

The Impact of Military Occupational Specialty Training on the Trait Development of Marines

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Abstract

The U.S. Marine Corps expends extensive effort to instill its core values into marines. The process of transforming civilians into marines begins with recruiting select members and continues with entry-level training, commonly referred to as boot camp. However, the Marine Corps does not expect marines to leave boot camp with fully formed identities and values orientations. These characteristics, which are also classified as traits and professional military attributes, develop with sustained effort over time. Drawing on these characteristics, this mixed-method study measured the four dependent variables of honor, courage, critical thinking, and marine identity, to determine whether experiences at military occupational specialty (MOS) schools sustain the basic-level marine transformation process begun during boot camp. A sample of 231 U.S. marines were interviewed across four MOS schools. While research has examined the relationships between values and attitudes, behavior, and decision-making, little is known about when and how values influence critical thinking; the complex nature of value structures has been neglected. The

research questions were measured using quantitative pre- and posttests. In addition, the posttest consisted of six qualitative, open-ended questions, contributing to data confirmation and deeper insights around the constructs. The quantitative results revealed an increase in both honor and marine identity scale scores between pretest and posttest for all marine students. The critical thinking and courage scales were unchanged by the experience at MOS schools. These results suggest that the MOS schools sustain, and in some instances, enhance transformation to marines after boot camp and also provide further insight into the within-person stability of these scales, both over time and in context.

The U.S. Marine Corps expends extensive effort to instill its core values into marines. The process of transforming civilians into marines begins with recruiting select members and continues with entry-level training, commonly referred to as boot camp. However, the Marine Corps does not expect marines to leave boot camp with fully formed identities and values orientations. These characteristics, which are also classified as traits and professional military attributes, develop with sustained effort over time.

Becker (2013) provides empirical evidence that informs and deepens our understanding of the effectiveness of values inculcation and identification that occurs during Marine Corps boot camp and the Crucible. The Crucible is the fifty-four-hour boot camp capstone event consisting of forty miles of forced marches, and thirty-two stations that test physical toughness and mental agility. His study measures the effects of the Crucible on the four variables of honor, courage, critical thinking, and identity through the lens of the socialization process occurring during boot camp. His study reveals measurable and statistically significant gains in the recruits' values orientations and identities, attributable to the recruit training socialization process from entry processing to completion.

However, the Marine Corps recognizes that marines do not emerge from boot camp with fully formed core values and marine identities. Established or inherently desirable states can atrophy into less-than-desirable states. Sustaining transformations requires investments of energy and engaged leadership; when exposed to undesirable external influences, many marines' developments naturally decline or erode (Boyatzis, 2006). As continued formation and sustainment efforts are required, the Marine Corps will continue to ask if transformation is sustained.

This article seeks to determine if and how the experience of the four military occupational specialty (MOS) schools offered at the Marine Corps detachment on Fort Leonard Wood, Missouri, reinforces and sustains the basic-level marine transformation process. A mixed methods study was used to measure four dependent variables: honor, courage, critical thinking, and marine identity. This article provides



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guidance for strategies using experiential forms of adult development, training, and education, to aid senior leaders in designing and executing future training programs that enhance member development and engagement.

Broad research has examined the relationships among values and attitudes, behavior, and decision-making. However, little is known about when and how values influence critical thinking (Verplanken & Holland, 2002), and even less is known about how deep-structured values and identity influence critical thinking (Horton et al., 2014). The limited research to date has explored the influence of a single value, while the complex nature of value structures has been neglected (Connor & Becker, 2003).

This study builds on previous studies that explain or support the processes at work to acquire and maintain marine identity and value traits (Ibarra, 1999; Riketta et al., 2006; Tajfel, 2010). Additionally, the article reviews how leaders may activate identity and energize value-congruent behavior, and how critical thinking contributes to adult development.

Social Identity Theory

The literature on social identity theory offers the foundational insights around the relationships among values and attitudes, behavior, and decision-making. Notably, social identity theory provides a generative construct that addresses how identity and values influence the broader meaning of leadership and decision-making. Peo-

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ple tend to arrange themselves and others into various social groupings (Ashforth & Mael, 1989; Collinson, 2006). Social identity scholars argue there is more to the psychology of groups than the functionalist paradigm of understanding organizations as masses of individuals conducting themselves according to their own motivations (Tajfel, 2010). Social identity theory contributes significantly to social psychology's ability to describe cognitive, preference, and critical-thinking processes of group and organizational thinking.

Individuals claim discrete category memberships with varying degrees of importance to their self-concept. The degree of importance influences how people think, feel, and behave. In their quest to understand the antecedents and consequences of social identities, Hogg and Abrams (1988) develop numerous major conclusions, noting that because individuals simultaneously belong to multiple social categories, their social identity construct is uniquely complex. Hence, because self-construct of individuals depends on the category with which they identify, the fundamental question, "Who are we really?" can be answered in many ways and depends upon the context (Kramer, 2003).

Hogg and Abrams (1988) state that one or more social identities are present at the core of one's self-concept, and others contribute secondarily or peripherally. For example, some marines' central social identity is largely defined in terms of their professional identity, which facilitates common slogans like "Once a Marine, always a Marine." Other marines' service in the Corps may not be as significant. Thus, their social identities as marines may be marginal and bear less influence on how or what they value (Kramer, 2003). Central social identities are important to every individual, and they will be motivated to affirm their central identities when necessary. This need for affirmation drives cognitive, preference (values), and decision-making processes.

The salience of any particular social identity, central or peripheral, varies across social contexts and is cued by them. The cued peripheral social identity is dominant among other sub-identities. The recognition of this depth of available social identities is important for the executive leader to maintain and provide continually appropriate cues that trigger particularly desirable identities. In this manner, social identities are, or can be, transformed by the crucible of interpersonal experiences (Kramer, 2003).

Situated and Deep-Structured Social Identities

The extant literature, building off the social identity theory discussion, offers empirical and theoretical literature on the acquisition, maintenance or sustainment, and loss of identity and values. These insights contribute to our understanding around the developmental events and their use in the acquisition and sustainment of identity

and values, which are critical components to frame this study. Accordingly, at the end of this discussion, an examination of specific processes at work to acquire, maintain, and potentially lose marine identity and value traits are explored.

Identity

Identity bears significant emphasis in this study because it (a) provides an individual schema around which learning may be organized, (b) provides a foundation for an individual's motivational and subconscious guide that determines the extent to which an individual participates in developmental events, and (c) addresses an individual's personal narrative (Lord & Hall, 2005). As individuals mature, they not only rely increasingly on internal resources like identity to interpret their experiences but also tend to shift from individual to collective orientations.

The literature suggests that social identities exhibit either situated or deep-structured forms. One or more situational social identity may be prominent at any time and remain prominent as long as cues persist. While a situational social identity can be temporal and limited, a deep-structured social identity involves the transformation of one's self-construct, which includes characteristics (e.g., preferences and values), and more complex cognitive, emotional, and evaluative components. Once adopted or absorbed, a deep-structured social identity is more stable and less dependent upon prompts (Riketta et al., 2006). Because deep-structured social identities constitute a cognitive component of attachment (Riketta et al., 2006), they facilitate an enduring and readily available identity that evokes stronger emotion and evaluation than situated social identity. The transformation and maintenance of deep-structured social identities is essential to in-extremis organizations like the U.S. Marine Corps.

Within the literature, the construct of organizational commitment addresses a member's "emotional attachment to, identification with, and involvement in, the organization" (Allen & Meyer, 1990, p. 1). However, there is distinction between the constructs; commitment addresses effective and motivational strings of attachment that are not necessarily related to the self-construct (e.g., work variables such as reenlistments and performance). Conversely, social identity informs one's reactions to membership, whereas effective organizational commitment addresses reasons for maintaining a relationship with the organization (Meyer et al., 2007).

Self-Regulation

Self-regulation is the process of appropriately monitoring and adjusting thoughts, behaviors, and emotions (Day et al., 2009), and is an executive function of the self that depends upon "one's currently active identity, which may vary from individual,



to relational, to collective” (Lord & Hall, 2005, p. 596). Most novice leaders are sensitive to social feedback and are likely to emphasize their individual identities and need of recognition and acceptance (Lord & Hall, 2005). Intermediate leaders are increasingly able to shift focus from themselves to others and comprehend context connectionist networks. As intermediate leaders shift toward relational identities, their actual or implied presence may elicit unique self-regulatory processes (Lord & Hall, 2005). Although they may convey a credible image, basic-level marines do not possess a fully elaborated professional marine identity and have yet to fully internalize Marine Corps social norms and rules. They continue to have “inner conversations,” and their self-regulation remains vulnerable to undesirable influences.

The concepts of the possible and provisional self are types of self-schema that provide insight into self-regulation for basic-level marines. Day et al. (2009) identify the possible self as how someone desires to be or is afraid to be in the future. The possible self motivates how people behave and guides their pursuit of activities, and perhaps the values they reject or believe to be congruent. Ibarra (1999) suggests that individuals experiment with temporary and incomplete professional identities, called provisional selves, as they undergo life transitions. Kolb and Kolb (2009) explain that the concept of identity development has been further established and integrated with concepts relating to role modeling and experiential learning to explain the developmental process of creating and refining possible selves. First, individuals observe role models. Then, through active experimentation with the provisional self, individuals imitate the role model’s behavior, attitudes, routines, and impression management tactics. Finally, individuals evaluate the effectiveness of the provisional identity against internal assessments and social feedback. The greater the self-assessment, social feedback, and accompanying values are, the more congruent the identity fit and accompanying values will be.

Values

If values are considered a fundamental characteristic of identity, then when and how do values affect critical thinking? “When” and “how” can be asked with the realization that values prime different identities (Lord & Hall, 2005). Values are part of humankind’s deep-structured identity and direct thinking processes at an unconscious level. Values are not goals; instead, they are intimately connected with ethics (Stacey, 2012), and serve as reference points, aid in the construction of sophisticated understanding of contingencies, help establish priorities, and aid in discerning between good and bad, or appropriate and inappropriate (Johnson, 2012; Lord & Hall, 2005).

Values are cognitive; they assist in defining a situation and guiding actions (Lord & Hall, 2005; Verplanken & Holland, 2002). Values, however, are not prescribed or



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chosen; they are not consciously activated or rationally produced. Instead, values emerge in specific action contexts (Stacey, 2012) and develop through intense experiences and interactions with significant people. Therefore, both deep-structured values systems and deep-structured social identities are transformed, at least in part, in the crucible of interpersonal experiences (Kramer, 2003).

All branches within the armed forces have a primary means of instilling necessary cultural values and social identities that affect decision-making and behaviors within their personnel, such as the Code of Conduct and basic training regimens. For the U.S. Marine Corps, the primary means of indoctrinating a new member is boot camp (recruit training). In boot camp, recruits not only acquire knowledge about the Corps, but are also instilled with the cultural values of honor, courage, and commitment, along with the attitudes, customs, and courtesies of the Corps. Graduation from Marine boot camp is perhaps the defining moment in a marine's life. Nevertheless, while many values are culturally shared, all marines will differ in their personal prioritization and ranking of implicit values and marine identity, as values cannot be individually prescribed. An organization cannot attribute values to others, as this would form the identity, or self, of others. Values are emergent and require self-formation (Stacey, 2012). The task then becomes to facilitate members' mindsets to adopt new values and voluntarily act upon them. How might marines be brought to this willing state?

Deep-Structured Activation for Principled Values

Deep-structured social identity is the "taken-for-granted" value that develops principled problem definitions and underlies decision-making and action (Lord & Hall, 2005; Sharp, 1994). Although situated identities are required, they are insufficient to in-extremis organizations such as the U.S. Marine Corps (Meyer et al., 2007). Deep-structured social identities are preferable to organizations such as the U.S. Marine Corps because they are values-based, and therefore less dependent upon situational cues. They are more enduring and create a greater understanding of deep structures that define situational contingencies (Lord & Hall, 2005). However, the interest-based, unstable, and cue-dependent situated social identities can be transformed into deep-structured social identities. How are situated social identities transformed to deep structure? Once materialized, how are they sustained?

The literature provides numerous studies on the establishment and sustainment of situated social identities through the emphasis of (a) organizational successes, (b) external competition, (c) member-shared features, and (d) personal and organizational distinctiveness (Ashforth & Mael, 1989; Riketta et al., 2006). A review of the Marine recruit training instruction illustrates a concentrated effort on each of these stimuli. Further, such identities occur when situational cues make multiple so-



cial categories salient, causing the member to make comparisons, and resulting in self-categorization (Meyer et al., 2007). These cue-sensitive, temporary, and initial social identities are vulnerable to change as diverse categories become salient. The U.S. Marine Corps delineates its transformation process in five distinct phases: (a) recruitment, (b) recruit training, (c) cohesion, (d) sustainment, and (e) citizenship. As such, this study proposes that marines in the recruit and cohesion phases are not yet endowed with fully elaborated, deep-structured identities, and require value and identity “reinforcers” enabled through continued, planned, and experiential events to reinforce ways of acting they have not yet mastered.

As with knowledge structures, deep-structured social identity and values must be activated, but not all contexts influence the adoption of deep-structured identity and value development to the same extent (Tremblay et al., 2015). The critical factor in developing deep-structured identity and values is personal experience in varied relevant task environments (Lord & Hall, 2005). Further, as individuals gradually internalize the characteristics (e.g., preferences, values) of the social group, deep-structured social identities are more common among long-term members who have shared momentous events, where values have been the primary focus of attention to include crucibles, trigger events, and anchoring events. These values can continue long after the member has left the organization. Exposures to momentous events ingrain in members that one’s values also benefit the group (Meyer et al., 2007) as well as the sense of “oneness with or belongingness to the organization” (Ashforth & Mael, 1989, p. 34).

Leaders are responsible for arranging reinforcing events that can be particularly important to young adults, such as basic-level marines, who often have many active sub-identities; it is never easy to demarcate clear boundaries between inappropriate identities (Collinson, 2006). Examples of underdeveloped marine identity and values erosion that lead marines to behave according to an inappropriate sub-identity have produced strategic implications. One example includes the 2012 video of Marine snipers urinating on a Taliban member’s corpse. A second example is the 2017 scandal in which marines allegedly displayed demeaning and degrading content on social media, purportedly sharing nude photographs of female marines and openly harassing them.

Instrumental rationality and economic theories of critical thinking assume that members of an organization formulate their decisions through expectations and consequences, gaming them to arrive at the most beneficial and preferential outcomes. Social identity and values-based decision-making theories assume that organizational members will conduct sense-making by “identifying situations as matching identities, including the beliefs (facts) and norms (values) of an organization” (Torpman, 2004, p. 11).

While it is increasingly recognized that there are two important systems at work within critical thinking processes, namely the unconscious intuitive system and



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Table 1

Results of Paired Comparison t Tests on Sample

Variable	Before MOS School Experience	Before MOS School Experience	T	df	p
	M (SD)	M (SD)			
Honor	15.03 (3.50)	16.00 (3.89)	2.74	230	.007*
Courage	12.42 (2.10)	12.62 (2.17)	0.96	230	.344
Critical thinking	9.86 (2.24)	9.68 (2.33)	0.86	230	.393
Marine identity	20.87 (2.96)	21.52 (3.16)	2.38	230	.018*

Table 2

Analyses of Variance (ANOVA) Results for MOS School on Key Variables

Variable	R ²	Adj. R ²	F Ratio	p
Honor	.03	.01	2.23	.09
Courage	.01	.01	0.23	.84
Critical thinking	.03	.01	1.95	.12

the conscious analytical system, much cognitive processing occurs subconsciously. Equally, there are two important influences on both systems: marines' deep-structured social identity and marines' deep-structured values. However, academia has either neglected or limited the concern of social identity and values. Informed by the growing scholarly interest in identity itself, this study addresses the importance of how identity and values contribute to understanding this process.

Materials and Methods

This study involves a sample of 231 marines across four MOS schools of the Marine Corps detachment on Fort Leonard Wood, which graduates an average of 7,500 students annually and where one of every seven marines receives their MOS training. The four MOS schools consist of Motor Transport Instruction Company; Military Police Instruction Company; Engineer Equipment Instruction Company; and the Chemical, Biological, Radiological, and Nuclear Defense (CBRN) School.

Two quantitative research questions were measured in a pretest and posttest design at the beginning and end of MOS training using Becker's (2013) instrument. The two quantitative research questions were,



1. What effect did the MOS school experience have on the marine's identification with the U.S. Marine Corps traits of honor, courage, critical thinking, and marine identity?
2. Did the effect on traits of honor, courage, critical thinking, and marine identity differ by MOS school?

To explain and contribute insight to the statistical results, the posttest instrument was complemented by six qualitative, open-ended questions to provide data regarding how the marines viewed their MOS school experience, how they believed it affected them as individuals, how it reinforced what they had learned in boot camp, and its impact on their commitment to the Marine Corps and its central values. The qualitative questions asked were, What are the student perceptions of the MOS training experience at Fort Leonard Wood, Missouri, and how does this experience shape their identities as marines? How do these identities affect their values orientations?

Informed Consent

Because marines are expected to comply with requests from authorities, protections were afforded to the marines, who are viewed as a vulnerable population under the Department of Defense Instructions (DoDI 3216.02, 2011). The voluntary nature of their participation in the study was explained, and the data were collected using methods that ensured the marines understood they had a choice regarding whether to participate before providing their written informed consent. The institutional review boards at the University of Charleston and the Marine Corps, as well as the Marine Corps survey officer, approved this research and concurred that the research team was following required protocols for the protection of human subjects.

Results

Quantitative Results

To test Research Question 1, paired sample t-tests were conducted to compare marines' values and identities from two time periods: before and after the MOS school experience. The scores of honor and marine identity increased significantly, and scores for courage and critical thinking scores did not change (see Table 1).

To test Research Question 2, a one-way ANOVA was conducted to compare the posttest scales on the four MOS schools: Motor Transport, Military Police, Engineering Equipment, and CBRN. The results indicated no difference between the



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Table 3

Themes to Question 1 (N = 229)

	MITC	EEIC	MPIC	CBRN	
Theme	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	Total
Honor	42 (82)	36 (83)	26 (100)	9 (54)	87%
Courage	17 (29)	7 (23)	12 (46)	1 (8)	31%
Critical thinking	1 (2)	5 (17)	4 (15)	1 (8)	9%
Marine identity	28 (55)	25 (83)	26 (100)	8 (62)	73%

Table 4

Themes to Question 2 (N = 230)

	MITC	EEIC	MPIC	CBRN	
Theme	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	Total
Boot Camp	14 (12)	6 (13)	9 (24)	3 (15)	15%
The Crucible	59 (52)	16 (35)	17 (45)	7 (35)	41%
Boot Camp Leave	24 (22)	16 (35)	6 (16)	3 (15)	22%
Marine Combat Training	4 (4)	4 (7)	1 (3)	3 (15)	6%
MOS School	8 (7)	2 (4)	6 (16)	3 (15)	9%

schools on any of the tests (see Table 2). Quantitatively, the results confirm that the experience of the four MOS schools reinforces and sustains the basic-level marine transformation process, and the positive effects of the Crucible.

The qualitative strand of this research provided 1,364 responses from 231 respondents, providing rich insights into the marines' perspectives. Guest et al.'s (2013) two-phase analytic approach was performed on the responses. Phase 1 included a hypothesis-driven analysis that was confirmatory in purpose. Phase 2 included a content-driven, exploratory analysis that was inductive in its orientation. The marines indicated in varying degrees the importance of honor, courage, commitment, and other emergent themes, and supported their responses with examples of when and where these values were important.

Do You Like to Be Referred to as a Marine? Of the respondents, 216 affirmed they liked being called a marine, and 207 elaborated on why they like the title (see Table 3). This qualitative analysis parallels the quantitative results.

The respondents conveyed complex images of how they viewed themselves and believed others viewed them as marines. For example, a motor transport marine re-



Table 5*Themes to Question 3 (N = 229)*

Theme	MITC <i>n</i> (%)	EEIC <i>n</i> (%)	MPIC <i>n</i> (%)	CBRN <i>n</i> (%)	Total
Honor	8 (7)	12 (27)	8 (20)	7 (33)	15%
Courage	2 (2)	12 (27)	4 (10)	4 (19)	10%
Critical thinking	3 (2)	6 (13)	4 (10)	4 (19)	7%
Marine identity	29 (24)	22 (48)	23 (57)	12 (57)	38%
Adult learning	5 (4)	0 (0)	2 (5)	3 (14)	4%
Just training	13 (11)	1 (2)	3 (7)	1 (5)	8%

sponded, “I do, but I have not ‘accepted’ the title within myself, because I am still not the Marine I envisioned myself to be.”

The responses provided examples of how marines had accepted, renegotiated, and even rejected their Marine identities. While marine identity appears stable, it is viewed in terms of “not yet earned,” and as a potential self, or what one hopes to become. Marine identity is not viewed as an individual identity, but as a service identity, requiring significant honorable experiences. For example, a CBRN marine responded, “I love being called a Marine. There is so much history and honor and pride behind the name that sometimes I believe I don’t deserve to be called that until I see combat.”

The marines realize they have embarked on a career not yet mastered and are still engaged in active experimentation. They recognize they are expected to embody the marine identity, which requires a rite of passage (see Table 4).

Describe the Defining Moment That You Realized You Had Become a Marine. As expected, the defining moments in which these marines realized they were marines were during boot camp and the Crucible. However, 37% of the marines viewed becoming a marine as a process or journey. For example, a marine engineer replied, “Over time I slowly started to realize it. I saw the decisions I would now make and compare them to my past and take pride in them.”

When asked to identify the defining moment in which respondents realized they had become marines, 9% indicated that their recognition occurred during their MOS training. This suggests the MOS school experience involves an interaction in both psychological and social processes (see Table 5).

What Did the MOS School Experience Mean to You? Regarding an overall subjective observation of the MOS experience, 223 marines reported the school to be a positive experience, and six reported it was a negative one. The themes of identity as a marine, and vertical growth outside of acquiring MOS skills, were prevalent. For example, a CBRN marine reported, “With little oversight ... it is here I began to



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Table 6

Themes to Question 4 (N = 228)

	MITC	EEIC	MPIC	CBRN	
Theme	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	Total
Reduced commitment	7 (6)	2 (5)	2 (5)	5 (28)	7%
No effect on commitment	16 (14)	7 (16)	5 (12)	4 (22)	15%
Increased commitment	86 (79)	34 (80)	34 (83)	9 (50)	73%

Table 7

Themes to Question 5 (N = 219)

	MITC	EEIC	MPIC	CBRN	
Theme	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	Total
Everything taught	27(23)	23 (51)	21 (53)	8 (42)	7%
Marine identity	50 (43)	8 (18)	11 (28)	3 (7)	15%
Reinforced values	4 (3)	3 (7)	4 (10)	4 (22)	73%
Challenge	0 (0)	3 (7)	1 (3)	2 (11)	15%
Leadership	9 (8)	5 (11)	3 (8)	4 (22)	15%
It did not	19 (17)	4 (9)	2 (5)	3 (16)	15%

define, establish, and most importantly, implement the Marine lifestyle.” A motor transport marine responded, “It meant for me that I was finally taking life into my own hands and starting my journey as a Marine.”

The linkage between the MOS school experience and sustaining or developing identity is strong. However, the linkage between the MOS school and critical thinking is not.

How Did the MOS School Experience Affect Your Commitment to Being a Marine and Upholding Marine Corp Values? Of the respondents, 73% stated the MOS experience increased their commitment to be a marine and uphold Marine core values (see Table 6). A Marine engineer wrote, “Given the greater freedom, we have an opportunity to better learn who we are ourselves. Being able to make my own choices, I had to learn how to use my own judgment. I grew.” Another marine in motor transport said, “It taught me that no matter how long you’ve been in, you’ve never really ‘made’ it because you’ll always be a work in progress; you may be the best version of yourself so far but there’s always room for you to grow/learn and seek self-improvement.”



Table 8*Themes to Question 6 (N = 229)*

Theme	MITC <i>n</i> (%)	EEIC <i>n</i> (%)	MPIC <i>n</i> (%)	CBRN <i>n</i> (%)	Total
Honor	20 (17)	9 (19)	3 (7)	6 (29)	18%
Courage	15 (13)	11 (23)	6 (15)	5 (24)	21%
Critical thinking	3 (2)	1 (2)	2 (5)	0 (0)	4%
Marine identity	78 (65)	24 (52)	28 (68)	9 (43)	78%
Leadership	2 (2)	4 (9)	0 (0)	0 (0)	3%
Other	1 (1)	1 (2)	1 (2)	1 (5)	2%

The themes of commitment to being a marine and organizational values were strong among all four MOS schools. However, seven percent of the respondents indicated that their MOS school experience did not positively affect their commitment to be a marine and uphold the core values. Most of these individuals expressed disappointment in the lack of warrior culture, and those themes centered on social engineering efforts (see Table 7).

How Did the MOS School Experience Reinforce What You Had Already Learned During Boot Camp? The analysis revealed that all four MOS schools broadly reinforced lessons learned from boot camp, marine identity, and leadership development. For example, a military police marine said it

Helped me “settle into” myself as a Marine. Instead of instilling discipline, the MOS school developed discipline by giving junior Marines responsibility and taking off the training wheels—we study on our own or we fail on our own. No one holds our hand.

Another wrote,

We had to make the right choices, we had to put in effort when no one was forcing us to. I feel as if I saw the fruits of my labor while others saw consequences. The MOS school was the first time it was on us and only us.

The analysis showed that 15% said that the MOS school experience did not reinforce lessons learned in boot camp.

Commenting on this, one CBRN marine wrote, “The school was too soft, too slow.”



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Describe What It Means to You to Be a U.S. Marine. The most important theme and triangulation to the quantitative analysis stems from this question. Table 8 illustrates responses to this question. This triangulation suggests a high degree of congruence between their provisional construction and conceptualization of the kind of marine they are and the kind of marine they hope to be. Being a marine is about identity that is supported by honor and courage. Identity congruence is important because if it is self-justified, it is more likely to become internalized and deeply structured. Obligation to convey role identity will likely remain situated, if not discarded. This perspective is supported by Day et al. (2009), who suggest that leadership and identity are processes and not positions. Finally, here, there is a weak linkage between individual respondents' views of what it means to be a marine and critical thinking.

The literature suggests that when people adapt to new roles or are in a period of transition, they adapt to these new roles by experimenting with provisional selves, which serve as trials for possible but not fully elaborated identities. In the study, the marines reveal themselves provisionally; that is, being a marine is not necessarily how they view themselves, but how they hope others view them or who they hope to become. The marines in this study tend not to view identity in a historical construct but rather as a service identity, predicated by important prior experiences (combat) or as something they are doing.

Marines clearly acknowledge and reveal they are professionally immature, are immersed in a life requiring complex mannerisms, social customs, and courtesies, which clearly, they have not yet mastered. They are still developing their values and understanding how to live within them. To become fully elaborated and deeply structured, the marines will require continued cues and separation from their civilian identities and the incorporation of who they hope to become.

Discussion

There is convincing evidence that the four MOS schools sustain, and in some instances, enhance the transformation process in powerful and important ways. Further, the expectations of marines regarding MOS skill development and knowledge acquisition were met through the MOS school experience. However, while 26% of the marines reported increased critical thinking skills in the qualitative data, the quantitative data suggests otherwise. Consequently, the most novel outcome of this study is the realization that harnessing the potential of critical thinking and internalizing the Corps' central values is necessary for individual marines, and as early in their careers as possible. There is evidence to suggest that this is the ideal time to transcend and increase cognitive development within the instruction programs.

In Qualitative Question 3, the marines expressed dissatisfaction toward the behaviorism learning theory in which they are viewed as passive, and are merely re-



quired to respond to environmental stimuli, resisting the perspective that learning is something done to them. The qualitative strand revealed marine calls for both constructivism and cognitivist paradigms, wherein the learner is viewed as an information constructor and processor.

Recommendations

Marines only remember what they process and refer to upon. This is also true with self-regulation and internalization of core values. Learning and values inculcation must be processed to exist psychologically. This study suggests there is an exciting frontier in the marine transformation process that links MOS school training integrated with vertical development initiatives. It is likely that the marines' self-recognition of the need for vertical development would be a powerful catalyst to assist in curriculum development. These findings affirm the need for adult learning methods that engage the student marines' vertical development in addition to the horizontal MOS skill development; for example, beginning each training day with a period of reflexivity and evaluation.

The MOS instructors possess the occupational experience and skill set, but as a potential issue, this research suggests they are undeveloped in basic understanding of adult learning theory. To enhance the transformation and values orientation, it is clear the MOS schools must provide further educational opportunities for their MOS instructors. This finding presents an opportunity for future research regarding curriculum design within the MOS school environment with respect to enhancing vertical development. This study also suggests replication of this study within other MOS schools, to capture the progression and maturation of marines as their experience in the Marine Corps increases and as they have experiences in the operating forces.

Additionally, 22% of the respondents indicated that boot camp leave provided their defining moment in the realization of becoming a marine, while another 7% revealed they had lost their identities as marines and returned to their civilian identities. It appears that boot camp leave contributes more significantly to the transformation experience than has been previously suggested and may warrant additional attention. One suggestion might be greater linkage or a "hot hand-off" between the recruiter, members of the Marine Corps League, or even retirees, and the newly minted marine while home on leave.

Conclusion

This study investigates the efficacy of MOS schools in reinforcing and sustaining the basic-level Marine transformation process. It evaluates two different benchmarks in the MOS school experience: arrival at the Marine Corps detachment and during



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the marines' final week of training. Overall, the results reveal significant growth in honor and identity as a marine, and sustainment of the values of critical thinking, and courage across all four schools. As expected, marines increasingly draw on internal resources such as identities, values, and mental representations of both situations and expectations of marines during their developmental transition. Clearly, the trait development of marines must continue after boot camp.

The average age of the respondents was 21 years old. As such, their identities, values orientations, and internal compasses remain strongly cued by the opinions of others and are easily swayed or influenced by what they believe others want to hear. The marines at MOS schools still sense the tension between their yearning for their prior civilian identities and the distinctness of being a marine. They are in a state of transition. Their one year of service has not fully erased their 19 or 20 years of civilian identities, and they are still entering something new.

Working with other marines has always been the method of the Marine Corps leadership school, operating on the assumption that if one shows marines what good leadership looks like, those marines will be good leaders. However, until there is a greater focus on critical thinking, and vertical development is integrated into the MOS program of instruction, the most difficult challenge for marines will continue to be the limitations of the way marines “make meaning” at their current level of development.

Limitations

This study considers only four of over 32 military occupational schools. The disparity between the number of respondents and schools (MTIC 124 or 54%–CBRN 19 or 8%) makes it hard for relevant and accurate conclusions with respect to Hypothesis 2.

Finally, challenges exist in the application of these findings to all marines and leaders due to their different lives and learning experiences (Day et al., 2009). Variables such as prior exposures may increase or decrease feelings of intensity or stress responses as well as sex, cultures, and other demographic variables, all of which will cause different interpretations of the events. ❧

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