety of ways, including face-to-face, written format or via internet surveys (Morse, 2012). I wanted to focus on retired Air Force commanders' stories and narratives of leader development and transformation for this study of emotion, transformative learning, and Air Force leader development. The ideal method to get to the heart of these experiences was through narrative inquiry, more specifically, semi-structured interviews. I used the interview protocol in Appendix E to guide these interviews.

However, Mertova and Webster (2020) warn of traps and limitations associated with stories and narratives in research and how data collection can easily become extensive. To mitigate this, I limited each participant to 2-3 interviews at no more than 1.5 hours each. In total, I ended up with 13 recorded interviews totaling 13 hours and twelve minutes. Interviews were

also guided by an interview protocol to focus data collection on the research purpose and research questions. Moreover, I used Zoom to allow for interviews to be conducted anywhere despite geographic location, provided the participant has internet access, access to a computer, and the Zoom application. Zoom is a free telecommunication application that can easily be downloaded to any personal computer. Additional tools for Zoom include a USB camera or computer monitor installed camera to enable face-to-face communication, a microphone, speakers, headphones, or earbuds listening devices. Headphones and earbuds were recommended for increased privacy. These interviews were recorded using Zoom's record function. The University of Tennessee, Knoxville (UTK), also provides a paid version of Zoom for students and faculty, which removes meeting time limitations and provides a record and transcription function that converts the audio file into text. This provided roughly a 60-percent solution to transcribing interviews and was personally checked word for word for accuracy. That said, I watched each interview recording and checked Zoom's transcripts for accuracy while also noting any additional items of interest that came from the participant's inflection, pause, tone, gestures, etc. This process was very labor intensive, and I ended up going through each transcript three times alongside the recorded interview to make sure the transcripts accurately depicted the participant's responses.

**Data Collection, Emotion, and the Interview Process.** Interview-based methods in qualitative research allow for a rich, diverse, and nuanced understanding of human-centered topics. However, it can also pose emotional challenges that the researcher must be prepared to address. Magnusson and Marecek (2015) say it is not uncommon for research participants to react emotionally during interviews. Seidman (2006) also explains that in the process of interviewing and as trust builds, participants may share uncomfortable aspects of their lives,

which may lead to emotional distress. Moreover, Lillrank (2012) says the interviewer must manage emotions during the interview process to facilitate interviewer-interviewee knowledge production, which is an essential skill for the interviewer. Lillrank (2012) also suggests that the researcher develop strategies to empower interviewees, potentially resulting in rich data gathering. However, Lillrank (2012) also discusses the emotional toll and mental demand on the researcher conducting the interview and explains that active listening requires openness, intellectual and emotional engagement, and attentiveness, which can be mentally demanding.

Considering this study's theoretical framework, which heavily relies on transformative learning, emotion's influence on this process, and the participants being asked about their significant lived experiences that profoundly changed them as people and as leaders, emotion was a factor during the interview and reflection process. To mitigate this, I provided each participant with a list of mental health support services for retired military members. I also provided a guide for the participants to contact these services by providing website links and phone numbers if needed. In the case of emotional distress, Magnusson and Marecek (2015) also recommend stopping the interview immediately and allowing the participant the time and space to recover. They go on to say that this material should also be excluded from the study.

Additionally, interviews were conducted via Zoom, which allowed the participant to have a measure of control over where the interview physically takes place on their end, lending to the empowerment piece discussed above. Furthermore, I conducted Zoom interviews in a home office with the door closed and a do not disturb sign on the door and with headphones to maintain privacy. I also opened up my schedule during the data collection process and made myself available whenever was convenient for the participant. These measures allowed for a

measure of safety, control, and comfort for the participants to share their experiences on Air Force leader development.

Another important concept in research is the insider and outsider phenomenon, which are terms used in research to explain one's place in reference to the people or groups being studied. More specifically, insiders are described as natives, indigenous, or the people being studied (Johnson & Christensen, 2019; Narayan, 1993). Conversely, outsiders are described as objective observers or those outside of the group being studied (Johnson & Christensen, 2019). Johnson and Christensen (2019) also say that qualitative researchers constantly work to understand the research participants' or native's or actor's perspectives. Here, the insider perspective is paramount and oftentimes, the researcher is the outsider looking in. In my case, I am an active-duty Air Force officer and am an insider regarding this study's topic. For example, I have experienced transformative learning that has led to my development as a leader. I distinctly remember emotions, particularly guilt, shame, sadness, and anger, as well as hope and love that enabled the transformative learning process. That said, the question of how I would manage my own emotions during the data collection, more specifically, the interview process kept coming back to me.

On the face of it, this did not seem like it would be an issue. In other words, why would the experiences of others and their emotions impact me as a researcher? Going back to the section on research participants, I selected professional acquaintances as research participants because of their experiences as Air Force commanders and leaders. The issue here lied with what Seidman (2005) highlights as a possible issue of interviewing acquaintances. Not to mention, there are acquaintances (potential research participants) who may have leadership and development experiences similar to mine. Seidman (2005) said interviewing acquaintances can

come with the notion that the researcher understands the participant's assumptions, experiences, or even what is said without seeking clarification (Seidman, 2005). I take this also to mean that along with the assumptions and experiences, I might also assume I have an understanding of their emotions and how these influenced their experiences and leader development based on my own experiences. In fact, I found this to be the case with one of the research participants, Remi. We enlisted in the same year and had similar experiences regarding the challenge of dealing with emotions in the military. I had to check my assumptions and personal inclination towards thinking I knew what she went through and how she processed her emotional experiences. I did this by making it a point to follow up for additional details with each of her responses to minimize room for assumptions. I also wrote a subjectivity statement to help check my potential bias and understanding of this study's concepts. Writing this section has also highlighted potential issues that might have gone unnoticed as I conducted the interviews and analysis. This helped me ensure that I asked follow up questions, sought clarification, and minimized assumptions as much as possible, which helped especially as I interviewed Remi.

### *Data Analysis*

Thorne (2022) describes data analysis simply as coding for themes and categories. Johnson and Christensen (2019) label the identification of themes in research and findings as thematic analysis and state that this is perhaps the most popular type of analysis in qualitative research. Braun and Clarke (2006) also define thematic analysis as “[A] method for identifying, analysing and reporting patterns (themes) within data” (p. 79). From this, we gather that data analysis occurs as the researcher codes the data for categories and themes. Tesch (1990) describes the purpose of coding as a way to aggregate all of the data about a theme or topic so they can be studied individually. Moreover, narrative research involves the researcher

interpreting meaning by analyzing “plotlines, thematic structures, and social and cultural referents” (Kim, 2016, p. 190). To do this, I have compiled the coding and analysis cycle below. It is based on general insights from Tesch (1990), as well as insights from Saldaña (2016, 2021) for particular coding methods such as In Vivo coding, emotion coding, narrative coding, structural coding, and eclectic coding, and Riessman (2008) for a sense of the temporal aspect that provides sequence and order in understanding the participants journeys of developing as leaders in the Air Force.

For the first step of the coding and analysis cycle, Tesch (1990) recommends reading through the data documents to get a sense of the whole, and to jot down notes and impressions for each document to help with understanding the data. Saldaña (2016, 2021) also encourages researchers to do this as early as data collection and formatting. He calls this preliminary jotting. He also encourages researchers to pre-code data by highlighting, bolding, circling, and simply identifying aspects of the data that strike the researcher, which can also occur as data is being collected and formatted. I also relied on in-vivo coding during this step to highlight significant statements from the participants related to important ideas in this study. Saldaña (2016, 2021) points out that In Vivo coding has various labels throughout the literature including, literal, verbatim, inductive, indigenous, natural, and emic coding. In this study, I have highlighted and relied on word for word statements from the participants in order to understand their development as Air Force leaders and emotion’s influence on their learning and in some cases, transformation as leaders and people.

Step two involved a combination of coding methods, including emotion coding, structural coding, and narrative coding. Saldaña (2016, 2021) says structural coding uses a conceptual phrase or content-based description for a data segment related to the research questions. This

helped me identify important elements within the participant's narratives for further code refinement, categorization, and theme creation later on. Additionally, I used emotion coding for its direct application to this study's topic on emotion, transformative learning, and leader development. Saldaña (2016, 2021) explains that emotion codes label the participants' emotions and are useful in exploring intrapersonal and interpersonal participant experiences, directly relatable to this study's purpose. Moreover, I used narrative coding to keep the participant stories and their associated narratives intact as much as possible. Saldaña (2016, 2021) acknowledges the complex nature of narrative in his explanation of narrative coding by pointing out the lack of overall rules for modes of investigation or for the consensus on the definition of narrative in the literature, but he does qualify it in the realm of coding and says "Narrative Coding applies the conventions of (primarily) literary elements and analysis to qualitative texts most often in the form of stories" (p. 154, p. 195). Furthermore, Riessman (2008) explains that the term narrative holds many meanings from various disciplines and is often synonymous with story. She goes on to explain that typical oral storytelling involves a speaker who connects events in a consequential sequence for later actions and meanings based on what the speaker wants the listener to take away (Riessman, 2008). This connects the element of story with the lessons, themes, emotions, and overall message in the form of a narrative. This is what I worked to capture throughout this study. In other words, the narratives of the participants and how this shaped their development as Air Force leaders through their experiences and emotion's influence on this process.

Through narrative coding, I was able to keep the participant's stories intact while highlighting the various important elements of emotion, transformative learning, and leader development within the greater narrative. This also involved a combination of data including, interview transcripts, participant journal entries, field notes, and my own journal entries with

overall impressions, lessons learned, and items of note following each interview and every Friday throughout the data collection and coding period over the course of a month and a half. Seeing these codes and separate forms of data at first helped me to identify their relationship later on as they cropped up in the participant's narratives in relation to their development as leaders in the Air Force.

In step three, I used eclectic coding as a transition step for refining codes and consolidating coded items. Saldaña (2016, 2021) explains that eclectic coding is appropriate after a first draft of coding using an array of coding methods for a transition to a strategic second draft of coding. In this case, based on what I learned from steps one and two, I refined and consolidated elements of the multiple coding methods I used before. These included In Vivo, structural, emotion, and narrative coded items.

For step four, coding was essentially complete. However, I reviewed the data again for any additional insights and connections to the research purpose, research questions, and theoretical framework for this study. This step helped me identify connections I used in the remaining steps to create categories and themes.

Step five involved grouping the codes into categories. Saldaña (2016, 2021) explains the transition from code to categories as synthesis, which he describes as combining different items to create a new whole. He also says this is the primary heuristic for qualitative data analysis (Saldaña, 2016, 2021). Additionally, Rossman and Rallis (2003) describe categories as words or phrases that depict some segment of the data and are explicit. Some of the categories from this study include joining the Air Force, help along the way, and trust. The rest of the categories can be found in Appendix F.

For step six, I wanted to better understand how each participant developed as leaders over the course of their careers. The participants shared their significant lived experiences through an episodic approach throughout the interview process, providing glimpses into their development. This is because my interview protocol did not follow a chronological approach. For example, here is the third item from my interview protocol: “Tell me about a significant experience, either personally or professionally, that changed the way you view, understand, or practice leadership.” Here, the participants would pick an experience and describe what they learned and how they changed due to it. However, this could have been at any point during their time in the Air Force, and it did not provide an understanding of how they grew as leaders over time. Doing this, I found the following theme: a transformative leadership lab.

In step seven, I identified three additional themes based on patterns in the data found from the codes and categories. These are listed and described in Chapter 4 and can also be found in Appendix F. Saldaña (2016) also explains that the goal of theming the data is to develop an overarching theme or integrative theme that merges various aspects into a coherent narrative. Saldaña (2021) also described theming the data as providing detailed descriptions of the observed and constructed patterns by expanding on major ideas through extended phrases or sentences. Rossman and Rallis (2003) also explain themes as phrases or sentences describing subtle and tacit processes.

These steps enabled data organization, coding, categorization, theme creation, and analysis through credible methods from the literature. The software I used to accomplish these steps is ATLAS.ti, which The University of Tennessee, Knoxville, provides to students and faculty for research. ATLAS.ti is a qualitative data analysis software that allows researchers to

upload, import, organize, analyze, refine, and create visualized insights from their data with the help of artificial intelligence (ATLAS.ti, n.d.).

### **Trustworthiness**

Trustworthiness is a criterion in qualitative research that stems from Lincoln and Guba's 1985 book *Naturalistic Inquiry* (Flick, 2022). Since then, the concept of trustworthiness has developed to include many forms and names in research literature. These include validity, authenticity, dependability, confirmability, reliability, rigor, quality, verisimilitude, and other terms to mean that the researcher has done their due diligence to meet the criteria for credible research (Creswell & Miller, 2000; Johnson & Christensen, 2019; Lincoln & Guba, 1985; Polkinghorne, 2007; Seale, 1999). Alvesson, Sandberg, and Einola (2022) define trustworthiness as “[I]nvolving an assessment of the potential validity and reliability threats to the knowledge being developed and how they are going to be dealt with in the study” (p. 27). However, dealing with subjective and interpretive aspects of qualitative research, particularly this study’s use of narrative inquiry is challenging and requires measures to ensure the study meets the criteria for trustworthiness.

Lincoln and Guba (1985) explain that this challenge is due to naturalistic inquiry being an open system with no amount of internal or external measures that could ever result in the research being labeled as unassailable. They go on to say that, at best, measures such as member checking, triangulation, thick description, auditing, etc., could only persuade others of the study’s trustworthiness (Lincoln & Guba, 1985). Lincoln and Guba (1985) help with this by providing a basis for establishing trustworthiness through various techniques that address credibility, transferability, dependability, and confirmability. These terms also have rationalistic paradigm counterparts listed in Table 3.1 below. Guba (1981) explains that the rationalistic

Table 3.1. Terms for Trustworthiness in the Rationalistic and Naturalistic Paradigms

Rationalistic Terms	Naturalistic Terms
Internal Validity	Credibility
External Validity/Generalizability	Transferability
Reliability	Dependability
Objectivity	Confirmability

*Note.* Adapted from Guba's (1981) table on scientific and naturalistic terms and the aspects of trustworthiness.

paradigm informs conventional inquiry and favors logical positivism. Lincoln and Guba (1985) later add characteristics that provide nuance to understanding the naturalistic paradigm, such as using qualitative methods, the human instrument, purposive sampling, inductive analysis, the acknowledgment of multiple realities, employing emergent designs, and more. These aspects also lend to the debate on the best term to describe research that emphasizes the aforementioned characteristics. Merriam (2009) and Merriam and Tisdell (2016) point to terms such as qualitative, naturalistic, or interpretive research and say these terms have been debated in the literature for the best term to describe research that considers the many philosophical, disciplinary, and historical influences that impact what we know as qualitative research today. These characteristics provide a basis for understanding the distinctions of qualitative research that guide the approach, its methodologies, and many methods.

Lincoln and Guba (1985) underscore the importance of credibility, calling it crucial, and describe it as a major trustworthiness criterion. They continue by explaining that without it, inquiry report consumers cannot deem findings and conclusions credible (Lincoln & Guba, 1985). Techniques that help establish credibility in qualitative research include prolonged engagement and persistent observation in the field, triangulation, peer debriefing, negative case analysis, referential adequacy, and member checks (Lincoln & Guba, 1985). This study used triangulation through interview transcripts and journal entries from the researcher and research participants that allow for additional reflection on leader development and any thoughts on the research topic, interview questions, or anything else the researcher and participants think is relevant or important to the study.

Transferability is described in a somewhat roundabout way. Lincoln and Guba (1985) describe transferability by asking, “How can one tell whether a working hypothesis developed in

Context A might be applicable to Context B” (p. 124)? Here, they use the terms “similarity” and “fittingness” to describe the degree of transferability from one case to another (Lincoln & Guba, 1985). Thick description is a technique that allows for transferability. Lincoln and Guba (1985) describe thick description as a thorough description of the context, setting, transactions, or processes that also provides the inquiry location, what the inquiry was concerned about, and the contextual details relevant to the issues or policy options being researched.

Lincoln and Guba (1985) say that there can be no credibility without dependability. Shenton (2004) explains that to address dependability in a qualitative study, research processes should be reported in detail to allow researchers to repeat the work. The intent here is to repeat the work, not necessarily obtain the same results. He goes on to say that in-depth coverage and detail also allow the reader to assess the rigor of the research and whether proper practices have been followed (Shenton, 2004). A technique for ensuring dependability in a study includes techniques previously associated with credibility. This goes into the first line of this paragraph from Lincoln and Guba (1985), where they tie credibility and dependability together. More specifically, Lincoln and Guba (1985) state, “Since there can be no validity without reliability (and thus no credibility without dependability), a demonstration of the former is sufficient to establish the latter” (p. 316). Here, Lincoln and Guba (1985) provide triangulation as an overlap method that addresses both dependability and credibility. They also provide the inquiry audit as another technique to help build dependability. Through an inquiry audit, the auditor examines the research process and the product (data, findings, interpretations, recommendations, etc.) and attests that the study is properly supported by data, internally coherent, and has met the appropriate criteria for research and may be accepted (Lincoln & Guba, 1985).

Finally, confirmability. Shenton (2004) describes confirmability as steps taken to demonstrate that the research findings were a product of the data and not the researcher's predispositions. Guba (1981) recommends triangulation and practicing reflexivity to help with confirmability. Triangulation was also listed with credibility and dependability and is a potent tool in naturalistic research. Here, Guba (1981) provides examples of enabling confirmability by using other investigators and research teams with various perspectives, including those with rationalistic perspectives that allow for multiple sources for each claim in the study. Practicing reflexivity is another of Guba's (1981) recommendations and enables the researcher to intentionally reveal their epistemological assumptions and viewpoints that might influence their interpretations and findings. Ways of practicing reflexivity include daily introspective journaling, peer debriefings, and documenting shifts in thinking and orientations (Guba, 1981). Considering all of Guba's (1981) and Lincoln and Guba's (1985) aspects of trustworthiness, I used triangulation, member checks, peer debriefing, journaling, and a subjective statement and explanation to achieve trustworthiness.

### ***Triangulation***

Flick (2022) discusses the evolution of triangulation, starting with its use in the early days of researching complex social problems through multiple empirical approaches. He goes on to provide an example from the 1920s that involved combining several quantitative and qualitative methodologies and three different forms of data to obtain a more complete understanding (Flick, 2022). This is triangulation through multiple methodologies. Flick (2022) then points to Denzin's two versions of triangulation that began with his work in 1978. Denzin (1978) viewed triangulation as a criterion for establishing validity or credibility in Guba's (1981) naturalistic alternative. Denzin (1978) explains that the combination of multiple methods in a

study would better enable the researcher to forge valid propositions while considering rival causal factors (Denzin, 1978). Denzin (2012) later explains that triangulation has grown into a research strategy that enables an in-depth understanding of the phenomenon being studied and is best understood as adding rigor, breadth, richness, and depth.

In this study, triangulation was used to build credibility, dependability, and also as a strategy for building a rich understanding of a phenomenon. I conducted interviews and compared the interview transcripts, themes, and researcher field notes produced during interviews and while coding data. I also wrote and analyzed my reflective post-interview journals and examined participant post-interview journals. This enabled the collection and analysis of data from multiple perspectives while aiding in the validation of the findings and conclusions.

### ***Member Checks***

Morse (2022) explains that member checking enhances and safeguards accuracy, consistency, and reliability in research. She also provides several ways to conduct member checking, including returning transcriptions to the research participants for checking, auditor or participant validation of findings, and researcher independent analysis (Morse, 2018, 2022). This understanding also lines up with Lincoln and Guba's (1985) explanation of member checking as another technique for establishing credibility and trustworthiness in qualitative research. For this study, once the interviews were converted to transcript form, I emailed these using the UT Vault application from the University of Tennessee, Knoxville's (UTK) Office of Innovative Technologies (OIT), to the email address of the research participant's choice for verification and to ensure accuracy. UT Vault enabled secure file transfer to personal computers and works with both personal computers (PC) and Mac platforms (*UT Vault: Send and view emails through vault*, 2023). I also sent each participant instructions on how to register and access UT Vault

through the OIT website (<https://utk.teamdynamix.com/TDCClient/2277/OIT-Portal/KB/ArticleDet?ID=124639>). Additionally, I asked the participants to respond and certify their transcripts within seven days and included the suspense date for clarity. This allowed the participants to not only ensure their perspectives were accurately transcribed but also allowed for omissions or additions to any part of the interview upon request.

### ***Peer Debriefing***

Peer debriefing is another technique for advancing credibility, confirmability, and overall trustworthiness. Lincoln and Guba (1985) describe this as a process of working with a disinterested peer or peers to explore aspects of the study that are potentially implicit in the researcher's mind. In other words, peer debriefing allows for another helpful perspective throughout the research process. More specifically, Flick (2022) describes peer debriefing as improving research quality, obtaining different views on ideas, progress, and results, and adding a diversity of perspectives and a way to collect second opinions. I worked with my committee chair throughout this dissertation to ensure proper academic rigor and quality. Particularly, we collaborated face-to-face using the Zoom application to ensure the research methodology, methods of data collection, data, transcription, coding, and analysis were sound. Moreover, all research products were shared using the UT Vault application to maintain privacy and data security, as described previously. I also debriefed the results and findings with my committee chair to allow for another perspective and for input on any aspects I may have missed. We met for the following milestones: 1) interviews have been transcribed, and data is ready for coding; 2) data has been coded; 3) the codebook is complete, and the codes are ready to be categorized; 4) once the themes and categories have been created.

## *Journaling*

Finally, this study included reflexive journal entries, enabling trustworthiness through all four of Guba's (1981) and Lincoln and Guba's (1985) criteria: credibility, transferability, dependability, and confirmability. Guba (1981) recommends practicing reflexivity through introspective journaling to intentionally reveal epistemological assumptions and viewpoints that might influence interpretations and findings. To that point, I asked the research participants to write brief post-interview journal entries following each interview and annotate any thoughts they may have regarding the items covered during the interview. For example, thoughts on their development as Air Force leaders, emotion's influence on their leader development, areas they want to expound on or clarify, additional experiences they would like to share, etc. This allowed for another opportunity to share their perspectives and insights. I did not put a word or page limit to this request but asked that they provide their journal entries in a Microsoft Word document or body of an email within seven days to keep data collection moving forward.

Additionally, I kept a reflexive journal throughout the study. More specifically, I made an entry in a Microsoft Word document following each interview and a weekly entry on Friday of each week throughout the research process to annotate my thoughts on the research. To help with this, I started with the following list of considerations and built on it: The research process, questions or ideas sparked from the interviews, interpretation of participant views, impression of the participants themselves, relevant theories and concepts, and how these influence interpretations of the data, shifts in thinking, etc. Lincoln and Guba (1985) explain, “[I]ntrospective journals...display the investigator's mind processes, philosophical position, and bases of decisions about the inquiry” (p. 109). That said, understanding researcher subjectivity is another important aspect of qualitative research and requires a great deal of reflexivity.

### *Subjectivity and the Researcher*

Critics have charged that qualitative research, inquiry, and studies are too subjective (Denzin & Lincoln, 2005; Patton, 2015; Wertz, 2011). In qualitative research, the researcher is the instrument (Guba, 1981; Johnson & Christensen, 2019; Patton, 2015). The researcher designs the study, collects the data, analyzes and interprets the results, and writes on the findings (Johnson & Christensen, 2019). Here we can see the potential for bias and subjectivity to impact the study from start to finish through design and, ultimately, an interpretation of the data. That said, the researcher's interest and passion in a given area sparks a need to investigate and know more. This inclination toward a topic would naturally drive thoughts and feelings that can and likely do influence how a researcher sees and understands their research. Creswell and Creswell (2018) say, "Researchers recognize that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural, and historical experiences" (p. 8). Knowing this, qualitative researchers must work to understand their subjectivity and how it influences their research.

**Researcher Subjectivity Statement.** "Being naïve to the participants and topic enables the researcher to examine the setting without preset ideas and bias" (Flick, 2022, p. 386). Unfortunately, I do not have the benefit of naïveté as it relates to this study of emotion, transformative learning, and Air Force leader development. I am biracial, Caucasian, and Korean. I feel like I am part of both but am not truly considered either. I am also a father of two, a husband, and middle-aged. I am a US Air Force officer and aviator and have served as an enlisted US Marine for almost a decade. I have been an instructor, teacher, and student for much of my adult life and consider these experiences central to my personal and professional growth. I have two advanced degrees, both with a heavy emphasis on leadership. Additionally, I consider

myself a humanist at heart and value human dignity and autonomy. As a teacher, I work to help my students grow to be independent, confident, emotionally intelligent, free-thinking, and open-minded, with a strong sense and understanding of self. These aspects of myself have developed due to higher education, and I would like to pass them on to the next generation. As an Air Force officer, I aspire to lead by providing Airmen with the direction, tools, resources, creative leeway and support they need to do the job. I have also experienced several transformative episodes throughout my life, reference Figure 3.2 below.

In Figure 3.2, I used a river to depict my winding and changing path through life. The bends and forks represent significant choices and turning points that have altered the course of my life through transformative learning. For example, at 18, I enlisted in the Marine Corps instead of college or the workforce. After graduating high school, I went to Marine boot camp with an adolescent mentality but quickly realized I had to grow up. That was a big challenge in and of itself, but I also had to become a Marine, which was a huge shock and a change to how I thought, behaved, and even what I valued. The Marine Corps instilled in me a greater sense of service and the idea that I was part of a proud family of capable warriors who depend on each other to get the job done. I also took the Marine Corps core values of honor, courage, and commitment as my own and still hold them to this day. I learned accountability, work ethic, respect, and discipline. In short, I had to reconcile the person I was with the person I needed to become. This shocked me to my core and sparked a disorienting dilemma, which started the transformative learning process. Here, I experienced Mezirow's ten phases of perspective transformation. The result was a fundamental change in how I saw myself, my values, and even how I saw and understood the world around me. This experience and others like it have shaped my beliefs and perspectives. I carry these into my research and understand that my biases and



Figure 3.2. Nick’s Journey of Transformation, So Far. This is an adaptation of an attribution-free stock photo titled Mountains Windy River. The red dots represent significant turning points and milestones in my life. Some of these have led to transformative learning.

viewpoints can influence the findings if I am not careful.

## **Limitations**

A limitation of this study is that the participants were geographically separated throughout the United States and Europe. This limited interview options to Zoom to save on researcher travel costs and time constraints but allowed for participant convenience. Conducting Zoom meetings also limited my observation to facial gestures and voice, while in-person interviews would have allowed for observation of body language, providing another layer of communication to the interview and, subsequently, the data for analysis.

Another limitation is that I have worked with the research participants. Seidman (2005) highlights a possible issue of interviewing acquaintances and says that this can come with the notion that the researcher understands the participant's assumptions, experiences, or even what is said without exploring these aspects or seeking clarity. This study used semi-structured interviews, explained more in-depth in the data collection section. Here, the researcher guides the general course of the interview using a question stem where the participants can respond freely, and the researcher may ask probing questions as necessary (Morse, 2012). I say this to say that the semi-structured interview method allows for probing questions that help minimize assumptions and fill in any gaps in the researcher's understanding.

Additionally, Magnusson and Marecek (2015) explain that when considering personal acquaintances such as friends, close co-workers, clients, or relatives, they may feel obligated to take part in the study, may refrain from sharing certain experiences for fear of jeopardizing the relationship, or may feel compelled to share information they would have otherwise kept secret. In this case, the participants are leaders I have worked with or met professionally in the Air Force. However, I do not have a close personal relationship with them, and our professional

relationships ceased once they retired from the Air Force. Moreover, I have not verbally communicated with or seen many of the participants in years prior to the interviews. Also, in the pre-interview portion, I made it clear that the participants are free to share what they want, nothing more. This was also made clear in the following Appendices prior to data collection: Appendix A Recruitment Script, Appendix B Consent Cover Letter, Appendix C Informed Consent Form, and Appendix D Demographic Questionnaire.

Finally, wrapping up this last limitation and returning to Magnusson's and Marecek's (2015) point regarding the participants potentially refraining from sharing certain experiences due to the researcher-participant acquaintance relationship. My previously established relationships with the participants, however minimal, may have influenced what they were willing to share and may have impacted data collection and, ultimately, the research findings.

### **Chapter Summary**

Chapter 3 provided an explanation of the qualitative research approach, this study's methodology, and the methods used to select participants and collect and analyze data. This chapter also discussed trustworthiness and the various techniques to increase it in qualitative research, researcher subjectivity, and the limitations of this study.

## **Chapter 4**

### **Findings**

This dissertation delves into the intertwining relationships between emotion, transformative learning, and the development of Air Force leaders. Chapter 1 provided a foundation of the study with the traditional dissertation elements, including background, purpose, significance, etc., and an explanation of Air Force culture and Professional Military Education (PME) along with the various adult learning concepts and theories used to develop leaders in the Air Force throughout history and today. Chapter 2 provided a literature review of important adult learning concepts, including andragogy, transformative learning, and situated cognition and learning, to understand how Airmen learn and the contexts where their learning takes place. Additionally, a review of educational psychology literature provided an understanding of the connections between cognition, emotion, learning, and transformation. Moreover, the concepts of leader development and leadership development were explained, and together, these important ideas formed the theoretical framework for this study, reference Figure 3.1. Next, Chapter 3 explained this study's research approach, methodology, and methods, as well as detailed the study's research participants and how data was collected and analyzed. This chapter also discussed the measures taken to establish trustworthiness, the subjectivity of the researcher, and the subjectivity statement.

Chapter 4 reveals the research findings, starting with a data collection and analysis summary. Each participant is also introduced with a little about who they are, why they joined the Air Force, and a brief summary of their careers and how they developed as leaders. Leader development milestones are also provided to lay out their most significant learning experiences

and how these shaped the participants as leaders. Finally, this chapter ends with a discussion of the research themes and a summary.

### **Summary of Data Collection and Analysis**

For this study, I used purposeful sampling and recruited six retired Air Force officers with command experience. Other recruiting and participant-related documents are provided in the appendices section, including the recruitment script, informed consent form, demographic questionnaire, etc. Semi-structured interviews were conducted via Zoom at the participants' convenience, and the protocol can be found in Appendix E. The Zoom application was beneficial because the participants were geographically spread throughout the United States and Europe. I conducted two interviews each for five of the participants and three for the sixth participant, for a total of 13 audio and video-recorded interview sessions. This allowed for follow-up questions, and the participants seemed more comfortable during the second and third interviews. On my end, I conducted interviews in a home office, with the door closed and a sign posted, and I also wore headphones for increased privacy. Interviews averaged 61 minutes and were anywhere from 35 minutes up to 99 minutes. Moreover, I found that recording both audio and video added depth to the transcripts because I could go back and rewatch each interview multiple times to ensure field notes accurately depicted the participant's emotions, facial gestures, body language, and vocal cues. I watched each interview three times through the transcription and field note process to ensure they were ready for coding and analysis. As I did this, I jotted down notes, highlighted important areas, and found connections that helped me through this process. For coding, categorization, and analysis, I relied on literature from Tesch (1990), Saldaña (2016, 2021), Riessman (2008), and Rossman and Rallis (2003). Based on their insights, I formed a

seven-step coding, categorization, and theme creation process. Before I explain the findings, I will introduce the participants and outline their developmental experiences.

### **Narrative Introduction of Participants**

This section introduces the participants and their leader development experiences. To maintain anonymity, the participant names have been replaced with pseudonyms. The first letter of the pseudonyms is based on the first letter of their actual last names. Table 4.1 below also provides a demographic breakdown of each participant, their years of military service, and the levels where they held command.

The participants began each interview with background information on their lives before the military and why they chose to join. This provided an understanding of their motivations to join and explored their transition from civilian life to active-duty military service, which can be a transformative experience in and of itself. Next, significant lived experiences are explained in chronological order to provide an understanding of the experiences that shaped the participants as leaders over the course of their careers.

#### ***Edward***

Edward is a Caucasian male who served in the Air Force for over 31 years as an enlisted member and officer and commanded at the squadron level. He began his Air Force career as an enlisted aircraft maintainer, where he learned the importance of following regulations and technical orders to ensure the safety of the pilot and aircraft. During this time, Edward would be morally injured following the unsafe orders from a Chief Master Sergeant, someone who holds the top enlisted rank in the Air Force and should represent and enforce the core values of integrity, service before self, and excellence. This experience, along with several others, including being continually pushed with additional responsibilities by his leadership, being

Table 4.1. Participant Demographics.

<b>Pseudonym</b>	<b>Racial/Ethnic Identity</b>	<b>Gender</b>	<b>Year Joined</b>	<b>Year Retired</b>	<b>Years of Service</b>	<b>Levels of Command</b>
Edward	Caucasian	Male	1992	2024	31	Squadron
Liam	Caucasian/ Hungarian	Male	1995	2022	26	Squadron
Matthew	Caucasian	Male	1995	2021	26	Squadron, Wing
Nathan	Caucasian	Male	1996	2020	24	Squadron
Remi	African American	Female	1998	2024	24	Squadron (x2)
Robert	Filipino	Male	1995	2015	25	Squadron

trusted to rehabilitate problem Airmen, betrayal from a spouse, support, and encouragement from compassionate leaders, and having children would all alter the course of his life and how Edward would go on to lead Airmen.

### ***Liam***

Liam is a male Hungarian immigrant who served 26 years in the Air Force and commanded at the squadron level. He moved to the United States (US) from Romania at an early age. Growing up, Liam had a strict upbringing and was raised with a sense of responsibility as the oldest child. He was proud to be an American citizen and understood the sacrifices it took to be an American. Liam was drawn to the Air Force through family, friends, and relatives. Moreover, he earned his officer commission through Air Force ROTC and is a graduate of the Silver Wing Program. This additional, more challenging program ran in conjunction with ROTC. This experience reshaped how Liam understood leadership, and as he made mistakes and missteps throughout his career, leaders would step up to support him and enable him to learn from these experiences. Liam realized that leaders serve and enable the people they lead. He called this servant leadership.

### ***Matthew***

Matthew is a Caucasian male and served 26 years in the military. He commanded at the squadron and wing levels and retired in 2021. Matthew grew up on a dairy farm in an underprivileged family. The military promise of adventure, travel, and financial stability appealed to him. Matthew started his military career in the Army Reserves as an enlisted member. Here, he followed orders to survive. He said, “I did what the Sergeant told me to do to just survive and try to be as perfect as possible, but basically not get yelled at.” This drove Matthew towards a “zero defect mentality” that set him on a path to career success. However,

this strained his relationships over time, resulting in a loss that changed the course of his life and how he understood and practiced leadership. Through this experience and others, Matthew grew his understanding of leadership to emphasize trust, balance, and putting Airmen first.

### ***Nathan***

Nathan is a Caucasian male who served in the Air Force for 24 years, including his time in the Air Force Academy and on active duty. He commanded at the squadron level and retired in 2020. Nathan grew up in the Mid-West United States and described his family as “not really well off.” He was offered the opportunity to go to the Air Force Academy for rifle shooting in high school, and the prospect of adventure, camaraderie, and tuition assistance interested him. Additionally, with his Grandpa having served in the Navy during World War II and the thought of being able to fly airplanes, Nathan decided to join the Air Force. He went on to experience significant incidents early in his career that would influence his decision-making and policies for the rest of his career. Experiences like these shaped Nathan as a leader who deeply cared for all of the Airmen he led, and a leader dedicated to voicing and enforcing standards.

### ***Remi***

Remi is an African American female who served in the Air Force for 24 years. She began her career as an enlisted member and transitioned into becoming an officer after four years. Remi commanded at the squadron level twice. Tired of school and looking for adventure and independence, Remi joined the Air Force. She found a family of Airmen who taught her that leadership is about taking care of each other. Over the years, Remi also learned through personal failure and loss. Through these challenging times, Remi worked to distract herself and ignore her feelings. Work was a convenient distraction for Remi, who grew to realize she was a workaholic. Through heart-wrenching experiences in both her personal and professional life, Remi eventually

learned it was okay to feel and let her emotions out as a leader. It was okay to let her Airmen see her as a person. This experience and others like it shaped Remi into a leader who is passionate, caring, and empathetic.

### ***Robert***

Robert is a Filipino male who served in the military for 25 years, with time split between the Navy and Air Force, and he commanded at the squadron level. Robert was commissioned into the Air Force through the Naval Academy. Watching his father serve in the Air Force, the idea of serving something greater than himself and defending the nation appealed to him. Robert learned early on in his career that part of being a good follower was learning from the leaders around him. This formed the basis of Robert's leadership, which culminated around PME and was enabled by the growth mindset he learned early on. He grew to become a leader who considered the balance of taking care of people, accomplishing the mission, and making the best ethical decisions for the Air Force.

### **Study Themes**

Narrative analysis of the data uncovered four themes: 1) a transformative leadership lab; 2) it takes a village; 3) holistically nurturing excellence; 4) leadership and military service come at a price. Each theme has several accompanying categories, each consisting of many codes. Table 4.2 and Appendix F depict these items. Appendix F represents a larger sample for reference.

### ***Theme One: A Transformative Leadership Lab***

Theme one was common among all of the participant narratives. Leader development was predominantly viewed as a story of becoming, journey, or evolution over the course of the participants' careers and lives. These incremental leadership lessons and major developmental

Table 4.2. Themes, Categories, and Codes Sample

Themes	Categories	Codes
1. A transformative leadership lab	<ul style="list-style-type: none"> <li>a) Aim High, Joining the Air Force</li> <li>b) The unforgettable lessons</li> <li>c) Emotion and Experience               <ul style="list-style-type: none"> <li>i. Control your emotions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>i. Adventure, pride, tuition assistance, financial stability</li> <li>ii. TL experiences, confusion, frustration, shame, fear</li> <li>iii. Control your emotions, self-awareness, emotional injury</li> </ul>
2. It takes a village	<ul style="list-style-type: none"> <li>a) Leader development</li> <li>b) Coping for life, leadership, &amp; development</li> <li>c) Trust me</li> </ul>	<ul style="list-style-type: none"> <li>i. Trust from leadership, support from leadership, humility, talking to others, mentorship</li> <li>ii. Trust from leadership, support from leadership, power of trust, lack of trust, loss of trust, fragility of trust</li> </ul>
3. Holistically nurturing excellence	<ul style="list-style-type: none"> <li>a) Key to growing our capacity to lead</li> <li>b) Balance in leadership &amp; life</li> </ul>	<ul style="list-style-type: none"> <li>i. Experience, PME</li> <li>ii. Balance, leaders are human too, work/life boundaries</li> </ul>
4. Leadership and military service come at a price	<ul style="list-style-type: none"> <li>a) The emotional toll</li> <li>b) Leadership is about...</li> </ul>	<ul style="list-style-type: none"> <li>i. Stress, weight of responsibility, suffering in silence</li> <li>ii. Leadership is about taking care of people, growth mindset, knowing the people you lead is important, enforcing the standards matters, trusting your people</li> </ul>

and sometimes transformative milestones all come together over the span of a lifetime or, in this case, a career in the Air Force to transform young women and men from civilians transitioning into a new and intimidating military world into leaders capable of successfully commanding a unit with dozens, hundreds, even thousands of Airmen. The categories that make up Theme One include Aim High, joining the Air Force, the unforgettable lessons, and emotion and experience.

**Aim High, Joining the Air Force.** This category provides an understanding of the transition from civilian to Airman. This highlights where the participants started in their leadership journeys to give a sense of how they developed as leaders over the course of their careers. Analyzing each participant's Air Force experiences showed various paths and motivations for joining. Some of the more common aspects include adventure, tuition assistance for college, and financial stability.

*Edward.* Along with these, Edward was feeling the pressure of becoming an adult. He lacked direction in college; his father was pushing him to commit to a path in life, the Air Force promised the camaraderie he missed from his days playing football, and his cousin, who was in the Air Force, was encouraging Edward to join. The prospect of this new adventure “scared” and “excited” him. However, Edward was also confident that he could endure the experience.

Edward said:

I was scared. I was really scared. I was excited about the opportunities that might be out there. I was scared, umm, because I've never really been away from home, but I knew that I wanted to go out and see the world, and this was one of the opportunities, and I think my excitement outweighed my fears. Because when I joined, I was 21, and I was, you know, I knew in my head, I'm like, hey, I gotta find my way in life, and... This may give me the opportunity to do that. I had it in my head, I was like, you know what? I

could stand on my head for four years. If I don't like it, I'll do my four years and get out, and that's how I always would look at things...Dad would always tell me, if there was something I didn't like, hey, you could stand on your head for two hours. If you don't like it, it'll be over with soon.

The Air Force provided Edward with military training, the means to a new career as an aircraft mechanic, and a new way of life. Fortunately, he was stationed at the same bases as his cousin for the first eight years. Edward often looked to his cousin for advice and support through this formative time. He said:

I spent my first eight years in the military with my first cousin working on the flight line, and, you know, he worked in crash recovery and EMS [emergency medical services] and I worked in the fighter squadrons. And, you know, having that person there that, you know, I could go and talk to and get, you know...If I had a question about leadership or anything I was seeing and wanted somebody on the flight line that I didn't agree with...we had a lot of long discussions, and he really...he planted a lot of leadership seeds in my head at a young age that I don't think a lot of the people around me got...

Edward's experiences before joining the Air Force and as a new Airman serving alongside his cousin set the stage for how he would rely on others to learn and grow as a person and leader.

***Liam.*** Liam, a Hungarian immigrant, was driven to give back to the US. He understood the sacrifice of becoming an American and wanted to serve his country. He said:

So, I knew I wanted to serve. I had this just drive. The sense of not obligation in a negative sense, but just a sense of I wanted to give back, right? I was proud. I am proud to be a US citizen. I'm proud of my Hungarian heritage, but I see myself more as an American than I do anything else. But I know that there were a lot of circumstances and

sacrifices along the way that got me to be able to be an American. And so, I'm like how best...how best can I use my talents to continue to serve my country? And so, the military just seemed like a calling.

Once Liam decided that the Air Force was the right military branch for him, he went to college and attended ROTC, where he learned about the Silver Wing Program. Here, he learned about military discipline, professionalism, and what it took to be a leader in the Air Force. Liam observed various leadership types, but the one that resonated with him most was servant leadership. He described servant leadership as serving those you lead through trust, empowerment, guidance, and equipping those you lead with the resources to do the job.

Servant leadership was in stark contrast to how Liam understood leadership before ROTC. His model for leadership growing up was his father, who led with strict adherence, no questions asked. Liam said:

The folks that...that really resonated with me were those folks in Silver Wing. The guys...and gals that had made it through the program. And then the juniors, seniors, who were the advisors. They led with such a calm and a poised demeanor about themselves that some of these guys at the time, I would do anything. Like I would run through a burning building for them because of the way they led. That calm, confident, you know, demeanor about them. That's, that's what I gravitated towards more. And I don't know if that was a function of, you know... cause my growing up, my dad was very, you know, he barked orders. If he said to do something, you better get it done, and there was no hey, Dad, let me ask why. No, just get it done. So, I don't know if part of that was, you know, my desire not to continue to, you know, go down that path, and it, it didn't resonate, you know, when my dad barked orders at me.

The contrast between serving those you lead and what Liam initially saw as leadership through strict obedience to orders would spark his development as an Air Force leader and guide his understanding and beliefs on leadership and decision-making in the future.

**Matthew.** Joining the military as a kid from a dairy farm left Matthew with no reference to what life would be like in the military. During this time, he saw leadership from the perspective of a football player, where he was part of a team working together to win. He said:

[T]he opportunity to lead, I thought, was going to be exciting...I kind of equated it back to my high school and junior high experiences. I loved being a part of a team...I enjoyed that type of a leadership role, if that makes sense. So, I thought, gosh, the Air Force might give me a chance to, to lead to be a, you know, a team leader to, you know, a captain of a, of a team, even if it was a small project, you know, along those lines.

However, this team-centric understanding of leadership shifted during his time in the Army Reserves.

As a young, enlisted member in the Army Reserves, Matthew grew to understand that following orders and perfection at his job was necessary to survive. It was not the environment he thought it would be. Matthew said:

You know, early in my career, especially early enlisted...leadership was kind of about just survival. And I would say, just like, you know, just make sure...I did my job well enough. I did what the Sergeant told me to do to just survive and try to be as perfect as possible, but basically not get yelled at.

Here, Matthew saw perfection as the key to survival and success. Matthew described this as a “zero defect mentality.”

As Matthew transitioned into the Air Force and went through initial training, he excelled at the top of his class in virtually everything he did. However, Matthew's zero-defect mentality was taking a toll, putting great pressure on himself. He said:

I was pretty successful going through ROTC in the Air Force and had a real good GPA and stuff. And, then I did really pretty well at Navigator School, Navigator Training, umm, and I almost had kind of like a zero-defect mentality. Like, I didn't, as a student nav and a young second lieutenant I didn't allow myself to make any mistakes. If I missed one on my, on a test whether it was ROTC, or then, you know, follow on Nav or EWO [electronic warfare officer] school, you know, I beat myself up about those, you know, those very minor miscues, or if I got marked down on a sortie or anything like that.

This pressure and drive to be the best would set the stage for Matthew's most challenging experience and greatest leadership lessons.

***Nathan.*** Nathan was a rifle marksman in high school and garnered the attention of the Air Force Academy. At this point, the prospect of money for college to help his underprivileged family, the possibility of flying airplanes, and the legacy of his Grandpa's service in the Navy during World War II enticed Nathan to accept a seat at the Air Force Academy. Nathan took the transition from being a high school student to becoming an Air Force officer in stride. While at the Air Force Academy, Nathan was learning to juggle coursework, classes, and additional responsibilities as well as understand and enforce Air Force values. As his time passed at the Academy, Nathan would be incrementally trusted with responsibility. He said:

[W]hen I was cadet...you're so involved with school, and there's just things that thinking about being a leader wasn't there until probably your junior year where all of a sudden they give you a little bit of responsibilities and stuff like that. And when I was a junior...I

was the human relations officer...I have to intervene with people that are my age, you know? I'm like a year older than some of them or two, and basically start defining standards, or basically, you know, counsel people, and just basically really have to deal with, this is your responsibility. It may be small, but we gave it to you, you know, go do it...I kind of learned the feedback loop, and, you know, just learning of how to deal with people that you know...I don't have that much more experience than.

Here, Nathan learned about responsibility, accountability, and how to effectively discipline, rehabilitate, and grow Airmen through feedback.

Nathan also explained that the focus while in the Academy was more on “assertive followership” than on leadership. Nathan said “[A] lot of it still is what we call at the Academy, assertive followership. I'm just doing what I'm told, trying to learn some stuff, but really not exposed to leadership.” His two most significant takeaways from the Academy were the importance of integrity, the first core value in the Air Force, and time management. These lessons would carry Nathan successfully through pilot training and his transition from assertive follower to leader in the Air Force.

**Remi.** Remi was looking for a way out of her parent’s home after high school. She was tired of being told what to do, and the promise of adventure, travel, tuition assistance, the financial means to help out her family, and the privilege of serving her country made the Air Force an appealing choice. It would be life on her terms. Remi was excited at the prospect of a bright future but did not know what to expect transitioning from high school to the Air Force. She was shocked by the intense atmosphere of basic training and found herself shaking as the military training instructors yelled at her. This brought her back to her childhood when her father would yell at her. This is what Remi said about the experience:

I didn't realize how many people is going to be telling me what to do. I was like, what did I sign up for? I was like, I left home...because it was only my mom, my grandmother, telling me what to do, and I thought I was grown. I kept saying, I can't wait until I'm grown and out of the house so I can do what I want to do, when I want to do it. Well, that didn't too much happen for me, because now I got everybody telling me what to do. I'm a freaking airman basic. So, everybody I see, I'm a lock up, you know, and yes sir, and yes ma'am, and everybody's barking orders at you. It was different. It was overwhelming at first. I will say that because my dad used to holler at me a lot when I was kid, and so it's still kinda bothered me because I'm like, Oh, my gosh! I'm shaking up again. It takes me back to my childhood, and I hate when people holler at me. I'm like, I'm still a person. You don't need to holler at me to get your point across. But you know, basic training, all I do is holler at you all day long, so I kinda had to get myself used to that and not get into my feelings and allow that to interrupt that experience for me and say, hey, it's just a process. You just gotta go through this process and get through these six weeks, and you're going to be okay. I didn't even realize, like the whole uniform and boots piece. I don't know what I thought. I went with my hair done and my nails done. I did not know...I didn't know...I'm not going to lie, what to expect. I just knew it was going to be something new and something different.

During this time, Remi was not thinking about leading. She was more concerned with keeping her head down to avoid getting yelled at, so she focused on following. This was similar to Matthew's description of following early on to survive and not get yelled at. Following was something Remi struggled to do with her mother and grandmother back home. She said:

I was kind of one of those shy people that like to be in the background. So, what I tried to do for the most part, because I didn't want to get hollered at, I'm like you just need to fit in and just go with the flow, you know. And after a while you just get used to going with the flow so that you don't cause any waves, you don't cause any attention to yourself. So, leadership was definitely at basic training...not what I was looking to do at all. I was okay with being a good follower. Because I feel like as a leader, you gotta learn how to follow, anyway. So I think at that point because even leaving my parents house, you heard me say I didn't want to do what they told me to do, so I think joining the Air Force taught me how to effectively follow, but still be a good leader at the same time. Because I had a problem with following, and I thought I knew it all, and I'm like, well, no, I don't want to do it this way, I don't want to do it that way, I think it'd be better that way...Sometimes you just gotta be quiet and follow

Remi learned that a good leader needs to be a good follower first. This led to her following the guidance and sometimes forceful push of various leaders who believed in her. Remi would learn and accomplish more than she thought she was ever capable of.

**Robert.** Robert grew up as an Air Force dependent. Watching his father serve, Robert liked the idea of serving the nation and something greater than himself. He was also inspired by the movie Top Gun and was determined to join the Navy as a fighter pilot. Through perseverance, he found a way into the Navy through their Broadened Opportunity for Officer Selection and Training (BOOST) program, but he was disqualified from flying aircraft. His father encouraged him to find another way and to ask the flight surgeon about the requirements for flying in the Air Force. This led Robert down the path to becoming an Air Force officer from

the Naval Academy. He was determined and hard-working and ended up being one of only six selected out of a hundred who applied for a commission in the Air Force.

Going in, Robert had some understanding of military service life through his father's example. Here, he saw a life in the military as a life of service and defending the nation's citizens. The Naval Academy taught him that there is always an opportunity to learn. He said, "[T]he Naval Academy kind of raises you is, hey, there's always an opportunity to learn about leadership. It's a life-learning process. You're never gonna be the best leader you can be if you stop being willing to learn..." This early lesson in the Naval Academy enabled Robert to view every follower and leadership experience through a learning lens. Robert also described his understanding of leadership from the Naval Academy: "To me, it was taking care of people, and then if you take care of the people they will, in turn, take care of the mission..."

**The Unforgettable Lessons.** Each participant shared significant learning experiences that changed how they viewed, understood, and practiced leadership. I then framed the participants' experiences chronologically to help build an understanding of how these leaders developed over the course of their careers. This section outlines and describes their developmental experiences, what the participants learned, and how it changed them as leaders. It is also important to note that not all of the learning experiences shared by the participants were transformative in nature.

Edward's first significant learning experience occurred following his move to a new base with his cousin. Edward's cousin warned him that the squadron he was going to had morale issues. However, Edward saw this new assignment as an opportunity to learn and progress in his career. He would be assigned to the Wing Commander's aircraft and work under a crew chief he liked and respected. Everything was going well until his first deployment to Korea. A Chief

Master Sergeant told him to do something unsafe and against regulations. Edward was confused but followed the order, causing moral injury. He went against what he knew to be correct, and his parents taught him to know better. Edward was dumbfounded, confused, regretful, anxious, frustrated, and angry at himself for following the order. He said:

I was dumbfounded. Everything that they taught us from the time I come day one...to tech school to that point in my career. You know, you gotta give the aircrew a safe and reliable aircraft. And here's this guy in this, you know, in this position that's telling us not to do that...

He later added:

[T]he core values, I got them drilled into me from the time I was, you know, old enough to know right from wrong, you know? Dad and Mom both...they was always, tell the truth, don't do things that...that's going to be harmful yourself to others...It's almost like I let my own self integrity down at that point when I went ahead and changed that brake and let that jet fly. And trust me when I mean the next hour and a half, especially when I start seeing jets in a pattern...Man...I was a wreck on the inside.

Edward was also scared that something might go wrong with the aircraft. He verbally lashed out at the Chief and then refused to talk to him. Ultimately, the Chief had to answer for disregarding regulations and safety and was removed from the unit. Throughout all of this, Edward had the support of his direct leadership and his cousin. He learned that it was important to get to know your people and build trust, to watch and listen to them for toxic elements they see in the unit, and to have the courage to speak up and stop it.

Edward's second leader development experience took years to realize. It started when he was paired with an Airmen who was known as a problem child. Initially, he was "pissed" and

frustrated, thinking this was going to be a burden on him. However, his flight chief helped him see it from another angle. Edward recalls the experience:

[T]he flight chief was like...you've got a lot of great leadership qualities, and he's like, and I think...if you could just, you know, he can start learning from you. He's like, I don't think he had anybody that vested any time in him at all. And when he said things like that, it kind of started changing me a little bit to be like, okay, don't get pissed off. This is an opportunity.

Edward was tasked to either "straighten his ass up, or we'll show him the door." Through this experience, Edward worked with the Airman to maintain discipline and adherence to aircraft maintenance technical orders and regulations. The Airman struggled with this and was caught multiple times repairing the aircraft without the appropriate manuals, which could result in faulty repair and potentially catastrophic results. Edward eventually got through to the Airman, who successfully ended his time with the Air Force. However, it was not until years later that the Airman reached out to Edward to tell him how much he appreciated him for giving him the opportunity to succeed by helping him through that rough patch in his life. The Airman would go on to say how much he appreciated Edward being tough on him because that was what he needed at that time. He began asking himself, "[C]ould I have done more?" Here is what Edward said about the experience:

I think it was another one of [those] humbling moments...You know, because...he was brash. I mean he...didn't take pride in his uniform. He didn't take pride in himself, and to see him turn that corner, and knowing that if you find somebody that truly cares about you, that...the influence you can have on them...You know there was times I thought to myself, could I have done more? You know, could I have done more to kept this guy

in...[T]he moments that I go back and think, you know, could I done a little bit more to help this guy out? But I'm very happy to see that he's done a lot for himself, and he's grown. You know, that's what we always gotta look to see is, you know, trying to groom that next generation that's coming behind us and making them better than what we were. This experience taught Edward the influence leaders can have on the people they lead. He walked away with a new perspective and an outlook that leadership is about grooming the next generation to be better than the one before.

Edward's third significant experience occurred after 14 years of marriage. He caught his wife cheating on him. Edward's emotions ran the gamut of disbelief, betrayal, confusion, embarrassment, shame, dread, sadness, anger, and acceptance. Edward ultimately divorced his wife, but trust issues continued to haunt him throughout his career. During this time, Edward met a compassionate and understanding commander who encouraged him to seek counseling and get help. Edward was afraid this would mean the end of his career and the end of his aspirations to command in the Air Force. Despite this, his commander persuaded him to get help. Edward recalls the experience:

He's like, hey, come in here a minute, and he shut the door. And I'll never forget, he's like what's going on? And...I kind of dropped my head. And...I was looking at him and looking at the wall, and he took his name patch, and he pulled it off his uniform, and he turned it upside down, and he said, listen, he says, I'm no longer your commander. He says, I'm worried about you as a human being. He said, you need to tell me what's going on. He said, I'm concerned about your personal safety. He says...I've noticed a change in you. He said, everybody around noticed a change in you...I explained to him, you know, all that when she moved out, and things like that...And he gave me the opportunity just

to vent and explain everything that was going on, and I'll look back on that time that he was one of those guys that I was like, you know what, if I ever make it to Lieutenant Colonel, I want to be that person that could sit here and have that open discussion, let me talk, provide me guidance, and get me the help that I need.

Here, the commander demonstrated empathy, compassion, and support. Something Edward would never forget. This experience taught Edward the value of supportive and caring leadership and ultimately changed how he led his Airmen through the same support, understanding, and empathy his commander showed him that day.

Edward's fourth significant learning experience occurred as he was scheduled to move to a new base following his divorce. At this point, he was remarried but bitter, doubtful of his future in the Air Force, and somewhat confused and guilty based on his ex-wife's resentment of him making more money than her after becoming a commissioned officer. She also tried to blame him by saying things like, "what if you would let me stay up there a year? She said, I would've got it out of my system, and I would come home." It was during this time that his group commander pulled him aside. He wanted to talk to Edward about his future. At this point, Edward only wanted to do the minimum time required to retire. During their meeting, Edward told the group commander everything: the divorce, bitterness, and plans to retire. The group commander told Edward not to sell himself short, to rethink his outlook on life, not to close any doors, and not to let the divorce ruin him. Edward grew to realize it is important to see the bigger picture in life and help the people you lead see that as well. He also learned that the group commander saw something in him that he did not see in himself. Edward said:

I hope I can see that in other people and be able to help them see that in themselves.

And...I said it many times to the cadets; it's taken an entire village to grow this idiot, and

to provide me guidance, and to be there to put their arm around me to put their foot in my ass if I needed it. And...if you can find a way to be able to see that and then be able to then be that type of leader, I think that's what success looks like.

Edward's fifth and last significant developmental experience centered on his new wife and having children. When Edward got re-married, his wife came with two children. This changed the course of his life and how he understood leadership. Edward's new wife taught him that it is important to let the children have a voice, make mistakes, and help them learn through mentorship, guidance, and support. Edward appreciated his wife's advice and would carry these lessons forward into his leadership. He said:

[B]eing a parent has also helped me grow my leadership. And seeing that both of my kids have grown up, you know, is there things that I wish they would have done differently? Yes, but you know what? It's their life, and I gotta let them live their life. And I think as a leader...you gotta let people make some of the decisions, and what path they decide to take in life and their career, you know, give them guidance, be there to mentor them, and see where it takes them.

Liam's first significant learning experience occurred during his time in the Air Force Reserve Officers' Training Corps (ROTC) in college. He retaliated with some choice words about a cadet's mom when a group of senior classmen harassed his team during a volleyball match. This backfired on Liam. Here is Liam's recount of the experience:

[W]e're playing volleyball in our, in our PT [physical training] uniforms and everything, and again I'm a competitive person...So, as soon as the ball's served, I go from the position of attention to, I think I was center at that, in that rotation, and I got a really good set, and one of my fellow cadets got a really good, you know, spike on the juniors. And

the juniors were, you know, trying to, you know, get us off our game. They're, you know, teasing us a little bit, you know, harassing us, whatever. Talking a little smack. And Liam, big mouth that I have, right, Uh, I talked smack back and said something about one of the other cadet's moms, you know? And the juniors collectively lost their shit. They're like, disrespectful! This guy's, you know, just loose cannon. He needs to be disciplined. Blah, blah, blah, blah, blah. And so, you know, they ended the game, and we all went back to the detachment to change and, and go on with our Thursday lead lab classes...So this guy, Sed, you know, goes in. He hears all the rumbling amongst the juniors like Liam was disrespectful, this, that, and the other, and we need to punish him, etc. And again, I'm hearing about this all much much later. Sed steps up, and he's like, listen, he is a good cadet. I've seen him. I've trained him. He's not arrogant. He's not egotistical. He got carried away...He made a mistake. And then he kind of calmed them down, [Sed] comes up to me later...again I didn't realize this conversation had occurred, came up to me, is like, hey, listen, here's what's going on. You...were out of line. You said some things that you probably shouldn't have...It was just a very heartfelt conversation, non-rank related, but I could tell, you know, I mean, obviously he's a senior cadet lieutenant colonel, and the way he just explained it to me, I'm like, yeah, you're right. I was out of line...But then I find out later from other cadets that had heard Sed, you know, talk, support me on my behalf behind my back. I was like, that is a class Act...That is a leader that takes care of his people, that thinks about the others, and looks at the bigger picture...And how do we...turn this into a teaching moment for him, and make sure that he continues to progress, right?...So, that's one example where you know, when I realize that that's the type of leadership I want to emulate...

Liam felt shame for letting the “trash talk” get the better of him. He was also afraid of what would happen because the juniors were in an uproar. As the experience played out and he learned that Sed supported him, Liam felt appreciation, gratitude, and respect. Liam described Sed’s actions as servant leadership. Through Sed’s example, Liam realized that leadership is about serving those you lead. Here is what Liam had to say about the profound influence servant leadership had on him:

Servant leadership...you can throw that term around, but until you've been the recipient and beneficiary of something like that...like Sed didn't have to go to bat for me, but he knew he could see past my one infraction, had seen the bigger part of me having trained me and realized that I'm still a productive member of society, or can be. He went to bat for me because he saw, or he exhibited those traits as a servant leader...He was a servant to those underneath him. And I was like, okay, that is something I wanna emulate.

Liam would go on to make several missteps throughout his career, but his leaders would continue to support him and speak up on his behalf. He grew to understand that leadership was not about telling others what to do, but rather, leadership centers on supporting, empowering, and trusting the people you lead through servant leadership.

Liam’s second significant experience came about a decade later during his time as a student in the Weapons Instructor Course (WIC). It was naming night, and the tradition is to drink alcohol, defend a callsign, and have fun. Defending a callsign involves telling an entertaining story about yourself or something you did to get a nickname or go-by as an aviator. Liam had too many drinks and went overboard during his callsign defense to the point that he could have been ejected from the course. An instructor spoke up on his behalf, allowing him to stay. Liam said:

So I'm, I am the recipient of grace and mercy because there have been plenty of times in my career where I've made mistakes that people could have crushed me, but they saw past the mistake, and looked at me in a holistic manner, and said, this is uncharacteristic of him. Look at the circumstances of why he made such a poor choice, and then look compared to, you know, what else he's done throughout...his time as a WUG [Weapons School Undergraduate] or, you know, whatever the case may be. And I tried to remember that I've had grace shown to me, and it would be hypocritical of me not to take into consideration a disciplinary event, or whatever the case may be, when somebody is, you know, being brought before me in a leadership capacity. And so, I tried to, you know, to think of it...in those terms. How do, how do I serve those that, you know, rely on me for leadership?

Here, Liam was the recipient of grace and mercy, which made him appreciative, fortunate, and thankful that his leaders gave him room to grow and learn. This was another one of those experiences where Liam would misstep, but his leaders saw him as something more than the mistakes he made. This experience solidified a lesson he learned during ROTC and ultimately altered how he disciplined Airmen throughout his career.

Liam's third significant learning experience occurred when he stepped into a leadership position as squadron director of operations. The Commander was out of town, and Liam was tasked to meet a crew returning from a deployment. While waiting for the crew to arrive, he was met by a senior leader, who showed him a YouTube video in the aircraft, which is highly classified. This was a security violation and would likely require some type of discipline. Liam called his commander, who was out of town. His commander told him to take care of the situation until he returned. Ultimately, Liam found the offending Airman, who was then

demoted. Soon afterward, the Airman went onto Facebook and posted a comment about daughters and unwanted sexual acts. Liam had a daughter of his own and had a visceral reaction to the post. He describes the experience:

[Y]ou know it in your gut, but when you're experienced with it, you really have to force yourself to remain as unemotional as possible. Because as a father to a daughter, I had a very visceral reaction initially, like, I can't believe this dude just said that, right? Like, nowhere in the Air Force core values is that acceptable. And then, as a dad to a daughter, you know, I'm like...I wanna just throttle this dude, but you can't—so deep breath. Take yourself back. The term I used at the time, and I've used it since then, is dispassionate execution.

Liam worked to take as much emotion out of his decision-making as possible. He felt he owed it to the Airman and the Air Force to try and be objective. Here, he learned that controlling his anger, frustration, and disbelief was an important aspect of leadership.

Liam's next significant experience happened when his five-week-old child was in the neonatal intensive care unit (NICU) with a respiratory virus that nearly killed him. He was put into a chemically induced coma. Liam describes the experience:

I was Q coded [Exceptional Family Member Program coded] because my youngest son at the time when we were in Virginia still at the Pentagon...when he was five weeks old, ended up getting a respiratory virus that landed him...at Walter Reed, the children's NICU [neonatal intensive care unit], and they had to induce him in a chemically induced coma for five weeks, and they weren't sure if he was going to survive, because one lung collapsed, his body was fighting it. There was a viral, antibacterial infection, anyway; long story short, that was a very emotional time in my life, and I benefited from then an

Anonymous Major General, who went on to be the commander of ACC later, but...he pulled me out of the work that I was doing, told me to focus on my family, and, you know, take care of everything else later.

Fortunately, the director in charge of Liam made it a point to give him the time he needed to be with his family despite what was going on at work. This experience would influence how Liam understood what was important in life and leadership. He became more understanding and empathetic towards his Airmen, especially regarding family health matters.

The last significant experience that Liam shared centered on a situation with an Airman going through a divorce. The Airman was using alcohol to cope and was getting drunk regularly. He ended up driving home drunk one day but did not get into an accident. Liam found out and ended up talking to him (basically a slap on the wrist), and the Airman seemed like he'd be okay. About a week later, the Navy Masters at Arms (MAs) called Liam and said the Airman's car was left wrecked and abandoned on the side of the road. The Airman was found at home drunk with lacerations, but the MAs could not prove he was driving the vehicle or that he left it wrecked on the side of the road. Liam regrets not doing more to ensure the Airman was disciplined properly and admits this could have ended very badly. Liam learned that his view on caring for Airmen may have skewed his approach to discipline. He said:

[A]fter I found out that he'd had the car accident, and that's when I realized that...That could have been a very serious mistake. Thankfully, he didn't kill himself or somebody else. But I think I let it go a little bit too easy the first time around.

Liam tightened up his view on enforcing standards and realized the implications of what could happen if he did not. In this instance, he could have lost the Airman and potentially others in an alcohol-related incident. This changed Liam's stance on the importance of maintaining good

order and discipline. Initially, Liam wanted to minimize administrative discipline because he did not want to negatively impact the Airman's career. However, he learned that discipline is not only in the best interest of the unit but can also save an Airman's life.

Matthew's early lessons in leadership center on his time as a football player in middle and high school. Here, he saw leadership from a team perspective and understood that leadership means you are responsible for the people you lead and accomplishing the mission. Based on his time in the Army Reserves, Matthew developed a zero-defect mentality and followed orders to survive. This served him well as he transitioned into Air Force ROTC and flight training. He graduated at the top of his class in ROTC and flight training but found this wasn't paying the dividends he thought it would. He did not get assigned the aircraft he worked so hard for and was upset and mad that his hard work was not recognized. He also felt guilt and thought, "I should be happier than I am." Matthew recounts the experience:

I was pretty successful going through ROTC in the Air Force and had a real good GPA and stuff. And, then I did really pretty well at Navigator School, Navigator Training, umm, and I almost had kind of like a zero-defect mentality. Like, I didn't, as a student nav and a young second lieutenant, I didn't allow myself to make any mistakes. If I missed one on a test whether it was ROTC or then, you know, follow on Nav or EWO school, you know? I beat myself up about those, you know, those very minor miscues, or if I got marked down on a sortie or anything like that. I took...almost a zero-defect mentality kinda with me into my first assignment... But I quickly, you know, I quickly started to kind of change that leadership philosophy because the Air Force...when I felt like the Air Force...kind of gave me some stimuli that changed my approach. I did really well at nav school, and I thought, well, when it became track night...I thought, okay, I'm

first in my class so I'm gonna get a Strike Eagle. And if I don't get a Strike Eagle, I'll get a B-1 minimum. And if I don't get a B-1, then I'll at least be able to get an AC-130 or an MC-130, right? And they were like, okay...and tonight's uh ah...pecking order or choosing order, I should, you know say, it's like Matthew's first blah blah blah blah blah...And then they showed the drops, the airplanes available, and they were sending all eleven of us to EWO school...Anyways, now that was back in like 95 and uh, and so our drop was like ten RJ [Rivet Joint] and one Compass Call. So, I took the Compass Call, right? But...I was so upset, and umm, but that slowly kinda...that's the first indication that to me of like my zero-defect mentality was holding on too tight, you know? Like I became so upset and worked up about that, and I felt like my hard work wasn't being recognized. But I felt almost immediately a little bit mad, but I also felt like, gosh...I should be happier than I am, and it's because maybe my philosophy or my approach is...too intense or too...I don't know, just like the zero defect.

This experience caused Matthew to question his zero-defect mentality and soften his overall approach.

Matthew's next learning milestone occurred as he prepared for his first Air Force overseas trip. He was tasked with coordinating the logistics for the aircraft and crew. He was excited and enthusiastic but quickly became doubtful, overwhelmed, and lost. Matthew admits he did not know much about airmanship and struggled with the task. Matthew questioned his worth as a professional Airman and ultimately reached out to another member of the unit for help. He was met with compassion and empathy, starkly contrasting his own zero-defect mentality. Here is what Matthew said about the experience:

The very first TDY that I was ever assigned to operationally, we were just gonna take an EC-130 to Japan for an exercise and back home. So, we were gonna have to transition through Hawaii and Guam and so I was put as the project officer to just facilitate some of the normal logistics that at some of these stops along the way, and I was quite excited to have this responsibility. But what still sticks to me is that I had enthusiasm, and I wanted to do it, but like I literally didn't know...I was almost overwhelmed with, like what I didn't know. I didn't know how to get a PPR [prior permission required] for landing at...you know in Hawaii. I didn't know how to coordinate for fuel. I didn't know...as silly as this sounds, I didn't even know, like the DSN [defense switched network] prefixes, to call the Pacific bases to try to coordinate twelve rooms as we transited these locations. And so, I was excited that I had this responsibility, but I felt utterly a bit of a yeah...I wouldn't say a bit of a failure, but I felt really a bit challenged, like I was letting the team down early because I didn't know anything, and I eventually had to ask a kind of an older captain to help me. And he was quite nice, and he was quite empathetic because he remembered what he what it was like when he was a captain or a, a lieutenant, you know, six, seven years ago and didn't laugh at me when I didn't know how to work the DSN numbers if that makes sense and that type of stuff...And his kind of support and empathy still leaves a mark on me. Like, I still think about that captain and this guy that really...he kinda helped me out, if that makes sense.

Matthew was the recipient of grace and empathy. He appreciated the older captain's approach and learned the power of these aspects in leadership.

Also, during his first trip overseas, Matthew was reprimanded for breaking curfew and told by his squadron commander that he was going to another unit when they got back to the

United States. This devastated Matthew and began compounding with how he felt about his short time in the Air Force so far. He said:

On that same trip, I got umm...I got a letter of counseling for basically staying out a little bit past curfew with like three other lieutenants while we were at Yokota, at Roppongi. If you know that district in Tokyo...[W]e broke curfew, and I got a letter of counseling umm from that, and I don't know...I think back to that like...I'm like, holy cow...[N]ot only did I go from like the top of my Nav school class, top of my ROTC class, to not getting the plane I wanted. Oh, by the way, now, I've got a letter of counseling. Now, I'm in big trouble, you know? So, I have the gift of hindsight, but I could see how that really kind of chipped away at my picture perfect, things have to be a hundred percent, failure is not an option, you know, we're not even allowed to make one mistake type of mentality. And it really kind of mellowed me out, because I had made errors, right? And I needed a little bit of grace if that makes sense...

During Matthew's short time in the Air Force, these issues, mistakes, and missteps taught him humility and the importance of empathy, compassion, and grace in leading others. Here, his zero-defect mentality began to give way to understanding.

Matthew's third significant learning experience occurred while he was assigned to the Spec Ops community. He was met by an Admiral who put complete trust in his Airmen and their ability to execute the mission. Trust drew many positive emotions from Matthew, including confidence, calm, encouragement, and comfort. This reminded Matthew of a coach leading a team, which called back to his experiences as a football player, which resonated with him. Matthew discussed his experience with the Admiral several times over the course of two interviews. Here are the highlights from some of his statements:

I had the opportunity to spend about eight years of my career in in Air Force special operations, AFSOC, as I flew on the on the Talon-2. And that was a transformative umm leadership lab for me. Basically, like, because you're in such mixed company all the time...I just remember being a young O-3 in the TOC [tactical operations center] watching him as a one-star Navy Seal just give guidance and direction, and, you know, with, like, you know, a resting heart rate of about nine beats per minute, right? Just cool as a cucumber as we were getting ready to do something, you know, a little bit dangerous, a little bit violent, right?

I was just enthralled with this confidence, almost like umm...almost like a, a certain understanding of like this is what we've trained for. This is what we're gonna do. We've contingency planned. You've got the skill, you've got the training, we're ready for this. Now let's go execute. And it was just, you know, again, it reminded me kind of like a head coach, right? Like, I played...some sports in high school, and like a confident football coach will just be like, hey fellas, you've practiced, you've prepped, you know the plays. You know, everybody counts on the person on their right and their left to execute their job. Let's go do it! And I don't know, Admiral Anonymous, just he kind of set the deck like that, and I remember that, like crystal clear, it was just one, you know, wonderful, wonderful.

This is...I'm gonna be part of a team, and our little Talon is going to do x, y, and z, and it's our super bowl, and he just kinda collected the team, and talked us through it, and kinda gave us a pep talk, and it was calming and encouraging and comforting all at the same time, right? And uh...it was probably the leadership I needed the most at that time,

and that's why it still resonated with me, you know, and became part of my, of my recall, you know, 15 years later...

This experience taught Matthew the value of trust and confidence in leadership. He went on to yearn for trust ever since and now makes it a point to trust and encourage the people he leads.

Matthew's fourth significant learning experience was triggered by a divorce from his college sweetheart. Following an Air Force deployment, he returned, and his wife had already decided she wanted a divorce. Through counseling and reflection, Matthew realized that his life was out of balance. He was driven toward the mission, towards operational experience, and admittedly towards glory. This cost him his marriage and fundamentally changed him as a person and as a leader. Here is Matthew's description of the experience:

About at my...12 or 13-year mark in the Air Force, I went through a divorce. I married my college sweetheart, and we had three kids together, and I came home from a deployment and my wife was just, you know, just kind of finished. Finished, you know, finished with the Air Force, yes, but more finished with me and everything, and just fundamentally challenged me...I mean, you know...to the core, made me do such a deep self-evaluation...I was so lean forward in the mission, meaning that I never said no to a deployment...[N]ot even that, but I would volunteer for a deployment...I was chasing so much adventure and so much professional experience, and, to be honest, glory...I got a lot of positive feedback from like oh, my gosh, Matthew, you just, you know, you just sucked up another deployment, and good for you, and thanks for helping us out. And I came home from a deployment, and my wife decided, you know, for a divorce. And gosh...that changed me as a person, and I really think it kind of changed my leadership a lot, too, because well...I just realized that I think I had put mission so far in front of like

people and balance and what makes a person really good is kind of a holistic, you know, both professional and personal, spiritual, and physical, you know. I think maybe as I went through that divorce, I maybe realized I'd put things kind of out of balance, and you know, from some self-discovery through counseling and some other things, too, I feel like I came out on the other side a much better person, but and a better leader at the time, but just tons of self-discovery, tons of sadness. But I think it made me a much more empathetic leader, and realizing that it's okay for subordinates to take a knee, because for a year, I was pretty useless to my organization as I went through my divorce and counseling and some other things where...I just really wasn't a full up round in in the office. I was just sad a lot, you know, sad. I was missing my kids and all that type of stuff.

Through sadness, regret, and humility, Matthew was humbled. He learned to become more self-aware, and from this experience, Matthew grew to value personal, spiritual, physical, and professional balance in his life. Matthew also realized that balance was important for the Airmen he led as well. This lent to an understanding that he needed to give his Airmen flexibility, understanding, and grace. Some of which he learned before but now became more real because of what he lost.

The fifth and final learning experience that Matthew shared was during his time as a squadron commander. He broke down crying in front of his Airmen during a Monday roll call, which is essentially a meeting with the whole squadron. While Matthew's children were visiting shortly after the divorce, his house was broken into, and his children's laptops and Pokémon cards were stolen. The divorce was still fresh, and he wanted everything to be perfect. As he

spoke to his Airmen, he became emotional, thinking back on what was stolen from his children. Here is what Matthew shared about the experience:

[W]hile I was a squadron commander...we had a weekly Monday morning roll call, and over the weekend, my house had been broken into, like my house have just been broken into. And umm, so this is post-divorce...but my kids came back for their spring break to see me, and while they were with me, my like house was broken into, and, like, my kid's computers were stolen, and that type of stuff. And I just remember on Monday, yeah, I just remember on Monday morning, like, you know, at the roll call...I was talking to the squadron about that, and stuff, and about like how important renters' insurance is. So, please even if you're an E-3 or below, spend \$20 bucks and get the renters insurance. But I got emotional. I started crying because my son's Pokémon cards were stolen, you know? And I was just emotional because it was only about the second or third time I'd had the kids post-divorce, and I wanted it to be perfect, you know, and I was kinda able to play that scenario out with the uh...kind of in front of like the squadron, and I remember leaving and talking to the Chief, and I was like, you know...Chief...I look like an emotional wreck in front of the troops...And Chief was like, oh, man Sir, you don't understand just being human, showing human emotions, is so important in leadership, and I remember him saying that. And I was like, yeah, I think you're right because we want leaders that are humans, and humans have emotions, and we don't want leaders that are robotic, and stuff. So anyways, that's a long way of me saying that I think your ability to wrestle with emotions, understand them, recognize them in yourself and others umm, it's probably the most influential characteristic on being a leader, over.

Matthew felt ashamed of breaking down in front of his Airmen. However, his Chief helped him see that showing emotions as a leader is not something to be ashamed of. It shows the Airmen that leaders are human, too. This experience changed how Matthew viewed and understood the relationship between emotion and leadership. He now understood that feeling and showing emotion is not a weakness and that showing your Airmen that you are a person enables connection.

Nathan's leadership developed through several significant experiences. At the Air Force Academy, he transitioned from a high school student to an Air Force officer. Nathan is quiet and admits he does not have the best social tact. While at the Academy, he was often confused with the way people would jump to conclusions, rush to correct things, or how they would handle their emotions. So, Nathan looked at the Academy as a social and leadership learning lab where he got to observe various personalities and leadership tools and learn from the ones he liked. During this time, the focus was on what he called “assertive followership.” Here, he focused on doing what he was told and learning through observing the leaders around him. Nathan also learned the value of integrity and time management. Moreover, he left the Academy with blind trust and faith that Air Force leaders were competent and trustworthy and had all of the answers.

Nathan’s next significant learning experience occurred at pilot training, where his roommate and two friends died in a vehicle accident while driving under the influence (DUI) of alcohol. This drove an intolerance to alcohol-related incidents. He teared up as he described the experience:

I buried my college roommate and two friends at pilot training cause they crashed in a drunk driving accident. So, I mean that...every time an Airman got a DUI, or I would see

guys going out and drinking, I mean, it's, it's stuck in there. I'm just like I can't, I can't handle it...

Nathan added in a journal entry:

Whenever I hear someone get a DUI, I immediately can picture speaking at my college roommate's funeral. I will immediately tear up, and I immediately have to [no] tolerance for people who chose to take that risk.

Nathan did not express the emotions he felt during this experience, but at some points, tears ran down his face, and his tone seemed almost angry as he described discipline and situations with alcohol-related incidents.

Nathan's third significant experience was sparked when he got to his first operational assignment. He was excited to meet his crewmates and for this next new adventure. However, Nathan was confused to find that the squadron had an atmosphere of sadness and despair. He learned that the commander had committed suicide the night before. Tearing up, Nathan describes the experience:

Well, my very first day at the squadron, the commander, the night prior, had committed suicide. And so, when I walked in the building, like, I'm all pumped. I'm like, man, it's my squadron, we're gonna go all over the world...and just heads hanging, people crying, and I'm like, what in the hell is going on? And so...from what I was told, had an affair. It was gonna get back to his family, the guilt...he killed himself. He shot himself...And so that taught me a lesson of hey, these people are human. They make big mistakes in their lives. They don't know how to grieve with that kind of stuff, and so it was weird.

Nathan learned that leaders are people too and did not have all of the answers. This conflicted with his understanding of leaders from the Air Force Academy as all-knowing and wholly competent, which helped him see leaders and leadership in a new, more human light.

Another lesson Nathan learned during his first operational assignment came when he saw two accomplices to a sexual assault get away with a slap on the wrist after they were arrested. The commander at the time seemed more concerned with salvaging the offenders' careers than maintaining Air Force standards, good order, and discipline. This shocked, baffled, and frustrated Nathan as he struggled to reconcile and understand his commander's attempts at salvaging the offenders' careers with what Nathan saw as them breaking Air Force moral code. Here, he watched the commander spend excessive time working with these Airmen to keep their careers on track while neglecting the bulk of his Airmen who did nothing wrong. Nathan describes the experience:

A guy committed sexual assault leaving an Air Force officer club overseas. The Airman called the cops. Well, the three guys from our squadron had left, but she called the cops after they left. Well, they caught them at the hotel after hours drinking alcohol. They had a flight in six hours...showed them stealing stuff from the hotel and everything else. So, cops tracked them down. Well, the cops show up at the plane when the engines are started, go up on the plane, arrest the kids. So, our commander basically goes through this whole process, and he kind of punishes one kid, but for the next two years, he's so worried about the damage that was done to the other two lieutenants and stuff that he's still like giving them awards. He's still looking out for them, and like, you know, just putting them in jobs that they should never have been...I was always shocked...like our job is to take care of people that do well...you know, meet the standard...If people are

breaking laws like...they're breaking morals, and that's not your job to then take care of them.

Nathan learned that it is important to take care of all of the Airmen in the unit, especially those who are doing the right thing. This experience reinforced to Nathan that upholding standards and Air Force values is crucial to maintaining good order and discipline. In this case, Nathan believed that the Airmen who helped commit the egregious offenses should have been held accountable, not coddled.

As Nathan gained experience in the Air Force and as a pilot, he was trusted with more responsibility. His fifth learning experience occurred during aircraft commander upgrade training. Here, he spent more time thinking about what it was to be a leader and the people side of leadership. Nathan's focus up until this point was on flying and accomplishing the mission. Now, he wanted to understand how to talk to people and work with people. Nathan said:

So, from, you know, co-pilot to aircraft commander, and I say that was the first time I really had to think about watching people. Understanding how to talk to people, work with people, and what I wanted to be as a leader. Because I would see the aircraft commanders that just, you know, they just...they would ask people questions, but you could tell they had already made their decisions. Or they would like, tell people what they wanna do, and then they turn around and ask them, well, what do you think? And it's been my experience, if you are labeled or looked at as the person in charge, if you spit out your idea first, you know, it's pretty hard to really get a good input from anybody else. So, I learned that a lot from watching other aircraft commanders and stuff run briefs, make decisions, that I always try to least always start out with, hey, this is the scenario.

What do you think? Go around the table. If I'm in charge, I speak last, and then, you know, from there we'll go back and forth.

In his experience transitioning from co-pilot to aircraft commander, Nathan asked himself who he wanted to be as a leader. Here, he made some regretful mistakes but ultimately learned leadership is not only about accomplishing the mission or being in charge. Leadership is more about collaboration and working with others.

Approaching the rank of Major, Nathan was hired to be the wing executive officer. He described this as his best job for learning to be a leader. This was Nathan's sixth and last significant learning experience shared during our time together. He credited this time as the wing executive officer with opening his eyes to understanding the larger Air Force and the importance of volunteering for new opportunities and learning from these experiences. He said:

What helped me the most develop as a leader...I don't know...I'd honestly just say volunteering opportunities, and just stepping out when commanders would just pick you to do things. Like there's so many different events that you just don't want to do, but the little things you learn from all of them is like...it's amazing how some of it sticks with you. Like, I was a wing exec. No one wants to be a wing exec. You do it to make rank and everything else, but like that one year of just sitting in the seat, the amount of freaking crap you learn administratively to help your people, do certain things for people, good and bad, and really understand the big picture of what's going on in the whole organization. Like that helped me a ton.

He also said, "[A] big piece of leadership is to be open-minded. Learn as much as you can from everybody you can." Nathan learned to respect, appreciate, and understand the roles of other occupations, such as the medical group, security forces, and many others in their wider role,

enabling Air Force operations. This experience as a wing executive officer widened Nathan's perspective on the Air Force, trying new things, learning, and, most importantly, keeping an open mind.

Remi was shy, looking to keep her head down after basic training. At this point, leadership was a foreign concept until her first assignment. During this time, Remi was surrounded by leaders who created a family atmosphere that fostered trust, accountability, mentorship, and encouragement. Here, her first supervisor taught Remi to drive, and her Lieutenant tutored her whenever she needed help with her college homework. Remi felt trust, encouragement, support, and genuine care from her leaders like these Airmen were her family. She said:

[T]hey really took care of me, even though I was far away from home. They made it feel like they were still my family, and I could trust them and I could depend on them. And it was all about taking care of your people. You take care of your people, your people would take care of you, and I kinda went with that kinda mind frame throughout my whole career...So that helped mold me as a person...

Through this experience, Remi went from a follower mentality to understanding that leadership is about taking care of people. This formative experience created a base for her leadership beliefs that she would hang on to for the rest of her career.

Remi's transition from enlisted to officer triggered her second significant learning experience. Once commissioned, she faced a harsh reality that left her feeling alone in a dog-eat-dog world, and she yearned for her family experience as an enlisted member. Remi explained that her new boss did not like her, and she had Remi move to another squadron. She said:

[W]hen I first came in as an officer, I really wanted to give up. Like my first boss, she just didn't like me. I didn't do anything to the lady, but she just didn't like me, and she's like, well, I'm going to move you to another squadron. That's fine, you know. So, getting that right off the bat as an officer coming from an enlisted career where people took good care of me. It was like a great paradigm shift. I was like, what did I just step into?

Fortunately, she moved to a unit where a senior officer took her under her wing. The Group Commander put Remi in charge of the Military Personnel Flight (MPF) despite Remi's doubts and lack of experience. Here, the Group Commander trusted Remi to lead the MPF and encouraged her to talk to her whenever she needed to. Remi took advantage of this open-door policy with the Group Commander, who mentored Remi through challenging scenarios, and Remi's confidence grew. This experience also taught Remi to lean on her senior non-commissioned officers as experts in the field who could help her lead the MPF. Here, Remi learned that leadership is a collaborative effort and, again, found the family she was looking for.

Remi's third significant learning experience came when she failed a physical fitness test after moving to a new base. She was coming off a high of winning Air Force-level awards at her previous base, and her career was on the upswing. She was unsure of the career implications and faced fear, disappointment, shame, and disapproval. However, she was met with empathy, understanding, and grace. Remi describes the experience:

I failed my first PT [physical fitness test] test as a Captain, and I was like, oh, my gosh! I don't fail at anything. And I just remember those emotions, feeling like a failure and feeling like, is this the end of my career? Like is this gonna be a referral report? And just going through all those emotions at that time and working directly for the wing commander...and I'm like, oh, my goodness, this is the worst!...I talked to the vice

commander, and he was like Remi, I know you can pass your PT test. He's like, maybe you just had an off day... So I just remember that feeling and the vice commander saying, Remi, you got 90 days to retake your test. Just take your time. As long as you pass it before your next OPR [officer performance report] is due, I got your back, and you're gonna be fine. So, going back to that emotion and just being I guess more open to people having a bad day. That helped me to see that. Because before I kind of felt like everybody needs to be perfect.

Like Matthew, Remi developed a zero-defect mentality that led to early career success.

However, experiencing failure, followed by compassion from her leaders, taught Remi that no one is perfect, and people can have a bad day. This experience taught Remi the value of empathy and understanding in leadership.

Remi's next significant experience came when she was faced with divorce. She realized that she was a workaholic and that her husband was secondary to her career. Remi's balance was off. Upon further reflection, she realized her work ethic and need for self-sufficiency stemmed from her childhood, where her mother stayed with an abusive husband for far too long. From this experience, she learned she didn't want to have to depend on anyone. This drive towards self-sufficiency and career success left her husband feeling neglected, and eventually, they divorced. She worked hard to maintain a façade and “keep on the face like I'm the commander.” Remi's nights were spent crying, and while at work, she would act as if nothing were wrong. Here is what she wrote about the experience in a journal entry:

I was a great Airman but not always a great wife. Sometimes you have to face the hard truth, even if it hurts. My first husband was my middle school sweetheart, and we were married for 14 years before we finalized our divorce. I NEVER thought I'd

go through a divorce and always thought that we'd work through anything that we faced. I thought that we'd be together forever...everyone did! However, I do have to take accountability for my actions during the marriage. First, I was rarely present. I worked long hours, was heavily involved in the community on and off duty, and was well respected by my peers, my leaders, etc. However, that took a toll on my marriage because I gave my husband what little energy I had "left over" from a full day. And most days, my tank was empty by the time I got home because I'd given everything that I had to give to everyone else. And even when I came home, I wasn't home (not mentally and emotionally). I was still locked in to work on my laptop or phone for another few hours before I'd shut everything down. My balance was terrible because I'm a true workaholic...I love work; I love being challenged; I love taking care of the mission and the people. The problem was that I didn't make time for my spouse and tried to "squeeze him in" when I could. When we moved apart (I was stationed in Korea for two years and he got a job with DoDEA overseas), I started to miss him, and I could see the error in my ways. He was not a priority to me, and his words were "I felt like a Christmas ornament on a tree." I could understand his feelings and I was deeply sorry for my actions. It made me wonder, why do I work so hard and not have the balance that I need to have a healthy marriage? I take it back to my childhood. My dad was very abusive to my mom (emotionally and physically), but she stayed with him for years because she didn't have the money to go out on her own without him and support three kids. So, we endured his treatment for eight years....at least I did because I was in 3rd grade when my mom had built up

enough courage and money to leave him. I remember coming home that day to an empty house...nothing left but a rocking chair in the living room. All my toys, my bed, etc...gone. My dad took everything and left us with nothing but the rocking chair. As a child, I was sad because he had taken my “stuff” but what I realized is that my mom would have to start all over again but would have peace and not have to suffer any longer with my father’s actions. She was FREE! So, from that moment, I decided that I would never put myself in a situation to where I needed to depend on anyone, especially not a man. So that’s why I worked so hard and why I never let anything, or anyone keep me down.

Through this experience, Remi relied on her faith and credited God with healing and giving her peace. She regretted neglecting her husband but said this made her soften her approach towards the people she was leading through understanding. She began to lead with more compassion and slowed down to keep her people along for the ride instead of having them chase her. She also realized that people often put on a “different face” when going through difficult times and learned to see her Airmen in a different light.

The last significant learning experience Remi shared centered on the George Floyd incident. The Wing Commander directed all squadron commanders to address their units regarding the situation. Remi had been keeping herself too busy to digest the issue but was now faced with having to address her squadron. What exacerbated this was the fact that she was recently divorced, her mother and grandmother had also recently passed away, and she was also the only African American commander on the base. Remi was overwhelmed, afraid, sad, and never felt more alone.

Up until this point, Remi had valued suppressing her emotions and kept herself too busy to feel. She thought emotions got in the way of “logical” decision-making and would frequently "stuffed them back down." Now, she was forced to feel and reflect on a painful incident. Her emotions washed over her like a flood as she described the experience. Remi said, tearing up and crying:

[O]nce that George Floyd situation came about, it was like, oh, my goodness, and that was probably one for the books for me, because the Wing Commander sent something out to all of his commanders, and just addressing that situation and his stance on it. It was so much going on during covid that I hadn't really taken the time to really digest it. I've seen it, I got it, but I was like, okay, what I do with this? You know, I hadn't really taken the time to sit down and really just sit in it for a minute. So, once the wing commander sent it out, and he wanted to send something out to the squadron. I read his message, and I was like, oh, my gosh! Now I gotta face this, because now I've gotta put my voice on this, and I gotta write something out to my squadron and address this whole situation, and how I feel about it...and they were packing up my stuff that day. My household goods because I was getting ready to move, and I remember sitting there for hours, and I just cried because I didn't have anybody to call. I was like, I'm the only black commander right now commanding at Ramstein, and I was like, who in the world am I going to call just, so, I can just kinda like talk to for a minute? And it was another female. She's of another race. I can't remember what she is. Maybe Latino....I called her, she didn't answer. So, I was like, I don't have anybody to talk to, and I had never felt so alone, so isolated in my life. And I was like...even now getting tears about it, because...sigh... yeah. So that was one of those situations where I felt like...where do I get the strength

from that I need to address my squadron? So, it took me all day, I mean all day, to write my little message out, but it was, it was good. It came from my heart, and you wouldn't believe the amount of people that just responded back to me, and we're like, well, thank you, you know, for putting this message out, because they were like a lot of people are just quiet about these situations...and I don't say anything. And I'm like, well, I can't not say anything, but I feel like being in command, you're so busy, you don't have to deal with it. So, if the wing commander hadn't sent that message out and told us to address the squadron, I probably wouldn't have said much. I probably would have went out and about and said something if we were out and about, but I wasn't going to put in the email because I didn't want to face those feelings. But that forced me to have to face that situation and talk to the squadron about it. So, it was good, but I wasn't ready for it. I wasn't ready for it at all. But long story short, I was just telling them, you know, you treat people with respect and dignity. We trust the people that wear these uniforms just like the police officers are wearing uniforms. A lot of us are wearing uniforms and serving other people, too, and people are expecting a lot from us. People shouldn't be treated differently because of the color of their skin or things of that nature. I love each and every one of you all. Some of you all look totally different from me, totally different backgrounds, but that has nothing to do with how I treat you, and how we should treat each other. You know, at the end of the day we're all from the same race, the human race. And like I told them, I was like, I'm not really worried about, you know, what happens with me because I'm taken care of. I was like is not because of who I am, but because of who's I am, and I'm a child of God, you know, and then people take any kind of, you know, stance with that's fine. That's up to you all. I can't say, you know, who you believe in, but I do believe

in a higher power, you know? So, it was good. I was able to get that message out...That was probably the toughest time in my FSS [force support squadron] time as a commander just dealing with that situation.

Through this painful experience, Remi let go of the shame of showing her emotions. She learned it was okay to feel and let her emotions out as a leader. It was okay to let her Airmen see her as a person. This authenticity also made Remi more approachable and relatable to her Airmen and enabled connection.

Robert was an outlier among the research participants. From his perspective, he did not attribute any significant leader development to his experiences but rather to PME. Robert saw PME as the primary contributor to his leader development, and he viewed experience as an opportunity to practice and fine-tune what he learned during PME. That said, based on the experiences Robert shared, I found two significant experiences that shaped him as a person and leader in the Air Force.

The Naval Academy was foundational in Robert's understanding of leadership. He was transformed into a capable officer who saw leadership as a journey with learning opportunities around every corner. His baseline understanding of leadership after the Naval Academy centered on three aspects: 1) There is always an opportunity to learn, 2) Leadership is about taking care of people, and 3) Leadership is a lifelong journey. Robert describes his thoughts on followership and leadership at the Naval Academy and flying training:

[Y]ou know a lot of the Naval Academy is about leadership, right? It's really just a leadership lab when it comes to an educational, you know, institution. And what I knew coming in as a CSO [combat systems officer] was I had to learn to be a good follower first, right? And part of being a good follower is watching those leaders that you want to

emulate and the leaders that you don't want to emulate, and you take lessons from each of them. So, you're gonna see when you look at leadership, you see, examples of that didn't go the way I thought it would go, right? So, that's probably an example of what I'm not going to do in the future. Then you get examples of man, this guy, I would follow them up the hill with machine guns blazing on me because that's what I feel about that person in their leadership and their leadership style. So I took from both when I was in the follower role, right? So, I did think about leadership, even though, at the time, I wasn't in a leadership position. I was really learning the trade of my craft, but in that time, I was still taking leadership notes, right? That's just how...the Naval Academy kind of raises you is, hey, there's always an opportunity to learn about leadership. It's a life-learning process. You're never gonna be the best leader you can be if you stop being willing to learn, right?

When asked about his understanding of leadership after graduating from the Naval Academy, Robert said, “To me, it was taking care of people, and then if you take care of the people, they will, in turn, take care of the mission...you can see that seed was planted very early in my leadership journey...”

Robert’s next significant learning experience occurred during electronic warfare officer initial qualification training. He had been doing very well through training, and it was time for his flight evaluation. This is referred to as the check ride, a graded flying event where the student is evaluated to see if they have the skills and knowledge to be a qualified aircrew member. Robert ended up getting a Q-2 evaluation rating. This essentially means that he needed some extra training events, but once complete, he would be qualified to fly missions without an instructor. This crushed Robert. He was disappointed and briefly felt shame and doubt about his

ability and performance. However, Robert's commander helped him see this as merely a "speed bump" and "snapshot in time." Robert recalls the experience:

I was burning through training like, I mean, I was doing great, you know, soaking in everything that the instructors gave me, and then I got deployed as a student and did my check ride overseas, and my check ride didn't go as well as I hoped it would. I ended up getting a Q-2, which is not failing, but you know it was a Q-2, meaning I had to do some extra rides in order to be fully qualified. And as I was going through that...I was beating myself up pretty good. But the commander at the time, you know, he called me in the office once I got back from deployment...he's like, hey, don't let this impact your desire to get better...and just because you've got a Q-2 on your initial check ride doesn't mean that, you know, your career as an electronic warfare officer is over, because that's kind of how I was looking at it...My gosh...you know I'm like, I'm horrible! I thought I was good, but I'm horrible, you know? But his initial sit down to take the time, because he had, you know, he had a hundred officers in his squadron, he took the time to talk to me and say, hey, this is merely a speed bump, and it's a snapshot in time of your performance at that time. That doesn't mean that is your performance all the time. And I was like, wow, that makes a lot of sense. So, I took that, and then the next check ride that I had EQ'd [exceptionally qualified] it right? So, I went from a Q-2 to an EQ, but that wouldn't have been possible unless that commander...he took the time to realize that, hey, one of his Airmen was down and he wanted to make sure one, I kept my head up, and I kept striving to learn the trades of the craft, and he put the fire in my belly, right? So, from then on...I kind of had a humble chip on my shoulder that I'm going to show everyone I

fly with that my capability is better than a Q-2, you know? And then I felt a little redemption when I went into my, my next check ride, but a year later and EQ'd it, right? Robert's commander demonstrated empathy, grace, understanding, support, and encouragement. This grew Robert's desire to learn and grow and showed him the power of positive influence and encouragement from leadership. This experience taught Robert the value of these aspects.

The significant learning milestones above illustrate that leader development involves continual growth through learning experiences over the course of an Air Force career. Who the participants were when they joined and who the participants were after they retired are essentially two different people in terms of leadership and, in some cases, beliefs and values. For example, in Liam's case, he went from understanding leadership from an authoritative, no-questions-asked approach, based on his father's example, to becoming a "servant leader" who sees leadership as a collaborative effort. Throughout Liam's career, he learned to value mercy, grace, empathy, encouragement, support, trust, accountability, and discipline, which he later realized could save people's lives. This is an especially different understanding of leadership compared to when Liam first joined the Air Force. Matthew sums up this category aptly, and in a larger sense, Theme One, he said:

I say my adjusted leadership style, but there's no real...you know, there's no like hard and fast date on like April first, I woke up with a new leadership style, right? Like...you know all of it...slowly morphs and changes as you go through life events, as you read a book or two, and you think about an idea or two that sticks with you, and you try it out, or you see a leader do something good or bad, and, you know, all of that is just kind of mixed in a big cauldron that, and it kind of influences you to become the leader you are.

Some changes were more stark than others, depending on the experience and the person.

However, the trend from the data favors significant change and periods of development over the course of an Airman's career.

**Emotion and Experience.** Throughout the interview process, the participants shared emotions they felt during their significant learning experiences. As they shared these experiences, their emotions came back through tears and changes in voice inflection, or at times, they struggled to speak. Their facial expressions and body language would also give away their feelings. Emotions, in this sense, made these experiences “feel” more significant and consequently more memorable. Many of the participant narratives from this section were already presented in *The Unforgettable Lessons* section above but are also provided here for context and to underscore the connection between emotion and experience. For instance, Liam shared an experience where he was brought back to the emotional events of almost losing his five-week-old son. During this time, he was in command of a geographically separated unit overseas. The Airmen in his unit were sent there for one-year remote tours. Meaning they were essentially deployed for a year and separated from their families. One of Liam's Airmen had a son with multiple sclerosis, and his condition was rapidly worsening. This brought back emotions and memories of almost losing his own son. Liam explains:

[T]hat was a very emotional time in my life, and I benefited from [my boss]. He pulled me out of the work that I was doing, told me to focus on my family, and, you know, take care of everything else later...[W]hen I found out about this young man and my NCO's [non-commissioned officer] plight, it kind of brought back my own emotions of what happened with my own son. So, initially, I was very sympathetic and empathetic to what he was going through. And then again, my own emotions from that very poignant

moment where I almost lost my son, youngest son, when he was five, kind of came flooding back.

Liam remembered the painful experience and the support he received from his leadership, which made it all the more memorable. Here, the emotion of almost losing his son anchored the experience, while the support from his leadership taught him the value of empathy and compassion in leading others.

Like Liam, Matthew discussed emotional experiences that taught him profound lessons throughout his career. During these times, he noted that every time he had a significant life experience, his reading rate would increase exponentially as he sought answers. He credited his significant experiences, more specifically his emotions, with sparking reflection and a drive to improve through reading. He relied on reflection and books for perspectives on problem-solving, psychology, growth mindset, and leadership. Matthew explains:

I always felt like when I was wrestling with some of these emotions, from setbacks or positive things, that it caused me to be self-reflective, and...the outcome for that was often a desire to like...I don't know, to read, to study...kind of like a small self-improvement drive...[E]motions, I think, drove me a little bit towards the self-improvement, and that affected my learning because it caused me to kind of deep dive into books... a lot of like leadership books, psychology, growth mindset books, Simon Sinek books, umm, you know, leadership of generals and civil war, World War II bomber mafia...But...the emotions, I think, really drove just a self-improvement, self-discovery, learning mode, and I felt like that best was best manifested in just like, reading. Reading about how others did it, or how others attack problems or solve problems, or how others deal with emotions...

Emotions motivated Matthew to learn and develop while pointing to a problem that needed to be solved. Each time a significant and emotional experience occurred, Matthew looked to books for answers.

Nathan shared a particularly emotional experience involving the death of some friends over 20 years ago. At pilot training, his friends crashed into a bus in a drunk driving accident. All three passed away as a result. Here, loss and sadness make the experience more visceral during reflection. He said that hearing about driving under the influence (DUI) incidents always brings him back to speaking at his roommate's funeral. I asked Nathan if he felt the emotion as he reflected on the experience. Nathan said with a hint of sarcasm and tearing up:

I'm here crying on your Zoom, so I would say, yeah, it takes me back...I mean cause that was my roommate, a person I knew...I can always feel it, but to answer your question, I will always feel that one.

Nathan also added in a journal entry:

Whenever I hear someone get a DUI, I immediately can picture speaking at my college roommate's funeral. I will immediately tear up, and I immediately have [no] tolerance for people who chose to take that risk. When I see a fellow Airman who I haven't seen in eight years, I can immediately remember certain emotional events we experienced together. I may not remember what that person's job was in the squadron, but I do have memories of what we went through together. These experiences affected the way I made decisions. These emotional events affected how I acted around the personnel I lead. I cannot remember many of the day-to-day tasks of being a squadron commander, but I can remember countless emotional events I had with my Airmen.

The experience of losing his friends because of a DUI is stamped with powerful emotions relating to loss, making it unforgettable. There is also a sense of anger when listening to Nathan speak about the incident and what he took away from it. Nathan learned firsthand the price that could come from drinking and driving. He learned that it is important to be clear on the implications of this crime.

Like the others, Remi shared various experiences rooted in emotion. One in particular centers on her failing a physical fitness test. More than a decade later, she still printed out her Air Force record of performance (ROP), clinging to the hope that the failing score would finally disappear. Remi saw this as a blemish on her otherwise perfect record. Here is Remi's account of the experience:

I failed my first PT test as a Captain, and I was like, oh, my gosh! I don't fail at anything. And I just remember those emotions, feeling like a failure and feeling like, is this the end of my career? Like, is this gonna be a referral report and just going through all those emotions at that time. And working directly for the wing commander...at the time, and I'm like, oh, my goodness, this is the worst!...So, I think that was humbling for me, and it always would show up. You know how when you print your, your ROP, and then you look at all your PT tests, they all show up? I don't know why, but every time I was like, it's gonna fall off this year. I wanted it to fall off of my ROP. It never fell off of my ROP. So, every time I would print it out, I will always see that PT test, and it said, you know, fail, and I was like man, it stayed, but I think that that kept me humble every time I looked at my ROP. Yup, you got a great record. But guess what? You still had something that you had to overcome and get through during your career as well. And it's gonna be in

your record for the rest of your life as long as you're in the Air Force, and it's there. So, that's just one way I look at emotions and how to tie that into leadership.

Thinking back on the failure brought back the anxiety and fear of not knowing what a failure would do to Remi's career. She also felt shame, disapproval, and frustration for failing. She said, "I can't believe I failed that PT test." The emotions anchor the experience and remind her that no one is perfect. Remi says this experience keeps her humble and taught her to be more empathetic and understanding.

***Control Your Emotions.*** This is a sub-category that often came up with half of the participants as they shared their leadership development experiences. Oftentimes, the story would go into the problem of emotion in leadership and the challenge of controlling emotions when leading Airmen or when dealing with challenging situations. For example, Liam shared an experience where he dealt with an Airman who posted an inappropriate comment on Facebook about unwanted sexual acts and daughters. This excerpt and others may contain repeated narratives from previous sections. Please excuse the repetition. Liam said:

I learned that you...you really have to force yourself to remain as unemotional as possible. Because as a father to a daughter, I had a very visceral reaction initially. Like, I can't believe this dude just said that right? Like, nowhere in the Air Force core values is that acceptable. And then, as a dad to a daughter, you know, I'm like I oh, I wanna just throttle this dude, but you can't. So deep breath. Take yourself back. The term I used at the time, and I've used it since then is dispassionate execution.

Liam would go on to share another experience where he grew frustrated and angry with the slow-moving bureaucracy that kept his Airman from returning to his special needs son, who received a negative prognosis. Liam details the experience:

[A]s the, the situation progressed, and I saw the institutional resistance, or just...the bureaucracy and the slow glacial pace with which, you know, it was working, despite the AFI [Air Force Instruction] saying this should be a fast process, I just got very angry, very upset, and frustrated with the process. I'm like, you know, we always say, you know, people are our most important resource, but we don't when it comes down to it, and we have a scenario where we can do right by one of our Airmen, we're not fricking, you know, bending over backwards. And, you know, the mantra that was like, are we Americans, or American's right? Can we do this? Let's get to yes. How do we get to yes here? And so, you really had to like, okay, bite your tongue. Yelling at, you know, the career field functional manager or yelling at Mrs. Anonymous EFMP [exceptional family member program] Rep, who's the EFMP case manager, is not gonna help the situation, even though I want to, right? I wanna just unload, right? I'm finally a lieutenant colonel. I'm a squadron commander on G-series orders. I've got a problem with one of my Airmen. The Chief couldn't even help. I mean the Chief Master Sergeant in the Air Force could not help. They wouldn't talk to him because he wasn't in his direct chain of command, so the only person that they would talk to was me. So, I'm like, okay, I'm keeping, you know, my chain of command in the loop...and so I'm frustrated. I'm like, you know, I'm finally in a position in my career where I should be able to help my Airmen. Yet the system is bogging it down, and that's just again a lot of frustration. But as the, you know, squadron commander, what you're going to experience is as angry, as frustrated as you are on the inside, you've got to be that calm, cool, collected dude on the outside. Again, yelling at Mrs. EFMP Rep would not have helped.

Remi learned to suppress her emotions while at Air Force Basic Training. Here, the experience of being yelled at brought her back to her childhood when her father would yell at her. Remi would find herself shaking again as the Training Instructors barked orders at her. She describes the experience:

[E]verybody's barking orders at you. It was different. It was overwhelming at first. I will say that because my dad used to holler at me a lot when I was kid, and so it's still kinda bothered me because I'm like, Oh, my gosh! I'm shaking up again. It takes me back to my childhood, and I hate when people holler at me. I'm like, I'm still a person you don't need to holler at me to get your point across. But, you know, basic training, all I do is holler at you all day long, so I kinda had to get myself used to that and not get into my feelings and allow that to interrupt that experience for me and say, hey, it's just a process.

Remi would carry this mentality through most of her career, from her time as a young, enlisted Airman to her time as a commander. She also admits she might have stayed busy to avoid facing her emotions. Here is what she said:

I'm good with suppressing emotions, especially if I'm busy. I love to work. I love to work. I love to keep busy, but then, when I look back on it, sometimes I think was I keeping busy so that I did not have to deal with some of the emotions and some of the things I should have been dealing with, because, just like with the George Floyd situation, if I wasn't forced to have to deal with that situation, and my wing commander didn't sent that message out. I think back, and I say would I have sent the message out? Would I have dealt with that the way that I dealt with it? Once he asked us to get something out to our squadrons. So I do feel like emotions play a big part in it, but as I matured along the way and got a little bit more emotional intelligence, I would say that I

was able to put my emotions to the side so that I would not make emotional decisions, especially when you're in command, or you're in a position to where you got other people that are dependent on you. And I experienced this quite a bit in FSS command. Chief Anonymous and I went through a lot. Like I was saying with one of our group commanders, he would just get emotional about stuff. And I was like well Sir, calm down. Let's like think logically about this cause right now we're in our feelings, and what I tried not to do was make emotional decisions, because my emotions can change tomorrow or next hour. But if I make a logical decision thinking about what's the outcome, and then how is this going to affect A, B, C, and D right now, it's going to be a better decision. So, what I learned to do if I'm emotional about something. I'll give myself a minute, maybe 30 minutes, to get these emotions out. And if I need a little bit longer, I'll tell my boss if it's something like you need a decision on, I need a minute and then let me come back and give you my decision. So, I learned a long time ago not to make those emotional decisions. I have to credit my ex-husband for that because he used to always tell me, get out of your feelings. This is nothing...This is not, this is not personal. This is not personal. So, you know, he would hurt my feelings a lot, but it helped me. I use those things to help me to become a stronger person and a more resilient person, because after a while I was able just to shrug it off.

Next, Robert discusses emotion and leadership and explains that humans are impulsive and emotional. He also explains that leadership requires self-awareness to manage emotions.

Here are a couple of excerpts from Robert's interview transcripts:

[E]motion is human nature. So, one thing about human nature though is, it's impulsive.

As a human, you're impulsive. So, you have to learn as you go through your leadership

journey and through life, how to control your emotions and that's a tough thing to do. You gotta learn to do that. You gotta learn about yourself, know what your buttons are and triggers, and say if this happens, I know that I have to maybe take a minute before I respond, because you don't want to respond in emotion that you can't take back. ((Smiles, shakes head)) So, once the words leave your mouth, you can't pull them back in. So, you have to think about it and say, all right, am I going to respond with emotion, or am I going to take a minute, gather my wits, and then respond? And so, for me, when you talk about emotion and leadership, the biggest thing a leader has to be able to do is know himself and know how to control his emotions in the different scenarios that they're going to be placed in.

Robert adds while sharing a slide on emotional intelligence:

You have to have self-awareness, knowledge about yourself, you have to have management, right, of those emotions, you have to have that relationship management, and then social awareness, basically seeing how the recipients of your message are taking it, and that's like reading body language...Listening to what they're saying versus formulating what you're gonna respond with instead of listening, you know? So emotional intelligence is...it's so much more than just a word. I mean, it is a whole process.

Suppressing and mitigating emotion came up enough in the participants' narratives to warrant mentioning here. Next are the categories and key participant narratives comprising Theme Two.

### ***Theme Two: It Takes a Village***

The second theme that surfaced from the participants' narratives was *it takes a village*. This theme centers on the idea that Airmen learn and grow as leaders and as people with the

support of others. Theme Two is made up of three categories: Leader development, coping for life, leadership, and development, and trust me. *It takes a village* stems from a participant's description of a significant contributor to his development as a leader in the Air Force.

Throughout the years, Edward relied on family, friends, peers, mentors, and leaders for support, guidance, and encouragement in good times and bad. He succeeded because the people around him enabled and fostered his personal and professional development. As I reviewed the participants' narratives, it was evident that Edward was not the only one to benefit from community. It became clear that leader development in the Air Force takes a village.

**Leader Development.** This category centers on the participants' leader development experiences, some transformative and others not. As the participants shared their stories, it became evident that their experiences were made up of antagonists, supporters, and background cast members. Digging deeper, the role of the supporter stood out as essential to the participants' development as Air Force leaders. I used portions of previously shared developmental experiences from the sections above and highlighted the role of the supporter.

Edward was an aimless college student being pressured by his father to “pick something and stick with it.” Meanwhile, his cousin in the Air Force was encouraging Edward to join. Additionally, a high school acquaintance told Edward that “he absolutely loved” being in the Air Force and that Edward would enjoy it there, too. Edward's Walmart supervisor commended him for his leadership qualities and discussed a future with him in management. Furthermore, Edward's coworker had a son who recently joined the Air Force, which likely made the prospect more tangible. This host of supporters all had an influence on Edward's joining the Air Force, and that was just the start.

While in the Air Force, Edward was challenged, encouraged, and supported by leaders who helped him through his most challenging experiences. For example, as a young Airman, Edward was deployed for an exercise and told to do something by a Chief Master Sergeant that went against Air Force maintenance regulations. This compromised the safety of the pilot and aircraft. Edward describes the experience:

I said, that brake's bad, and Sergeant Anonymous [an engine troop Edward was working with] like, I see that. Chief walked over there, and he's like, what did you say? I said, Chief, I said, that brake's bad, and he's like, listen here, Airman, he says, what you're gonna do, he says, you're gonna put that tire back on. And he says we're gonna turn this jet. And I looked at him, and I was like what?! And he said, yeah...you need to put that tire on. And Sergeant Anonymous, he's like, you gonna sign that Red X off, right?...And Sergeant Anonymous...he's like, sure. And the aircrew's standing there, and I'm like holy shit, and I'm a senior airman, and I'm like, I have never in my life been told to do something that in black and white it says it's bad, and you're telling me to put it on. So I put the tire on, and I just...I wouldn't talk to anybody, and he signed off the exceptional release and all that stuff, and just he looked at me...Started the jet up, launched it out, and as soon as that jet taxis out of the spot he rolled in. He rolled his window down. He looked at me. He's like, go order a brake for that jet. Oh, my God, I went off! I looked at him, I said, don't you, F'in speak to me, you know? And just he's like, do what Airman?! And I said, don't fucking talk, and I just kept walking, and he kept trying to drive, and I turn around and walk the other way. And I'm sitting here thinking to myself, holy shit! What did I get myself into?...[M]y cousin tried to tell me, and I didn't listen...Well, that was like day two of the [deployment]...we stayed over there almost a month...And the

minute we got back, Frank was waiting on me. I come down off the KC-10, and he come put his arm around me. He's like, let's go for a walk. He had, you know, word already gotten back there what I'd done. He's like, what did Chief tell you to do? And I explained to him the whole situation. He's like that's bullshit. He's like, he should've never made you do that. And I told him I said, Frank, I said, you know, it happened to other people over there, too, and he says, yeah, we know. He says, trust me...a lot of us know some of the things that he's made...you and other people do...So, they pulled me in. I got to talk to section commander...the Senior Master Sergeant...Next thing you know, guess what? That Chief, gone.

In this narrative, Edward was accompanied by several key figures. These include an antagonist known as the Chief, Sergeant Anonymous, who played a background role, and a supportive group, including Frank, who met Edward after he disembarked from the KC-10 transport aircraft, a Senior Master Sergeant from the safety office, and Edward's cousin. These supporters helped Edward see he was not alone in wanting to do the right thing. They believed his story and comforted and supported him, and ultimately, the Chief was removed from the unit. Edward credits many people around him during his Air Force career for helping him develop into the leader he is today. He said the following two statements that drive this point home: “[B]eing surrounded by a great group of NCOs and commanders...I think that's what helped grow me my entire from...you know, from the time I came in until I actually exited three weeks ago.” Edward also said, “[I]t's taken an entire village to grow this idiot, and to provide me guidance, and to be there to put their arm around me, to put their foot in my ass if I needed it.”

Liam also benefitted from the guidance and support of others. As a new member of ROTC while in college, Liam was introduced to Air Force requirements and the concepts of

professionalism and leadership. During a physical training (PT) event with the other ROTC cadets, Liam responded unprofessionally to some trash talk from his upperclassmen, potentially jeopardizing his career early on. However, an influential upperclassman named Sed would support Liam behind the scenes, allowing Liam to continue in the program and learn from the experience. Liam said:

So, this guy, Sed, you know, goes in. He hears all the rumbling amongst the juniors, like Liam was disrespectful, this, that, and the other, and we need to punish him, etc...Sed steps up, and he's like, listen, he is a good cadet. I've seen him. I've trained him. He's not arrogant. He's not egotistical. He got carried away...He made a mistake. And then he kind of calmed them down...comes up to me later...hey, listen, here's what's going on...you were out of line. You said some things that you probably shouldn't have. Yes, it's college. Yes, it's a volleyball game, but we are a military-affiliated organization, so you gotta take your punishment. And the way he talked to me just...very collegial... But then I find out later from other cadets that had heard Sed, you know, talk, support me on my behalf behind my back. I was like, that is a class Act...That is a leader that takes care of his people, that thinks about the others, and looks at the bigger picture...So, that's one example where, you know, when I realize that's the type of leadership I want to emulate...

In Liam's story, the enraged upperclassmen, Sed, and the students who told Liam about what Sed had done were central to his growth. The upperclassmen made it clear that Liam's behavior was unacceptable and intentionally or unintentionally provided a lesson to be learned, while Sed supported Liam and spoke behind the scenes on his behalf. Then, the students who told Liam about Sed's actions helped him see another aspect of leadership through Sed's service and support. Sed's advocacy directly enabled Liam's progression in the ROTC program, but on a

much larger scale, his development as a leader. Here, Sed exemplified servant leadership, forever transforming Liam's understanding of leadership.

Moving on to another example, Matthew learned that showing emotions and showing Airmen that leaders have a human side is important. During this time, Matthew was recently divorced and had his children over for the weekend. Their house was broken into while they were out, and the children's laptops and Pokémon cards were stolen. That Monday, Matthew called the squadron together for a roll call and ended up breaking down in front of his Airmen. Here is Matthew's recount after the breaking down:

I remember leaving and talking to the Chief, and I was like...Chief ...I look like a, you know, I look like an emotional wreck in front of the troops...And Chief was like, oh, man Sir, you don't understand just being human, showing human emotions, is so important in leadership, and I remember him saying that. And I was like, yeah, I think you're right because we want leaders that are humans, and humans have emotions, and we don't want leaders that are robotic and stuff. So anyways, that's a long way of me saying that I think your ability to wrestle with emotions, understand them, recognize them in yourself and others umm, it's probably the most influential characteristic on being a leader, over.

Here, Matthew's cast included his children, squadron members, and most notably, the Chief, who helped him see that understanding, recognizing, and showing emotion at times is an influential characteristic of being a leader and enables connection with those you lead.

Nathan also relied on support and guidance from others during his career. As a squadron commander, Nathan's Chief Master Sergeant made a comment about an Airman's hair that she found racist. Nathan describes the experience:

So, when I was the Commander, our Chief had said a comment to a black woman in the front office about her hair. And those two had already had a rough relationship. They just had not...just their personalities clashed and everything else. And he made a comment on her hair, and she took it in a racist way. She told me that basically he's trying to say, like black women can't have straight hair. And so, I remember going home, like talking to my wife going, hey, I have a problem with like my Chief. Like, the person that's like...you know, it's supposed to be your equivalent. You know, the model...the person that deals with like enlisted issues. So, she's just kinda like, well, you have to tell them because, you know, if you don't, she's gonna think you're blowing her off just because he's the Chief. But yeah, you need to tread lightly. And then she's like, maybe talk to the Shirt, because I was fortunate that the Shirt I have is also a black female. And so, I was like, all right, well I'll talk to her going, would you find this offensive? Either way, it doesn't matter cause she's offended. At least kinda ask her for advice. And the shirt actually stepped in for me. It was like, let me talk to Chief. I'll tell you now. This is kind of a little bit more of my lane. I'll talk to them, and I'll talk to her off to the side, and then we'll both come back to you.

In this case, Nathan was supported by his wife and the Shirt (the Airman responsible for care and discipline in the unit), who helped him decide how best to approach the sensitive situation. This experience reinforced what Nathan had learned years earlier: relying on the advice and wisdom of others is crucial to learning and effective leadership. Moreover, this experience also illustrates that Nathan views leadership as a collaborative endeavor.

Remi learned early in her Air Force career that support is essential to leadership, command climate, and culture. Her first few years in the Air Force were met with a family

atmosphere that set the tone for her ideas on leadership. Remi describes her experience as a young Airman in her first unit:

I wrote about my enlisted experience because I was saying, that's like my best...experience with leadership when they set the tone for me. So even my first supervisors like Sergeant Anonymous. He was one of my first supervisors, he taught me how to drive...And I'm security forces. He's like, well, you gotta learn how to drive unless you going to be stuck at this gate for the rest of your four years...and I was like, that's going to suck. So he taught me how to drive, and like a month later I totaled the police car. Who does that right?! And everybody's like concerned about me, because I mean the airbag flew out. I ran a car to a ditch. We were like having an exercise, and it was dark, and I couldn't see, so they deemed it...It's not my fault, because it was dark, couldn't see back there, anyway. But just the way they took care of me, and to make sure I was okay, I didn't have to pay anything for the car, but what I liked about Sergeant Anonymous was like the accountability part of it. Like...he's like you can't drive for like three months. You're going back to the gate for three months, and then we'll think about putting you back on patrol...and I had Lieutenant Anonymous...She was...over the trainer section, and she started putting me on the officer track because I was coming up at my four years, and I had won all these awards. Airmen of the year, Volunteer of the year, Honor Guard member of the year, all this stuff. And they was like, well, what's next for you? It was like, I think I'm going to be done. I was like, I just wanted to do four years and get an education. I got my associate degree, two of them, and then she was like, no, I think you need to look at something else. She's like, I really think that you're a great leader, because she was like, you're running the Airman's Council here. You're on all the different

organizations on base, you know, you got wings level achievements...She was like, let's look at, you know, maybe putting you on the officer path...And I was like, okay, I haven't really thought about that before, but I'm willing to consider it. And so she really helped me, you know, to get my package together, and help me understand what it meant to be an officer because she was great. She was my lieutenant, but I would be able to talk to her about problems with my boyfriend, you know, she was the only female in the shop, so we would talk and she would help me with my math homework, because she...was very smart, and I was like, ma'am, I'm having problems with my math class. She's like, oh, I can help you with that. She would tutor me. So, things like that. They really took care of me. Even though I was far away from home, they made it feel like they were still my family, and I could trust them, and I could depend on them. And it was all about taking care of your people. You take care of your people, your people would take care of you, and I kinda went with that, with that kinda mind frame throughout my whole career.

Remi was supported throughout her first years in the Air Force by multiple leaders who taught her to drive, tutored her in math, and whom she could confide in regarding personal matters. These leaders were foundational in Remi's development as a leader and modeled what taking care of Airmen would look like for the rest of her career.

Robert also had a significant developmental experience early in his career when he struggled to pass his initial electronic warfare officer flight evaluation. His commander comforted and encouraged Robert to pick himself up. Robert described the experience:

I was beating myself up pretty good...But the commander at the time, you know, he called me in the office once I got back from deployment...he's like, hey, don't let this impact your desire to get better...and just because you've got a Q-2 on your initial check

ride doesn't mean that...your career as an electronic warfare officer is over...But his initial sit down to take the time...to talk to me and say, hey, this is merely a speed bump, and it's a snapshot in time of your performance...That doesn't mean that is your performance all the time...

Here, Robert credits his commander with putting a fire in his belly and helping him to score the highest grade available, EQ (exceptionally qualified), for his next flight evaluation. Robert would go on to learn from his commander's example of leadership through support and encouragement.

**Coping for Life, Leadership, and Development.** This category provides insights gleaned from the participants' narratives, focusing on the support systems they leaned on to navigate their leader development experiences. This category draws parallels with some of the leader development support experiences above; however, besides support from others, the participants also relied on reflection, reading, faith, growth mindset, and humility, which opened their minds to learning. For example, Edward relied on community for support and guidance throughout his Air Force career. He said:

[K]nowing that it's okay to make a mistake, and you got people there that will support you, you know, that will help you grow. Having her [his current wife]. Knowing that, you know, I'm not the perfect husband, father, but knowing that she's there, supporting me, is an outstanding feeling. I didn't have that in my other marriage. Didn't have that for 14 and a half years of my career, and it was a very humbling experience. And then, you know...it was like people would walk into my life at the right times, whether it be friends, whether it be coworkers, whether it be people in the community...I've been blessed to have that. And...it's a wonderful feeling, and that's how it's helped me cope

through some difficult times. Even in Afghanistan. I mean, I ran into some great folks over there, Afghans as well as my interpreters, as well as my coalition partners I worked with.

Edward says, “it's okay to make a mistake, and you got people there that will support you, you know, that will help you grow.” This highlights his openness to learning from mistakes and his reliance on others for support and help to grow from these mistakes. Edward also specifically identifies his wife, friends, coworkers, people in the community, folks in Afghanistan, coalition partners, and interpreters who have helped him “cope through some difficult times.”

Additionally, Edward sought counseling to help him cope with his divorce and subsequent trust issues stemming from this later on. In short, Edward’s coping mechanism centered on community support.

Like Edward, Matthew benefitted from the support of others. During two notable experiences described in previous sections, Matthew reached out to a counselor for help after his divorce. A Chief Master Sergeant also helped him see the importance of emotion in leadership after Matthew broke down in front of his Airmen. This changed how Matthew viewed and understood the relationship between emotion and leadership as something to embrace and understand, not something to be ashamed of and suppress. Along with the support of others, Matthew also relied on reflection and reading during particularly emotional and impactful experiences. He said:

I always felt like when I was wrestling with some of these emotions, from setbacks or positive things, that it caused me to be self-reflective, and that often...the outcome for that was often a desire to like...I don't know, to read, to study...kind of like a small self-improvement drive. I would say internal when I was dealing with these emotions, and

that often caused me to read books on...leadership, on growth mindset, on psychology, you know, kind of like the psychology of leadership, both, you know, military books, but also thinking fast and slow...[T]he emotions, I think, really drove just a self-improvement, self-discovery, learning mode, and I felt like that best, was best manifested in just like, reading. Reading about how others did it, or how others attack problems or solve problems, or how others deal with emotions...

Here, Matthew's coping mechanism was to seek out knowledge and understanding by being "self-reflective" and reading books. This aided in a deeper comprehension of his emotions, leadership, and himself.

Nathan's primary coping mechanism centered on talking to others for an outside perspective. Analyzing each of his experiences, Nathan learned a great deal from personal experience, reflection, and observing others. Through this, he sought insights from others to build understanding and provide additional insights for learning, leadership, and decision-making. Nathan said:

I talked to my wife a lot cause I lucked out. My wife was previous military, and she would point out things once in a while if I'd be frustrated...she was very big on me when I became a DO. She's like your jokes are fine when you're a captain or a major. Jokes as the boss in front of everybody get read the wrong way and can get you in trouble. And I'm like, no, I'm funny. And she's just like, yeah, you're a funny captain. You're not a funny lieutenant colonel. So she was huge, and then just I would just talk to other people. Like, usually I try to spread it out who I would sit down and talk within the squadron or buddies and stuff like that to ask questions...So, for me it was a lot more, just like when I was a DO, I would talk to Jeremy at the Intel Squadron. We would talk when I was a

squadron commander. I would go talk to other squadron commanders, and stuff like that about stuff. And just for me, it's just being very open, honest, and just trying to engage people that weren't involved with problems or to ask questions and stuff like that.

This statement describes Nathan's ideal method for coping with challenges. However, Nathan also shared an experience when others were not interested in revealing their perspectives.

A notable learning experience from Nathan's first operational assignment involved Airmen getting away with a slap on the wrist after a sexual assault. He did not provide details on what exactly occurred, but he was frustrated by the commander's lack of action regarding discipline and the commander's lack of an explanation. Nathan said:

I was disappointed in a lot of just the leadership involved that it was always, hey, we're looking out for people...And I'm like, what about the Airman that got assaulted? Like, what's going on there? What's going on about the legal, you know, ramifications, and just all of that was just kind of...he never discussed it. There was no briefing of like make the guys get up and brief everything that they did that was irresponsible.

No one wanted to speak about what occurred, and two of the Airmen involved continued to thrive in their careers. This did not sit well with Nathan, and what exacerbated this was his inability to rely on his coping method for answers and understanding. Through this experience, Nathan understood the value of transparency and mentorship in leadership. He would go on to explain his decisions to the unit and through mentoring sessions with junior leaders in the squadron.

Throughout Remi's career, she relied on a combination of experience, community, and reflection for personal and professional development. When dealing with significant and challenging life experiences, Remi had the mentality of "go through it and try to grow through

it.” To help her with this, she used a combination of positive thinking, surrounding herself with positive people, religious faith, journaling, and a growth mindset to help her through. She explains with the following:

I never tried to like go around it. I'm like, I'm just gonna have to go through this, and then see what the end's gonna be, you know? Surrounding myself with positive people. I mean, I just had some really good friends, some really good mentors, my family, of course going to church, and being in that positive environment. And I think, feeding myself just positive affirmations. Like in the mornings, I would always listen to a good word, even if it's just some Joel Osteen or something for like 20 minutes or just my gospel. So, I was like, if I get my day started right that's gonna help me to keep going throughout this day to go back and resonate to that positive part. Another thing I would do often is, I would have a journal. And I would always go in there, and I started like a thankful journal. And that helped me a lot too, because what I focused on was the things I was thankful for. And then once I looked at everything I was thankful for, and all the good stuff, it kinda helped me to look at some of the other things that weren't going so well. I'm like, well, that's actually little stuff compared to everything that's going so well right now. So, it kinda kept me focused and kept me balanced. Even in my squadron, they know...I would tell them never forget the goodness. And what I would do is every Friday, I would send like a goodness email because we would always get slammed for something. We're the FSS, somebody's always complaining. And what I would do is I would highlight some of the goodness from that week's things that we have done. And every week it was always at least four or five things that I could focus on and I can talk about. And that kinda helped them to see that it's not all bad. Yeah, we're gonna get

hammered sometimes, but at the end of the day, you still have some goodness right here in front of you. Let's focus on that. Fix this stuff on the side as we need to, but don't forget that we have a lot of goodness going on, too. So, that kinda helped me just to have that positive mindset and to know that those trying times are not gonna last always. So, look at it as how is this gonna work for me versus why is this happening to me, if that makes sense. Like, what am I gonna learn from this? How am I gonna grow from this? And then just look at it that way, and you just keep moving forward, one foot in front of one front, one foot in front of the other each day.

Remi projected her positivity to the people she worked with through her example and encouragement. This uplifted the unit and improved morale. Remi's primary coping mechanisms were positivity and maintaining a growth mindset, allowing her to view challenges as opportunities.

Robert developed through a combination of PME, experience, and reflection, all enabled by a growth mindset. To cope with his significant leadership challenges, Robert took a practical approach. He simply recognized the areas he needed to improve on or change, took a mental note of these areas, and actively worked to incorporate these changes. Through trial and error, Robert would work to break the habit, resulting in change and development. Robert describes his coping method:

I basically would just recognize that, hey, this needs to improve, or this needs to sustain, or I need to stop doing something. Having that awareness, you would just incorporate that...and you have to think about it, though, right? Because humans are very habit-based. So, when you incorporate changes, you are changing your habits, and that is hard to do. That takes discipline. So, you have to take those and say, all right, if I'm making

this change, I have to make a conscious effort the next time I need to show this leadership trait that I'm going to do it this way instead of the way my habit says I would normally have done it, and that's hard to do. You gotta be conscious and aware that I need to make that improvement and then put it into action. So, when you put it in terms of how did I deal with it? That's how. You just have to make that mental note that I'm changing a habit pattern, and you don't get it right out of the gate sometimes. You're like, hey, I know I need to make this improvement, but dang it, I just went right back to my habit instead of changing the habit. And then the next time you go into that situation, you're like, all right, gonna do it this time. I'm gonna change the way I react based on knowing I need to improve here.

Robert's practical coping method also extended out to what he called his "paper brain." This was a notepad that functions as a journal for documenting tasks and significant events he encountered throughout the day. Robert would review and reflect on these notes each evening, seeking learning opportunities.

Each of the participants relied on coping mechanisms to process, learn, and work through their significant learning experiences. The trend among them was the role of others who played an important part in the participants' development. Another essential element in all of this was trust.

**Trust Me.** Five of the six participants discussed the value of trust from multiple perspectives throughout their Air Force careers. For example, Edward credits his development as an Air Force leader to being trusted with responsibility early in his career. Trust also enabled confidence with the knowledge that his leaders would support him, even if he made a mistake.

When asked about his thoughts on the support system provided by his leaders and how it felt, Edward said:

[I]t was an amazing feeling. It was one of those that none of us want to screw anything up, make a mistake. But knowing that it's okay to make a mistake, and you got people there that will support you, you know, that will help you grow.

Edward was trusted with responsibility, empowered by his leaders to accomplish the mission, and unhindered by a fear of making mistakes. Edward also shared a significant experience that resulted in a loss of trust and explained how that impacted his relationships years later.

Edward's first marriage ended in divorce after he caught his wife cheating on him. Edward describes himself as a good person and a good husband. He was left feeling confused, betrayed, angry, and embarrassed. He said, "I tried convincing myself this is not happening to me. This would never happen to me. You know, I'm a good husband. I feel like I'm a good person." Reeling from the experience, Edward lost trust not only in his ex-wife but in others as well. He said:

I trusted her so much. I trusted everything she told me until that, you know, before I went on that foot-shot [missile firing exercise] and things started happening, and it really, it affected me as a human. I, you know...to this day, you know, little things...I question, you know, trusting people, giving people my 100-percent trust in them. You know, that if I do, are...they gonna screw me over? And that's bled over into our marriage with my new wife.

Edward sought counseling after his divorce and has been working through these issues for over 15 years. Trust continues to be a sensitive issue, potentially impacting his personal and professional relationships.

Liam describes trust from two perspectives. First, the Air Force bestows a “sacred trust” in commanders to lead. Second, as a commander, Liam trusted his Airmen to accomplish the mission. He describes an interaction with his director of operations after taking command. Liam said:

I told my DO when I was a squadron commander...you are the director of operations. You run operations. I am the squadron commander. I handle all the other peripheral stuff around that because my job is to make sure you and your staff and our maintenance team, our supply team, our comm team, are resourced to do their job. And I need to trust you to do your portion of that. And that's lead operations. If I'm doing your job, one or the both of us are doing something wrong, right?

Liam laid out his expectations for the director of operations while also instilling trust. He basically said I will leave operations to you, and if you need any resources, let me know. Liam relied on trust here to empower the director of operations.

In contrast to Liam instilling trust in others, Nathan was trusted by a young Airman with something highly personal and sensitive. An Airman confided in Nathan that he wanted to undergo gender reassignment surgery and asked that he keep the matter private. Nathan was surprised, impressed, and grateful that the Airman trusted him with something he did not trust with anyone else in the squadron. In fact, the Airman asked Nathan not to tell anyone, which made Nathan's efforts to help the Airman more difficult. Nathan tears up as he describes the experience:

I was in my office and we had an Airman...who came in and told me he wanted to do the surgery to go from male to female, and my first reaction was, oh, shit like, what did all the computer-based training tell me I'm supposed to say? Not say?...What am I supposed

to do right now? But then I kept my mouth shut. I listened, I listened, and then I realized that it's like, it's pretty damn impressive that someone's willing to walk in here after-hours and even tell me they're willing to do that...I was like well shit, that's kind of cool, the person at least tells me that, you know, they're willing to do this. But then...the person when he told me was like, you can't tell anybody else. And I'm just like, what do you mean I can't tell anybody else? He's like, I'm not ready for everybody else to know...So, we kinda went and met with a couple of people to at least know a road ahead...like I said, I'm buying time to make decisions, and like help, and not do anything rash. And then from there the person realized, hey, I have to at least tell my maintenance CO, this person, and eventually over time, the person was so confident with their decision. And I kept saying how thankful I was that they were comfortable talking to me that, you know, it came out that he was gonna have the surgery.

Throughout this experience, what particularly stuck out to Nathan was the Airman's trust and willingness to confide in him, despite the many levels of leadership that separated the two. Nathan was careful not to betray the Airman's trust and had to work carefully behind the scenes to get the Airman the care they needed without revealing the sensitive nature of the situation. He felt the profound nature of trust, but he was not the only one. Matthew describes how trust influenced him as both a follower and a leader.

Matthew said, "I feel like I tried to give trust because, in hindsight, I really yearned for it..." This statement sums up Matthew's view on trust both as a leader and follower. He yearned for trust, which empowered and motivated him to accomplish the mission or any assigned task. He describes the positive influence trust had on him as a follower:

[A] lot of my positive emotions centered around leadership was when...my superior trusted me. When I felt like I was trusted, like, hey Matthew, we're sending you...forward...and you're gonna go do X, Y, and Z. And I was like, man, this commander trusts me to be in charge of four Army helicopters, and I'm not even a helicopter guy, but, you know, I'm the lieutenant colonel in charge of these helicopters. It's amazing, right? But...he just trusted me, you know? When I was a squadron commander, and my group commander trusted me to give a presentation to COMACC [Commander of Air Combat Command]...I mean, I felt rewarded and trusted when I was promoted to brigadier general because I was like man...General Anonymous at ACC [Air Combat Command] trusted me enough to like recommend me for promotion, you know? He trusted me enough to hire me and now recommend me for promotion. So, I think...all through my career, when I was trusted with an opportunity, with a mission set, or with a responsibility...that felt good...

From the leader's perspective, Matthew emphasized the importance of trusting and empowering his Airmen because of the profound impact these aspects had on him. Here, he describes an experience where he asked a leader to take command of a squadron suffering from toxic elements on very short notice:

Lt Col Anonymous, you got it, you know? Things are a little messed up over there, and I'm sorry to pull you and throw your life in complete turmoil, but like we trust you, we got you, you know? And I'll do everything I can...AND to call back and be like, okay, Anonymous, how are you doing? It's been two weeks. Are you still jet lagged? Have you figured out how to log into your squadron commander's computer yet?

Matthew trusted the commander to find and remove the squadron's toxic elements, improve morale, and accomplish the mission. He also made it a point to consistently follow up and encourage the commander throughout his tenure as the Wing Commander. Here, trust went both ways. Matthew trusted the new commander to lead a squadron of approximately one hundred Airmen and a mission that was growing rapidly, while the new commander trusted Matthew to provide support, guidance, and understanding during a rough transition.

In Matthew's case, he yearned for trust and felt empowered by it. In Remi's case, she was trusted by her group commander to lead the Military Personnel Flight (MPF), but she was terrified. Remi was worried because she had no experience working in the MPF. Despite this, the group commander told Remi that she believed in her and that her door was always open for support. Remi recounts the experience:

So, I had a really great group commander...and she's like Remi, you're going to be my MPF Commander, Military Personnel Flight Commander...And I was like, well, how am I going to be your Military Personnel Flight Commander? I've never worked in the MPF. I've only done section commander, and I've done exec, group exec, and I've done...pretty much section commander and group exec, that's it. I was like, I've been in for almost four years, even though I've been begging you all to put me in the MPF so I can learn some of those different jobs within the MPF. I said, No one put me there. They just kept putting me as section commander. And she was like, well, you're it. She's like, you're my only other officer right now. You're going to have to take that job. She's like, I believe in you. You can do it. And I didn't believe in myself because I was nervous. I'm the MPF Commander now? You want to put me over this whole shop? I've never even worked in the MPF, period. I don't know any of their jobs. So that put me in a position now to

where you're leading, but you have no idea about the other entities of that job. And now you're going to have to trust your people to do their jobs, but then you also need to know a little bit about a little bit, because you can't just go in there blind, not knowing. So now it's like, okay, now, I'm researching, and I'm trying to learn more, and I'm getting a little bit closer with that MPF team. So, I can go in there, and I can actually lead them effectively the way I should be leading them. But...that was a great experience for me. That was like my first little mini command, I guess you could say that as the MPF Commander...but it also taught me the value of your senior NCOs.

In Remi's experience, trust occurred at multiple levels. The group commander trusted Remi to lead the MPF, Remi trusted the group commander to support her, and Remi had to trust her MPF staff to execute the mission. The last sentence regarding the value of senior NCOs also depicts Remi trusting her senior enlisted leaders to help her lead the MPF.

Trust is an essential element of Theme Two. Without it, there would be no community of support and encouragement. Participants would undoubtedly refrain from seeking advice, guidance, and alternative perspectives from others to help them cope with challenging experiences. Leaders would likely hoard responsibility and micromanage, fearing their subordinates were incompetent or unable to accomplish the task. Followers would be apprehensive to go to their leaders, fearing they did not have their best interests in mind. In short, trust is a fundamental aspect of leadership, learning, and development.

### ***Theme Three: Holistically Nurturing Excellence***

Holistically nurturing excellence is comprised of two categories: key to leadership growth and balance in leadership and life. This theme stems from participant narratives discussing the primary essential aspects that feed into their development. The participants also

talked about their views on the importance of balance in life and leading others.

**Key to growing our capacity to lead.** As a young Airman, Edward was trusted with significant responsibilities. He attributes this and the example of great NCOs and commanders to his development as an Air Force leader. These leaders pushed Edward to grow with additional responsibility over the years and would support him throughout his entire career in good times and bad. He explains:

I think them [leadership] having trusted me and given me that responsibility really helped me grow as a person and as a leader. And then giving me an opportunity...They also, it seemed like, you know, if they had a trouble child on the flight line, they'd put him with me. And I...at first, I didn't like that, but I was like, you know, why are they giving me all these problem children? And it gave me an opportunity to grow my leadership...later on...I talked to one of the guys that has pretty much been around me and knew the Flight Chief that had done that to me. And he's like, hey, man, we saw a lot of potential in you, and that's why...you always got these guys...It's not because we didn't like you, but we knew that...you would help develop these people, and one of two things: Either you'd boot them out, or...they'd turn a corner. And I think that really, you know, at a young age them doing things like that to me help me to develop as a leader. And then, being surrounded by a great group of NCOs and commanders, and I think that's what helped grow me my entire from...you know, from the time I came in, until I actually exited three weeks ago.

Leadership support and examples from great leaders also influenced Liam's development as a leader in the Air Force. However, he attributes experience as the most influential contributor to his development. Liam's experiences molded him and provided him with a reference for

future experiences both as a leader and as a follower. As he garnered more experience, he learned empathy, understanding, and how to appropriately lead Airmen in a manner that resonated with his personality and values. In short, experience added to Liam's toolkit for future leadership challenges. Liam explains:

I would say the experiences that molded me along the way probably had the most influence on how I turned out as a leader. And I say those experiences because we are a sum of all those different events, activities, decisions made, you know, successes, failures along our career. You can't help but take some of what is in you and put it into your leadership and take care of your Airmen through your own experiences. Because, hey, I've either experienced that, I felt those emotions, I felt those failures, and I know what they're going through, or I've been the, the recipient of grace and level headedness of a commander that didn't knee jerk and just crush my soul when they could have. So how do I, how do I emulate that? And then, at same time, you've probably seen commanders that are guys that you would not want to follow, right? And that's not really written in any book or any AFI [Air Force Instruction]. Like, hey, if we got to exhibits X, Y, and Z traits, don't follow them...And then you experience some of that yourself by working for bosses that you're just like dude, I would never do that. You know, I never dress down any Airman in in public. You praise in public, punishing in private kind of thing. That sounds great in a PowerPoint slide or in a leadership course handbook, but until you see it in practice, it doesn't really hit you as hard, right? Like when you see somebody getting their ass chewed in public, and it shouldn't be, you're like, wow! I will never do that. That's a terrible way to lead. So, I would say, the experiential side of my development

through, you know, being a lieutenant all the way up to a colonel probably have the most influence on my leadership style, and how I led my Airmen.

Matthew also credited experience as a primary contributor to his development as a leader in the Air Force. However, his explanation was more centered on observing leaders in action. Whether it was a mission or a staff meeting, Matthew was enthralled by how leaders carried themselves, their body language, and how they spoke. He also spoke extensively about his time in Air Force Special Operations Forces (AFSOC). During this time, he worked with a diverse group of United States Joint Forces from several branches and appreciated their various styles and methods of leadership. He also explained that he stored these observations and lessons in his “hard drive,” better preparing him to lead. Matthew said:

I will say without a doubt, it was the experience of watching other leaders. So, just being around other leaders at like every level, you know, from second from second lieutenant on, I was always really fascinated when I had opportunities to be in the room. A staff meeting, a secure VTC [Video Teleconference], you know the random briefing to a two or three-star even, you know, even as like a lieutenant or a captain, and reading his or her body language, and I had the opportunity to spend about eight years of my career in in Air Force special operations, AFSOC, as I flew on the on the Talon-2. And that was a transformative leadership lab for me. Basically like, because you're in such mixed company all the time...you're with the 160th SOAR [Special Operations Aviation Regiment] helicopter guys out of Campbell...You're with the Rangers, right? You're with conventional forces. You're with special operations forces. All the services you're with...You know I was a captain in the room when...Admiral Anonymous...he was a one star, and I got to see him in action right kind of like pulling a sink together in Bagram as

we were getting ready to do an objective...I just loved it...I loved watching...even when I had opportunities to watch the senior enlisted that were around me. Watching them...organize and lead maybe NCOs and junior enlisted. And...I saw lots of good and lots of bad, and I always tried to kinda like stick those lessons, you know, deep in my hard drive, so that if I ever had the opportunity to use them again, that I would...or make sure that I didn't use the bad ones, you know? So without a doubt, so you could probably group that under experience or observation, but the more experience, the longer I stayed in, the more leaders I saw, and I feel like the more leaders I saw in action, the better prepared I became as a leader to lead.

Nathan credits experience, more specifically “volunteering opportunities,” as the primary contributor to his leader development in the Air Force. He viewed volunteering as an opportunity to learn something new. Through volunteering, Nathan learned about the wider Air Force outside of the flying world he was used to. He grew to appreciate what he called the “big picture” in helping him understand the various roles and occupations that go into daily Air Force operations. Here is what Nathan said:

I'd honestly just say volunteering opportunities, and just stepping out when commanders would just pick you to do things. Like there's so many different events that you just don't want to do, but the little things you learn from all of them...it's amazing how some of it sticks with you. Like, I was a wing exec...that one year of just sitting in the seat, the amount of freaking crap you learn administratively to help your people do certain things for people, good and bad, and really understand the big picture of what's going on in the whole organization. Like that helped me a ton...just reading all of the reports and

learning the organization from that perspective was great, and it just followed me...I learned about me, about how to manage time, priorities, and stuff like that...

Remi credits several significant contributors to her development as a leader in the Air Force. These include observation of leaders, role models, and mentors. She also credits faith, enabling a growth mentality to help her drive through challenging experiences while asking herself, what can I learn? Remi also makes it a point to say that Air Force PME, specifically, Air Command and Staff College (ACSC), was definitely not something that helped her develop as a leader. She criticizes its emphasis on air power and history and would have liked more focus on education geared towards preparing her for leadership and command opportunities. Remi said:

I don't think it's one thing in particular definitely, not the PME. It was more so, seeing people along the way, and having great mentors along the way to help me to understand leadership. But also show me what leadership is...All the way from my enlisted leadership, I would say up to my officers, I had some good leadership. Not as good as enlisted, because I know when I first came in as an officer, I really wanted to give up...But I had a really great person, Captain Anonymous...She's like, I'm going to help you through this. And she was a great role model. So, people like that, that I can always look back on, I can always look through each career, each step of my career and say, these people helped me, these people helped me. So, it wasn't just one experience. It was like a whole lot of people that just saw something in me that I probably didn't see in myself, or that was there when I needed somebody to talk to or listen to me, or that poured into me...So it's just been a whole lot of different experiences. Some good, some not so good. But I learned from the things that weren't so good to help me to be a better person, a better leader. And then the things that were good, I was like great. Now I can

use that to help somebody else along the way, as well, you know. So, it's just been a mixture of everything. But I would say the one big thing that's been constant, I would say, is my faith in God...And I was like God, I know that you hear us like I so want to give up right now, the ruck sack marches...That's really why I'm still here...because it's really my faith that really allowed me to just continue to go on to know that it was somebody else that was really taking care of me through everything. And I feel like God is the person that put those people around me that helped me along the way. Even those people that taught me some things from some not so good experiences. I feel like that was still good for me, too, because everything can't be all good. If you never go through struggles and never go through anything, you never really have to lean on God and depend on him. But as soon as you're going through stuff, you're like, okay God, what do I do? So, sometimes I feel like he does that to ((Nods head)) kind of keep you close to him, because that helps you, and it helps you not to get so stagnant along the way to where you feel like everything is good, and you got it. But you always gotta lean on him for something, so I'm very very...appreciative to my mom for introducing me to Christ and showing me, you know, what that looks like because she went through a lot through her life as well, and I've seen her go through those struggles, but she's kinda like me, she's resilient, and she would bounce back...Like I said, it's not one thing, it's a whole lot of things that helped me to be the person and the leader that I am.

Contrary to Remi, Robert credits PME as the most significant contributor to his development as an Air Force leader. PME provided Robert with a formal education in military leadership and also provided him with opportunities to practice what he learned once he returned

to the squadron. He viewed PME as an investment in people and appreciated the Air Force's efforts to grow him as a leader. Robert said:

I'm telling you the military is a great leadership environment and the reason why is one, you learn about it formally, but then you also get to take what you learn formally and put it into action, right? So, the organization takes time to continue to grow you. So, you mentioned, you know, professional military education. I don't know of many other organizations that are willing to send one of their team members off to go learn for an entire year, right? And pay for them and their families to move their house to the area where they're teaching that particular, you know, course. To me, that's a huge investment that often people kind of took for granted. It's just like, hey, it's just expected in the military, but if really you look at it, they're making an investment in you to hopefully gain those leadership traits that will make the mission successful, right? And I got to do that several times in my career. So, I had, you know, obviously Squadron Officer School, I believe at the time it was like eight weeks, so got to go for two months. Then, I went to Command and General Staff College with the Army. That was a full year. Then, I got to do a school called School of Advanced Air and Space Studies. That was another full year, right? So, that was another full year, and then the Air Force was getting ready to send me to another full year school, but then I turned in my papers to retire, right? So out of a 20-year career, I spent four of it learning about, you know, learning about leadership. That's a huge investment! You know, that is, you know, a fifth of my time in the Air Force that they're investing in me to learn about leadership, and then turn around being able to take that investment, and pour back into the organization.

The key to unlocking Air Force leadership depends on the Airman. Experience was noted in various forms by a majority of the participants as a significant contributor, if not the main contributor, while others noted multiple contributors to their development as leaders. An interesting item of note was the lack of participant responses placing more emphasis on PME in their development as Air Force leaders. Part of this was likely the way the question was presented. The question was written to seek the main contributor to the participant's development. That said, the influence of PME on Airmen leader development needs to be studied more closely.

**Balance in Leadership and Life.** A majority of the participants discussed the importance of balance in various ways. For example, Nathan recognized the need for balance in considering the needs of others versus mission requirements. He also talked about his struggle with balancing the many professional priorities the Air Force places on its Airmen with family life and appreciating those who could balance these aspects. Nathan said:

As a flight commander, that was the first time where all of a sudden, hey, you know, my grandma is having these problems, I need time off. Hey, I can't deploy because, you know, my son's in high school. And so that was the first time of me learning to try to balance people's needs and understanding I gotta ask more questions about people versus just going, I got 25 missions to fly. These are the crews that need to do them. These are the things I have to get done... From there, I would say, approaching major, and everything was really the leadership of how do I balance trying to get PME done. How do I balance, you know, being the best at my job. And just, you know, kind of back to that time management. And what does Air Force say is a good leader? What do you need to

do to achieve all that? So, that was a big struggle of just what was I willing to do to like check my boxes, do all that and yet still, you know, do stuff.

He added later:

It was not too late admiring the people that you could tell had that balance. The family, physical fitness...they just seem to have the good balance. The ones that were all work and everything else. Looking back, I'm glad I didn't go down that path. It just, I don't think it did them any favors or people any favors. It's just like I said, I'm glad I had one or two of those along my journey to kind of at least speak it, and it definitely helped.

Matthew also discussed the value of balance in his own life after swinging the pendulum too far to the professional side multiple times throughout his career. These experiences are provided with more depth in the sections above. As a young Airman, he had a zero-defect mentality that did not allow for mistakes. After several missteps and unrealized expectations early on, Matthew realized he was holding on too tightly to a mentality that was not working for him. Midway through Matthew's career, his zero-defect mentality returned as he pushed toward professional experience and personal glory, ultimately driving his marriage to divorce. Matthew realized self-discovery and counseling that he needed balance. He said:

I just realized that I think I had put mission so far in front of like people and balance and what makes a person really good is kind of a holistic, you know, both professional and personal, spiritual, and physical, you know. I think I maybe as I went through that divorce, I'd maybe realize I'd put things kind of out of balance and you know, from some self-discovery through counseling, and some other things, too ((Nods head)) I feel like I came out on the other side a much better person, but and a better leader at the time, but

just tons of self-discovery, tons of sadness. But I think it made me a much more empathetic leader, and realizing that it's okay for subordinates to take a knee...

Matthew later summed up balance with the following:

I wouldn't say heroes arc, but that's kind of like my arc of leadership from like this crazy zero defect thing, to like kind of getting punched in the face a little bit, I felt like, and then I became ramped up too intense too much, and got kind of back on that like super intense thing, and then kind of got punched in the face again and then didn't want to get punched in the face a third time, so I became kind of I what I felt like was...a better-balanced leader, post-divorce as a senior major, over.

Remi also acknowledged the importance of balance and discussed how her severe tendency toward being a workaholic cost her marriage and even the prospect of having children. She also explained that her childhood watching her mother's dependency on an abusive husband drove Remi never to want to have to depend on anyone. She could guarantee her independence through career success, driving her to become a workaholic without understanding the implications this imbalance would have on her personal life. This segment pulls portions from Remi's journal entry in *The Unforgettable Lessons* section. Here is what Remi wrote about balance:

My balance was terrible because I'm a true workaholic...I love work; I love being challenged; I love taking care of the mission and the people. The problem was that I didn't make time for my spouse and tried to "squeeze him in" when I could...It made me wonder, why do I work so hard and not have the balance that I need to have a healthy marriage? I take it back to my childhood. My dad was very abusive to my mom (emotionally and physically), but she stayed with him for years because she didn't have

the money to go out on her own without him and support three kids. So, we endured his treatment for eight years....at least I did because I was in third grade when my mom had built up enough courage and money to leave him. I remember coming home that day to an empty house...nothing left but a rocking chair in the living room. All my toys, my bed, etc...gone. My dad took everything and left us with nothing but the rocking chair. As a child, I was sad because he had taken my “stuff” but what I realized is that my mom would have to start all over again but would have peace and not have to suffer any longer with my father’s actions. She was FREE! So, from that moment, I decided that I would never put myself in a situation to where I needed to depend on anyone, especially not a man. So that’s why I worked so hard and why I never let anything, or anyone keep me down...

Remi shared the implications of her lack of balance. She said, “Although I wanted kids, I knew that I didn’t have the balance that I needed to be a good mom, especially as I was struggling to be a good wife.”

Robert also considered balance in both how he made leadership decisions and in understanding that his Airmen needed balance in their lives. He took it upon himself as the commander to enable balance in the Airmen’s family lives with mission requirements. He said:

So, for me, you gotta remember there's a mission that every unit in the military's got to do. But you also gotta remember that the people you're charged with leading have a life outside of that mission and the service, right? And you've got to create opportunities for them to have that balance because it's pretty demanding when you ask Airmen to go out for ninety days, and you're going to be away from your family. And, you know, basically, time stands still for that family while that member’s gone, you know? You gotta realize

you have to support them to make sure that their household is intact, right? And it wasn't always easy, you know? Sometimes you had to tell people, hey, that's not a reason for me to bring you home right, even though it was a great reason. I mean, like there are so many...but you know, it was always hard to say, hey man I need you to finish the deployment. I can't bring you home for that, you know? So, balance of knowing when it was the right time to support the member, or know that, hey, we need to continue the mission and we can't bring you back at this time right now. There were circumstances where we'd bring people back, and then someone else would have to go out type of thing, but we tried to limit that you know. But all of that to say, you gotta remember that military members or people...they're not just robots. You don't just push the button and say, hey, go do the mission that you're tasked to do. You gotta realize that they have emotions. They have responsibilities outside of their job and their service to the Air Force, and you gotta be able to help them balance that and create space for them to do that.

#### ***Theme Four: Leadership and Military Service Come at a Price***

Theme Four is made up of two categories: the emotional toll and leadership is about. The emotional toll centers on the pressures the participants faced in the Air Force and the toll these pressures took on them and their families. The category, leadership is about, pertains to how the participants view leadership to derive where their leadership pressures stem from. For example, Liam's notion of servant leadership revolves around serving the people he leads, which may place more or a different type of pressure on him versus authoritative leadership.

**The Emotional Toll.** Edward shared a variety of emotional experiences that caused anger, anxiety, confusion, regret, disbelief, embarrassment, guilt, and many other emotions. In

one instance, Edward was put in an ethically compromising scenario as a young Airman when a Chief Master Sergeant told him to perform maintenance on the aircraft that was clearly against regulations. This could have had enormous implications on the safety of the pilot and aircraft. Years later, he was also betrayed by his wife of 14 years, negatively impacting his ability to trust for years. This betrayal bled into Edward's relationship with his new wife while he was deployed. Edward has drawn profound growth through these experiences but has had to seek counseling on multiple occasions to help him reconcile these events. Here is a glimpse into how one of these episodes affected Edward while it was occurring:

I tried convincing myself this is not happening to me. This would never happen to me. You know, I'm a good husband. I feel like I'm a good person. And then I was in disbelief emotionally, that it is happening. I was embarrassed. You know, I thought to myself, you know...I know that it's gonna take its toll on me mentally, and I knew that I...like I said I wanted to make a career, and I had all that stuff like whirling through my head all the time. That, you know, this is gonna, you know, one, it was embarrassing for me for me to like...for my family, because my mom and dad, you know, they had some issues, but they may always made it through. And here I was gonna have to face them and tell them, hey, I'm getting a divorce, you know? We had lots of, you know, we all came through tech school together. A lot of us were married. We had, you know, friends together that I was now gonna have to go face them and tell them that, hey, my wife's cheatin on me, you know?

Liam has also faced many challenges in the Air Force, each helping him to develop into the leader he is today. Throughout the course of his career, leaders have helped him navigate his mistakes, missteps, and family crises. Liam described his leaders' supportive actions as servant

leadership, which can have an emotional impact on the leader. He also explained that command in the Air Force can invariably lead to guilt and frustration as most of his time was spent on only a small portion of the workforce, leaving him feeling like he was neglecting the rest. Liam wrote the following in a journal entry:

Very few people ever talked to me about the emotional toll of leadership. One of the gotchas of a servant-leadership approach is that you have to get to know your troops, know their stories, know their goal & aspirations. As such, you become more involved in their lives, their triumphs, and their failures. So, it stands to reason that when one of them gets into trouble that requires discipline at your level, these moments weigh on you because you know them, their families, their circumstances. So, it goes back to making the determination of whether their infraction was a mistake or a crime. If it's a crime, there's less room for you as a commander to maneuver even if you think they're a great troop or officer. If it's a mistake, however, this is where it becomes more important to assess the situation, the circumstances, look at the person (do they have the ability to bounce-back, continue in the AF, and keep moving up in rank...or not), and then figure out which of those three end-states you think is the right decision and work your way back to the appropriate disciplinary tool. But all of this consumes a significant amount of your own emotional energy in the process...Another emotionally exhausting aspect of leadership is the old adage that you will spend 90 percent of your time on ten percent of your people. The ten percent tend to be the "problem children" so you will invariably have to spend more time dealing with their shenanigans, whether that is administrative action, corrective action, punitive action, or other UCMJ methods. Because you spend so much of your time with this group, you will feel exhausted...Consequently, you can also

develop a sense of frustration and guilt because, while you're allocating ninety percent of your time to the ten percent, you feel like you're neglecting the other ninety percent of your command. A commander should be out handing out coins, shaking hands, and giving atta-boys. Instead, you'll find days that you barely left your office.

Throughout Matthew's military career, he experienced highs and lows stemming from career successes, personal losses, and everything in between. Early in his career, his zero-defect mentality helped him climb to the top of his electronic warfare officer class, only to find that the needs of the Air Force thwarted the hard work he put into lining himself up for flying in F-15s, B-1s, or special operations aircraft. Matthew initially felt anger and guilt as he realized his zero-defect mentality was too intense and that he put a lot of unnecessary pressure on himself. Over a decade later, Matthew's zero-defect mentality would return as he pushed for more and more operational experience and, admittedly, glory, driving his marriage to divorce. Again, Matthew learned he was holding on too tightly to this mentality and that it was hurting him and those he cared about. Matthew describes how he processed emotion through substantial events in his life:

I kind of went through like all seven stages of grief during, you know,...I feel like in many substantial events in my life that have left a mark, like, well, the negative ones I should say specifically, like, you know, there's some like anger. There's some grief. There's some resentment. There's some, you know, finally acceptance, and, you know, it's like...anger at myself for making a mistake, or we're not realizing that things weren't great...and then...probably at first not wanting to take full accountability for my role in some of that...but eventually through...some self-reflection and that type of stuff...You know, that's an emotional journey too as you're self-reflecting a little bit. I think you start to take more and more personal accountability, and I think that's very important for a

leader to take stock internal with their own personal accountability, right? The best leaders are also pretty reflective of like, you know, whether it's an internal monologue...little bit of a debrief of like, that was good, that was bad, I could do better, or that actually went off pretty good, you know? But as I kinda dealt with those different emotions eventually you get to the point of like acceptance and like, okay, now, what can I do about this, right? Now both of those times...they weren't like fast-twitch decisions that came. You know, meaning like...that letter of counseling played...The aftermath of that played out...If you think about the rest of my career over the...remaining 24 years of my career, you know...that divorce happened about...twelve years before I retired, so I had the last twelve years of my career to kind of reflect back on that. I mean many decisions and many leadership things have to be made at a much faster pace, but the ones that were substantial in my path allowed me to really just kinda deal with it, sit with it, chew on it and ride that roller coaster of emotions, but eventually settling on the emotion, you know, kind of settling on the emotion of like determination. Like, okay...I've gotta learn! So, I've gotta make some lemonade out of these lemons, and I've gotta figure out how I can get better, because I wanna stay in the Air Force and I wanna do the best I can for the people around me.

Nathan also felt the emotional toll of military service and leadership in the Air Force. In pilot training, he lost three friends to a DUI. Additionally, on the day he started checking into his first operational unit, Nathan was shocked to find that his new commander committed suicide the night before. During this same assignment, three Airmen were arrested for sexual assault while on deployment, and the commander seemed to make it a point to look out for two of these Airmen. Nathan struggled to reconcile and understand the leader's attempts at salvaging the

offender's careers after they broke Air Force moral code. These experiences helped shape Nathan as a leader, but they certainly took a toll. He also took many of these experiences into command and felt the pressure of setting the tone for the squadron while wrestling with taking care of his people. Nathan explains his perspective on emotion and command:

So, once you go into that seat, it's truly the emotion. You're on the emotional side of the house. I mean, everything you're asked to do is rate your people, help them with personal problems, understand the...mood, and set the tone of the organization. I mean, that's the biggest thing. If you're a person that's just complaining, bad mood...it's amazing. It goes down through the squadron. I knew there were times where I was not doing my part, having a good attitude, and I'd come into work, and you could just tell, it was going on in the whole squadron, and it was my fault.

As Remi progressed in her Air Force career, she encountered many challenging experiences. As a young, enlisted Airmen, she was met with a supportive, encouraging, and caring group of leaders who pushed her to grow and excel. When Remi became an officer, however, she felt alone in a dog-eat-dog world and yearned for the family of leaders she had during her enlisted assignment. Among her many experiences, she suffered through a leader who betrayed her and recognized that her workaholic tendencies led to neglecting her husband and ultimately divorce. Moreover, as a squadron commander, Remi was forced to come face to face with her deep-seated emotions to address racial tensions with her squadron after the George Floyd incident, all while dealing with a recent divorce and the loss of her mother and grandmother. Here is Remi's account, with the transcript emotional cues left intact, of how she felt and what she was thinking through this experience; she says:

I felt really, I would say sad, ((Eyes tearing up)) and then you don't just...hearing him, George Floyd, call out for his mom, ((Voice quaking)) and I was like, man...that's sad. You know, you enter your last moments, and you're calling out for the person, you know, that you probably love the most, and that you want to know that you want them to know that, you know, you love them, because you're calling out at your last moment, and it made me kind of think about like, who would you call out to during your last moments if you got to that point ((Wiping tears))? ((Tears streaming down face)) So yeah, and at that point, my mom had passed away while I was overseas. My grandmother passed away while I was overseas, and I had just went through a divorce, and I was like, uh ((Wiping tears)), so it was all kind of emotions. ((Crying, sniffing)) Yeah.

Remi wrote a heartfelt email to the unit expressing her views and love for everyone. She also sought the comfort of faith and God to help her through these challenging times.

Like the other Air Force commanders, Robert experienced many significant emotional challenges. For example, he faced several pilots from his squadron being accused of infidelity with an enlisted Airman while deployed. As Robert worked through this experience, he felt the weight of the situation and considered the impact on the Airmen, their families, the mission, and the squadron as a whole. He describes the toll this experience took on him:

So, you know, it was a four-month worth of stress on my time, stress on my emotions, stress on the ability to lead the rest of the squadron as I was working through this situation. And then stress on just doing my job because I still had a responsibility to fly too, right? So, had to do all of that on top of deal with this investigation.

Moreover, early into Robert's squadron command, one of his Airmen lost a child, which still emotionally impacts Robert many years later. Tears well up in Robert's eyes as he recounts the experience:

So, first week in command, one of our Airborne Systems Engineers, he and his wife were having a baby. So, I get a call, I was in a staff meeting and they said, hey, she gave birth, and it's not going good. It's looking like they're gonna lose the child. So, you know, I went to the hospital, you know, and blessed to meet their son Jackson, and forever his name is written on my heart. I felt for the parents because I was at the time I was a parent too, and to lose a child to meet them first, you know, because he was alive when he was born, but then to lose them a couple of days later was devastating, and I had to figure out a way to support him in this hard time, right? And you can see...I still get emotional because it was tough for me as a commander. He was one of my Airmen.

**Leadership is about.** The participants all have a clear understanding of leadership, but each is slightly different. For example, Edward's concept of leadership stems from the support and encouragement he has received throughout his career. Edward describes his core belief on leadership with the following, "[I]t's just being good to people, treating people like you want to be treated, and taking the time to get to know your folks and what makes them tick, and how you can help them succeed." To Edward, leadership is about taking care of the people he leads.

Liam gravitated toward a particular type of leadership called servant leadership. Similar to Edward's concept of leadership, Liam believes that leadership centers on taking care of the people. He does this by providing guidance and support, and, at the same time, Liam entrusts his Airmen to accomplish the mission. In this aspect, Liam serves his Airmen by enabling them to get the job done. Liam explains his perspective and inclination towards serving those he leads:

I just never felt comfortable using positional authority as my initial go to...Do this because I said kind of leadership mentality. And so, because I didn't feel comfortable in, in using positional authority, I always figured, you know, the best way to get our collective mission done was, how do I empower my people and give them the resources that they need and give them guidance. Tell them here's my expectations. Go forth and conquer. And so, I think just over time that servant leadership mindset continued to grow inside me.

Matthew's concept of leadership centers on trust, empowerment, support, and encouragement. He was captivated by watching other leaders and how they led their people, but he found himself continually reflecting back on those leaders who led with quiet confidence and trusted their people to accomplish the mission. Matthew highlighted an Admiral in Special Operations Command in particular. He said:

I was just enthralled with this confidence...almost like...a certain understanding of like this is what we've trained for. This is what we're gonna do. We've contingency planned.

You've got the skill, you've got the training, we're ready for this. Now, let's go execute.

Matthew appreciated the Admiral's approach and led in much the same way as a commander and general.

Nathan's leadership centers on being clear about expectations, maintaining and enforcing standards, getting to know and learn from the people he leads, and spreading his effort across the entire organization, not just a select few. Here is Nathan's take on maintaining and enforcing standards:

I just never wanted to be a person that showed favoritism...But just to me, people in the Air Force...like it's okay to make mistakes, but when you are deliberately breaking rules

or anything else, there has to be a consequence because the people around you and around the squadron, they're waiting to see what's gonna happen. I mean, a hundred percent. They want to know how big of a consequence is there to what just happened. And so, that always followed me. So, when I was the commander overseas, the way you know people getting DUIs, it was gonna be clearly, you're all gonna get, you know, something pretty similar as far as like an Article-15, loss of a stripe... Don't dare ask me for a decoration on the way out because you were just here for three years, and, you know, don't anyone bring me any type of award. And if that OPR [officer performance report] EPR [enlisted performance report] shows firewall fives [perfect rating] or something, I'm gonna lose my mind. Like...I would try to be very clear about that.

The foundation of Remi's leadership stems from her time as an enlisted security forces member. Here, a supervisor taught her to drive a car, the training officer tutored Remi with her math homework and also lent an ear about personal matters, and she was pushed to perform and grow as a person and Airman. This atmosphere of support and caring made Remi feel like she was part of a family and has driven her understanding of leadership ever since. Remi explains:

[T]hey really took care of me, even though I was far away from home. They made it feel like they were still my family, and I could trust them, and I could depend on them. And it was all about taking care of your people. You take care of your people, your people would take care of you, and I kinda went with that...mind frame throughout my whole career.

Robert viewed leadership as a careful balance of mission, Airmen's needs, Air Force values, and squadron good order and discipline. In the narrative excerpt below, Robert was weighing the future of several deployed pilots who were accused of infidelity with an enlisted

member. He had to weigh mission requirements, the future of the pilots and their families, the implications of sending replacement pilots and the strain this would have on the unit, and Air Force values. Robert explains his thought process regarding a decision that considered all of these elements:

I had to make the right decision regardless of what the mission was and how it was going to impact the mission because the thing about leadership is, it's not about just each of those individuals. It's about the entire organization or the squadron in this case, and whether you believe it or not, people are watching you, and they watch what decisions you make, and if they back up what you say, you stand for, right? So, the decision was even bigger than the three families...It'll impact the entire squadron.

This theme provided a glimpse into the emotional toll these Airmen have endured and the prices they had to pay. Their emotional experiences highlight the various considerations that Airmen and commanders face in the Air Force. Compounding these life challenges is the ever-present grind of the mission, occupation specific requirements and qualifications, the weight of responsibility, Air Force regulations, moral and ethical standards, months and year-long deployments separated from family, and the expectation to meet promotion requirements. All of this unfolds against the backdrop of civilian everyday life. The price? Time, stress, personal sacrifice, significant emotional challenges, and a tax on their relationships.

### **Chapter Summary**

This chapter began with a summary explanation of the data collection and analysis process followed by a narrative introduction of the six participants. These introductions provided a little about where the participants came from, their path to the Air Force, and their careers to provide a general understanding of who they are and to establish a connection with them as real

people. Next, the four study themes were introduced and discussed. These include 1) a transformative leadership lab, 2) it takes a village, 3) holistically nurturing excellence, and 4) leadership and military service come at a price. Theme One is made up of Aim High, joining the Air Force, the unforgettable lessons, and emotion and experience. Theme Two includes leader development, coping for life, leadership, and development, and trust me. Theme Three is made up of key to growing our capacity to lead, and balance in leadership and life. Finally, Theme Four consists of emotional toll of leadership, and leadership is about. Each theme included an analysis of the participant narratives and extensive excerpts from the transcripts to highlight important aspects of the themes and categories and keep the narratives intact.

Chapter 5 provides a summary of the study, followed by a discussion of the significant elements and a response to the research questions. This chapter also provides recommendations and implications for future research.

## Chapter 5

### Discussion, Implications, and Conclusions

This narrative inquiry examined the leader development experiences of retired Air Force commanders to explore how their narratives shaped their growth while also focusing on the role of emotions in influencing their development. Learning from these leaders and their perspectives was a remarkable opportunity that provided leader development insights collectively spanning over 150 years among the six participants. Their profound and emotional life experiences over the course of their careers uncovered valuable insights that seem to indicate that leader development is a transformative journey enabled by a community of supporters. The narratives from the participants also exposed that leader development has common elements but diverse and nuanced individual factors as well. Finally, the participants' narratives underscore that military service and leadership in the Air Force come at a price. This chapter discusses these findings in more detail, starting with a summary of the study. Next, the discussion portion provides a response to the three research questions, followed by implications for practice and research and the conclusion.

#### Study Summary

This narrative inquiry centers on emotion, transformative learning, and Air Force leader development. From commissioning into the Air Force to commanding a unit, officers formally develop their capacity to lead through commissioning sources such as the Air Force Academy, Reserve Officers' Training Corps (ROTC), and Officer Training School (OTS), as well as occupational specific training, varying levels of Professional Military Education (PME), and professional experience. Moreover, the Air Force includes mentorship, culture, character, and core values in describing aspects influencing leadership and leader development (*AFDDI-1*

*Force Development*, 2011). In short, the Air Force places great emphasis on developing its leaders. However, the most profound learning and leader development may occur outside of formal Air Force education and training efforts.

### ***Problem, Purpose, and Research Questions***

The problem lies in important yet overlooked aspects of leader development that are missing in the elements above. These are emotion and the concept of transformative learning. Air Force PME relies on other aspects of adult learning theory, including andragogy, self-directed learning, experiential learning, and situated cognition and learning, all within the formal guidelines of Air Force PME and training. What is missing, however, is the consideration of learning that comes informally through lived experience in both a personal and professional context that can lead to profound growth and change in an Airman's conception and practice of leadership. Moreover, the literature tells us that emotion can trigger and inform reflection and influence significant change through transformative learning (Dirkx, 2001; Taylor, 2000). The literature also tells us that leader development can occur through transformative learning and aspects of it (Kim, 2020; Sweet, 2022; Sweetman, 2018). However, studies providing direct linkages involving these aspects are lacking in the literature, especially in the military and Air Force context.

The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers.

The research questions that guided this study were:

1. How do Air Force leaders experience leader development?

2. In what ways do Air Force leaders experience emotion in their leader development experiences?
3. What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

### ***Theoretical Framework***

The theoretical framework for this study was built on a foundation of Lazarus's (1982, 1984, 1991a, 1991b, 1997) cognitive appraisal theory, followed by Mezirow's (1978a, 1978b, 1981, 1991a, 1991b, 1997, 1998, 2000, 2006, 2009) transformative learning theory and its various crucial elements, and topped off with Day's (2000, 2011) conception of leader development, reference Figure 3.1 in Chapter 3. Additionally, in-depth descriptions of these concepts are provided in Chapters 2 and 3. It is also important to note that these individuals worked with many others to develop their ideas over time, and some of these contributors can be found in the reference section of this dissertation.

Cognitive appraisal theory explains the relationship between cognition and emotion and centers on the idea that emotion is based on a person's evaluation of the experience in relation to their well-being, values, commitments, background agendas, goals, aspirations, and other essential aspects that provide their life meaning (Lazarus, 1991b, 1997). This evaluation also determines the emotion experienced as well as its intensity (Lazarus, 1991b, 1997). Cognitive appraisal theory is also comprised of primary and secondary appraisal components, which provide an understanding of the various aspects people focus on to appraise their experiences. For this study's theoretical framework, cognitive appraisal theory's secondary appraisal components of "blame or credit, coping potential, and future expectations" (Lazarus, 1991b, p.

39) are the focus and form the connection between the framework's foundation of cognitive appraisal theory with transformative learning.

Mezirow (2000) said, "A defining condition of being human is our urgent need to understand and order the meaning of our experience, to integrate it with what we know to avoid the threat of chaos" (p. 3). As we seek to understand our experiences, especially profoundly emotional and significantly meaningful experiences, we might find problematic aspects of our beliefs, biases, presuppositions, and meaning perspectives. Transformative learning is the process of working through and reconciling these problematic aspects. Transformative learning involves transforming taken-for-granted frames of reference, including meaning perspectives, habits of mind, mindsets, biases, beliefs, values, and premises, making them more inclusive, emotionally capable of change, open, and reflective (Mezirow, 1998, 2000). Additionally, transformative learning often involves intense emotions (Mezirow, 2000). Emotion influences transformative learning by acting as a trigger, guiding and informing reflection, and also affects how well the experience, reflection, and subsequent transformation will be remembered (Mezirow, 1991b; Mezirow & Taylor, 2009; Taylor, 2000). Through cognitive appraisal and transformative learning, leaders can change and transform how they view, understand, and practice leadership, resulting in leader development.

Leader development focuses on the development of individual human capital and occurs at three enduring and dynamic levels throughout life: 1) the acquisition of leadership competencies, 2) self-regulation and identity development, and 3) within the domain of adult development (Day, 2000; Day et al., 2009). Day et al. (2021) add many other elements when considering leader development, including time, the role of followers, leadership contexts, culture, leadership environment, and the possibility that leader development might traverse the

entire lifespan (Day et al., 2021). Through cognitive appraisal and transformative learning, Air Force leaders have the potential to develop as leaders through their experiences and over the course of their careers.

### ***Methodology***

I used purposeful sampling for this study and recruited six retired Air Force officers with command experience. The research methodology was narrative inquiry, and I relied on semi-structured narrative interviews for data collection. Reference Appendix E for the IRB-approved interview protocol. Narrative inquiry allows the researcher to examine human lives through a narrative lens and respects lived experiences as a form of knowledge and understanding (Clandinin, 2013). I chose semi-structured interviews because, as Morse (2012) explains, these are ideal when the researcher is familiar with the topic and can distinguish what is pertinent to the research questions but does not necessarily know, nor can they anticipate all of the responses. Moreover, interviews were conducted using the teleconferencing application Zoom, which allowed for recorded audio/video face-to-face meetings with the participants anywhere with an internet connection and the proper equipment typically installed on laptops and cellphones today.

I transcribed, coded, and analyzed 13 hours and 12 minutes of recorded interview sessions, with 269 pages of single-spaced transcripts and journal entries. I also received four journal entries from three participants and coded and analyzed these. To do this, I compiled a seven-step coding and analysis cycle based on insights from Tesch (1990), Saldaña (2016, 2021), and Riessman (2008), described in Chapter 3. Four themes emerged from the transcription, coding, and analysis process.

In terms of trustworthiness, I implemented several measures, including triangulation, member checks, peer debriefing, and journaling. I also outlined and explained my subjectivity as

a researcher who has experienced both leader development in the Air Force and transformative learning. Alvesson et al. (2022) explain that trustworthiness involves assessing the potential threats to validity and reliability in a study and how these will be mitigated. I have leaned on these trustworthiness measures to check my bias and identify blind spots, hoping to produce honest and valid results through the participants' insights.

### ***Findings***

Chapter 4 introduced the six research participants and presented the following themes based on narrative analysis of the interview transcripts and journal entries: 1) a transformative leadership lab, 2) it takes a village, 3) holistically nurturing excellence, and 4) leadership and military service come at a price. A transformative leadership lab is made up of three categories: Aim High, joining the Air Force, the unforgettable lessons, and emotion and experience. It takes a village includes the following categories: leader development, coping for life, leadership and development, and trust me. Holistically nurturing excellence includes: key to growing our capacity to lead, and balance in leadership and life. The final theme, leadership and military service come at a price, includes: emotional toll of leadership, and leadership is about. These findings are discussed in relation to the research questions in the discussion section below.

### **Discussion**

In this chapter, I discuss the findings outlined above and provided in Chapter 4 in conjunction with the research questions and relevant literature. I also compared the findings from this study with other studies that connect transformative learning with leader development. Each response to the research question may also contain sub-responses to explain the primary response's crucial elements.

### ***Response to Research Question One***

Research Question One focused on the leader development experiences of Air Force leaders. The question was: How do Air Force leaders experience leader development? It sought to understand how Air Force officers develop their conception of leadership and capacity to lead, ultimately becoming commanders. The predominant responses amongst the participants centered on experience in one form or another as the primary contributor to their leader development. However, it is worth noting that most participants also acknowledged the influence of various other factors that influenced their development, including PME and training, personal development endeavors and interests, maintaining a growth mindset, faith, and mentorship.

Bringing it back to experience, leader development occurred in varying degrees, with some experiences seemingly resulting in transformative learning with indications of fundamental change in understanding and application of leadership as well as shifts in how the participants viewed the people they led and themselves as leaders. Most experiences, however, resulted in incremental learning toward how they viewed and practiced leadership. Overall, the primary response to Research Question One is that the participants viewed their leader development as a journey or evolution over the course of their careers through a culmination of their experiences that made them the people and leaders they are today. This finding aligns with Taylor and Marienau's (2016) assertion, "All knowing (therefore all learning) begins with experience—not just current, this moment-in-time experience but all our previous experience" (p. 38). To provide a deeper understanding of the various experiences the participants learned from, the response to Research Question One contains two sub-responses: transformative learning and leader development and experience and leader development.

The idea that leader development is a journey or evolution aligns with findings from the field. For example, Sweetman (2018) conducted a qualitative study that explored transformative learning in an online leadership course, and “leadership development is a journey” was the most predominant theme in the study (p. 10). She also found that thinking of leader and leadership development as an ongoing and lifelong journey facilitates growth and enables leadership success (Sweetman, 2018). Additionally, the literature commonly agrees that leader and leadership development is a journey or lifelong process. For example, Sweet (2022) describes leadership development as an evolutionary process. Moreover, Day et al. (2009) and Day (2011) describe leader development as a lifelong and ongoing journey. Day et al. (2009) also assert, “The transformation of leaders is one that transpires across nearly the entire lifespan” (p. 40). Furthermore, *The Army Doctrine Publication 6-22: Army Leadership & the Profession* (2019) explains that Army leaders prepare for leadership positions through a lifelong learning mentality involving the acquisition of knowledge and reflection. In short, the findings from this study indicate that Air Force leader development is an evolutionary and lifelong journey aligning with the literature and other research involving transformative learning and aspects of it as well as leader development. Within this finding are two essential elements that center on experience: transformative learning and learning from experience. The experiences that indicated transformative learning are described below.

**Transformative Learning and Leader Development.** Mezirow (2000) stated:

Transformation Theory’s focus is on how we learn to negotiate and act on our own purpose, values, feelings, and meanings rather than those we have uncritically assimilated from others—to gain greater control over our lives as socially responsible, clear-thinking decision makers (p. 8).

Five of the six participants' experiences indicated transformative learning had occurred during their careers that changed how they viewed, understood, and practiced leadership. Jack Mezirow's statement above highlights many of the key elements that developed within the participants. For example, early in Edward's career, his conception of leadership focused on adhering to Air Force guidelines, regulations, and standards from his time in aircraft maintenance. Here, following the rules and adhering to regulations is a matter of safety. His views on leadership changed after Edward caught his wife of 14 years cheating on him, leading to a disorienting dilemma, a flood of emotion, and, ultimately, indications pointing to transformative learning. Edward was left feeling betrayed, crushed, and in disbelief. He said, "I tried convincing myself this is not happening to me. This would never happen to me. You know, I'm a good husband. I feel like I'm a good person." As Edward thought more about the situation, he thought about what he was going to tell his friends and family. He thought about what he could have done differently and the implications for his future. Edward began blaming himself as he struggled to understand the situation. During this sensitive time, however, Edward was met with an empathetic and understanding commander who showed him that leadership is about support, providing guidance, encouragement, and help when your people need it. Edward's commander urged him to seek counseling to get the help he needed to heal. Reluctant, he accepted. Through this experience, Edward's understanding of leadership and leading Airmen shifted from a mission and task accomplishment orientation geared towards adhering to regulations and standards to taking care of people. This seems to indicate that transformative learning had occurred.

Liam began his Air Force journey in college, attending the Silver Wing program. He started with a sense of leadership from his father's authoritative example. Leadership was

barking orders, doing as you are told, and no questions asked. In Silver Wing, Liam met Sed, who supported, empowered, and trusted the people he led. Sed went on to support Liam after a misstep that got him in hot water with the upper class. He feared for his future in the program. However, through Sed's support, Liam was allowed to continue and learned a valuable lesson. He realized that leadership did not have to be about barking orders and instant obedience but could be about something more, something different and in line with his values and who he wanted to be as a leader. Liam challenged his uncritically assimilated understanding of leadership from his father's example. Mezirow (2000) explains that this allows for greater control towards social responsibility, clear thinking, and decision-making. Liam took agency in shaping his leadership identity to align more closely with Sed's example and Silver Wing's social and leadership norms, indicating that Liam's view of leadership had transformed.

After graduating from the Air Force Academy, Nathan was focused on followership, time management, and living with integrity. Leadership was not immediately a priority and not really on his mind. During pilot training, however, this would all change. Nathan lost three friends, including his roommate, in a DUI accident and spoke at his roommate's funeral. The pain and sense of loss drove Nathan to reflect on what could have been done to prevent the accident. Here are clear indications of Mezirow's (1991b) transformative learning process, with losing his friends as the catalyst and disorienting dilemma leading him down the path of reflection and, ultimately, transformation. Ever since this experience, Nathan has had an intolerance to alcohol-related incidents and a strong belief that being vocal and clear about breaking the law and maintaining standards was important in leadership. This experience seems to have changed Nathan's perception and focus on the crucial aspects of leading Airmen. He grew to understand that an important element of leadership was being clear about expectations and maintaining and

enforcing standards. Next, I interpreted specific aspects of transformative learning from the literature in two cases, with Matthew as a personal example that led to leader development and Remi as a professional example that led to leader development.

Matthew discussed how his divorce changed his understanding and practice of leading Airmen. Initially, he led with a mission-first and glory-seeking mindset, which cost him his marriage. Through “deep self-evaluation” and “self-discovery through counseling,” Matthew grew to understand how his attitude and actions harmed his relationships. He learned to balance the personal, spiritual, physical, and professional aspects of his life, ultimately changing his understanding of leadership and how he led Airmen. In fact, Matthew said that after the divorce, he would work hard to find win-win solutions for Airmen and their families alongside the best interests of the Air Force. However, Matthew admitted that he would lean towards making decisions favoring the Airman, “even if it wasn't the most optimal solution for the Air Force.” A stark change from the mission-first attitude he held before. This experience indicates that Matthew experienced transformative learning, specifically perspective transformation, which Mezirow (1991a) describes with the following:

The process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting upon these new understandings” (p. 14).

Matthew seems to have become aware of his mission-first and glory-oriented presuppositions and drive as problematic to his relationships, costing him his marriage. He also seemed to have reformulated these assumptions and beliefs to become more integrative and inclusive by

establishing a balance with the personal, physical, spiritual, and professional as the key to life and leadership. This experience indicates that transformative learning had occurred.

Remi had worked to suppress her emotions since basic training. Almost 20 years later, she was now a commander leading over one thousand civilians and Airmen, and the George Floyd incident had just occurred. Remi and the rest of the squadron commanders were directed to address the situation with their units. At this time, she was stationed overseas and recently divorced, and her mother and grandmother passed away while she was there. She was the only African American commander on the base. She had never felt so alone. Up until this point, Remi kept herself too busy to feel. She thought emotions got in the way of "logical" decision-making and "stuffed them back down." Now, as she struggled to put together the words to address her squadron, Remi's thoughts and emotions from the divorce and losing her mother and grandmother all came to the forefront. As she described and reflected on the experience, Remi struggled to speak as tears ran down her face. Through this painful experience, Remi learned that feeling and letting her emotions out as a leader was okay. Remi let her Airman see her as a person for the first time. She said:

I'm a human person. I'm not just some robot that's always on the go. Always good to go, always with a smile on my face. I have emotions, too. I feel things just as well as you all feel things. I just don't always show it. But at that point, I actually showed it.

Remi's shift in allowing herself to feel and opening herself up as a person to her Airmen enabled a connection she did not allow or have before. This profound change in understanding and leadership indicates transformative learning and leader development had occurred. Here, key elements of Mezirow's (2000) transformative learning seem to stand out, including a

transformation of Remi's habit of mind and mindset of suppressing emotion and becoming more open and emotionally capable of change, of showing her human side.

These summaries from the participants' narratives suggest that the participants experienced Mezirow's (1991b) phases of transformative learning, such as disorienting dilemmas, self-examination with powerful accompanying emotions, critical assessment of epistemic assumptions and beliefs, recognition of discontent, exploration of options, new understandings, and roles as a leader, and ultimately reintegration into the leadership role with a new understanding of leadership. These examples also suggest transformative learning and leader development can occur from personal and professional experiences. This supports Kim's (2020) findings, indicating that meaningful learning can occur through personally and professionally significant experiences and unexpected challenges. This sub-response also validates Kim's (2020) study on American school principals, which highlights transformative learning theory within the broader field of adult learning as useful for explaining profound change and growth in leadership perspectives.

**Experience and Leader Development.** This section discusses leader development through non-transformative learning experiences. In other words, learning from experience, experience-based learning, experience learning, and experiential learning. These varied terms from adult learning literature explain the relationship between experience and learning, which is explained in more depth in Chapter 2. Moreover, experience is an essential element in adult learning theories and concepts, including andragogy, transformative learning, self-directed learning, and experiential learning (Andresen et al., 2000; Brockett & Hiemstra, 1991; Knowles, 1975; Knowles et al., 1998, 2015, 2020; Mezirow, 1991b). All of this highlights the crucial role

experience plays in adult learning and, in this case, learning about leadership and leader development.

While conducting the interviews and rewatching these multiple times for transcription, coding, and analysis, it became apparent that many of the experiences and narratives contained incremental yet significant lessons in leadership. As explained in the section above, some of these were more profound and potentially transformative in nature; however, the majority of experiences were not. For example, early on, Liam learned that leadership was about serving those you lead. Over the years, he learned that his inclination towards supporting, serving, and caring for Airmen was too lenient after he almost lost an Airman to an alcohol-related incident. Liam tightened up his view on enforcing standards and realized the implications of what could happen if he did not. Moreover, Robert had a fundamental understanding of leadership as taking care of people and enabling them to accomplish the mission. After a disappointing initial flight evaluation and requiring additional training to become fully qualified, he was crushed and left questioning his future. Through his commander's supportive and encouraging example, Robert learned an essential aspect of leadership that bolstered his understanding of taking care of Airmen. Here, experiential learning occurred through what Saddinton (1992) explained as a process of reflecting on experiences and translating these into new concepts that guide future experiences and, in this case, future leadership practice.

Another example comes from Matthew. After his divorce, Matthew went from leadership with a mission-first focus to understanding that leadership requires balancing the personal, spiritual, physical, and professional aspects of life. Later, as a squadron commander, his home was broken into while his children were visiting, and their laptops and Pokémon cards were stolen. Luckily, they were all out when the break-in occurred. This was soon after the divorce,

and Matthew wanted everything to be perfect for their visit. That following work day, Matthew called the squadron together to discuss important items for the week and broke down while urging his Airmen to obtain renter's insurance to cover potential home break-ins. He was ashamed and embarrassed that he let his emotions out in front of the Airmen. His Chief, the senior enlisted member in the squadron, explained the importance of showing the Airmen that leaders are human too and that showing emotion is not something to be ashamed of. Now, along with an understanding that leadership requires balance, Matthew also led with the knowledge that emotion is an essential part of connecting with Airmen. Each participant shared experiences of learning and leader development along these lines, which are detailed in Chapter 4.

The experiences above indicate incremental leader development, which enhanced the participants' grasp and application of leadership. While their general conception of leadership remained the same, there were indications that their comprehension of important aspects became more developed, and their approach to leading Airmen seemed to become more nuanced. This can be explained by Chickering (1977), who explains that all learning is experiential and that experiential learning is acquiring knowledge, understanding, or skill through a lived event or events and the effects on the judgments and feelings that come from these experiences.

Additionally, Beard and Wilson (2002) describe experiential learning as insights gained through internalizing personally experienced or observed interactions that build on past experiences and knowledge. Furthermore, Merriam and Brockett (2007) aptly say, "[T]he idea is not merely that the accumulation of experience makes a difference; it is how learners attach meanings to or make sense of their experience that matters" (pp. 152-153). These explanations help us understand that experience and how those experiences are interpreted influence what the participants learned from their experiences. These explanations also add a layer of complexity with the idea that

people can undergo the same experience but interpret it differently and learn very different lessons. That said, these descriptions from the literature also underscore the immutable relationship between experience and learning, thus experience and learning about leadership, solidifying the relationship between experience and leader development.

### ***Response to Research Question Two***

Research Question Two focused on the aspect of emotion in Air Force leader development. The question was: In what ways do Air Force leaders experience emotion in their leader development experiences? Throughout the interview process and as the participants described their leader development experiences, they seemed to relive the event. As they reflected, participants often smiled, laughed, cried, became angry, struggled to speak, pointed around the room, and looked off camera as if seeing the people and returning to the experience. I got the sense that reflection stoked the emotions they felt during the event, making the experience and lessons learned more memorable. In other words, it seems that as the participants reflected on their most significant and challenging experiences, they seemingly relived the event and felt the emotion again, which sustained retention of the significant experience and lessons learned from it in memory. The literature provides an explanation for this relationship involving experience, emotion, memory, learning, and, at times, transformation.

In the description above, as the participants reflected on and described their significant experiences, there would be indications of emotions such as tears, struggling to speak, a break in their voice, a change in tone, and changes in their facial expressions and body language. This seems to validate Lazarus's (1982, 1984, 1991a, 1991b, 1997) cognitive appraisal theory, which posits that cognitive appraisal and interpretation of the environment and situation drive emotional reaction. Throughout the interview process, there were indications of emotion as the

participants reflected on their experiences. However, there were no clear indications of emotion before I started asking questions. For instance, as Nathan described losing his roommate and friends in a DUI accident early in his career, tears ran down his face. I gathered that he felt sadness for the loss and asked if he could feel the emotion as he reflected on the experience. Nathan said sarcastically, “I’m here crying on your Zoom, so I would say, yeah, it takes me back.” Later, I found out there was more to his tears than sadness. He later wrote the following journal entry:

Emotions affect leadership and who you are as a leader...when I see someone or have a recent event occur, my mind will always put me back to a previous emotional experience. Whenever I hear someone get a DUI, I immediately can picture speaking at my college roommate's funeral. I will immediately tear up, and I immediately have [no] tolerance for people who chose to take that risk.

Nathan's sorrow was compounded by a feeling of anger toward his friends' decision to endanger themselves by drinking alcohol and driving. There was also a resolute and determined stance on being transparent about expectations and standards and administering discipline for anyone arrested for a DUI under Nathan's command. As Nathan reflected on losing his friends, the memory stoked emotion, and it came flooding back as he described the experience.

The strong emotional connection associated with Nathan's experience impacted his retention of the experience, ability to recall it in memory, and tendency to reflect on the experience. In fact, Nathan and several other participants said that the emotions from some of their experiences made them impossible to forget. Bower (1992) provides an explanation and says, “[A]s a general principle, events associated with strong emotional reactions tend to be well learned, and usually more so (within limits) the stronger the reaction” (p. 15). Bower (1992) adds

that emotional experiences tend to persist and decay slowly in our thoughts, leading to continued reflection or what he calls rehearsal of the event, looking for what caused the emotional arousal. Ortony et al. (2022) also explain that emotion impacts memory and that emotional experiences seemingly act as signatures for indexing memory. Through these insights and Nathan's example, it becomes apparent that emotions, memory, and learning are interconnected and have the capacity to influence and result in leader development. This translates to emotion and transformative learning as well.

Emotion influences transformative learning in several ways; it acts as a trigger to critical reflection, a necessary aspect of transformative learning, and guides and informs reflection, people must be emotionally capable for change to occur, and it impacts how well the experience, reflection, and subsequent transformation will be remembered (Brookfield, 2000; MacLeod & Egan, 2009; Mezirow, 1991b; Mezirow & Taylor, 2009; Taylor, 2000). This understanding lends to Bower's (1992) explanation that emotional experiences tend to persist and decay slowly, leading to the rehearsal of the event and seeking the cause of the emotion. Additionally, Mezirow (2000) said, "Transformative learning, especially when it involves subjective reframing, is often an intensely threatening emotional experience" (p. 6). Here, subjective reframing and transformative learning involve identifying problematic frames of reference and growing these to become more true to a person's evolving conceptions of self and the world around them. Through emotion's ability to influence reflection on significant and challenging experiences, leaders can learn, transform, and develop as leaders. Next, I provide insight from two sub-responses that help us understand the complex relationship between emotion, leadership, and development in the Air Force. These sub-responses are learning to control your emotions, and the emotional toll.

**Learning to Control Your Emotions.** When asked about emotion's role in leader development, half of the participants discussed emotion impacting decision-making and leadership or the importance of mitigating emotion, not the relationship between emotion and leader development. This lines up with Salovey and Mayer's (1990) explanation of emotional intelligence as the ability to appraise and regulate emotion in oneself and others. Moreover, Kerr et al. (2006) say that the leadership literature views emotional intelligence as a key determinant of effective leadership, which explains the perspective of some of the research participants. For example, Liam coined the phrase "dispassionate execution" to explain his approach to discipline while remaining as "unemotional as possible." Here, Liam was dealing with an Airman who posted inappropriate remarks about unwanted acts and daughters on Facebook. As a father with a daughter, he was livid. Liam also saw this as a clear violation of Air Force core values. However, in the best interest of the Airman in question and the Air Force, Liam wanted to objectively assess the situation in conjunction with Air Force disciplinary standards, core values, and codes of conduct to make a fair recommendation to the commander for disciplinary action. Through this experience, Liam learned that it was best to remain as unemotional as possible for "informed decision making based off of facts that I have not emotionally colored or put a bias against" for the sake of fairness and objectivity.

As explained previously, Remi had a habit of suppressing her emotions. She learned this early on while at Air Force Basic Training. She found herself shaking when the training instructors would bark orders at her and realized it stemmed from being yelled at by her father when she was a child. Remi learned to compartmentalize her emotions and carried this mentality for much of her career. Even as a commander 20 years later, she would intentionally find excuses to stay busy. Remi later realized that she might have been doing this to avoid the painful

experiences that happened around that time. She said, “[W]hen I look back on it, sometimes I think was I keeping busy so that I did not have to deal with some of the emotions and some of the things I should have been dealing with...” However, before this realization and for much of her career, Remi found value and career success by suppressing her emotions. This is a common coping strategy called avoidance coping amongst adult learners (Lapina, 2018). This kept her focused and productive.

Robert said that “emotion is human nature” and described humans as impulsive and emotional. He also noted that leadership requires self-awareness to manage emotions. Robert described this as emotional intelligence: The ability to garner self-awareness, knowledge, and understanding of self to manage one’s emotions in leadership scenarios. Robert explained that this was the most significant aspect of leadership. According to Kerr et al. (2006), leadership literature tends to agree that emotional intelligence is a key determinant of effective leadership.

This study did not delve into mitigating or managing emotion; however, the relationship between military culture and emotion was explained in Chapter 1, which seems to line up with the findings from these participants. Richard and Molloy (2020) explain that military culture and ideas on masculinity emphasize avoidance and decreased value of emotion. Emotion is viewed as a negative influence, something to be suppressed or controlled not only to fit into a culture of masculinity but also to enable rational decision-making. Moreover, Williams (2010) describes emotion as a potential trap within a list of other considerations that must be avoided and compensated for to prevent poor military decision-making outcomes. However, the ice may be melting on the military’s view of emotion as something to be suppressed or controlled. In a conversation with Lieutenant Colonel D.A. Clark (personal communication, June 26, 2023), the former Director of Design and Development at the Air Force Global College of Professional

Military Education, he said that the military's thoughts on emotion have drastically changed over the last 20 years. That might explain my leadership's request for my research to focus on emotion, learning, and leader development.

**The Emotional Toll.** A common thread among the participants was the emotional toll military service and leadership had on them. In their study on work stress and military life, Batara et al. (2024) explained that stress is particularly more pronounced in the military and found that a majority of research participants experienced a moderate level of stress while a significant number experienced severe and potentially dangerous stress. Batara et al. (2024) also characterized the military sector by its complex situations involving heightened experiences, unique traditions, and cultural norms, all lending to what they coined in their title as the warrior's strain (Batara et al., 2024).

As the research participants shared their experiences, emotions often bubbled to the surface. Most of them would not immediately describe their emotions as they reflected on their experiences, and I would have to follow up on how they felt. Still, there would be indications of emotions through the telling of their experiences. Others would clearly describe emotion's toll on them as people and leaders. For example, Liam explained that command in the Air Force can invariably lead to guilt and frustration as most of his time was spent on only about ten percent of the workforce. He described these Airmen as "problem children" and explained that ninety percent of his time was spent on them. Liam was left feeling emotionally exhausted and frustrated. He said, "A commander should be out handing out coins, shaking hands, and giving atta-boys. Instead, you'll find days that you barely left your office."

Robert shared several emotional experiences that taxed him as a leader. For example, he faced several pilots being accused of infidelity with an enlisted Airman while deployed. As

Robert worked through this experience, he felt the weight of the situation and considered the impact on the Airmen, their families, the mission, and the squadron as a whole. Ginsberg (2008) explained that situations like this are an inevitable part of being a leader and that some decisions will be very difficult. He goes on to say, “that few, if any, leaders are prepared for the emotional side of making hard decisions” (p. 293). Robert described the stress of this experience in terms of his time, emotions, and ability to lead the squadron and fly. Moreover, early into Robert’s squadron command, one of his Airmen lost a child shortly after birth. The Airman was scheduled to deploy shortly afterward. Tearing up as he shared the experience, Robert described how he pulled the Airman from the deployment and tasked another to take his place. Here, he had to contend not only with the situation of the Airman who lost a child but also with mission requirements and the burden of sending another Airman who was planning on remaining home with his family.

Now imagine being the only African American commander on an Air Force base overseas. Imagine having gone through a recent divorce and losing your mother and grandmother while being stationed on that base. Now, you are told by your boss that you need to address your one thousand Airmen and civilian members on the George Floyd tragedy. You call a fellow commander, but she does not pick up. You are alone. Compound that with the fact that you have suppressed and distracted yourself from feeling emotions for around 20 years. Imagine sitting in front of your computer and trying to put the words together to address this after watching George Floyd call out to his mother with his dying breath on YouTube. The emotion of losing your own mother comes flooding back. You ask, “Who would you call out to during your last moments if you got to that point?” You sit for hours fighting back tears in front of your computer and try to

focus on the right words to say to your Airmen. That is the emotional toll of leadership in the Air Force.

What can we learn from experiences like these? It will likely be different for everyone, but one thing we can say is that leadership is stressful and emotional, particularly in the military context (Batara et al., 2024; Ginsberg, 2008). The literature also tells us that emotion, experience, and learning are intertwined. This interconnection has the power to shape and develop us as people and as leaders. I have written on this relationship with insights from the literature above.

### ***Response to Research Question Three***

Research Question Three focused on the support and coping strategies the participants leaned on to navigate their leader development experiences and emotions. The question was: What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context? As I have interviewed, coded, categorized, found themes, and analyzed it all, it has become increasingly apparent that emotion is essential to the participants' lives, leadership, and development. Much of that was how they dealt with their emotionally challenging experiences and how that enabled their leader development. This is where the participant responses seemed to splinter into a diverse mix of ways and means that helped them process the intersection of leader development and emotion.

Batara et al. (2024) explain that coping mechanisms are important for individuals confronted with stress or negative experiences because they enable effective handling of challenging emotions and preserve emotional well-being. They also identified four themes within their study on work stress in military life regarding coping strategies, including “psychosocial support,” “engaging in physical recreational activities,” “building spiritual resilience,” and “use

of technology for communication” (Batara et al., 2024, p. 31). This partially matches this study’s findings, specifically psychosocial support and building spiritual resilience. On the whole, the research participants relied on community support, trust from leaders, self-directed learning, seeking expert advice through counseling and therapy, looking within through reflection, and religious faith. I briefly discuss each participant’s coping mechanisms to provide a sense of diverse methods of processing the intersection of leader development and emotion. Then, I provide an explanation of the sub-response, trust, which enabled the participants to process this intersection.

Edward relied on a community of peers, leaders, a professional counselor, and a chaplain to help him through his most challenging and emotional experiences. This community also enabled Edward to open himself up to taking risks and making mistakes because he knew his leaders would provide support and encouragement to help him grow and learn from the experience. Like Edward, Liam relied on community support to help him through his most challenging leader development experiences. In particular, he would describe experiences where leaders spoke up on his behalf on several occasions, and he also discussed reaching out to peers and friends to help him through challenging leadership experiences. Matthew relied on what he called self-evaluation and self-directed learning through books, trusted military leaders, and professional counseling to help him navigate the challenges of life and leadership. Nathan’s primary coping mechanism centered on support and advice from his wife, who also had military experience. He valued her honest perspective and candor, contributing to his leadership success and growth. Remi relied on a variety of coping mechanisms to navigate the intersection of emotion and leader development. She relied on mentors and caring leaders and had a solid

religious faith foundation, which enabled a positive and growth mindset that allowed her to tackle learning experiences and challenges head-on.

Finally, with Robert, there was no apparent emotion in how he navigated the intersection of emotion and leader development. He explained that his development as an Air Force leader was primarily through PME. This allowed for leader development in a controlled academic environment. The literature tells us that emotion and learning are interconnected, not only in experience, which this study has focused on but also in academic settings. Pekrun and Stephens (2012) explain that emotions are instrumental for achievement and personal growth and are readily experienced in academic settings. Immordino-Yang (2016) also says that complex emotions such as interest, inspiration, indignation, and compassion influence our inferences and interpretations of ideas. Pekrun and Linnenbrink-Garcia (2012, 2022) also explain that emotions in academic settings profoundly impact student performance and engagement. Furthermore, Renninger et al. (2024) discussed the benefits of interest and the emotion's positive impacts on attention, engagement, and the use of learning strategies. This tells us that Robert likely experienced emotion during his leader development experiences while attending PME. This was a missed opportunity, and I should have dug deeper with follow-up questions during the interviews to better understand the emotions he experienced and how he coped during this time.

**Trust.** Trust is a major element of Air Force leaders' coping strategies to process the intersection of leader development and emotion. Parry (2011) highlights the relationship between trust and aspects such as leadership support and consideration, which influence the performance of those they lead. Moreover, Day (2000) emphasizes the need for a foundation of trust and respect in leadership development. Furthermore, Romero et al. (2020) add that individuals who actively seek help and support from others to cope with stressful situations demonstrate trust in

the reliability of interpersonal relationships and are apt to recover faster. For example, Edward relied on trust from his leaders and relied on others to help him cope with challenging experiences. He credits his development as an Air Force leader to being trusted with responsibility early in his career. Trust also enabled confidence with the knowledge that his leaders would support him, even if he made a mistake. This helped Edward work through his fears and learn from the challenges and responsibilities his leaders trusted him with, resulting in leader development. On the other hand, Edward also trusted a community of supporters throughout his career to help him cope with challenging experiences.

Throughout his career, Liam relied on leaders to support him through his mistakes and missteps. Here, his leaders trusted Liam's ability to grow, learn from the experiences, and develop as an airman and as a leader. In fact, Liam describes command as a "sacred trust" to lead bestowed by the Air Force. This empowered him to lead with the confidence that his commanders would support him and continue to help him learn from his mistakes and develop as a leader.

Matthew also relied on trust from his leaders to empower and motivate him to accomplish the mission, lead, and learn. Even if he made a mistake or did not do as well as he had hoped, he could rely on leaders to support him, allowing Matthew to learn from these experiences and develop as a leader. In fact, Matthew grew to understand the essential nature of trust in leadership and yearned for it while providing trust to those he led. He said, "I feel like I tried to give trust because, in hindsight, I really yearned for it..." He yearned for trust and felt empowered by it, which enabled him to confidently step out into leadership challenges and learn from these experiences.

Early on in her career, Remi was pushed into a leadership position she did not feel ready for. Her group commander trusted that she could do the job and told Remi to come to her whenever she needed help. Remi took advantage of this offer and had many leadership discussions with her commander. Over time, her fear and apprehension about stepping into a leadership role were replaced by confidence. Here, Remi relied on mentorship from her commander to help her through this intimidating leader development experience.

Above are examples of the participants relying on the trust of their leaders to empower them to step outside of their comfort zones and learn. Moreover, reliance on others for help and support through challenging situations highlights trust in the dependability of others, which can enable more effective coping and faster recovery (Romero et al., 2020). This is evident in the examples of community support provided in many of the participant narratives in this chapter and Chapter 4. For example, Edward was stationed in the same locations as his cousin for his first eight years in the Air Force. During this time, Edward relied heavily on his cousin for advice as well as to vent and discuss work and leadership challenges during difficult times. Nathan would consult with his spouse to help him navigate difficult situations and learn from these experiences. Others relied on professional advice from therapists and counselors to help them process their emotions and significant life experiences outside of what their trusted community could provide. Here, trust was essential to navigating the intersection of leader development and emotion.

### **Implications for Practice**

This study sought to better understand the relationship between emotion and Air Force leader development through the narratives of retired Air Force commanders. Their significant and sometimes transformative experiences over the course of their careers provide a glimpse into

how they developed as leaders, how emotion influenced that development, and what strategies they used to cope with the challenging intersection of leader development and emotion. These insights can be applied in practice to adult education, particularly PME.

Air Force PME provides deliberate leader and leadership development education through theories, concepts, and models while emphasizing important aspects, skills, and knowledge such as ethics, core values, critical thinking, effective communication, airpower history, doctrine, strategy, force employment, international security and relations, joint and interservice operations, political-military issues, national instruments of power, and the conduct of war all within the context of Air Force culture (*Officer Professional Military Education Student Handbook*, 2021). What is missing in this impressive list is how emotion and transformative learning can influence learning and leader development. Outside of emotional intelligence and the idea of managing emotion, emotion's role and influence in leader development are often missed in Air Force PME. Salovey and Mayer (1990) describe emotional intelligence as the ability to appraise and regulate emotion in oneself and others. This has an important role in leadership; however, emotion has the power to do much more. This section discusses two opportunities to implement insights from this study into Air Force Professional Military Education (PME).

This study found an essential connection between emotion, learning, and transformative learning, which can fundamentally change how leaders view and practice leadership. The first opportunity to implement insights from this study would be to integrate an understanding of transformative learning theory, emotion's influence on learning, and how these influence leader development into the Air Force PME curriculum. One way to do this is to actively foster the transformative learning process. For example, Sweet (2022) used guided critical reflection in her qualitative study to explore transformative learning with doctoral students in a leadership

program. She found that guided critical reflection through journaling, collaborative discussion, and other reflective practices led to increased self-awareness, awareness of others, deep learning, and shifts in mindsets aligning with transformative learning theory (Sweet, 2022).

Moreover, Murthy et al. (2011) designed, developed and implemented a leader development course for the Marine Corps called Ka-Bar. It used coaching and self-reflection exercises, including journaling, small-group discussions, and sharing with a learning partner to enable “transformative change.” Murthy et al. (2011) pulled different interpretations of the terms “transformation process” and “transformative change” from organizational and leadership literature, but these had parallels with Mezirow’s transformative learning, such as the concept of reflection leading to deep, lasting, and significant change, potential for radical change, a dilemma or paradox to overcome and learn from, and an increased awareness of self that enabled openness, learning, and growth. These are not direct correlations but share characteristics and important aspects of transformative learning that can be applied in much the same way.

So, where does emotion fit into implementing transformative learning theory into Air Force PME? Dirkx (2001) and Taylor (2000) tell us that emotion can trigger and inform reflection and influence significant change through transformative learning. Taylor (2000) adds that transformative learning requires more than reason and rationale; it also requires the affective dimension of knowing. Here, the students must be aware of their emotions and follow them down the path of reflection. For example, Mezirow’s (1991b) second phase of transformative learning centers on self-examination with emotions such as guilt and shame. Being aware of these emotions and following them through critical reflection can lead to finding and assessing problematic epistemic, sociocultural, or psychic assumptions, potentially leading to recognizing one’s discontent, exploring new roles, relationships, and actions, all leading the student through

Mezirow's (1991b) transformative learning process. Through self-awareness, understanding emotion's role in reflection, and learning about the transformative learning process, students can enable their own learning and development, including outside of PME. In other words, by teaching PME students about transformative learning and emotion's role, we can better equip Airmen with the tools they need to learn, transform, and develop as leaders.

However, understanding emotion's role in learning extends beyond transformative learning. Emotions can guide learning in any experience. For example, Bower (1992) uses failed expectations to explain a tendency to revisit and reflect on important aspects of emotional experiences. The emotions bring the experience back to the forefront of our thoughts, where we judge and analyze the failed expectation. We direct our attention toward why we failed and what we can do to be successful in the future, thus driving our focus and, ultimately, our learning. Five out of six participants in this study named experience in one form or another as the main contributor to their development as leaders. This opens the door for PME students to learn from more than PME and transformative learning but also through their everyday leadership experiences. Teaching PME students about emotion's ability to influence and guide their learning further opens the door for their leader development outside of PME and also enables learning outside of potentially life-altering experiences such as those found in transformative learning. It is important that students understand the various influences on their learning so they can maximize efforts toward their personal and leader development outside of the short times they have at PME. To do this, PME curriculum should be updated to incorporate an understanding of emotion and experience's role in learning. This will accomplish several things: increase the students' readiness and ability to learn from their experiences, enable a growth

mindset, and provide Airmen with the insights they need to learn and develop as leaders even after they have graduated from PME.

The second opportunity for improving Air Force PME is through its instructor training course. Instructors play an essential role in facilitating learning. Immordino-Yang (2016) says, “[W]e only think deeply about things we care about” (p. 17) and explains that meaningful and effective learning considers emotion that motivates students, produces deep understanding, and transfers real-world skills. To that end, PME instructors need to understand the role emotion plays in the student learning experience to improve their ability to reach adult learners and enable their learning. Air Force officer PME instructors undergo a short course that includes the curriculum, lesson plan creation and use, snippets of adult learning theory, and Bloom’s taxonomy. However, teaching requires much more.

Brockett (2015) provides four keys to effective teaching: know the content, know the adult learner, know about teaching, and know yourself. Understanding emotion’s influence on learning helps the teacher better understand the adult learner, themselves, and how to enable learning for their adult learners. Emotions, particularly in academic environments like PME, are instrumental for achievement and personal growth (Pekrun & Stephens, 2012). Immordino-Yang (2016) also explains that complex emotions and feelings such as interest, inspiration, indignation, and compassion relate to our inferences and interpretations of ideas. Renninger et al. (2024) also discusses the benefits of interest and the emotion’s positive impacts on attention, engagement, and the use of learning strategies. Moreover, Bower (1992) points out emotion’s ability to influence memory retrieval, and Ortony et al. (2022) add that emotional experiences act as signatures for indexing memory. Through all of this, we see that emotion can impact student receptiveness in class, affect recall of what is learned, and how long the student retains the

information. Understanding these important aspects of emotion and learning can help prepare and enable PME instructors to create learning environments that are more conducive to learning. To help with this, PME instructors should learn about Knowles's (1970, 1978, 1980) concept of andragogy, and Knowles et al. (1998, 2015, 2020) andragogical process elements, as well as Brockett's (2015) essential qualities of ideal teachers. In fact, Brockett's (2015) book *Teaching Adults: A Practical Guide for New Teachers* could aid a great deal in preparing PME instructors for teaching and reaching their adult learners.

### **Implications for Research**

As I conducted this study on emotion, transformative learning, and Air Force leader development, I began reflecting on Richard and Molloy's (2020) article that explained that military culture and ideas on masculinity emphasize avoidance and decreased value of emotion. A decade earlier, Williams (2010) described emotion as a potential trap within a list of other considerations that must be avoided and compensated for to prevent poor military decision-making outcomes. Half of the research participants showed signs of these tendencies to suppress or avoid emotion, not to mention shame, when they did display emotion. Based on this, what is the impact of masculine military culture on emotion and leader development? Has military culture somehow influenced the relationship between emotion and learning? What is the impact of the masculine military culture on learning? Does this affect the various military branches differently due to the disparate and unique aspects of their cultures? This is an area I would like to study in the future, and I think it could add some much-needed insight to the fields of adult learning and leadership by changing these masculine views of emotion, potentially opening the door for greater learning as well as personal and leader development.

The research question, what strategies do Air Force leaders use to process the intersection of leader development and emotion, contained many answers, including community support, trust from leaders, self-directed learning, seeking expert advice through counseling and therapy, reflection and self-evaluation, and religious faith. However, as I was able to identify the strategies themselves, I was left wondering how they help in coping with emotion and leader development experiences because they are all so different. What kind of help do these strategies provide? How can I use this information to help others learn to cope with their own challenging and emotional leader development experiences? The participants provided some insights; however, I wanted to dig deeper to better understand the various coping strategies, what they provided, and how I can use them to help others cope with the turbulent intersection of emotion and leader development experiences. Lapina (2018) sheds some light on coping through reflective learning in adult education. She identified three main coping strategies: problem-focused learning, avoidance coping, and emotion-focused coping, and advocated for practicing reflective learning in adult education based on its positive effects on coping capacity and learning outcomes (Lapina, 2018). These coping strategies are discussed from an adult education perspective to account for coping with stressful experiences in this environment, but perhaps this can also shed light on how adult learners cope with challenging and stressful experiences outside of the classroom as well.

This study was conducted with a small sample of six retired Air Force commanders. Soeters et al. (2006) explain there is a cultural distinction between the branches of the military and the various occupations within these branches. For example, the dominant culture within the Air Force is pilot-centered; however, non-pilots, such as intelligence officers and ballistic missile officers, or even pilots within distinct communities, such as fighter pilots and bomber pilots,

each have their own sub-cultures (Long, 2016). More extensive studies with nuanced sub-cultures within the Air Force and studies with retired sister service commanders could shed light on important cultural differences that might influence how these leaders view and understand emotion and its relationship to leadership and learning. It might also shed light on common elements of emotion, experience, and leader development that could be used to provide universal insights to the larger leader development field within a Department of Defense or military context and beyond.

Based on the predominant response from the participants regarding experience as the main contributor to their leader development, a closer look at the particular aspects of these experiences and how these aided in transformative learning and leader development is an interesting direction for future research. For example, Phenomenology could be used to draw out the common essence of these leader development experiences to provide an understanding of the universal element or elements common to all leader development experiences. Phenomenology assumes that individuals are not entirely unique and that there are commonalities within lived experiences (Creswell, 2015; Johnson & Christensen, 2019). This methodology attempts to bracket out participant demographics, culture, and personal characteristics to root out the essence of the shared experience. In this case, the experience of developing as a leader in the Air Force.

## **Conclusion**

The purpose of this study was to understand how the narratives of retired United States Air Force commanders shaped their leader development experiences and emotions throughout their careers. This narrative inquiry into the leader development experiences of six retired Air Force commanders highlighted the important relationship between emotion, experience, learning, transformative learning, and leader development. Their profound emotional journeys of growth

as leaders were at times difficult to hear and even more difficult to fully comprehend as they contended with challenges that pushed some of them to the brink. Dyson (1994) explains the power of this process:

Stories help us construct our selves, who used to be one way and are now another; stories help to make sense of, evaluate, and integrate the tensions inherent in experience, the past with the present, the fictional with the “real,” the official with the unofficial, the personal with the professional, the canonical with the different or unexpected (p. 242).

Through the participants’ experiences, they grew and developed into the leaders and people they are today. I am proud and honored to have had this opportunity to learn from their experiences and share their lessons here in this dissertation. The main findings include experience is central to Air Force leader development, emotion connects memory and learning to experience and influences the tendency to reflect on the experience, and finally, to process the intersection of leader development and emotion. The participants used a multitude of diverse means and ways, including community support, trust from leaders, self-directed learning, seeking expert advice through counseling and therapy, reflection and “deep self-evaluation,” and religious faith.

This study works to address a gap in leader development literature regarding “emotion and affect-related theory and processes” (Vogel et al., 2021, p. 15). However, this is only a minuscule step in balancing the scales of our understanding of the leader development field that predominately favors the cognitive domain of understanding leadership and development.

## References

- Acton, B. P., Foti, R. J., Lord, R. G., & Gladfelter, J. A. (2019). Putting emergence back in leadership emergence: A dynamic, multilevel, process-oriented framework. *The Leadership Quarterly*, 30(1), 145–164. <https://doi.org/10.1016/j.leaqua.2018.07.002>
- AETC FY21 Strategic Communication Plan*. (2020).
- AFDD1-1 Force Development*. (2011). USAF.  
<https://www.airandspaceforces.com/PDF/SiteCollectionDocuments/Reports/2011/November%202011/Day17/AFDD1-1.pdf>
- Air Force Doctrine Publication-1*. (2021). U.S. Air Force.
- Air Force Instruction 1-2: Commander's Responsibilities*. (2014). [www.e-publishing.af.mil](http://www.e-publishing.af.mil)
- Air Force Manual 35-15*. (1948). Department of the Air Force.
- Allvin, D. W. (2024). A legacy of adaption. In *The Case for Change: Optimizing the Air Force for Great Power Competition*.
- An AETC Vision for Learning Transformation*. (2013). USAF.  
[https://www.airandspaceforces.com/PDF/SiteCollectionDocuments/Reports/2013/March%202013/Day25/AETC\\_Learning\\_Transformation-022813.pdf](https://www.airandspaceforces.com/PDF/SiteCollectionDocuments/Reports/2013/March%202013/Day25/AETC_Learning_Transformation-022813.pdf)
- Andresen, L., Boud, D., & Cohen, R. (2000). Experience-Based Learning. In G. Foley (Ed.), *Understanding adult education and training* (2nd ed). Allen & Unwin.
- Army doctrine publication 6-22: Army leadership & the profession*. (2019). Army Publishing Directorate.  
[https://armypubs.army.mil/ProductMaps/PubForm/Details.aspx?PUB\\_ID=1007609](https://armypubs.army.mil/ProductMaps/PubForm/Details.aspx?PUB_ID=1007609)
- ATLAS.ti. (n.d.). Why ATLAS.ti. Retrieved February 1, 2024, from <https://atlasti.com/why-atlas-ti>

- Avolio, B. J., & Chan, A. (2008). The Dawning of a New Era for Genuine Leadership Development. In G. P. Hodgkinson & J. K. Ford (Eds.), *International Review of Industrial and Organizational Psychology 2008* (pp. 197–238). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9780470773277.ch6>
- Barnouw, V. (1971). *An Introduction to Anthropology: Ethnology* (Vol. 2). The Dorsey Press.
- Barrett, L. F., Lewis, M., & Haviland-Jones, J. M. (Eds.). (2016). *Handbook of emotions* (4th ed). Guilford Press.
- Batara, J. T., Rosales, R., Cabaguing, A. M., & Porton, A. T. (2024). Warrior’s strain: An exploration of work stress in military life through explanatory mixed methods designs. *International Journal of Multidisciplinary Research and Development*, *11*(2), 25–37.
- Baumgartner, L. M. (2012). Mezirow’s Theory of Transformative Learning from 1975 to Present. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice*. Jossey-Bass.
- Beard, C. (2022). *Experiential learning design: Theoretical foundations and effective principles*. Routledge.
- Beard, C., & Wilson, J. P. (2002). *The power of experiential learning: A handbook for trainers and educators*. Kogan Page; Stylus Pub.
- Beitin, B. K. (2012). Interview and sampling. In J. F. Gubrium, (Ed.), *The Sage handbook of interview research: The complexity of the craft* (2nd ed). SAGE.
- Berliner, D. C. (2006). Educational Psychology: Searching for Essence Throughout a Century of Influence. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (2nd ed). Erlbaum.

- Brand, A. G. (1985). Hot cognition: Emotions and writing behavior. *Journal of Advanced Composition*, 6, 12.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), Article 2. <https://doi.org/10.1191/1478088706qp063oa>
- Breunig, M. (2011). Paulo Freire: Critical Praxis and Experiential Education. In T. E. Smith, & C. E. Knapp (Eds.), *Sourcebook of experiential education: Key thinkers and their contributions*. Routledge.
- Brockett, R. G. (2015). *Teaching adults: A practical guide for new teachers*. Jossey-Bass/A Wiley Brand.
- Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice*. Routledge.
- Brookfield, S. (1986). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices*. Open University Press.
- Brookfield, S. D. (2000). Transformative Learning as Ideology Critique. In J. Mezirow & Associates, *Learning as Transformation*. Jossey-Bass.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1), 32–42.
- Bryant, J., Ayers, J., & Missimer, M. (2023). What transforms? – Transformative learning in a sustainability leadership master’s program. *International Journal of Sustainability in Higher Education*, 24(9), 231–251. <https://doi.org/10.1108/IJSHE-03-2022-0086>
- Cacioppo, J. T., & Berntson, G. G. (1999). The Affect System: Architecture and Operating Characteristics. *Current Directions in Psychological Science*, 8(5), Article 5. <https://doi.org/10.1111/1467-8721.00031>

- Cannella, G. S. (2022). Ethical entanglements: Conceptualizing ‘research purposes/design in the contemporary political world.’ In U. Flick (Ed.), *The SAGE handbook of qualitative research design*. SAGE reference.
- Case, P., French, R., Simpson, P. (2011). Philosophy of Leadership. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership*. SAGE.
- Chan, C. K. Y. (2023). *Assessment for experiential learning*. Routledge.
- Charmaz, K. (2011). Grounded theory methods in social justice research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed). Sage.
- Chase S. E. (2005). Narrative Inquiry: Multiple Lenses, Approaches, Voices. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed). Sage Publications.
- Chickering, A. W. (1977). *Experience and learning: An introduction to experiential learning*. Change Magazine Press.
- Clandinin, D. J. (Ed.). (2007). *Handbook of narrative inquiry: Mapping a methodology*. Sage Publications.
- Clandinin, D. J. (2013). *Engaging in narrative inquiry*. Left Coast Press, Inc.
- Clifford, G. J. (1984). *Edward L. Thorndike: The sane positivist*. Wesleyan Univ. Press.
- Coffey, T. M. (1982). *HAP: The story of the U.S. Air Force and the man who built it, General Henry H. “Hap” Arnold*. Viking Press.
- Collins, M. A., Brick, J. M., Kim, K., & Stowe, P. (1997). Measuring Participation in Adult Education. *Technical Report*.
- Conger, J. A. (1993). The brave new world of leadership training. *Organizational Dynamics*, 21(3), 46–58. [https://doi.org/10.1016/0090-2616\(93\)90070-H](https://doi.org/10.1016/0090-2616(93)90070-H)

- Connelly, F. M., & Clandinin, D. J. (1990). Stories of Experience and Narrative Inquiry. *Educational Researcher*, 19(5), Article 5. <https://doi.org/10.3102/0013189X019005002>
- Cranton P., Taylor E. W. (2012). Transformative Learning Theory: Seeking a More Unified Theory. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice*. Jossey-Bass.
- Creswell, J. W. (2015). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed). Pearson India Education Services.
- Creswell, J. W., & Creswell Báez, J. (2021). *30 essential skills for the qualitative researcher* (2nd ed). SAGE Publications, Inc.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed). SAGE.
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124–130. [https://doi.org/10.1207/s15430421tip3903\\_2](https://doi.org/10.1207/s15430421tip3903_2)
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage Publications.
- Daiute, C. (2014). *Narrative Inquiry: A Dynamic Approach*. SAGE Publications, Inc. <https://doi.org/10.4135/9781544365442>
- Dalakoura, A. (2010). Differentiating leader and leadership development: A collective framework for leadership development. *Journal of Management Development*, 29(5), Article 5. <https://doi.org/10.1108/02621711011039204>
- Daniels, H. (2008). *Vygotsky and research*. Routledge.
- Davidson, J., & di Gregorio, S. (2011). Qualitative research and technology. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed). Sage.

- Day, D. V. (2000). Leadership development: A Review in Context. *The Leadership Quarterly*, 11(4), Article 4. [https://doi.org/10.1016/S1048-9843\(00\)00061-8](https://doi.org/10.1016/S1048-9843(00)00061-8)
- Day, D. V. (2011). Leadership Development. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership*. SAGE.
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25(1), Article 1. <https://doi.org/10.1016/j.leaqua.2013.11.004>
- Day, D. V. & Halpin, S. M. (2004). Growing Leaders for Tomorrow: An Introduction. In D. V. Day, S. J. Zaccaro, & S. M. Halpin (Eds.), *Leader Development for Transforming Organizations*. Psychology Press. <https://doi.org/10.4324/9781410610102>
- Day, D. V., Harrison, M. M., & Halpin, S. M. (2009). *An integrative approach to leader development: Connecting adult development, identity, and expertise*. Psychology Press.
- Day, D. V. and Kragt, D. (2023). Leadership Development: Past, Present, and Future. In D. Schedlitzki, M. Larsson, B. Carroll, M. C. Bligh, & O. Epitropaki. (Eds.), *The SAGE handbook of leadership* (2nd ed). SAGE.
- Day, D. V., Riggio, R. E., Tan, S. J., & Conger, J. A. (2021). Advancing the science of 21st-century leadership development: Theory, research, and practice. *The Leadership Quarterly*, 32(5), 101557. <https://doi.org/10.1016/j.leaqua.2021.101557>
- Day, D. V. & Zaccaro, S. J. (2004). Toward a Science of Leader Development. In D. V. Day, S. J. Zaccaro, & S. M. Halpin (Eds.), *Leader Development for Transforming Organizations*. Psychology Press. <https://doi.org/10.4324/9781410610102>
- DeMarrais, K. B., & Lapan, S. D. (Eds.). (2004). *Foundations for research: Methods of inquiry in education and the social sciences*. L. Erlbaum Associates.

- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed). McGraw-Hill.
- Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), 80–88.  
<https://doi.org/10.1177/1558689812437186>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE handbook of qualitative research* (3rd ed). Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed). Sage.
- Department of the Air Force Instruction 36-2670: Total Force Development*. (2020). Department of the Air Force.
- Department of the Air Force Manual 36-2032: Military Recruiting & Accessions*. (2019). Air Force e-publishing.
- Department of the Air Force Policy Directive 36-26: Total Force Development & Management*. (2022). Air Force e-Publishing.
- Dewey, J. (1897). My Pedagogic Creed. *School Journal*, 54.
- Dewey, J. (1997). *Experience and education*. Touchstone (Original work published in 1938).
- Dey, I. (2005). *Qualitative data analysis: A user-friendly guide for social scientists*. Taylor & Francis e-Library.
- Dirkx, J. M. (2001). The Power of Feelings: Emotion, Imagination, and the Construction of Meaning in Adult Learning. *New Directions for Adult and Continuing Education*, 2001(89), Article 89. <https://doi.org/10.1002/ace.9>

- Dirkx, J. M. (2006). Engaging emotions in adult learning: A jungian perspective on emotion and transformative learning. *New Directions for Adult and Continuing Education*, 2006(109), Article 109. <https://doi.org/10.1002/ace.204>
- Drew, D. M. (1997). Educating Air Force Officers. Observations after 20 Years at Air University. *Air Power Journal*.
- Duffy, T. M., & Jonassen, D. H. (Eds.). (1992). *Constructivism and the technology of instruction: A conversation*. Lawrence Erlbaum Associates Publishers.
- Elias, J. L., & Merriam, S. B. (2005). *Philosophical foundations of adult education* (3rd ed). Krieger Pub.
- Finney, R. T. (1955). *USAF Historical Studies No. 100: History of the Air Corps Tactical School 1920-1940*. Research Studies Institute, USAF Historical Division, Air University.
- Flick, U. (2014). *An introduction to qualitative research* (5th ed). Sage.
- Flick, U. (Ed.). (2022). *The SAGE handbook of qualitative research design*. SAGE reference.
- Forbes, D., Metcalf, O., Lawrence-Wood, E., & Adler, A. B. (2022). Problematic Anger in the Military: Focusing on the Forgotten Emotion. *Current Psychiatry Reports*, 24(12), 789–797. <https://doi.org/10.1007/s11920-022-01380-x>
- Freire, P. (1970). *Cultural action for freedom*. Harvard Educational Review.
- Gates, A. I. (1949). Edward L. Thorndike: 1874-1949. *Psychological Review*, 56(5), 241–243. <https://doi.org/10.1037/h0062782>
- Ginsberg, R. (2008). Being Boss is Hard the Emotional Side of being in Charge. *Phi Delta Kappan*, 90(4), 292–297. <https://doi.org/10.1177/003172170809000411>
- Guba, E. G. (1981). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Communication and Technology*, 29(2), 75–91.

- Harris, K. R., Graham, S., Urdan, T., Graham, S., Royer, J. M., & Zeidner, M. (Eds.). (2012). *APA educational psychology handbook, Vol 2: Individual differences and cultural and contextual factors*. American Psychological Association. <https://doi.org/10.1037/13274-000>
- Hedegaard, M. (1998). Situated Learning and Cognition: Theoretical Learning and Cognition. *Mind, Culture, and Activity*, 5(2), 114–126.  
[https://doi.org/10.1207/s15327884mca0502\\_5](https://doi.org/10.1207/s15327884mca0502_5)
- Hung, D. W. L., & Chen, D.-T. (2001). Situated Cognition, Vygotskian Thought and Learning from the Communities of Practice Perspective: Implications for the Design of Web-Based E-Learning. *Educational Media International*, 38(1), 3–12.  
<https://doi.org/10.1080/09523980121818>
- Immordino-Yang, M. H. (2016). *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience*. W. W. Norton & Company.
- Johnson, B., & Christensen, L. B. (2019). *Educational research: Quantitative, qualitative, and mixed approaches* (7th ed). SAGE.
- Johnstone, J. W., & Rivera, R. J. (1965). *Volunteers for learning: A study of the educational pursuits of adults*. Aldine Publishing Company.
- Kerr, R., Garvin, J., Heaton, N., & Boyle, E. (2006). Emotional intelligence and leadership effectiveness. *Leadership & Organization Development Journal*, 27(4), 265–279.  
<https://doi.org/10.1108/01437730610666028>
- Kim, J.-H. (2016). *Understanding narrative inquiry: The crafting and analysis of stories as research*. SAGE.

- Kim, T. (2020). Becoming skillful leaders: American school principals' transformative learning. *Educational Management Administration & Leadership*, 48(2), 353–378.  
<https://doi.org/10.1177/1741143218802596>
- Kirke, C. (2010). Military Cohesion, Culture and Social Psychology. *Defense & Security Analysis*, 26(2), 143–159. <https://doi.org/10.1080/14751798.2010.488856>
- Kirshner, D., & Whitson, J. A. (Eds.). (2009). *Situated Cognition: Social, Semiotic, and Psychological Perspectives*. Routledge (Original work published in 1997).  
<https://doi.org/10.4324/9781003064121>
- Kitchenham, A. (2008). The Evolution of John Mezirow's Transformative Learning Theory. *Journal of Transformative Education*, 6(2), 104–123.  
<https://doi.org/10.1177/1541344608322678>
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Association Press.
- Knowles, M. S. (1975). *Self directed learning: A guide for learners and teachers*. Cambridge Adult Education.
- Knowles, M. S. (1978). Andragogy: Adult Learning Theory in Perspective. *Community College Review*, 5(3), 9–20. <https://doi.org/10.1177/009155217800500302>
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (Rev. and Updated). Association Press; Follett Pub. Co.
- Knowles, M. S. (1989). *The making of an adult educator: An autobiographical journey*. Jossey-Bass.
- Knowles, M. S. (1990). *The adult learner: A neglected species* (4th ed). Gulf Pub. Co.

- Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed). Gulf Pub. Co.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). *The adult learner: The definitive classic in adult education and human resource development* (8th ed). Routledge.
- Knowles, M. S., Holton, E. F., Swanson, R. A., & Robinson, P. A. (2020). *The adult learner: The definitive classic in adult education and human resource development* (9th ed). Routledge, Taylor & Francis Group.
- Kolb, Alice. Y., & Kolb, D. A. (2013). *The Kolb Learning Style Inventory 4.0: A Comprehensive Guide to the Theory*  
*The Kolb Learning Style Inventory 4.0: A Comprehensive Guide to the Theory*.
- Kroth, M., & Cranton, P. (2014). *Stories of transformative learning*. Sense Publishers.
- Lapina, A. (2018). Facilitating Coping Through Reflective Learning in Adult Education: A Review of the Reciprocal Relationship Between Coping and Learning. *Adult Learning*, 29(4), 131–140. <https://doi.org/10.1177/1045159518776126>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lawrence, E., Dunn, M. W., & Weisfeld-Spolter, S. (2018). Developing leadership potential in graduate students with assessment, self-awareness, reflection and coaching. *Journal of Management Development*, 37(8), Article 8. <https://doi.org/10.1108/JMD-11-2017-0390>
- Lazarus, R. S. (1982). Thoughts on the Relations Between Emotion and Cognition. *American Psychologist*, 37(9), 6.
- Lazarus, R. S. (1984). On the primacy of cognition. *American Psychologist*, 39(2), 124–129. <https://doi.org/10.1037/0003-066X.39.2.124>

- Lazarus, R. S. (1991a). Cognition and motivation in emotion. *American Psychologist*, 46(4), 352–367. <https://doi.org/10.1037/0003-066X.46.4.352>
- Lazarus, R. S. (1991b). *Emotion and adaptation*. Oxford University Press.
- Lazarus, R. S. (1997). *Fifty Years of the Research and theory of R.s. Lazarus*. Psychology Press. <https://doi.org/10.4324/9780203774595>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Long, A. G. (2016). *The soul of armies: Counterinsurgency doctrine and military culture in the US and UK*. Cornell University Press.
- Lord, R. G., Day, D. V., Zaccaro, S. J., Avolio, B. J., & Eagly, A. H. (2017). Leadership in applied psychology: Three waves of theory and research. *Journal of Applied Psychology*, 102(3), 434–451. <https://doi.org/10.1037/apl0000089>
- Lord, R. G., & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *The Leadership Quarterly*, 16(4), 591–615. <https://doi.org/10.1016/j.leaqua.2005.06.003>
- Mackintosh, N. J. (1974). *The psychology of animal learning*. Academic Press.
- Magnusson, E., & Marecek, J. (2015). *Doing Interview-based Qualitative Research: A Learner's Guide*. Cambridge University Press. <https://doi.org/10.1017/CBO9781107449893>
- Manning, T. A., Ashcroft, B. A., Emmons, R. H., Hussey, A. K., & Mason, J. L. (2005). *History of Air Education and Training Command, 1942-2002*. Office of History & Research Headquarters, Air Education & Training Command.
- Marcus, L. J., Dorn, B. C., & Henderson, J. M. (2006). Meta-Leadership and National Emergency Preparedness: A Model to Build Government Connectivity. *Biosecurity and*

*Bioterrorism: Biodefense Strategy, Practice, and Science*, 4(2), 128–134.

<https://doi.org/10.1089/bsp.2006.4.128>

Marcus, L. J., Dorn, B. C., Henderson, J., & McNulty, E. J. (2015). *Meta-Leadership: A Framework for Building Leadership Effectiveness*.

Merriam, S. B. (Ed.). (1993). *An update on adult learning theory*. Jossey-Bass.

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, 89, Article 89.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (2nd ed). Jossey-Bass.

Merriam, S. B., & Baumgartner, L. (2020). *Learning in adulthood: A comprehensive guide* (4th ed). Jossey-Bass.

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice*. Jossey-Bass, a Wiley brand.

Merriam, S. B., & Brockett, R. G. (2007). *The profession and practice of adult education: An introduction* (Updated ed). Jossey-Bass Publishers.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed). Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed). Jossey-Bass.

Mertova, P., & Webster, L. (2020). *Using narrative inquiry as a research method: An introduction to critical event narrative analysis in research, training and professional practice* (2nd ed). Routledge.

- Mezirow & Associates, J. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. Jossey-Bass.
- Mezirow, J. (1978a). *Education for Perspective Transformation: Women's Re-entry Programs in Community Colleges*.
- Mezirow, J. (1978b). Perspective Transformation. *Adult Education*, 28(2), Article 2.  
<https://doi.org/10.1177/074171367802800202>
- Mezirow, J. (1981). A Critical Theory of Adult Learning and Education. *Adult Education*, 32(1), 3–24. <https://doi.org/10.1177/074171368103200101>
- Mezirow, J. (1985). A critical theory of self-directed learning. *New Directions for Adult and Continuing Education*, 1985(25), 17–30. <https://doi.org/10.1002/ace.36719852504>
- Mezirow, J. (1991a). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. Jossey-Bass.
- Mezirow, J. (1991b). *Transformative dimensions of adult learning*. Jossey-Bass.
- Mezirow, J. (1997). Transformative Learning: Theory to Practice. *New Directions for Adult and Continuing Education*, 1997(74), 5–12. <https://doi.org/10.1002/ace.7401>
- Mezirow, J. (1998). On Critical Reflection. *Adult Education Quarterly*, 48(3), Article 3.  
<https://doi.org/10.1177/074171369804800305>
- Mezirow, J., & Taylor, E. W. (2009). *Transformative learning in practice: Insights from community, workplace, and higher education*. Jossey-Bass.
- Moon, J. A. (2013). *A Handbook of Reflective and Experiential Learning*. Routledge.  
<https://doi.org/10.4324/9780203416150>
- Mott, S. (2006). What is leadership? *Journal of Pediatric Nursing*, 21(6), Article 6.  
<https://doi.org/10.1016/j.pedn.2006.10.002>

- Nanda, S., & Warms, R. L. (2018). *Culture counts: A concise introduction to cultural anthropology* (4th ed). Cengage Learning.
- Narayan, K. (1993). How Native Is a “Native” Anthropologist? *American Anthropologist*, 95(3), 671–686.
- National Security Strategy*. (2022). Biden-Harris Administration.  
<https://www.whitehouse.gov/wp-content/uploads/2022/11/8-November-Combined-PDF-for-Upload.pdf>
- Neuman, T. P. (1996). *Critically Reflective Learning in a Leadership Development Context* [Dissertation]. University of Wisconsin-Madison.
- Officer Professional Military Education Student Handbook*. (2020). Air University Press.
- Officer Professional Military Education Student Handbook*. (2021). Air University Press.
- Okon-Singer, H., Hendler, T., Pessoa, L., & Shackman, A. J. (2015). The neurobiology of emotion-cognition interactions: Fundamental questions and strategies for future research. *Frontiers in Human Neuroscience*, 9. <https://doi.org/10.3389/fnhum.2015.00058>
- Ortega, A. C. (2017). What Is Leadership? What Is Toxic Leadership? In *Academic Libraries and Toxic Leadership* (pp. 1–13). Elsevier. <https://doi.org/10.1016/B978-0-08-100637-5.00001-7>
- Ortony, A., Clore, G. L., & Collins, A. (2022). *The cognitive structure of emotions* (2nd ed). Cambridge University Press.
- Parrott, W. G., & Schulkin, J. (1993). Neuropsychology and the cognitive nature of the emotions. *Cognition & Emotion*, 7(1), 43–59. <https://doi.org/10.1080/02699939308409175>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed). SAGE Publications, Inc.

- Pessoa, L. (2008). On the relationship between emotion and cognition. *Nature Reviews Neuroscience*, 9(2), Article 2. <https://doi.org/10.1038/nrn2317>
- Polkinghorne, D. E. (2007). Validity Issues in Narrative Research. *Qualitative Inquiry*, 13(4), 471–486. <https://doi.org/10.1177/1077800406297670>
- Popalzai, E., & Kottasova, I. (2022). Taliban suspend university education for women in Afghanistan. *CNN*. <https://www.cnn.com/2022/12/20/asia/taliban-bans-women-university-education-intl/index.html>
- Renninger, K. A., Hidi, S. E., & Arijit, D. (2024). Exploring interest theory and its reciprocal relation to achievement goals, self-efficacy, and self-regulation. In G. Hagenauer, R. Lazarides, & H. Järvenoja (Eds.), *Motivation and emotion in learning and teaching across educational contexts: Theoretical and methodological perspectives and empirical insights*. Routledge.
- Richard, K., & Molloy, S. (2020). An examination of emerging adult military men: Masculinity and U.S. military climate. *Psychology of Men & Masculinities*, 21(4), 686–698. <https://doi.org/10.1037/men0000303>
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage Publications.
- Romero, D. H., Riggs, S. A., Raiche, E., McGuffin, J., & Captari, L. E. (2020). Attachment, coping, and psychological symptoms among military veterans and active duty personnel. *Anxiety, Stress, & Coping*, 33(3), 326–341. <https://doi.org/10.1080/10615806.2020.1723008>
- Ruben, B. D. (1999). Simulations, Games, and Experience-Based Learning: The Quest for a New Paradigm for Teaching and Learning. *Simulation & Gaming*, 30(4), 498–505. <https://doi.org/10.1177/104687819903000409>

- Safran, J. D., & Greenberg, L. S. (1982). Eliciting “hot cognitions” in cognitive behaviour therapy: Rationale and procedural guidelines. *Canadian Psychology / Psychologie Canadienne*, 23(2), 83–87. <https://doi.org/10.1037/h0081247>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed). SAGE.
- Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed). SAGE Publishing Inc.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- Schedlitzki, D. (2019). Developing apprentice leaders through critical reflection. *Higher Education, Skills and Work-Based Learning*, 9(2), Article 2. <https://doi.org/10.1108/HESWBL-09-2018-0095>
- Seale, C. (1999). Quality in Qualitative Research. *Qualitative Inquiry*, 5(4), 465–478. <https://doi.org/10.1177/107780049900500402>
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed). Teachers College Press.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Shipton, H., & Sillince, J. (2013). Organizational learning and emotion: Constructing collective meaning in support of strategic themes. *Management Learning*, 44(5), 493–510. <https://doi.org/10.1177/1350507612450547>
- Smith, M. C., & Pourchot, T. (Eds.). (1998). *Adult learning and development: Perspectives from educational psychology*. L. Erlbaum Associates.

- Smith, R. M. (1982). *Learning how to learn: Applied theory for adults* (Reprinted). Open Univ. Press.
- SOS Welcome Letter: Class 21D. (2021).
- Sosik, J. J., & Jung, D. I. (2010). *Full range leadership development: Pathways for people, profit, and planet*. Routledge.
- Spector, J. M., Merrill, M. D., Elen, J., & Bishop, M. J. (Eds.). (2014). *Handbook of Research on Educational Communications and Technology*. Springer New York.  
<https://doi.org/10.1007/978-1-4614-3185-5>
- Steele, A. L. (2023). *Experiential learning in engineering education*. CRC Press.
- Strongman, K. T. (2003). *The psychology of emotion: From everyday life to theory* (5th ed). Wiley.
- Sweet, S. F. (2022). Using Guided Critical Reflection to Discover Deepened and Transformative Learning in Leadership Education. *Journal of Research on Leadership Education*, 194277512211189. <https://doi.org/10.1177/19427751221118951>
- Sweetman, M. M. (2018). A Qualitative Exploration of Transformative Learning within an Online Leadership Course. *Journal of Occupational Therapy Education*, 2(2).  
<https://doi.org/10.26681/jote.2018.020206>
- Swennen, A. (2020). Experiential learning as the ‘new normal’ in teacher education. *European Journal of Teacher Education*, 43(5), 657–659.  
<https://doi.org/10.1080/02619768.2020.1836599>
- Taylor, E. W. (2007). An update of transformative learning theory: A critical review of the empirical research (1999–2005). *International Journal of Lifelong Education*, 26(2), Article 2. <https://doi.org/10.1080/02601370701219475>

- Taylor, E. W. (2008). Transformative learning theory. *New Directions for Adult and Continuing Education*, 2008(119), Article 119. <https://doi.org/10.1002/ace.301>
- Taylor, K., & Marienau, C. (2016). *Facilitating learning with the adult brain in mind: A conceptual and practical guide*. Jossey-Bass, A Wiley Brand.
- Tennessee Code § 1-3-105. (n.d.). Definition of terms used in code. Lexis Law. <https://advance.lexis.com/container?config=014CJAA5ZGVhZjA3NS02MmMzLTRlZWQtOGJjNC00YzQ1MmZlNzc2YWYKAFBvZENhdGFsb2e9zYpNUjTRaIWVfyur9ud&crd=61d2c6df-7edf-48f3-8355-4a5608c9b78a&prid=5160fd29-1a79-43d7-b480-6bc5595931ca>
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. Falmer Press.
- The Air University Catalog: 2012-2013*. (2012). Air University Press.
- The Air University Catalog: 2020-2021*. (2020). Air University Press.
- The Air University Catalog: For Sessions 1947-1948*. (1948). 2(1).
- Thorndike, E. L. (1912). *Education, A First Book*. The Macmillan Company.
- Tsai, W., & Ghoshal, S. (1998). Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Journal*, 41(4), 464–476. <https://doi.org/10.2307/257085>
- Vogel, B., Reichard, R. J., Batistič, S., & Černe, M. (2021). A bibliometric review of the leadership development field: How we got here, where we are, and where we are headed. *The Leadership Quarterly*, 32(5), 101381. <https://doi.org/10.1016/j.leaqua.2020.101381>
- Von Kármán, TH. (1945). *Toward new horizons: A report to General of the Army H.H. Arnold, submitted on behalf of the A.A.A. Scientific Advisory Group*.

- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wertz, F. J. (Ed.). (2011). *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry*. Guilford Press.
- Williams, B., S. (2010). Heuristics and Biases in Military Decision Making. *Military Review*.
- Wilson, P. H. (Peter H. (2007). Defining Military Culture. *The Journal of Military History*, 72(1), 11–41. <https://doi.org/10.1353/jmh.2008.0041>
- Zajonc, R. B. (1980). Feeling and Thinking: Preferences Need No Inferences. *American Psychologist*, 35(2), 25.
- Zajonc, R. B. (1981). A one-factor mind about mind and emotion. *American Psychologist*, 36(1), Article 1. <https://doi.org/10.1037/0003-066X.36.1.102>
- Zajonc, R. B. (1984). On the primacy of affect. *American Psychologist*, 39(2), 117–123. <https://doi.org/10.1037/0003-066X.39.2.117>
- Zimmerman, B. J., & Schunk, D. H. (Eds.). (2003). *Educational psychology: A century of contributions*. L. Erlbaum Associates.

## **Appendices**

### **Appendix A**

#### **Recruitment Script**

Good \_\_\_\_\_, (Morning, Afternoon, Evening)

I am wrapping up my final year as a PhD student at the University of Tennessee, Knoxville. For my dissertation research, I will be conducting a study on Emotion, Transformative Learning, and United States Air Force Leader Development. I am working to understand the relationship between emotion and leader development in the Air Force and am hoping to gain more insight into this relationship through your perspective. I have purposefully chosen you because I believe you have the insights, knowledge, and experience required to understand how the narratives of retired Air Force commanders shape leader development experiences and emotions throughout a career in the Air Force. If possible, I would like to conduct 2 to 3 interviews lasting 1 to 1.5 hours each at your convenience via the Zoom teleconferencing computer application. Please let me know if you would be interested in participating in this study by the requested reply date of day/month/year.

If you have any questions regarding the research or anything regarding this process, please do not hesitate to reach out to me using any of the contact information below. I can be reached anytime and will make myself available at your convenience to answer any questions. I look forward to hearing from you.

Very Respectfully,

Nick Cary  
Ph.D. Student, Educational Psychology & Research, Adult Learning  
University of Tennessee  
Knoxville, TN  
Email: ncary1@vols.utk.edu  
Cell: 850-293-5615

Personal Zoom Link: <https://tennessee.zoom.us/my/ncary1utk2024>

## **Appendix B**

### **Consent Cover Letter**

Good \_\_\_\_\_, (Morning, Afternoon, Evening)

I'd like to make sure you have everything you need to make an informed decision on whether or not you'd like to participate in my dissertation research. This study aims to understand how the narratives of retired United States Air Force commanders shape their leader development experiences and emotions throughout their careers. This will involve conducting 2 to 3 interviews lasting 1 to 1.5 hours each at your convenience using the Zoom teleconferencing computer application. Additionally, I have reached out to you specifically for participation based on your meeting the following criteria:

- Retired from active-duty Air Force service.
- Traditional 20-year service commitment required for retirement from military service.
- Held the formal position of Air Force commander.

In short, you have the knowledge, experience, perspectives, and leadership expertise required to gain an understanding of the intersection of emotion, transformative learning, and Air Force leader development. If you are still interested in participating in this study, I have attached an informed consent letter for your review and signature and a short demographic questionnaire for you to fill out if you are comfortable doing so. If you have any questions regarding the research, informed consent form, demographic questionnaire, or anything regarding this process, please do not hesitate to reach out to me using any of the contact information below. I can be reached anytime and will make myself available at your convenience to answer any questions or provide assistance throughout this process. Also, if you would like to contact my research

advisor for this study, Dr. Mitsunori Misawa, he can be reached via email at [mmisawa@utk.edu](mailto:mmisawa@utk.edu) or phone at 865-974-5440. I look forward to hearing from you.

Very Respectfully,

Nick Cary  
Ph.D. Student, Educational Psychology & Research, Adult Learning  
University of Tennessee  
Knoxville, TN  
Email: [ncary1@vols.utk.edu](mailto:ncary1@vols.utk.edu)  
Cell: 850-293-5615  
Personal Zoom Link: <https://tennessee.zoom.us/my/ncary1utk2024>

## Appendix C

### Informed Consent Form

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#### Consent for Research Participation

**Research Study Title:** Emotion, Transformative Learning, and United States Air Force Leader Development

**Researcher(s):** Nicholas Cary, University of Tennessee, Knoxville; Dr. Mitsunori Misawa, University of Tennessee, Knoxville

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#### Why am I being asked to be in this research study?

I am asking you to be in this research study because you are a retired Air Force commander with 20 or more years of leadership experience in the military.

#### What is this research study about?

This study aims to understand how the narratives of retired United States Air Force commanders shape their leader development experiences and emotions throughout their careers.

#### How long will I be in the research study?

If you agree to be in the study, your participation will last no more than 4.5 hours and will involve no more than 3 interviews over a 1-month period.

#### What will happen if I say “Yes, I want to be in this research study”?

If you agree to be in this study, I will ask you to talk about your experiences as an Air Force leader. I’d like to know about any significant life experiences that profoundly changed how you think of leadership, followership, or who you are as a person.

To do this, I’ll conduct a recorded interview using Zoom at times and dates that are convenient for you.

#### What happens if I say “No, I do not want to be in this research study”?

Being in this study is up to you. You can say no now or leave the study whenever you want.

Either way, your decision will not affect your relationship with us, the researchers, or the University of Tennessee.

#### What happens if I say “Yes” but change my mind later?

Even if you decide to be in the study now, you can change your mind and stop at any time.

If you decide to stop before the study is completed, just email Nicholas Cary at [ncary1@vols.utk.edu](mailto:ncary1@vols.utk.edu) Dr. Mitsunori Misawa, at [mmisawa@utk.edu](mailto:mmisawa@utk.edu) and us know. All interview and related information will be deleted and removed from the study. If the study is at a point where the data is de-identified and the code key to interpret the data has been destroyed, I will let you know that too. At this point, the information will have been submitted or published and cannot be tied back to you, but with that being said, we will do everything we can to delete and remove any information you have provided even in the latest stages of the study.

### **Are there any possible risks to me?**

It is possible that someone could find out you were in this study or see your study information, but we believe this risk is small because of the procedures we use to protect your information. These procedures are described later in this form.

Other possible risks include psychological trauma brought up when reflecting on significant life experiences. We believe the risk for this is minimal but will provide links and contact information for psychological services during each interview and upon request.

### **Are there any benefits to being in this research study?**

We do not expect you to benefit from being in this study. Your participation may help us to learn more about the intersection of emotion and military leader development. We hope the knowledge gained from this study will benefit the adult learning and leadership fields and others in the future.

### **Who can see or use the information collected for this research study?**

We will protect the confidentiality of your information by limiting recorded interviews and associated data to a single computer and backup drive kept in a secured location.

If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information or what information came from you. Although it is unlikely, there are times when others may need to see the information we collect about you. These include:

- People at the University of Tennessee, Knoxville, who oversee research to make sure it is conducted properly.
- Government agencies (such as the Office for Human Research Protections in the U.S. Department of Health and Human Services), and others responsible for watching over the safety, effectiveness, and conduct of the research.
- If a law or court requires us to share the information, we would have to follow that law or final court ruling.

### **What will happen to my information after this study is over?**

We will not keep your information to use for *future research or other purposes*. Your name and other information that can directly identify you will be deleted from your research data collected as part of the study.

We will not share your research data with other researchers.

### **Will I be paid for being in this research study?**

You will not be paid for being in this study.

### **Will it cost me anything to be in this research study?**

It will not cost you anything to be in this study.

### **What else do I need to know?**

*Because of the small number of participants in this study, it is possible that someone could identify you based on the information we collected from you.*

If we learn about any new information that may change your mind about being in the study, we will tell you. If that happens, you may be asked to sign a new consent form.

We use procedures to lower the possibility of psychological trauma caused by reflecting on significant life and learning experiences from happening. Even so, you may still experience problems or trauma, even when we are careful to avoid them. Please tell the researcher in charge, Dr. Mitsunori Misawa at 865-974-5440 or Nicholas Cary at 850-293-5615, about any issues or other problems that you have during this study.

If psychological trauma occurs, and you require immediate assistance, please contact 911. You can also receive urgent specialized mental health support through Tricare Mental Health Care. They can be reached by calling or texting 988, or via online chat at <https://988lifeline.org/>. If it is not an emergency, you can make an appointment with a Tricare mental healthcare professional at <https://tricare.mil/CoveredServices/Mental/MentalHealthAppts>. Other mental health services are provided by the Department of Veteran Affairs through <https://www.va.gov/health-care/health-needs-conditions/mental-health/>, which provides a list of ways to access their services.

The University of Tennessee does not automatically pay for medical claims or give other compensation for injuries or other problems.

**Who can answer my questions about this research study?**

If you have questions or concerns about this study, or have experienced a research related problem, contact the researchers, Nicholas Cary, at email [ncary1@vols.utk.edu](mailto:ncary1@vols.utk.edu), and cellphone at 850-293-5615 or Dr. Mitsunori Misawa, at email [mmisawa@utk.edu](mailto:mmisawa@utk.edu), and cellphone at 865-974-5440.

For questions or concerns about your rights or to speak with someone other than the research team about the study, please contact:

Institutional Review Board  
The University of Tennessee, Knoxville  
1534 White Avenue  
Blount Hall, Room 408  
Knoxville, TN 37996-1529  
Phone: 865-974-7697  
Email: [utkirb@utk.edu](mailto:utkirb@utk.edu)

***STATEMENT OF CONSENT***

I have read this form and the research study has been explained to me. I have been given the chance to ask questions and my questions have been answered. If I have more questions, I have been told who to contact. By signing this document, I am agreeing to be in this study. I will receive a copy of this document after I sign it.

\_\_\_\_\_  
Name of Adult Participant

\_\_\_\_\_  
Signature of Adult Participant

\_\_\_\_\_  
Date

## Appendix D

### Demographic Questionnaire

The following demographic questions are for research purposes only. You do not have to answer any questions you do not want to answer or are uncomfortable answering. Moreover, this information may be used for further analysis to understand the influence of the various factors below on emotion and leader development in the Air Force. Furthermore, this and all information collected for this study will remain anonymous.

1. What is your age?
2. What is your gender identity?
3. What is your ethnic identity?
4. What was your commissioning source?
5. What year did you join the Air Force?
6. How many years did you serve in the Air Force?
7. What year did you retire from the Air Force?
8. What Air Force command positions have you held? (i.e. squadron command, group command, wing command, etc.)

If you have any questions regarding these questions, the research, or anything regarding this process, please do not hesitate to reach out to me using any of the contact information below. I can be reached anytime and will make myself available at your convenience to answer any questions or provide assistance throughout this process. Also, if you would like to contact my research advisor for this study, Dr. Mitsunori Misawa, he can be reached via email at [mmisawa@utk.edu](mailto:mmisawa@utk.edu) or phone at 865-974-5440. I look forward to hearing from you.

Very Respectfully,

Nick Cary  
Ph.D. Student, Educational Psychology & Research, Adult Learning  
University of Tennessee  
Knoxville, TN  
Email: [ncary1@vols.utk.edu](mailto:ncary1@vols.utk.edu)  
Cell: 850-293-5615  
Personal Zoom Link: <https://tennessee.zoom.us/my/ncary1utk2024>

**Appendix E**  
**Interview Protocol**

**INTERVIEW GUIDE**

Emotion, Transformative Learning, and United States Air Force Leader Development

**PURPOSE AND RESEARCH QUESTIONS:**

This study aims to understand how the narratives of retired United States Air Force commanders shape their leader development experiences and emotions throughout their careers.

The research questions that will guide this study are:

1. How do Air Force leaders experience leader development?
2. In what ways do Air Force leaders experience emotion in their leader development experiences?
3. What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

**SCRIPT:**

It has been a while, so for the sake of formality, my name is Nick Cary. I am a doctoral student at the University of Tennessee, Knoxville, and am conducting interviews for my dissertation on emotion, transformative learning, and United States Air Force leader development. This interview will last approximately 60 minutes, and participation is completely up to you. If you feel uncomfortable at any time or change your mind about participating in this study, I will stop the interview and can delete what we have collected up to that point if you wish. If you have any questions or want any clarification at any time, please do not hesitate to ask. I also want to remind you that these interviews will be recorded and transcribed for analysis, but any identifying information will be removed and kept confidential. Are these terms acceptable? I

would also like to confirm that the consent letter has been read and signed by you. (Once confirmed) Are you ready to begin?

**RESEARCH QUESTION 1: How do Air Force leaders experience leader development?**

1. Can you briefly share the reasoning behind joining the Air Force?
2. What did you think life would be like in the Air Force?
  - a. How did you feel about joining?
  - b. What did you think about leadership at the time?
3. Tell me about a significant experience, either personally or professionally, that changed the way you view, understand, or practice leadership.
  - a. What about the experience(s) stands out to you most?
  - b. What do you remember feeling about the experience(s)?
    - i. Think back on the experience(s), how do you feel now?
4. What do you think helped you develop most as a leader in the Air Force and the reason behind this?

**RESEARCH QUESTION 2: In what ways do Air Force leaders experience emotion in their leader development experiences?**

1. Thinking back on your career in the Air Force, tell me about a leadership experience that really sticks out to you.
  - a. Can you explain the reason behind this particular experience standing out to you?
  - b. How did you feel during this experience?
  - c. What did you learn or take away from the experience?
2. What role do you think emotions played in your development as a leader?

**RESEARCH QUESTION 3:** What strategies do Air Force leaders use to process the intersection of leader development and emotion in the Air Force context?

- a) Tell me about how your thoughts on leadership changed over the course of your Air Force career.
  - a. What is the reason behind your thoughts on leadership changing?
  - b. How did you cope with these changes as a leader?
  - c. How did you feel during these times of change?
    - i. What drove these feelings?

**FINAL QUESTIONS:**

1. Is there any further information that you would like to share that we have not covered?
2. Do you have any questions before we end this interview?

Thank you for taking the time to meet and discuss your Air Force leadership and development experiences, and emotions with me. I really appreciate your insights and perspectives. Once we are done here, I will transcribe this interview and email you a copy to make sure it is accurate. If you have any questions, need clarification, or want to reach out at any time to add anything, provide feedback, or anything else, please don't hesitate to do so. Also, If you feel that psychological trauma has occurred and you require immediate assistance, please contact 911. You can also receive urgent specialized mental health support through Tricare Mental Health Care. They can be reached by calling or texting 988 or via online chat at <https://988lifeline.org/>. If it is not an emergency, you can make an appointment with a Tricare mental healthcare professional at <https://tricare.mil/CoveredServices/Mental/MentalHealthAppts>. Other mental health services are provided by the Department of Veteran Affairs through

<https://www.va.gov/health-care/health-needs-conditions/mental-health/>, which provides a list of ways to access their services.

**Appendix F**  
**Code Book Sample**

Themes	Categories & Subcategories	Codes (Sample)
1. A transformative leadership lab	a) Aim High, Joining the Air Force b) The unforgettable lessons c) Emotion and Experience i. Control your emotions	i. Why I served, learning from experience & observation, adventure, pride, tuition assistance, financial stability ii. TL experiences, anxiety, confusion, frustration, betrayal, anger, regret, shame, fear, Support from leadership, growth mindset, openness to learn, leadership is a journey iii. Emotion & learning, control your emotions, self-awareness
2. It takes a village	a) Leader development b) Coping for life, leadership, & development c) Trust me	i. Learning from experience & observation, growth mindset, help along the way, control your emotions, ii. Talking to others, faith, openness to learn, counseling, support from others iii. Trust from leadership, support from leadership, power of trust, lack of trust, loss of trust, fragility of trust
3. Holistically nurturing excellence	a) Key to growing our capacity to lead b) Balance in leadership & life	i. Experience, PME ii. Balance, leaders are human too, people are not robots, work/life boundaries

<p>4. Leadership and military service come at a price</p>	<p>a) The emotional toll b) Leadership is about...</p>	<p>i. Stress, commander's responsibility, weight of responsibility, draining, suffering in silence ii. Leadership is about taking care of people, growth mindset, knowing the people you lead is important, enforcing the standards matters, trusting your people</p>
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# Appendix G

## IRB Approval Letter



March 22, 2024

Mitsunori Misawa, Ph.D.  
UTK - Coll of Education, Hlth, & Human - Educational Leadership & Policy Studies

Re: UTK IRB-24-08115-XP  
Study Title: Emotion, Transformative Learning, and United States Air Force Leader Development

Dear Mitsunori Misawa:

The UTK Institutional Review Board (IRB) reviewed your application for the above referenced project. It determined that your application is eligible for expedited review under 45 CFR 46.110(b)(1), categories (6) and (7). The IRB has reviewed these materials and determined that they do comply with proper consideration for the rights and welfare of human subjects and the regulatory requirements for the protection of human subjects.

Therefore, this letter constitutes full approval by the IRB of your application (Version 1.1) as submitted, including:

**Documents Stamped:**

- 3. Informed Consent Letter\_v 2.0 - (Version 2.0)
- 5. Interview Protocol\_v 2.0 - (Version 2.0)
- 1. Recruitment Script Email and Individual Social Media messages\_ 2.0 - (Version 2.0)
- Journaling Activity Instructions - (Version 1.0)
- UT Vault - Secure Courier Registration Instructions - (Version 1.0)
- Demographic Questionnaire (English) - (Version 1.0)

That have been dated and stamped IRB approved. You are approved to enroll a maximum of 8 participants. Approval of this study will be valid from 03/22/2024 to 03/21/2025.


Any revisions in the approved application, consent forms, instruments, recruitment materials, etc., must also be submitted to and approved by the IRB prior to implementation. In addition, you are responsible for reporting any unanticipated serious adverse events or other problems involving risks to subjects or others in the manner required by the local IRB policy.

Finally, re-approval of your project is required by the IRB in accord with the conditions specified above. You may not continue the research study beyond the time or other limits specified unless you obtain prior written approval of the IRB.

Institutional Review Board | Office of Research & Engagement  
1534 White Avenue Knoxville, TN 37996-1529  
865-974-7697 865-974-7400 fax irb@utk.edu

**BIG ORANGE. BIG IDEAS.**  
Flagship Campus of the University of Tennessee System

Sincerely,



Lora Beebe, Ph.D., PMHNP-BC, FAAN  
Chair

Institutional Review Board | Office of Research & Engagement  
1534 White Avenue Knoxville, TN 37996-1529  
865-974-7697 865-974-7400 fax irb.utk.edu

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Flagship Campus of the University of Tennessee System 

## **Vita**

Nicholas Cary grew up as a Marine Corps dependent for most of his childhood and joined the Marine Corps himself, where he served as an avionics technician and instructor. During this time, he found a passion for teaching and developing others. After nine years, he transitioned from the Marine Corps to the Air Force, where he serves today. Since joining the Air Force, Nicholas has sought out and served in multiple teaching positions, including as an electronic warfare officer instructor in operational flying squadrons and a formal training unit and as an instructor at the Air Force Squadron Officer School. He has found profound growth and development in education and hopes to pass this on to future generations.