



Research Note 2014-01

**Soldier Development Following Negative
Cross-Cultural Experiences:
An Integrated Review of the Literature**

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**United States Army Research Institute
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SOLDIER DEVELOPMENT FOLLOWING NEGATIVE CROSS-CULTURAL EXPERIENCES: AN INTEGRATED REVIEW OF THE LITERATURE

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SOLDIER DEVELOPMENT FOLLOWING NEGATIVE CROSS-CULTURAL EXPERIENCES: AN INTEGRATED REVIEW OF THE LITERATURE

I. INTRODUCTION

The development of cross-cultural skills is a crucial component of effective Soldier performance. These skills, which encompass the capacity to communicate with others, negotiate, and regulate one's emotions, not only aid Soldiers in accomplishing their missions overseas, but also facilitate adaptation and reduce the negative effects of stress and culture shock (see Abbe, Gulick, & Herman, 2007 for a review). While there are a number of formal ways by which the Army trains and educates Soldiers to be cross-culturally competent, others suggest that the best way to develop mission-essential cross-cultural skills is through informal training; that is, through hands-on experience with people from other cultures.

The impact of multicultural experiences on skill development and performance is not a new concept. Several studies, focusing largely on the psychosocial adjustment of expatriates and students living abroad, have examined the role cross-cultural experiences play in the development of more culturally savvy individuals. The prevailing conclusion drawn from this research is that the more frequently individuals engage in or are exposed to cross-cultural experiences, the more open and culturally competent they are likely to become (Abbe, et al., 2007; Benet-Martínez, Lee, & Leu, 2006). This conclusion parallels theories such as the mere exposure effect (Zajonc, 1968; Bornstein, 1989), which posit that the longer an individual is exposed to or in contact with something, the more positively it is perceived. As critics of the mere exposure effect have noted, however, simply exposing an individual to another person or phenomenon does not always lead to positive results. In fact, exposing someone to a person or phenomenon that he or she initially perceives to be negative will generate even greater dislike than was present in the first place (Swap, 1977).

Given that cross-cultural experiences, like people and phenomena, are not monolithically positive in nature, it stands to reason that the relationship between multicultural exposure and skill development may not be as straightforward as originally thought. Indeed, some studies have shown that prior cross-cultural experience exerts little to no influence on adaptation, performance, or skill development (Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005; MacNab & Worthley, 2012), whereas others have suggested that different experiences may affect adaptation or performance in different ways (Takeuchi, Tesluk, Yun, & Lepak, 2005). While these findings help to illuminate (or perhaps complicate) the potential relationship between multicultural experiences and skill development, they, again, do not specify the types of experiences in which participants are engaging. One could hypothesize, for example, that the number of positive or neutral cross-cultural experiences one encounters exerts little impact on one's level of cross-cultural competence; at the same time, however, negative cross-cultural experiences may hinder one's willingness to learn about and interact with other cultures and,

subsequently, one's ability to develop cross-culturally relevant skills. This latter point is of particular concern for Soldiers who, given the nature of their job and mission, are often faced with negative cross-cultural situations, yet are expected to continue learning and performing effectively in spite of those situations.

Unfortunately, very few studies have been conducted that examine the role of negative cross-cultural experiences on performance and skill development; even fewer studies have examined this relationship within a military context. The purpose of the present report is to provide a preliminary examination of how negative cross-cultural experiences influence Soldiers. Specifically, this report will address the psychological, sociological, and organizational conditions that may impact how Soldiers perceive and process negative experiences, as well as the extent to which Soldiers can continue to develop and hone their cross-cultural skills following such experiences. The first section will discuss a number of precursory conditions that may serve to either facilitate or hinder one's ability to learn and develop from negative cross-cultural experiences. The second section explores in situ processing of the negative experience; that is, the types of cognitive processes that are likely to impact learning and skill development while the event is taking place. The third and final section addresses the ways by which Soldiers may begin to recover from a negative cross-cultural experience once it has already occurred. The report will conclude with a brief discussion of potential directions for future research.

II. ANTECEDENTS

Much of an individual's reaction to an event is determined by factors that have been in place long before the event itself occurs. These factors include individual differences, such as one's personality and identity, sociological variables, such as group cohesion, and organizational variables, such as climate and leadership. While each set of factors will be discussed independently of one another in the following sections, it should be noted that their psychological influence is likely anything but independent. As such, it will be important to keep in mind not only the unique contribution of these factors to learning and skill development, but also the combined impact of their interactions.

INDIVIDUAL DIFFERENCES

There are several individual difference factors that influence a Soldier's ability to learn from negative cross-cultural experiences. Some of these factors, such as traits, dispositions, and other immutable personal characteristics, reflect the makeup of the person. These factors predispose or prepare one for learning and skill development, but are very difficult to change. Other factors, such as goal orientation, self-regulation, and cognitive strategies, reflect more malleable qualities of the person (Maurer & Lippstreu, 2008) that can be readily shaped or influenced through training or experience. Although the number of individual difference factors that are likely to influence Soldier learning and development is vast, a selection of those that are most relevant to the present discussion is provided below.

Traits, abilities, and other relatively stable characteristics

Personality. Understanding the influence of personality with regard to negative cross-cultural experiences is a vital component of understanding the greater process of cross-cultural learning itself. To the extent that cultural adaptation and performance are dependent on traits that facilitate learning, research on personality may provide some clues as to which variables are most relevant to learning from negative cross-cultural experiences, in particular.

There is a vast and varied literature on the relationship between different types of personality dimensions and various aspects of cultural learning. Research in this area has focused primarily on the role of the Big Five personality traits in predicting adaptation and performance overseas. Unfortunately, studies investigating the Big Five traits, which comprise Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience, have resulted in mixed findings (cf. Abbe et al., 2007). To date, the most comprehensive analysis of the relationship between the Big Five and expatriate performance was conducted by Mol and colleagues (2005). Findings from their meta-analysis revealed that four of the Big Five traits, namely Extraversion, Conscientiousness, Emotional Stability, and Agreeableness, were significantly related to ratings of expatriate performance. Other studies have corroborated these findings, showing support for Conscientiousness as a predictor of expatriate performance (Caligiuri, 2000), Emotional Stability as a predictor of psychosocial and work-related adjustment

(Shaffer et al., 2006), and Extraversion and Agreeableness as predictors of performance, adjustment, and job persistence (Caligiuri, 2000; Searle & Ward, 1990; Shaffer et al., 2006).

Interestingly, Openness to Experience was not found to have a significant relationship with either performance or adjustment in any of these studies. This is peculiar given Openness's traditional association with attributes synonymous with being "curious" and "tolerant" (Digman, 1990; McCrae, 1996). A potential explanation for the lack of significant findings may be due to an indirect effect of Openness on cultural performance. In other words, effects pertaining to one's level of Openness may be observable through other means, such as seeking out experiences and one's motivation to learn. For example, one study showed that Openness was positively related to cross-cultural training performance (Lievens, Harris, Van Keer, & Bisqueret, 2003). Others have found that Openness, in addition to Extraversion and Conscientiousness, predict one's motivation to learn, actual learning, and developmental activity (Major, Turner, & Fletcher, 2006; Maurer, Lippstreu, & Judge, 2008). As such, highly open individuals, though not necessarily better performers, may be more inclined to perceive cross-cultural experiences (including those that are negative) as learning opportunities than those who are less open.

Cognitive ability. Cognitive ability, or "g", reflects a broad reasoning and information processing capacity, and has been shown to significantly affect the ability to learn and perform in a variety of contexts (Hunter, 1986). For example, in a meta-analysis, Colquitt, LePine and Noe (2000) examined cognitive ability as a predictor of training motivation and a number of other training outcomes. Cognitive ability was found to be a significant predictor of training outcomes and exerted an even stronger relationship with learning outcomes (e.g., declarative knowledge or skill acquisition). Other studies have found cognitive ability to be a significant predictor of adaptability or adaptive performance (Pulakos et al., 2002). Adaptive performance, which includes being open-minded when dealing with others, taking others' viewpoints into consideration, and adjusting one's attitudes and behavior where appropriate, is an essential tool for individuals working in varied environments (Pulakos et al., 2000). This is especially true for Soldiers who, given the unpredictable nature of their job and work environment, must be able to think and act adaptively when managing cross-cultural situations. Doing so is likely to lead not only to more efficient solutions to problems, but also reductions in the type of stress that coincides with managing such situations.

Prior experience. While future experience can be influenced, past experience cannot. As such, this section will briefly address the role prior cross-cultural experiences may play regarding one's ability to learn and develop following negative cross-cultural experiences. The research presented here may also inform ideas about how experiences can be created or selected to help shape learning and development from subsequent experiences.

Like the findings from research on personality and cultural performance, research in the area of cross-cultural experiences is inconclusive. As mentioned in the introductory chapter,

many researchers have suggested that prior international experience facilitates one's ability to adjust to, cope with, and perform in cross-cultural contexts (Abbe et al., 2007). However, various studies have also suggested that prior international experience has either weak or no associations with criteria such as adjustment and job performance (Black & Gregersen, 1991; Shaffer, Harrison, & Gilley, 1999), leading some to conclude that prior international experience is "of little practical use as a predictive tool" (Bhaskar-Shrinivas et al., 2005, p. 268). Still other work has suggested that prior experience is a multi-dimensional construct, and that different types of prior experience may affect outcomes differently. For instance, Takeuchi and colleagues (2005) found that the length or tenure of one's prior international experiences, as well as the domain specificity of those experiences (e.g., whether the experiences were work-related vs. non-work-related, occurred in a familiar vs. unfamiliar culture), moderated the relationship between cultural performance and adjustment. Interestingly, the actual number of international experiences was not shown to have a significant effect. These findings seem to suggest that it is the quality, rather than the quantity, of one's experiences that influence cultural adaptation.

Nonetheless, studies that seek to disentangle the differences between international experiences are scarce in number. As such, a "closer examination of the nature and role of previous cross-cultural experiences is warranted. In particular, a consistent and conceptually meaningful measurement approach to international experience is needed" (Abbe et al., 2007, p. 10). One possibility is to more closely examine the nature of the experiences in a multi-dimensional way (e.g., via a taxonomy) and to examine the valence of the various experiences (whether positive or negative) in more detail. By imposing structure and meaning onto these different experiences, researchers can begin to build a better sense of the types of experiences that help facilitate learning and development and those types that are likely to impede it.

Identity and the self. The way in which one perceives the self undoubtedly influences the extent to which one values learning and is motivated by learning opportunities. For instance, an individual who believes he or she is intelligent and capable will be more motivated to improve upon his or her existent capabilities than another individual who does not hold such beliefs. These beliefs comprise what Bandura (1997) refers to as self-efficacy, or the "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Several studies have suggested that self-efficacy is related to expatriate adjustment (Bhaskar-Shrinivas et al., 2005; Palthe, 2004). In other words, individuals who believe they are capable of adjusting to a new culture actually adjust better than those who are uncertain about or less confident in their adaptive capabilities. Of course, this relationship may be curvilinear in nature, such that a surplus of self-efficacy leads to detriments in performance (see Kruger & Dunning, 1999), however, additional research is needed to determine the extent to which this pattern occurs in cross-cultural performance contexts.

In addition to self-efficacy, the way in which one views him or herself when compared to other imagined "selves" can be a powerful motivator for continued development. The concept of possible selves, which is integrated with literature on implicit theories of abilities and traits

(Dweck, Chiu, & Hong, 1995; Dweck & Leggett, 1988) and self-efficacy (e.g. Bandura, 1997), refers to one's conception of his/her current self relative to a desired or feared state (Cantor, Markus, Niedenthal, & Nurius, 1986; Markus & Nurius, 1986). Prior literature has suggested that possible selves can serve as motives or standards for behavior and growth (c.f. Wurf & Markus, 1991; Strauss, Griffin & Parker, 2012), particularly if one envisions selves that he or she ought to be (i.e., ideal or “ought” selves). In this way, people may strive to grow, develop, learn, and become the possible self (meanwhile avoiding a feared possible self) to the extent that they believe it is possible and are actually able to achieve that goal (Maurer, 2002).

Research has also shown that self-conceptions can have a significant impact on the way individuals perceive and process events after they have occurred. While this aspect of self-conceptions is covered in greater detail later in this paper (see *Cognitive Approaches to Recovery*), it is worthwhile to note such influence within the context of the current discussion. According to Obodaru (2012), thinking about alternative selves (i.e., what could have been) naturally involves counterfactual thinking (i.e., thinking about alternative courses of action that could have been taken but were not and the results that may have occurred). Kray and colleagues (2010) reported that counterfactual thinking actually heightens the meaningfulness of experiences (including negative experiences) as opposed to viewing experiences as random events. In this sense, the consideration of alternative pathways can help individuals bring perceived meaning to the event. Fate perceptions (“it was meant to be”) and benefit-finding (recognition of positive consequences of the experience), for example, can result from counterfactual thinking, and, in turn, aid the individual in growing from the experience. With regard to negative cross-cultural experiences, to the extent that a Soldier not only finds meaning in a negative event, but also recognizes any benefits or positive consequences of that event, he or she will be more likely to effectively manage his or her reaction to that event, as well as prepare for similar events in the future. It is important to note, however, that this may be difficult to near impossible in extremely negative or traumatic situations. For example, spending time thinking about how things could have been different following an insurgent attack or the death of a team member may be more detrimental than beneficial to the overall well-being of a Soldier. Additional research is therefore needed to fully explore the influence of counterfactual thinking, particularly within a military context, and its utility as a developmental tool.

Motivation. The motivation to learn and develop reflects the degree to which a person wants to pursue and persist in learning or developing skills and knowledge. When a person is motivated to learn, he or she may also be inspired to understand and master new situations and challenges. The motivation to learn relates to training and to learning in new situations, including cross-cultural experiences, because it can enhance persistence, effort, and focus during such experiences with an emphasis on understanding and learning from the experience.

Much of the extant research on motivation to learn has examined its effects with regard to employee involvement in learning and self-development (Maurer et al., 2008; Maurer, Weiss, & Barbeite, 2003), as well as student propensity to learn and seek out developmental opportunities

in educational contexts (see Covington, 2000; Eccles & Wigfield, 2002 for a review). Generally speaking, involvement in learning and self-development includes having favorable attitudes toward participating in activities that facilitate such outcomes. It also includes having specific intentions for and actually participating in various types of learning and developmental activities such as training, coaching, classes, reading, feedback interventions, special assignments, and experiences that result in skill development. Findings from this research showed that self-efficacy for self-development and the perceived benefits of self-development play a significant role in one's motivation to develop, as is suggested in the training motivation and educational literatures. Perceiving oneself as possessing the necessary qualities for learning and development, which reflects one's self-concept as including learning capabilities, was predictive in this research.

For example, Noe and Wilk (1993) demonstrated the relevance of motivation to learn with regard to employees' participation in development and learning activities that were designed to improve and enhance skills. As in the previous studies, motivation to learn had a consistent, significant, and positive relation with participation in developmental activities. They also found that perceptions of the work environment, including social support for self-development from supervisors and coworkers, were related to participation in development activities.

This research informs the relevance of individual and situational variables in relation to motivation to learn and self-driven involvement in learning and developmental activities and behaviors. The constructs that inform individuals' motivation to learn and develop in organizational contexts may also inform one's motivation to learn and develop from negative experiences. To the extent that a Soldier is driven to learn, is highly motivated to develop and grow, and is drawn to involvement in challenging learning experiences, he or she should be more motivated to learn and develop from challenging and negative cross-cultural experiences than those who do not possess such motivation. Of course, the increasing number of daily duties and tasks for which Soldiers are responsible may make it difficult or challenging for some individuals to prioritize learning and development over meeting the basic requirements of their job. As such, it is incumbent upon both Army leaders and policymakers to provide Soldiers with the necessary resources (e.g., time, opportunities) by which such self-development can be made feasible.

Goal orientation. Another individual difference variable shown to be relevant to learning motivation and learning itself is goal orientation (DeShon & Gillespie, 2005; Dweck & Leggett, 1988; Maurer et al., 2008). Goal orientation has become the dominant approach to the study of achievement motivation (DeShon & Gillespie, 2005). In general, there are two main types of goal orientation: learning goal orientation and performance goal orientation. Individuals who have a learning goal orientation are attracted to learning opportunities and tend to retain a positive, confident composure during challenging experiences. On the other hand, individuals who have a performance goal orientation strive to demonstrate their competence and wish to

either prove their effectiveness to others (i.e., performance prove goal) or to avoid negative judgments of their performance (i.e., performance avoid goal; Dweck & Leggett, 1988).

Based on a meta-analysis, Payne et al. (2007) found that different types of goal orientation were differentially related to task-specific self-efficacy, self-set goal level, application of learning strategies, feedback seeking, and state anxiety. More distal relationships included learning, academic performance, task performance, and job performance. Overall, learning goals have been found to be positively correlated with these types of variables, generally speaking, whereas performance avoid and performance prove goals demonstrated negative or nonexistent relationships, respectively. Payne et al. also found that goal orientation, when operationalized as a static trait rather than mutable state, predicted job performance beyond what was predicted by cognitive ability and personality. Combined, these results suggest that a learning orientation may predispose one to be receptive to learning and thereby seek out difficult, challenging situations with the intent of learning or mastering the underlying dynamics of the situation. In contrast, individuals with performance orientations may avoid or approach such situations due to fear of failure or underperformance.

Goal orientation theory has numerous implications for how Soldiers might view and process negative cross-cultural experiences. Generally speaking, Soldiers with learning goals are likely to respond very differently to challenging experiences and situations compared to Soldiers with performance goals. For example, Soldiers with a learning goal orientation will be more apt to view a difficult or challenging situation as an opportunity to learn something new. Difficulty can stimulate a perceived need for increased effort or the need to use different strategies and ways of looking at and interpreting the problem at hand. Constructive self-talk, a positive prognosis for success, a tendency to explore options, and an ability to maintain positive affect (i.e., a positive mood or optimistic outlook) during difficult situations is also more likely to occur for learning-oriented people (Dweck & Leggett, 1988). Thus, Soldiers who possess learning goals should respond more favorably to challenging experiences and should be more adept at maintaining performance levels and composure throughout such experiences. Furthermore, this mindset may help Soldiers to better comprehend and understand why challenging or potentially negative situations occur, as well as develop strategies for how to manage them in the future.

It is worthwhile to note, however, that even if Soldiers possess a learning goal orientation, they may not be able to fully act on it if their leader does not share the same mindset. For example, a Soldier may want to devote more time to understanding why a particular event occurred, whereas his or her leader may only be interested in the extent to which the event helped facilitate the accomplishment of the mission. The leader's goal in this example is reflective of a performance goal orientation, which, though not always conducive to learning or self-development, is very consistent with military culture and operations, in general. To the extent that instilling a learning orientation in Soldiers is important to the Army, it will be increasingly necessary for leaders to foster an environment where goals related to learning and development are given equal precedence to goals related to mission accomplishment.

GROUP-LEVEL VARIABLES

Groups have become an important building block of organizational effectiveness and understanding how groups learn from experiences is critical for predicting organizational performance. Although researchers have defined group learning in a variety of ways, the core of most definitions is that group learning occurs as the team acquires experience (Argote, Gruenfeld, Naquin, 1999; Wilson, Goodman & Cronin, 2007). Until only recently, the focus of group learning research has been largely on learning from internal rather than external team experiences (for exceptions see Ancona & Caldwell, 1992 and Bresman, 2010). However, as organizations increasingly rely on teams to operate in unfamiliar contexts, understanding more about how the types, sources, nature (e.g., positive or negative), and impact of external experiences affect team learning is critical.

This is especially the case given that many more organizations operate in environments that are characterized as hostile, uncertain, mutable and complex than in previous years (Cascio, 2003). Under these operating conditions, crisis can be a regular or even expected event for many organizations, including the military (Ashby & Deacon, 2000; Perrow, 1984). Learning from these crisis events may become essential for effective crisis coping of both the organizations and subunits nested within them (Drach-Zahavy & Freund, 2007; Mitroff, Shrivastava & Udwadio, 1987; Moynihan, 2009). The following section will explore the ways in which group learning processes, including the development of collective efficacy, result from exposure to external stimuli. The sources and nature of experiences from which groups can learn will also be discussed, as will the various contextual effects that can influence learning at the group level.

Group learning processes and the development of collective efficacy

Group learning can be measured by assessing whether collective shifts in cognitions, attitudes, or beliefs have occurred (Wilson et al., 2007), or by evaluating the behavioral changes in performance that follow learning (Levitt & March, 1988). Collective efficacy, a belief or conviction that one's group or team can successfully execute the behaviors required for performance, is one type of collective cognition that can change as a consequence of performance outcomes (Bandura, 1997; Lindsley, Brass & Thomas, 1995). Specifically, performance outcomes, whether positive or negative, serve as a source of information that the team can use to update their collective efficacy beliefs. This, in turn, facilitates consecutive positive (or negative) shifts in a group's collective efficacy levels that affect the subsequent improvement, maintenance, or decline in their performance (Lindsley et al., 1995).

The efficacy-performance association is not assumed to be linear, but rather contingent on corrections in either self-efficacy or performance. Active experimentation and efforts to self-correct are believed to facilitate learning and help regulate team behavior and performance (March, 1976). One factor that can affect whether self-corrections or learning occurs from performance outcomes is the initial level of collective efficacy of a team. For example, a team that has high levels of collective efficacy may experience improved performance and more

successful outcomes. At the same time, however, too much collective efficacy may also breed complacency or overconfidence and lead to less active learning at the group level (Lindsley et al., 1995). Similarly, low levels of collective efficacy may cause a decrease in performance or make successful performance outcomes less likely. Such conditions could foster learned helplessness (i.e., the belief that one's efforts will not have any influence on outcomes), which, in turn, hinders the motivation to self-correct and learn from performance outcomes. Hence, the extent to which a team actively processes and grows from the information they gather from experiences may largely depend on their collective efficacy beliefs at the outset of the performance context.

Despite the common tendency to exclusively associate collective efficacy beliefs with task performance (i.e., performance on work-related goals or activities), collective efficacy may also be applied to contextual performance, or the social and relational aspects of group work (Lin & Peng, 2010). For instance, collaborative work in teams requires interpersonal and social interaction with individuals both within and outside of the team in order to accomplish their collective aims. It is probable, then, that teams may also form beliefs about their ability to establish, build, and maintain these social and interpersonal relationships that are critical for performance. In teams such as military units, these collective efficacy beliefs in the social and relational domains of team work, along with task performance, should also be related to performance outcomes due to the broad range of functions (e.g., social reconstruction and community) in which they tend to engage that go beyond the traditional calls of duty related to battle and warfare.

The collective sense of efficacy and group learning emerge from members' common exposure to objective stimuli. Hackman (1992) suggests that team members are exposed to two different types of stimuli that can be sources of new knowledge, behaviors, and attitudes. The first type is *ambient stimuli*, which are sources of influence that are team-oriented and affect the team as a whole. For instance, an ambient stimulus could be a leader or supervisor who intervenes in order to implement a new team norm, thereby influencing the subsequent trajectory and performance of the team. The second type of stimulus is *discretionary stimuli*, which are sources of influence that are person-oriented, affecting only select people within a team. An example of a discretionary stimulus would be a leader or supervisor who seeks to improve a particular team member's behavior through some intervention or leader-member exchange strategy. The ultimate goal of such an intervention would be to elicit a response or reaction from the individual, thereby changing his or her behavior or performance, but the influence on the group or team, as a whole, may be rather minimal. In combination, ambient and discretionary inputs are likely to affect team members both individually and collectively throughout the course of collaboration, ultimately shaping how the team changes and learns over time.

Although ambient or discretionary stimuli tend to be conceptualized as occurring within the boundaries of a team, stimuli external to the team can also shape group learning. These stimuli can be encountered through external learning activities, such as when team members

gather information from people and situations external to their environment, a process known as boundary-spanning (Ancona & Caldwell, 1992). These external learning activities, which tend to consist of non-stressful interactive events, have been shown to be positively associated with the team's task performance (Ancona & Caldwell, 1992; Wong, 2004). Further research is needed to investigate whether external learning activities that involve negative experiences (e.g., crisis, disaster, warfare) would replicate these findings and produce the same positive relationship between learning and performance. In addition to fostering task performance, external stimuli from interactions with people or in particular situations can also promote learning that results in social or procedural outcomes, such as changes in attitudes, behaviors, and beliefs about different cultures or ways of behaving in foreign environments.

Sources and dimensions of experiences

To further understand the conditions under which learning from experiences will occur and the extent to which it will either hinder or facilitate performance in teams, it is necessary to explore both the source of the experience, as well as the effects of various features of experiences. These features include: (1) whether the experience is positive vs. negative, (2) the ambiguity and uncertainty of the experience, (3) the extent to which teams employ internal vs. external attributions, (4) the level of control over the experience, and (5) the degree to which emotions are aroused.

Source. A team may gain experience via their own or others' external learning activities. Bresman (2010) suggested that teams can learn directly from their own external experiences through a process known as contextual learning. Teams engage in contextual learning by gathering information about various aspects of the environment, including people, organizations, and situational events. Teams can also learn vicariously from another team that is performing similar tasks (Bresman, 2010). A team may compare their performance to another to judge their performance relative to the other team and to gather information about how they can improve. As a result of this comparison process, the team may attempt to imitate the other team's performance in order to improve their own performance. This imitation requires the absorption of external knowledge into the team's knowledge, which often requires self-correction and updating of existing knowledge, practices and beliefs (Cohen & Levinthal, 1990; Todorova & Durisin, 2007). Recent research supporting this perspective has shown that team performance can be enhanced through vicarious learning only when sufficient internal team learning processes occur concurrently (Bresman, 2010). This comparison process can also shape collective efficacy beliefs, which can affect future performance (Bandura, Reese, & Adams, 1982).

Valence. The valence of an experience (i.e., the extent to which an experience is viewed by an individual as being either positive or negative) is likely to affect the inputs, processes, and outcomes associated with group learning. Extant research suggests that the mechanisms by which positive or negative experiences are processed could be cognitive, behavioral and/or emotional. For example, research examining individuals' responses to positive and negative

stimuli found that cognitive effects were weaker for positive compared to negative stimuli across a variety of task domains including memory recall and evaluative categorizations (Ito, Larsen, Smith & Cacioppo, 1998; Pratto & John, 1992; Porter & Peace, 2007). Negative information was also found to influence people's behavior more than positive information (Coleman, Jussim, & Abraham, 1987; Leary, Tambor, Terdal & Downs, 1995). Lastly, the influence of negative stimuli was found to have a longer lasting and stronger emotional impact compared to positive emotion among individuals (Fredrickson & Losada, 2005; Sheldon, Ryan, & Reis, 1996). Taken together, these individual-level studies suggest that positive and negative experiences are likely to affect group learning in distinct ways, and that more may have to be done to actively mitigate or control the effects of negative experiences.

Uncertainty. The complexity and unpredictability of the environments in which many groups operate can create challenges for group learning. It is increasingly more common for groups to operate across national boundaries, which requires frequent interaction with individuals from other cultures who possess different cultural norms, values, and practices. These differences can be a common source of irritation, conflict, and misunderstanding in cross-cultural collaborations (Brett, Behfar & Kern, 2006). An additional consequence of confronting the norms and culture of a host country in which a team is operating can be the stress-induced reaction of *culture shock* (Sims & Schraeder, 2004). Difficulties interacting with foreign nationals may signal an inability to perform in these foreign environments due to uncertainty about cultural norms and practices, all of which can reduce the team's collective efficacy. As a result, a downward spiral can be triggered that begins to negatively impact the performance of other team members. Efforts to familiarize teams about the foreign cultural context prior to their international experience may help to foster cycles of self-correction that could enable learning from interactions with foreign nationals.

Attribution. The tendency to attribute failures to external causes (i.e., causes occurring outside the team) can reduce the search for information and ways to improve the team's performance. As a consequence, the team may not alter their ways of thinking or behaving, which can result in unwanted outcomes such as close-mindedness or groupthink. Placing the locus of causality or blame on external sources, rather than on internal sources, is believed to be particularly common when teams interact with outgroups or competitors (Neuman & Baron, 1998). For instance, misunderstandings and conflicts may be more likely to arise in intergroup situations involving members from groups that come from different cultures backgrounds (e.g., Americans vs. Afghans) than among individuals from the same cultural backgrounds (e.g., all Americans). When intergroup challenges arise, individuals often seek to make sense of these social interactions, which can lead to unfavorable cognitive appraisals of the outside parties and antisocial treatment towards them (Neuman & Baron, 1998). In fact, research suggests that when individuals are in a suspicious state of mind, they are more likely to believe that actions are targeted towards them and that others have sinister motives (Kramer, 1998). When blame is placed on the other party rather than on one's own, it can foster greater feelings of hostility

compared to individuals who do not attribute blame in this manner (Bell & Song, 2005). When attributions about the locus of causality are wrong due to social biases, a team's lack of motivation can lead to inaction to correct its own behavior and can reduce the probability of learning from social interaction.

Control. Learning from experience as a team depends heavily on the degree to which team members perceive control over the situation or environment (Lindsley et al., 1995). For teams that encounter crisis situations characterized by surprising events that threaten the current course of action (Hermann, 1972), the perceived level of uncontrollability over their environment is likely to be higher. Anxiety, frustration, and feelings of helplessness can arise when the team perceives that there is a great deal of uncontrollability (Mikulincer & Nizan, 1988). This, in turn, fosters a downward spiral as drops in collective efficacy beliefs can lead to a subsequent reduction in the team's ability to perform. In contrast, when teams make attributions of controllability, they are more likely to engage in self-correction that is necessary for learning and improved performance.

Emotional Arousal. For teams operating in high-stress and unpredictable environments, such as military teams operating in theater, emotional arousal during and immediately following crisis events can be quite common. For example, a team of Soldiers may be given false information from a local national that results in them being the target of an enemy attack. While such heightened arousal is normal and to be expected under such circumstances, it can also foster fear and fear-provoking cognitions (Bandura et al., 1982; Barrios, 1983). In turn, these cognitions can facilitate the development of negative frameworks or schemas for interpreting information garnered from subsequent experiences (Kavanagh & Bower, 1985). These negative frameworks, if left unchecked, can perpetuate generalized negativity in teams, and lead to a reduction in overall performance and group efficacy. In the previous example, the team of Soldiers may attribute the outcome of their experience as typical for interactions with local nationals, thereby leading to a generalized distrust of and negative attitude toward local nationals altogether. While such attitudes may help protect group members from encountering similar situations in the future, it may also hinder them from developing crucial relationships or obtaining information that would otherwise be beneficial to the mission. Studies demonstrating support for this relationship have found that increased group anxiety and stress are linked to intragroup conflict and the tendency for group members to adopt increasingly narrow-minded viewpoints (i.e., groupthink; Krantz, 1985; Janis, 1983).

Collective processing of negative experiences

Social influence processes, such as verbal persuasion, can be a critical component of both the formation of collective efficacy beliefs (Bandura et al., 1982) and group learning (Wilson, et al., 2007). As members gain information from an external learning experience, this information can be shared with others, to affect group learning in meaningful ways. This requires a team to engage in a process of knowledge integration that involves information sharing, processing, and

integration in order to foster a change in collective understanding (Salazar, Lant, Fiore, & Salas, 2012). This shift in collective understanding can lead to self-correction in behaviors and group learning, which may facilitate either an improvement or degradation in collective efficacy beliefs and performance.

When negative information about people or events is gathered, it is also important to understand which aspects of cognitive interpretations and appraisals will be retained among members of the group. This feature of knowledge retention is a core component of the group learning process (Wilson et al., 2007). For instance, Lyons and Kashima (2000) examined how changes to a story, which contained cultural stereotypes, were made as the story was transmitted between several individuals. These authors found that when people communicate stories that involve social groups, they are more likely to reproduce stereotype-consistent information than stereotype-inconsistent information. Over time, stereotype-inconsistent information was increasingly omitted from the story as it passed through the 4-person chain of individuals. Given that individuals are motivated to emphasize the positive aspects of their own social groups and to focus on the negative aspects of other groups (Tajfel & Turner, 1979), it is likely that the natural tendency may be for individuals to give accounts of social interactions with outgroup members that focus more so on negative characteristics. The group is therefore likely to learn and retain the information about these external groups that conforms to existing stereotypes, and apply that information to later experiences.

Much like the transmission of knowledge, emotional arousal can easily spread amongst members of a team. For instance, one individual's negative emotions, which may have been caused from exposure to a negative event that occurred within the team's environment, can result in the emergence of a collective mood state of the team. Previous experimental research provides evidence of emotional contagion in groups by showing how the mood of a confederate member was adopted by the rest of the group, which, in turn, facilitated a shared mood state at the group level (Barsade, 2002). This emotional contagion can often be unconsciously triggered through facial expressions, features of the voice (e.g., tone, intensity, and volume) and posture (Hatfield, Cacioppo, and Rapson, 1994). Implicit and explicit processes can further facilitate this emotional contagion (Barsade, Ward, Turner, & Sonnenfeld, 2000). For instance, implicit processes consisting of non-conscious mimicry and synchronizing one's emotions with others can result in the convergence of group members' emotions and moods. In contrast, purposely seeking to alter others' moods and emotions, whether it be through the enforcement of display rules or openly commenting upon others' emotions, are more explicit means by which to alter the affective state of the group. This altered affect state can then influence a group's overall functioning (Barsade, 2002).

When learning from experiences, especially those that are negative in nature, angry or hostile emotions are likely to arise. For instance, a conflict with a foreign counterpart can lead to unfavorable cognitive appraisals of the counterpart, the team member involved in the conflict, or both individuals, all of which will cause negative emotions to be aroused. As individuals turn to

fellow team members for insight and advice about this social interaction, these negative emotions can be spread throughout the group (Volkema, Farquhar & Bergman, 1996). Team members, in turn, are likely to become invested in the conflict and come to share perceptions of the conflict, which often leads to the emergence of other negative emotions, such as hostility (Barsade, 2002). Relevant to understanding how group learning occurs following negative, uncontrollable, and stressful experiences, the contagion of negative emotions has been found to be associated with reduced cooperation, increased conflict, and a decreased perception of task performance in teams (Barsade, 2000). As mentioned in a previous section, it may also be the case that these negative emotions will endure longer than positive emotions would in groups, thus stifling group processes for a prolonged period of time.

Other group-level factors

There are a number of other factors occurring at the group or team level that are likely to influence an individual's ability to cope with and learn from negative experiences. These include team identification, team learning norms, team member experience, and perceived team support.

Team Identification. Teams can vary in the extent to which group members feel that the team is an emotionally significant aspect of one's identity. In other words, some teams have more members who perceive greater identification with their team than do other teams. In teams with high levels of collective team identification, more harmonious relations are likely to emerge among ingroup members who tend to have positive feelings toward other ingroup members, which, in turn, facilitate effective team processes (Tajfel & Turner, 1986). For instance, collective team identification can foster the motivation to strive towards agreement and the identification of shared beliefs (Haslam & Ellemers, 2005; Hogg & Terry, 2000; Pratt, 1998). When sense-making of negative events occurs in a team, it may be more likely that teams with high levels of collective identification converge on a common cognitive appraisal or emotional response compared to teams with low collective identification. Additionally, higher collective identification can buffer a team from the exposure to events that pose a threat to the group's cohesion or their ability to perform (Kane, Argote & Levine, 2005). While this process could be beneficial to team members when the appraisal of or response to a negative event is constructive (e.g., the event is interpreted as a learning opportunity), it is also possible that such high levels of collective identification can result in an insular team mindset that reinforces dysfunctional or irrational decision making (Janis, 1983). As such, it is important that members of a team or unit not only strive to foster a sense of cohesion and support within the group, but also ensure that their collective identification is one that facilitates, rather than detracts from, team performance, particularly in challenging contexts.

Team Learning Norms. Teams may also have varying norms for learning. Hargadon and Sutton (1997) identified how norms for learning help to support creativity in product design firms. In particular, these scholars suggested that norms such as asking for help, sharing knowledge, and giving help to one another can support behaviors that foster innovation.

Similarly, other scholars have found that encouragement to engage in learning within teams can also help to facilitate learning and creativity among individual team members (Hirt, VanKnippenberg & Zhou, 2009). Soldiers, who almost always perform in teams, may equally benefit from norms that emphasize learning. One of the most well-known applications of this in the military is the after-action review (AAR). During an AAR, service members are asked to discuss particular training or operational events, with a focus on identifying what happened, why it happened, and areas for improvement. AARs also serve as opportunities for service members to receive feedback about their or their team's performance. The goal of an AAR is not to find fault in the way service members carry out their duties, but rather to gather information about the way common situations are handled and the means by which similar situations could be handled more effectively in the future. While AARs are certainly effective in helping teams analyze and understand their experiences, they represent a formal, structured tool implemented across distinct temporal intervals. In addition to these formal learning mechanisms, leadership must also foster a climate in which team learning and development are constantly sought and encouraged. In other words, teams have the capacity to reap the benefits that can be extracted from experiences so long as there are norms present that support learning from them.

Team Member Experience. Following the logic outlined by Mathieu and Chen (2011), it is plausible that factors proximal to a Soldier's environment have the biggest influence on his or her ability to manage negative experiences effectively. For example, Killgore, Stetz, Castro and Hoge (2006) found that Soldiers reacted differently to pending deployments, in part, on whether they had previous combat experience. Interestingly, combat veterans reported lower affective yet higher somatic complaints relative to non-combat experienced Soldiers. Elsewhere, in a study of Israeli veterans of the 1973 Yom Kippur War, researchers (Dekel, Solomon, Ginzburg & Neria, 2003) found that, even though decorated war heroes reported the highest exposure to battlefield stressors, they experienced fewer PTSD symptoms than did individuals experiencing combat stress or a random sample of other Soldiers who also fought in the war. Moreover, the decorated war heroes showed lower rates of PTSD and better general psychological health than the individuals who had experienced combat stress over two decades later. More recent research conducted on samples of US Marines, however, has shown quite the opposite effect (MacGregor, Han, Dougherty, & Galarneau, 2012). Specifically, Marines who served multiple deployments experienced 175% the rate of PTSD as Marines who had only served one deployment. Hence, while it is possible that teams comprising Soldiers with prior combat experiences may be better equipped to handle the stress of battle than those with fewer previous combat experiences, it is also important to consider the nature and length of those combat experiences when drawing such conclusions.

Equally important to note is that the nature of combat today is substantially different from that of previous generations (Lind, Nightengale, Schmitt, Sutton, & Wilson, 1989; Scott, McCone, Mastroianni, 2009). Large- scale, conventional warfare has been replaced with smaller-scale combat operations that require a full range of kinetic and non-kinetic skills. In these

contexts, where the goal is often to “win the hearts and minds” of the local populace, Soldiers are increasingly expected to take on a number of different roles and responsibilities in accomplishing the mission. Couple this with substantial increases in deployment length (sometimes up to 15 months), decreases in dwell time, and a great deal of unpredictability, and the functioning of both individual Soldiers and the units to which they belong become a growing risk. As such, it is imperative that researchers take into consideration the types of situations Soldiers experience today, as well as the influence of current operations on those experiences.

Perceived Team Support and Cohesion. Being a member of a supportive unit is critical, as it not only helps to build team members’ resilience by enabling them to perceive and react to negative events more adaptively, but it also helps to motivate them to seek out valuable sources of support following traumatic events. Unit cohesion, which is one source of support for Soldiers, is seen as an important driver of numerous important outcomes in military settings (Grice & Katz, 2005; Kirke, 2010). For example, Ahronson and Cameron (2007) sampled Canadian military members and found that high cohesion ratings were associated with lower levels of psychological distress. Griffith (2002) argued that cohesion has a buffering effect, as it functions as a source of social support. Interestingly, both Griffith (2002) and Ahronson and Cameron (2007) found that the cohesion-coping link operates mostly at the individual level, rather than at the group level. This is consistent with the notion that social support may not be universally perceived, shared, or sought out by members of the same group.

Despite its influence at the individual level, cohesion can still affect functioning at the group level. Bartone, Johnsen, Eid, Brun and Laberg (2002), using a quasi-experimental design, examined factors associated with small-unit cohesion among Norwegian Navy Officer Cadets. The teams comprising more familiar members reported higher levels of cohesion. Teams led by supportive and high quality leaders also reported higher levels of cohesion, as did teams who had successfully experienced a stressful exercise together. Bartone (2006) also suggested that unit leaders can play a pivotal role in the cohesiveness of military units and thereby bolster Soldiers’ resilience. Overdale and Gardner (2012) found that instructors were a particularly salient source of social support for New Zealand defense force trainees. In fact, they found that outside sources of support were actually counter-productive for new trainees, surmising that the “use of external support may represent an unintended tradeoff between more or less useful resources if over-reliance on external support detracts from time and motivation to seek support within the training environment (p. 325).” Based on this collection of research, it is clear that social support is a more complex factor than would appear at first glance; when derived from different sources, it is likely to have different effects not only across different team compositions, but also across different types of contexts and situations. Additional research is therefore necessary to determine the ways in which both internal and external social support would differentially influence the performance of Soldiers, particularly those operating in cross-cultural environments.

ORGANIZATIONAL AND SITUATIONAL VARIABLES

The extent to which an individual or group can learn from positive or negative experiences depends greatly on the context in which that individual or group is situated. To better understand how learning occurs within context, it is important to first understand the multi-level and complex environment in which an individual operates. Examining contextualized learning from this multi-level lens is critical for the present discussion as military teams clearly operate in these complex nested environments. To illustrate, the reactions and behaviors of individual Soldiers are most directly a function of their individual knowledge, skills, abilities, and other characteristics (KSAOs). Features of the immediate context, such as squad morale and leader behavior, are likely to be the most salient to them, and, to a lesser extent, aspects of their platoon, company, and brigade, as factors become more removed or distant from them. All of these features are seen in the context of the theater of operations, current conditions, and cultural aspects of their deployment. While more complex arrangements exist, as well, this nesting arrangement of entities is a hallmark of multi-level models (Klein & Kozlowski, 2000).

The following sections review relevant research pertaining to the contextual (i.e., situational) and multi-level (i.e., organizational) factors that are likely to impact Soldier learning and development. Contextual factors, such as situational and job-related stressors, are immutable aspects of a Soldier's work environment whose influence must be effectively managed before learning or development can occur. On the other hand, multi-level factors, such as leadership influences, climate, and organizational policies and practices, are designed to facilitate learning and help individuals prepare for and recover from experiences, though they may not always be effective in doing so.

Contextual factors

Modern-day military contexts are wrought with different forms of stressors. Bartone and his colleagues (Bartone, 2006; Bartone, Adler & Vaitkus, 2008) identified several of these stressors, which include, 1) isolation, 2) role ambiguity, 3) powerlessness, 4) boredom – alienation, 5) danger and threatening environments, and 6) workload. Adler, McGurk, Stetz and Bliese (2004) compared stressors that exist in military garrison, field training, and deployed environments and found both significant differences and communalities. For example, they cited role stress, performance concerns, workload, and intragroup conflict as related to individuals' well-being and performance in training contexts such as ROTC. Alternatively, field training exercises, which often last for many weeks, mean additional family separation and lessened communication, even if the training occurs in the same country (or state) as the Soldier's home or family (Castro & Adler, 1999). Stress associated with field training intensifies even more once a unit is alerted for deployment. For instance, Castro and Adler (1999) noted that, during the preparation period prior to a rotation, Soldiers and leaders reported more distress, lower morale, and a higher incidence of adverse physical health symptoms than during other non-preparatory

periods in garrison. In sum, a major field exercise may be, in many ways, similar in its stressfulness to actual military deployment.

While in garrison, Soldiers experience additional forms of stress, including a lack of predictability. For example, many Soldiers reported that they were unsure of when their duty day ended, while others reported frequently receiving requests or orders just before the work day was over, despite not having anything to do earlier in the day. Yet not all garrison assignments follow such a sporadic pace. Castro and Adler (1999) noted that many Army commanders reported intense amounts of garrison activity and workloads that were frequently greater than during military deployments. These included not only regular garrison duties, but also extra obligations such as guard duty, vehicle and equipment maintenance, etc. attributable to already-deployed units. Garrison stress is compounded when commanders expect that garrison duties be performed as if the garrison were staffed at full strength.

In contrast, salient stressors occurring during deployment, such as living in austere conditions, boredom, family separation, and transitioning between deployment and home, were negatively correlated with psychological and physical well-being. Other deployment-related stressors included uncertainty about the mission's objectives, rules of engagement and particular Army policies, and, of course, direct threats to their safety and psychological well-being - even during missions not originally intended as combat.

Generally speaking, training-related stressors impact individual factors as Soldiers seek to learn new skills and better understand their new environments. Oftentimes, Soldiers view training as a competitive environment with associated pressures. The relative lack of structure and pace becomes a major source of stress while in garrison, as does the acclimation to new physical and cultural conditions. Once deployed, the physical conditions and potentially life-threatening situations generate additional pressures, but these stressors tend to bring the unit together, rather than pitting Soldiers against one another in competition. In sum, while Soldiers are subject to a wide variety of stressors throughout their tours of duty, the nature of these stressors differs significantly depending on the particular environment each Soldier encounters. This reduces the correspondence between what is learned in training and what is likely to be experienced in the field, a relationship that is essential for the transfer of training to be effective. Furthermore, the differences in psychological fidelity of the different circumstances act to constrain the extent to which Soldiers can be adequately prepared while in training or garrison to cope with challenging events or situations as they arise.

The effect of operations tempo (OPTEMPO) on Soldier and unit readiness is also an important issue for military and civilian leaders to address. Moreover, activities tempos are likely to act as stressors and also inhibit opportunities to engage in learning experiences. Other temporal factors include the length of time spent at home between deployments, or dwell time, and Soldiers' reports of PTSD and other mental health disorders. For example, MacGregor, Han, Dougherty and Galarneau (2012) sampled over 65,000 US Marines who were deployed once or

twice during Operation Iraqi Freedom. They found that Marines who had been deployed twice had 175% of the rate of PTSD of Marines who had only been deployed once. Further, they found that longer dwell times significantly reduced the incidences of PTSD among the twice deployed. Elsewhere, Tucker and colleagues (2009) conducted a two-year longitudinal study of work demands, perceived control, and indiscipline using a sample of Soldiers deployed in training rotations (Germany), and on peacekeeping deployments (Kosovo, Kuwait). Within each of six time points, as work overload increased, Soldiers who felt less control committed more indiscipline acts. In addition, indiscipline acts and Soldiers' feelings of powerlessness were related reciprocally over time. In short, work related demands had negative effects that were compounded over time.

In sum, the diversity of assignment environments and deployments, the OPTEMPO of modern-day operations, the increased number of deployments, and the shortening of dwell times all contribute to heightened degrees of Soldier stress. How exactly these different effects combine and interact is not well understood, nor have researchers yet identified the "tipping points" – that is, the times when a Soldier's resilience is depleted and he or she is particularly susceptible to the impact of negative events.

Multi-level factors - Climate

Supportive Learning Climate. Training and development research consistently show an organizational climate that is supportive of knowledge and skill acquisition is instrumental in ensuring the effectiveness of formal training initiatives. For example, previous research has demonstrated that a climate supportive of knowledge and skill acquisition is important in helping individuals prepare for development activities and achieve desired learning objectives (Tracey, Hinkin, Tannenbaum, & Mathieu, 2001), as well as in helping ensure that individuals transfer newly acquired knowledge and skills on the job (Colquitt, LePine, & Noe, 2000; Holton, Bates, Ruona, 2001; Mathieu, Tannenbaum & Salas, 1992; Rouiller & Goldstein, 1993; Tracey, Tannenbaum, & Kavanagh, 1995). Positive organizational climates for learning enhance the learner's self-confidence and boost beliefs that favorable outcomes will result from participation in training and development (Mathieu & Martineau, 1997). A related research area focusing on the updating of technical skills has found similar positive results for climate and supervisor support. For example, in a study examining engineers and their supervisors, Kozlowski and Hults (1987) found that a climate that supported skills updating was related to supervisory ratings of technical performance, updating orientation and skills. Leadership support, organizational support, feedback, rewards, and resources all contributed to a climate of support for skills updating.

Researchers have conceptualized, measured, and examined climate and support at the individual, manager, team, and organizational level (e.g., continuous learning climate, training climate, transfer climate). Despite differences in levels of analysis, conceptualization, and measurement, climate research shows that organizational, manager, and peer support for learning

influences knowledge and skill acquisition and transfer of learning. All are deemed as important with, all else being equal, the more proximal forces exerting relatively greater influence.

For example, Tracey and Tews (2005) conceptualize training climate as “perceived support from management, work, and the organization for formal and informal training and development activities” (p. 358), which encompasses learning and skill development. Their conceptualization includes three dimensions that can be subsumed within a higher-order climate dimension. The first dimension is *manager support*, which reflects “the extent to which supervisors and managers encourage on-the-job-learning, innovation, and skill acquisition and provide recognition to employees in support of these activities” (p. 358). The second dimension is *job support*, which represents “the degree to which jobs are designed to promote continuous learning and provide flexibility for acquiring new knowledge and skills (p. 358). The final dimension is *organizational support*, which reflects “policies, procedures, and practices that demonstrate the importance of training and development efforts, such as reward systems and resources to acquire and apply learned skills” (p. 358). To the extent that Soldiers feel supported across all levels of the organization, from their team to the Army, as a whole, they will be better equipped to manage negative experiences in a constructive and developmental way.

Specific Developmental Climates. In addition to examining how a learning or training climate influences learning and transfer of training, researchers have examined specific climates related to the use of errors for learning and the role leaders and teams have in shaping them. Van Dyck et al (2005) argue that a high error management culture (i.e., a culture that fosters practices related to communicating about errors, sharing error knowledge, helping in error situations, and quickly handling and detecting errors) influences mediators (e.g., learning, innovativeness, exploration, experimentation, initiative, improved quality of work products, service, and work procedures), which, in turn, have a direct effect on organizational performance. They conducted quantitative and qualitative studies using managers from two different European countries (medium-sized firms in the Netherlands and Germany). They did not test for mediation but, instead, employed the mediators as theoretical mechanisms through which an error management culture influenced organizational performance. Factor analysis of the error management culture scale revealed two dimensions: error management culture and error aversion culture. They found that error management culture was positively correlated with organization goal achievement and economic performance in both the Netherlands and Germany. However, they found no relationship between error aversion culture and firm performance in the sample from the Netherlands.

Along a similar vein, findings from research by Edmonson (1999; 2011) have supported the notion that both one’s team and one’s leader can significantly impact the extent to which an error-management culture exists within the organization. At the team level, for example, Edmonson (1999) found that when team members supported experimentation and risk-taking, team members exhibited more learning behaviors, which were subsequently related to higher team performance. Team psychological safety, a shared perception among team members that

the team is psychologically safe for risk taking, promoted team learning behaviors as the fundamental element of the team learning process. Teams that experienced more psychological safety engaged in more learning behaviors, such as information sharing, requesting assistance, feedback seeking, and discussing mistakes. Psychological safety was influenced by a supportive organizational context and the team leader.

Edmonson (2011) also emphasized that it is the leader's responsibility to help employees feel comfortable with and responsible for identifying failures and learning from them. Edmonson cites her own work with hospitals as support for the important role of mid-level managers in nurses' willingness to speak out about errors and other failures. Mid-level managers' responses to failures, including encouraging open discussion of them, welcoming questions, and displaying humility and curiosity, were keys to nurse willingness to speak up. She proposes five practices for how a leader can build a psychologically safe environment that is critical to enabling team members to spot failure and to learn from it. These practices include 1) accurately framing the work (shared understanding of the kinds of failures that need to occur in a given context and why openness and collaboration are important for surfacing and learning from them), 2) embracing messengers (individuals who come forward with bad news, questions, concerns, or mistakes showed be rewarded rather than criticized), 3) acknowledging limits (being open about what you don't know, mistakes you have made, and what you can't get done alone will encourage others to do the same), 4) inviting participation (asking for ideas and observations and creating opportunities for people to detect and analyze failures), and 5) setting boundaries while still holding people accountable (individuals feel psychologically safer when leaders are clear about what acts are blameworthy and the consequences of such acts). Edmonson also emphasizes that once failure occurs, it is necessary to understand its root causes; that is, it is necessary to analyze beyond first-order reasons (e.g., a lack of following procedures) why the failure occurred.

Applied to a military context, these findings suggest that Army practices that encourage Soldiers to share and communicate with each other about errors, particularly those that may have directly or indirectly contributed to the occurrence of a negative cross-cultural event, may play a role in overall mission effectiveness. Leaders, for example, could greatly facilitate Soldier learning and development following negative cross-cultural experiences by first cultivating an environment in which Soldiers feel comfortable discussing why such experiences occur and the means by which to avoid or prevent such situations in the future. Similarly, Soldiers who are particularly skilled in cultural domains could be designated as mentors or role models, and serve to correct and provide guidance to their fellow service members as they work together to fulfill the mission. While it is understood that an error-management framework may not be conducive to all contexts in which Soldiers operate, the extent to which leaders and Soldiers strive to maintain a supportive unit climate will be critical in ensuring continuous growth and development when such opportunities or challenges do arise.

Multi-level factors – Leadership

Leadership factors focus on how Army leaders influence Soldiers' expectations of and behavior in cross-cultural settings. Leaders can help Soldiers understand the potential for negative events to occur, shape their perceptions of and actions during cross-cultural events, and influence interpretations, learning, and development that take place after such events have transpired. In other words, leadership is relevant before, during, and after Soldiers experience negative cross-cultural events. Army leaders are intimately involved in training and preparing their troops during peacetime and wartime prior to deployments. While much of this preparation involves ensuring operational readiness, leaders have opportunities to foster cultural awareness and understanding in their troops. Once deployed, leaders at the squad, unit, and platoon levels are in close contact with Soldiers and have the ability to help them face negative events, guiding their perceptions, actions, and decisions in-the-moment. Army leaders also have the ability to engage Soldiers in formal and informal learning opportunities after challenging cross-cultural events occur. Certain leader capabilities and behaviors are especially critical for helping Soldiers make sense out of these situations, as well as continuously improve the effectiveness of their actions and responses to future situations (Army Leadership Field Manual FM 6-22; Abbe et al., 2007). In the following sections, a select number of these capabilities and behaviors will be discussed, including, 1) fostering cultural awareness, 2) creative problem-solving, 3) sensemaking, 4) planning, and 5) transformational leadership.

Fostering cultural awareness. Existing reviews and models of cross-cultural competence (3C) identify a number of specific attributes important for operating effectively across cross-cultural settings (Abbe et al., 2007; McCloskey, Grandjean, Behymer, & Ross, 2010). Leaders play a unique role in a Soldier's development of 3C in that they can provide a supportive environment and training opportunities that will enable Soldiers to improve their cultural knowledge and skills. At the same time, leaders must be able to recognize and provide training for Soldiers who are less open-minded about cultural differences or who have low levels of social and emotional skills, as these individuals may need more support when faced with negative cross-cultural events than will others. When assigning Soldiers to different tasks and missions, leaders must also recognize that some Soldiers are not likely to improve beyond a very basic skill level. In response, leaders should be able to provide meaningful developmental experiences to Soldiers who are at the early stages of building their cultural cognitive capacities (McCloskey et al., 2010). Conversely, leaders must also be able to recognize those Soldiers who have greater self-awareness and are proficient at effectively shaping and managing cultural interactions and experiences. These culturally competent Soldiers may be most likely to possess the skills needed to prevent negative cultural experiences from happening in the first place. In sum, maintaining awareness of how culturally competent Soldiers are, as well as the likelihood that each will develop culturally-relevant skills at different rates, will aid leaders in making more informed assignment and training decisions in cross-cultural settings.

Creative problem-solving. Negative cross-cultural events often arise rapidly, are novel, and have few precedents for how leaders and Soldiers should handle them. This implies the importance of leaders and Soldiers being able to think on their feet and generate workable solutions to prevent circumstances from worsening. A number of leadership theories and studies suggest that creative problem solving skills are important for leaders, especially those working in ill-defined, dynamic contexts (e.g. Connelly et al., 2000; Mumford & Connelly, 1991; Reiter-Palmon & Ilies, 2004). These models suggest that generative problem solving skills, such as problem construction, information search, and solution generation, as well as evaluative skills, such as idea evaluation and solution monitoring, contribute to leaders' abilities to accurately diagnose problems, come up with solutions, and help Soldiers effectively implement them. In a study of 1,800 Army officers at six different ranks, Connelly et al. (2000) found that these types of generative and evaluative problem solving skills predicted leader achievement and solution quality and partially mediated the effects of general cognitive ability, motivation, and personality on performance.

Given the collective nature of goals, tasks, and missions in the Army, leaders are evaluated and promoted, in part, by how well the Soldiers in their squads, units, and platoons perform. There has been little empirical work on how leader problem solving skills influence follower success, suggesting a need for future research. It is not difficult to identify the potential ways in which these leader skills could benefit Soldiers facing challenging or negative cross-cultural events. For example, leaders who are able to develop innovative, flexible plans and strategies may be better able to guide Soldier performance in the kinds of novel, dynamic environments characteristic of cross-cultural settings. Leaders with these skills will likely be able to set and shift priorities in response to challenging situational demands. Creative leaders may also be better prepared to find or develop resources that Soldiers need to be effective under conditions where resources are scarce or access to them is uncertain. Furthermore, leaders who have generative and evaluative problem-solving skills may be particularly skilled at identifying how and why a negative cross-cultural event occurred. Concordantly, they can work with Soldiers to minimize the negative effects of such experiences, either directly (by removing or altering the cause) or indirectly (by helping Soldiers view the situation from alternative perspectives).

Sensemaking. Sensemaking, and its corollary, sensegiving, is the ability to make meaning out of situations for oneself and others (Gioia & Chittipeddi, 1991; Weick, 1995). Within organizational settings, sensemaking is a process of creating shared meaning in a given situation or context (Weick, 1979; 1995). Leaders and Soldiers engaging in sensemaking reflect on what has occurred and build narratives to describe, understand, control, and predict events. Given its dynamic nature, sensemaking is an iterative process that involves continual attention to and incorporation of cues from the environment. The process is also inherently social in that it involves exchanging narratives with others and emphasizes plausibility over accuracy. Finally, sensemaking occurs within the context of identity, which shapes how people interpret events.

These characteristics imply that leaders and Soldiers may often not arrive at the same interpretations or conclusions about a negative cross-cultural event. This is due to the fact that both Soldiers and their leaders bring different things to the table in terms of their identities and what environmental cues they find to be salient. For example, Soldiers may have a very unit-centric perspective on the event, while leaders may view the situation from multiple perspectives, including but not limited to the unit's view. Effective leaders will engage in sensemaking and sensegiving for their followers by helping them to think more creatively about problems and helping them to question assumptions (Baran & Scott, 2010; Foldy, Goldman, & Ospina, 2008). Some research has indicated that leaders' sensegiving efforts must be able to resonate with followers. In a case-study review of a major organizational change effort implemented in Boston's city government, Bartunek, Krim, Necochea, and Humphries (1999) suggested that leader sensegiving must be consistent with follower values in order to be accepted.

One way Army leaders can enact sensegiving is to engage Soldiers in case-based learning through the relaying of relevant stories and anecdotes. This form of vicarious learning is an effective way to transmit key information and cultural lessons to Soldiers because cases are vivid, detailed, embedded in specific contexts, and are easily remembered (Kolodner, 1992). Case-based learning can occur with cases that Soldiers have not personally experienced, or, with reviews of situations they have faced. Leaders can help Soldiers extract lessons learned from both negative and positive cultural experiences by facilitating understanding of why an approach worked well or didn't work well, by helping Soldiers to question their own biases and assumptions, and by understanding situational factors that were at play as the event transpired. There is emerging research on case content and case analysis that provides guidance on how to use cases in leadership contexts to generate organized knowledge structures and long-term learning (Mumford, Peterson, Robledo, & Hester, 2011). In terms of negative cross-cultural events, case analysis can help Soldiers identify what individual knowledge, actions, behavior, effort, or capabilities may have contributed to the problem.

Planning. Cultural competency research suggests the importance of planning and forecasting in cross-cultural leadership contexts (Abbe et al., 2007; McCloskey et al., 2010). Norms, values, and behavior in some cultures differ widely from those with which US Soldiers are familiar. This requires leaders and Soldiers to think proactively about how certain actions and behaviors will be perceived by others and whether or not a course of action will accomplish its intended objectives. Forecasting goes hand-in-hand with planning because it involves mental simulation of the effects of actions or causes to identify potential positive and negative outcomes that could result (Shipman, Byrnes, & Mumford, 2010). Interviews and survey data collected by the Marine Corps' Center for Advanced Operational Culture Learning (CAOCL) from returning veterans indicated that leaders in Afghanistan and Iraq relied too heavily on traditional solutions in instances where nontraditional but more culturally appropriate plans and actions would have achieved better results (Hajjar, 2010). Some examples of culturally appropriate plans included

developing training schedules that considered prayer and fasting periods and selecting female Soldiers for assignments requiring interaction with Muslim women in the local communities. Additionally, Hajjar (2010) notes that there exist disconnects between military policy and strategy and what is considered viable and acceptable within a given culture. For example, the concepts of autonomy and empowerment do not translate well to Iraqi soldiers who have spent their military careers immersed in a highly centralized, hierarchical Army. As such, it is incumbent upon leaders to maintain a constant awareness of how the cultural milieu influences day-to-day operations, so that unnecessary challenges or obstacles can be avoided or prevented.

Transformational leadership. Transformational leadership theory has been tested in numerous cross-cultural settings and remains a dominant theory of effective leadership (Bass, 1985; Avolio, 1999). Transformational leaders exhibit a number of behaviors that facilitate follower development and performance, factors that may also help Soldiers better understand different cultural perspectives and help them overcome negative events and failures in cross-cultural contexts. Key facets of transformational leadership include inspirational motivation, intellectual stimulation, idealized influence, and individualized consideration. These capabilities enable leaders to communicate a shared vision with Soldiers, motivate them to achieve goals, challenge them to go beyond the status quo and behave in ethical ways that serve the collective (Shamir, House, & Arthur, 1993), and consider the needs and development of individual Soldiers.

This style of leadership would likely be conducive for helping Soldiers navigate the complexities of negative cross-cultural events for several reasons. First, transformational leaders may be able to reduce negative emotional reactions by shifting the focus away from individuals and refocusing them onto the broader group. In this scenario, the broader group could be the particular unit to which Soldiers are assigned, or it could also be a group within the culture that is relying on the Army for protection or aid. Recent research has shown that focusing on others by volunteering or helping others in need can mitigate negative feelings in specific ways (Lyubomirsky, in press). Helping others increases individuals' appreciation for the good aspects of their lives and distracts them from difficulties they might have. Second, in the face of negative events, transformational leaders can refocus Soldiers on the broader vision of what they are there to accomplish. Third, these leaders are able to provide support to Soldiers in a way that is tailored to their different motives, goals, and needs. Different Soldiers may require different kinds of incentives, training, and experiences to perform effectively in the face of negative events, something that a transformational leader's individualized consideration facilitates.

III. IN SITU PROCESSING

Whereas the previous chapter largely addressed the influence of factors inherent to the Soldier or leader on the ability to learn and develop from negative cross-cultural experiences, the present chapter focuses more so on the nature of the experience itself. Given that experiences differ as much as the individuals engaged in those experiences differ, it is important to understand not only from where negative cross-cultural experiences originate, but also why such experiences are likely to originate. It is also essential to identify and examine the role of certain cognitive processes and strategies that Soldiers may employ as a means by which to facilitate their awareness and understanding of the situation. Unlike those discussed in the previous chapter, the cognitive strategies presented here are less innate and, therefore, more amenable to training and development.

SOURCES OF NEGATIVE CROSS-CULTURAL EXPERIENCES

The way in which one intervenes after a negative experience and the type of training or development one implements to ensure successful recovery are dependent on what causes may have contributed to the negative experience in the first place. While the specific details of different experiences vary widely in terms of their frequency and severity, at least three sources can be identified as potential causes of negative cross-cultural experiences, in general. The first implicates the cross-cultural counterpart as the primary cause of the negative experience. Examples of such counterpart-related causes include violations of trust or violations of expectations for what should have happened or transpired had the situation progressed “normally”. A second source of negative experiences implicates the Soldier who, like the counterpart in the previous example, may have violated expectations of those with whom he or she works and interacts. The third source of negative experiences implicates the cultural context in which the experience occurs. In other words, no one in particular is to blame, but the direct experience of interacting and working with others, or perhaps vicarious experiences—i.e., hearing or seeing others who have had bad experiences—contribute to negative perceptions and/or outcomes.

Of course, many negative situations occur due to some combination of two or more of these causes. For example, an increase in stressors in the operating environment may cause a Soldier to lash out at his or her counterpart during an otherwise mundane interaction. Cyclical relationships between causes is also possible. An insurgent attack, for instance, might negatively shape Soldiers’ attitudes towards individuals from the same culture as the insurgents; the Soldiers may then be less willing or motivated to develop relationships with these individuals due to their prior negative exposure to the insurgents.

Contributing Factors

In addition to the causes mentioned above, there are also a number of contributing factors such as verbal aggression, norm violations, and conflict management skills that either alleviate or

exacerbate the extent to which a negative event unfolds. Understanding what factors are likely to interact with the common sources of negative experiences will help in identifying not only how conflicts escalate but also the ways by which they may be circumvented.

Verbal aggression. Infante and Wigley's (1986) *verbal aggressiveness theory* identifies verbal aggression as having both positive and negative connotations. Verbal aggression in the form of argumentativeness, for example, reflects the predisposition to challenge ideas and positions – a characteristic that can be a useful tool in situations where self and team evaluation and learning are critical. Verbal aggression displayed as an attack on another's self concept, however, can damage relationships and escalate conflicts.

Often times, people will employ verbal aggression when they have important goals they want to achieve. For example, a Soldier who is tasked with acquiring information that has important consequences for his or her unit becomes frustrated by an informant's unwillingness to quickly divulge information to him. Depending on what other stressors or constraints are present in the situation at that time, the Soldier may resort to higher levels of aggression to get what he or she needs in a timely fashion. Unfortunately, such aggressive displays are likely to escalate conflict as well as disintegrate cross-cultural relationships.

To prevent such escalations, it is necessary that Soldiers be provided alternatives to verbal aggression, either by their fellow Service members or leader. Teaching Soldiers to use well-reasoned arguments, especially those that are effective within a particular culture, for example, can help reduce the extent to which a difficult situation escalates into conflict. Encouraging Soldiers to think long-term about the consequences of their actions, particularly in circumstances where the accomplishment of certain goals is essential to the mission, will also help in preventing unwanted negative interactions. Of course, there will be times when experiences or interactions do not go as planned. After such experiences, it is important that Soldiers openly discuss what occurred, as well as potential alternative approaches that may have resulted in a more positive or desired outcome. Engaging in such practices should contribute to the likelihood of these approaches being applied to future interactions.

Norm violations. Another factor that often determines whether a cross-cultural experience will evolve into a negative one is the extent to which expected norms or social rules are broken or perceived to have been broken. Such violations can undermine trust in people from both cultures, as well as one's self-efficacy with regard to interacting and performing in that culture. A number of theories address this problem and make predictions about when conflicts are likely to escalate because of this type of violation. For example, *confrontation episodes theory* (Newell & Stutman, 1991) is used to differentiate how people respond to having their behavior identified as having violated a rule or expectation for appropriate behavior within a situation. For example, a person may claim that the rule was not agreed upon (nonlegitimacy) or justify his or her behavior by claiming that the particular episode was a special circumstance meriting the violation of the rule. When confronted with wrong-doing or norm violations, people

react by becoming defensive and justifying their norm-violating behavior by explaining that the behavior was an acceptable exception. This defensiveness may prevent learning from the experience because, rather than learning from a mistake, the person justifies his or her behavior and explains away his or her actions.

Identifying the social norms that are perceived to have been broken, and understanding how those violations escalate conflict or contribute to negative perceptions about people from another culture, is addressed by *expectancy violation theory* (Burgoon & Hale, 1988). Expectancy violation theory makes predictions about whether and when violations in expectations about norms are broken. Along a similar vein, *reciprocity theory* (Rolloff & Soule, 2002) predicts that people adapt to perceptions of others' behaviors by enacting behaviors of comparable value. In other words, if one person perceives that the other is being stubborn, then the first person will act in ways he or she perceives to be equally stubborn. Reciprocity in interaction, such as response cycles of attack-attack or attack-defend, have been shown to escalate conflict, whereas attack-neutral patterns have been shown to de-escalate conflicts (Poole & Garner, 2006). To illustrate this theory, imagine a Soldier and host national counterpart are working together to build a road. The Soldier suggests they build the road through the town, as that is the most direct route, while the host national believes that doing so would be disrespectful to the town's inhabitants. The host national takes his argument one step further by directly insulting the Soldier and claiming he shows no regard for his people's way of life. The Soldier could easily reciprocate the host national's sentiments by responding with a counter-insult or by defending his actions as stemming from an American perspective. Both of these strategies, as satisfying as they may be to the Soldier, would likely escalate the disagreement into a larger-scale conflict. Conversely, the Soldier could take a neutral stance in which he acknowledges the host national's concerns, but steers the disagreement away from emotionally-laden personal attacks and more toward determining which task-oriented strategy will serve both parties most effectively.

Training that intervenes to correct and recover from negative cross-cultural experiences can demonstrate how the violation of cultural norms and social rules conflicts with unmet expectations that people hold for how they believe others should behave. Training can further demonstrate that these violations are often not of moral or universal violations, but rather violations in expectations for what others should do. Learning to separate the content of a person's message, the behaviors that person enacts, and the motives behind that person's behaviors—particularly if those motives are clearly known rather than assumed—can contribute to more positive assessments of the other person and his or her culture.

Conflict management. Understanding the options available for managing conflict is addressed by Blake and Mouton (1964), who provide a grid of managerial leadership, which predicts that people will manage conflict based on whether they manage with a greater concern for production or for people. This theory could easily be applied to the emphasis on people versus outcomes when gaining information or goal achievement is at stake. The theory predicts

that high concern for both people and production will lead to a constructive and integrative approach to managing problems, whereas a low concern for people and production will lead to avoidance and/or apathy. High concern for people with low concern for production leads to yielding or accommodating, and high concern for production with low concern for people leads to dominating or forcing.

A later iteration of this grid was developed by Thomas and Kilmann (Thomas, 1976; 1992), who used the grid to predict interpersonal conflict styles by crossing high vs. low cooperation with high vs. low assertiveness. Later still, Pruitt and Rubin (1986) modified this grid to predict how people manage negotiations, crossing high and low concern for one's own outcomes with high versus low concern for the other party's outcomes, resulting in the same general behaviors as predicted by Blake and Mouton.

Research can identify which of these prevailing concerns Soldiers have when involved in negative cross-cultural experiences. Once identified, training can be used to teach Soldiers to reframe the situation so that concern for the other person or people becomes elevated within similar future interactions, thereby resulting in the use of more people-oriented conflict or problem-solving approaches to interactions.

FACILITATORS OF SITUATIONAL UNDERSTANDING

Given the numerous ways in which negative experiences can unfold, it is important that Soldiers develop and employ strategies that allow them to make sense of the situation as it is happening. In doing so, Soldiers are able to not only maintain control of the situation, or gain control back if control was previously lost, but also extract information that will help inform future encounters. While a discussion of all potential strategies is beyond the scope of this report, a selection of those that are most relevant to the processing of negative cross-cultural experiences is presented below.

Mindfulness and reflection

Baer (2003) defined mindfulness as "the non-judgmental observation of the ongoing stream of internal and external stimuli as they arise" (p. 125). Mindfulness is generally thought of as a multidimensional construct, composed of three key parts: *awareness*, *being in the present moment*, and *acceptance* (Germer, 2005a, 2005b). Awareness involves halting any automatic thoughts or behaviors that may interrupt one's attention to a task or activity, while, at the same time, observing those thoughts or behaviors in a nonjudgmental way, and then returning one's attention to the present moment or activity in which one is engaged. The second part, being in the present moment, refers to focusing one's attention on the current experience—the here and now—without worrying about the past or what will happen in the future. The third part of mindfulness, acceptance, involves learning to accept various experiences without judgment, regardless of how contrary they may be to one's expectations of what is "right" or "moral".

Jacobs and Blustein (2008) have suggested that mindfulness can reduce negative psychological states and reduce anxiety experienced by employees who face a high degree of employment uncertainty. In this sense, mindfulness is potentially relevant to a Soldier's experience and processing of negative events. If a Soldier is able to stop automatic thoughts and behaviors that may distract him or her from focusing on understanding the present situation, he or she may be able to continue performing in an efficient and attentive manner. Perceiving and gathering data about the present circumstances can be vital to a Soldier's full comprehension of an otherwise complex situation. Being able to focus on the present moment without shifting attention to the past or anticipating the future allows Soldiers to fully sense what is transpiring in the present circumstance ("here and now"). Furthermore, maintaining self-awareness and accepting the fact that negative thoughts are normal and happen to everyone may help Soldiers keep an open mind when navigating difficult situations that tend to trigger such negative thoughts.

Reflection on action, which is a Soldier's recount or reflection of what occurred after an event has transpired, is the primary emphasis of after-action reviews (Salter & Klein, 2007). However, despite substantial research and professional literature on reflection on action, less is known about reflection *in* action (or reflection *during* an experience; Jordan, Messner, & Becker, 2009; Seibert, 1999). Reflection in action, which is closely related to the second part of mindfulness, being in the present moment (Jordan et al., 2009), means making sense of and focusing one's reflective analytical thoughts on the present moment and actions—in other words, *in situ*. Seibert (1999) noted that reflection in action is one's attempt to make sense of what one is experiencing while one is in the midst of experiencing it. However, being able to reflect on one's experiences as they are happening is not necessarily a skill all individuals possess. Rather, some individuals must learn to develop their reflective abilities over time and with extensive practice. One approach that may be useful in helping Soldiers learn how to reflect in action is Kohls' (2001) Description, Interpretation, and Evaluation model. Though this approach tends to be cognitively taxing, it can lead to more accurate assessments of the situation and carefully determined responses to managing the situation. Kohls posits that, rather than judging a situation or person based on stereotypes or ingrained biases, an individual should first mentally describe what he or she observes. Next, the individual identifies a set of possible interpretations that could be made about the situation. As a last step—instead of a first step—the person evaluates the situation based on the range of information that he or she just acquired. Training Soldiers to slow down otherwise quick or automatic judgments is an important step in teaching them not to rely exclusively on reflexive or "knee-jerk" reactions during cross-cultural situations. Furthermore, such approaches encourage Soldiers to employ mindful approaches when interacting with others, particularly when the situation is tenuous or unpredictable.

Reflection in action can be both spontaneous as well as a learned process that helps one to examine and analyze in-the-moment actions and behaviors, while also considering potential causes and outcomes of those behaviors. Fully understanding the relationship between

mindfulness and reflection in action may be helpful for identifying how to enhance Soldiers' ability to efficiently recognize the various influences and possible courses of action within a complex situation while it is happening.

Attributions

Understanding what is transpiring in complex situations can depend, at least to some extent, on one's understanding of the other individuals with whom one is interacting. Soldier interactions with individuals from other cultures are affected by how they understand and view individuals in those cultures. These understandings stem, in part, from attributions, or common ways by which people explain human behavior. Attribution theories have highlighted a number of phenomena related to how people explain the causes of their own and others' behavior (Heider, 1958; Jones et al. 1972; Weiner, 1974). In general, people are prone to a number of attribution biases. The correspondence bias, also known as the fundamental attribution error, is the tendency to explain another person's behavior, especially his or her failures, using internal attributions, such as blaming the other person's intelligence, personality, or effort (Ross, 1977). Closely related to this is the self-serving bias, also referred to as the actor-observer bias, which is the tendency to attribute one's own successes to internal factors and one's failures to external or situational factors, while attributing others' successes to external factors and their failures to internal factors (Campbell & Sedikides, 1999).

These kinds of causal attributions stem from beliefs about whether causes of behavior are internal to a person, stable within a person, and controllable by a person. Research has demonstrated that people from Western cultures, such as the United States, are more prone to committing such biases than are people from Eastern cultures (see Choi, Nisbett, & Norenzayan, 1999 for a review). Researchers have suggested that this effect occurs largely because Americans are less likely to consider consensus information and contextual factors when making situational attributions about other people and their behavior.

Choi et al. (1999) have noted that these biases can lead to cultural misunderstandings, such as perceptions of inconsistency (e.g., Why did this person behave one way in this situation and another way in a different situation? She must not be reliable). Attributions about others based on their ethnicity, culture, or other salient feature can also stem from and lead to stereotyping and other forms of social categorization. Stereotypes are common generalizations about a group of people and can be either positive or negative. Negative stereotypes, which tend to be stronger and more pervasive, are often related to prejudice, discrimination, and the unfair treatment of people from particular groups (Allport, 1954; Bobbitt-Zeher, 2011; Heilman & Eagly, 2008; Lepore & Brown, 1997; Lin, Kwan, Cheung, & Fiske, 2005; Sherman, Stroessner, Conrey, & Azam, 2005).

Some Soldiers may be unaware of these attribution tendencies, and, as such, may not realize that they hold negative stereotypes about individuals from other cultures. Awareness of

these attribution tendencies and errors, as well as awareness of the attitudes and behavior that can stem from them, may help Soldiers to better understand the perspectives of the people with whom they are interacting in cross-cultural environments.

Trust

Trust is a concept composed of multiple dimensions (Cai & Hung, 2005). Therefore, establishing trust with others reflects the differential application of these dimensions within an interaction, which, at times, can reveal one dimension as being more salient than others depending on the goals of the interaction.

In general, researchers recognize four dimensions of trust: integrity, competence, dependability, and benevolence. Integrity is the level of trustworthiness in how people act justly and fairly, maintaining ethical and moral standards in how they behave and how they think about problems. Competence is the ability or capability that people possess that allows them to accomplish tasks and goals. Dependability refers to whether a person can be expected to accomplish what he or she says will be done or is asked to do. Finally, benevolence is whether the person will be expected to act in ways that take into consideration the needs of others and will act with empathy toward others.

When considering how Soldiers work with people in complex situations, trust becomes relevant in determining expectations, building relationships, and interpreting others' behavior. Soldiers operating in foreign environments must be able to rely on others around them to accomplish important tasks and organizational goals. The need to work effectively with and to depend on others extends not only to other U.S. Soldiers, but also to individuals and groups who are not U.S. citizens. This interdependence requires some level of mutual trust, so it is useful to understand the foundations of trust in organizational contexts, the factors that contribute to trust, how cultural differences may affect trust, and how to repair trust when it is broken or damaged.

Conceptualizations of trust within organizations have suggested that trust is a psychological state that involves positive social expectations about other people in the organization (Barber, 1983; Kramer & Lewicki, 2010). One dominant theory has defined organizational trust at a dyadic level (e.g., person to person, group to group, or organization to organization) where trust involves a willingness to be vulnerable to another's actions in situations where those actions are important to the trustor (Mayer, Davis & Schoorman, 1995). Similar to the dimensions identified above, Mayer et al.'s (1995) model of trust, which was developed around the dyadic definition, articulates three key characteristics of the trustee: ability or competence in a specific domain, benevolence (i.e., a desire to be helpful and good to the trustor), and integrity (i.e., adherence to principles that the trustor finds acceptable). The trustor's propensity or willingness to trust others, in general—the trait of trust—also contributes to how much he or she will trust the other party, particularly when there is little information available about the other party's competence, benevolence, or integrity. Mayer et al. (1995) suggested that

trust is relationship-based and situation-specific, two things that are important for Soldiers to bear in mind when learning to develop, maintain, and repair trust in cross-cultural settings. Kramer and Lewicki (2010) have highlighted a number of other important factors that contribute to trust within organizations. These factors include social identity (or common membership in social categories or groups), positive in-group stereotypes, negative out-group stereotypes, organizational roles and associated expectations for individuals serving in those roles, organizational rules and norms, leader expectations, and role-modeling.

Cultural differences can pose several challenges to Soldiers trying to establish trust in cross-cultural working environments (Schoorman, Mayer, & Davis, 2007). The GLOBE project (Global Leadership and Organizational Behavior Effectiveness) has assessed cultural dimensions in almost 1,000 organizations across 170 countries and 62 different cultures on how these factors influence trust (House et al., 2004). The nine cultural factors examined in this research include performance orientation, uncertainty avoidance, humane orientation, institutional collectivism, in-group collectivism, assertiveness, gender egalitarianism, future orientation, and power distance. With respect to organizational trust, each of these dimensions has implications for ability, benevolence, integrity, propensity for trust, and other precursors. For example, Soldiers from cultures that have a high performance orientation may have higher standards for what level of ability or competence engenders trust; this, in turn, may result in them having lower trust in individuals from cultures who are low in performance orientation because they believe those individuals may not complete the job successfully. Similarly, Soldiers from cultures high on humane orientation may have difficulty trusting individuals from cultures low on this dimension because they will perceive their cross-cultural counterparts to be less benevolent. To illustrate, a recent study by Huff and Kelley (2003) compared trust within organizations with trust outside of the organization in a sample of managers working in East Asian cultures (e.g. Japan, Korea, China) and managers working in the United States. They found a stronger in-group bias, lower propensity for trust, and lower external trust in managers from East Asian cultures. Unexpectedly, internal trust was higher among the U.S. managers. While it is important that Soldiers understand their own styles of trust, it is equally critical that they understand the extent to which individuals from other cultures are willing to trust them and why.

Knowledge of the elements, dimensions, and influences on trust is important for enhancing situational understanding in which trust may play a key role. Breaches of trust during overseas missions, particularly those that occur with individuals from other cultures, may be a particularly salient theme pervading the negative cross-cultural experiences Soldiers typically face.

Emotional regulation and emotional labor

Negative cross-cultural events often elicit a range of negative emotions such as anger, fear, sadness, grief, pessimism, and frustration. Given that negative emotional states often show stronger causal relationships than positive emotions with cognitive, affective, attitudinal,

physiological, and behavioral outcomes (Taylor, 1991), the ability to recognize negative emotions in oneself and in others is important. Equally important is the ability to regulate one's emotions, particularly in situations where displaying one's true emotions as intensely as they are felt may not be a wise course of action. For example, a Soldier may be angered by the behavior of a foreign national and wish to reprimand him or her for that behavior. Doing so, however, may cause irreparable damage to an otherwise important or valuable relationship. As such, helping Soldiers to recognize the emotional requirements of their work environments and to better understand the individual and organizational outcomes associated with these requirements may enhance in-situ understanding and improve adaptation within cross-cultural contexts and situations.

Research on emotional regulation and its correlate, emotional labor, which is defined as the effort required to regulate emotions as part of one's work role, suggests that organizations have formal or informal rules and norms regarding the expression of emotions (Ekman & Friesen, 1975; Grandey, 2000; Hochschild, 1983). In other words, work environments differ in what are considered to be appropriate *display rules* (e.g., when to smile, usage of appropriate phrases and gestures). Often times, these rules require the suppression of negative emotions and enhancement of positive ones, although the opposite may also be true for jobs in which displays of negative emotion are necessary to achieve performance goals (e.g., police). Furthermore, women are often judged more than men for not appearing friendly (Gwartney-Gibbs & Lach, 1991). Much of the research and theorizing on emotional labor has been done in the context of customer service work; however, recent work on the emotional labor of leaders (see Humphrey, Pollack, & Hawver, 2008) has suggested that Soldiers may employ emotional labor on a regular basis. Organizational environments for deployed Soldiers are quite complex because they span beyond the confines of U.S. Army bases, frequently bringing Soldiers into contact with foreign organizations including third-country military forces, international aid groups, civilian groups, among others. Each of these organizational contexts, including those encompassing other U.S. Army subunits or groups, may carry different expectations for whether and/or how Soldiers should display emotions.

Understanding and adhering to emotional display rules is essential to effective performance in certain situations, but these rules may require Soldiers to express emotions that are at odds with what they are actually feeling. Theories of emotional labor suggest there are two predominant forms of emotional labor: surface acting, or using suppression or faking to display an emotion that is different from what one is actually feeling, and deep acting, or changing what one is actually feeling to better align with display rules and be more appropriate for the situation (Grandey, 2000). Recent meta-analyses have shown that emotional labor has positive and negative outcomes for individuals and organizations. Scholars have hypothesized that senders and receivers of emotional displays do not like the feeling of dissonance created by the inauthentic emotions characteristic of surface acting (Côté, 2005; Grandey, 2000; Hochschild, 1983). Not surprisingly, surface acting has been associated with psychological strain, emotional

exhaustion, and depersonalization, whereas deep acting has not (Hülshager & Schewe, 2010). Only a few studies have examined the effects of surface vs. deep acting on performance, showing mixed results for surface acting and a positive relationship of deep acting with performance (Hülshager, Lang, & Maier, 2010; Hülshager & Schewe, 2010). However, Bechtold, Rohrmann, DePater, and Beersma (2011) found that the relationships of surface and deep acting on performance depend on individual differences in how well one is able to perceive emotions in others. Specifically, those individuals who were more accurate in perceiving others' emotions were more able to appropriately regulate their own emotions in a given situation, which resulted in positive relationships between surface and deep acting and performance. Situational moderators, such as a climate of authenticity within one's workgroup, also buffer the negative effects of surface acting on outcomes related to well-being (Grandey, Foo, Groth, & Goodwin, 2012).

The research on emotional regulation and emotional labor has a number of implications for Soldiers. First, emotional display norms for Soldiers may vary widely on a day-to-day basis while on deployment, with both organizational and cultural contexts requiring different norms to follow. This variance suggests that increasing awareness and understanding of these varied and complex sets of display rules may help Soldiers to recognize what emotional displays are expected to be effective in these varying contexts. Second, some Soldiers are likely to be better at perceiving emotions in others and themselves. This is particularly important for Army leaders, who must not only be able to recognize emotional displays from outside their unit, but also be aware of the effects emotions are having within their unit (Shipman et al., 2010). As previously discussed, emotions within team or group settings can have a contagious effect. As such, leaders must be able to recognize when and from where negative emotions are spreading in a unit and take measures to stop the outbreak. Finally, increasing Soldiers' awareness of the effects of their emotional displays on their own psychological well-being and performance may help them to select strategies for regulating their emotions that will be helpful for short- and long-term outcomes. In general, increasing a Soldier's capability to observe, monitor, and regulate emotions in the moment will greatly improve his or her ability to manage and develop from negative cross-cultural experiences.

IV. RECOVERY

Once a negative event occurs, certain behaviors and strategies must be enacted so that Soldiers can quickly recover from the experience and begin the developmental process. These behaviors and strategies, which include emotional regulation, experiential evaluation, and perspective taking, as well as other longer-term interventions, emphasize the importance of debriefing and reflection following a negative experience. Overall, the goal of recovery is to prevent negative attitudes, emotions, and judgments from interfering with a Soldier's ability to continue improving and developing his or her skills as well as to improve future cross-cultural interactions.

COGNITIVE APPROACHES TO RECOVERY

Emotional recognition and regulation

While emotional regulation has been discussed at length in previous sections as a factor related to the in situ processing of negative events, its role as a recovery tool has yet to be addressed. Anger management and emotional regulation (Matsumoto, 2006) are closely tied to both the prevention and intervention of conflict. Emotional recognition and regulation help people to understand why they are experiencing certain feelings, recognize what other people are feeling, understand how to appropriately express emotions, and use strategies to regulate their emotional reactions. Training that emphasizes the recognition and regulation of emotions is especially useful for helping Soldiers manage difficult situations, regulate their feelings during an encounter, and interpret outcomes after the encounter has ended.

Schartau, Dalgleish, and Dunn (2009) conducted a series of four experiments using cognitive bias modification (CBM) to shape how people appraised distressing stimuli. The method focused on encouraging people to consider a broader perspective or "the big picture" when viewing distressing stimuli or thinking about distressing autobiographical events. Practicing CBM decreased a variety of negative emotional reactions to distressing events and stimuli, including self-reports of negative emotions, levels of psychophysiological arousal, and event impact ratings, relative to control groups. Curseu, Boros, and Oerlemans (2012) found other benefits of practicing emotion regulation, such that effective emotion regulation in groups prevented task conflict from progressing into relationship conflict among group members. For groups that exhibited poor emotion regulation, task conflict eventually evolved into relationship conflict, particularly for groups that worked together on long-term projects.

One dominant model of emotion regulation suggests that certain regulation strategies occur before the emotional experience fully unfolds (i.e., antecedent regulation strategies), whereas other strategies occur after the emotion has been experienced (i.e., response modulation strategies; Gross, 1998). Antecedent regulation strategies, which include situation selection, situation modification, attentional deployment, and cognitive change, help individuals avoid, manage, or prepare for situations that require emotion regulation. On the other hand, response

modulation strategies, such as suppression, relaxation, or exercise, help to regulate an individual's reactions to an event after it has already occurred. Gross (2007) noted that multiple regulation strategies may be operating simultaneously and are on a continuum of conscious awareness. In cross-cultural contexts, understanding what strategies are culturally appropriate is important; for example, emotional suppression may not be advisable or acceptable in certain cultures, but may be required and essential in others. Training should prepare Soldiers to be able to code switch, or effectively select culturally appropriate behaviors, between strategies when necessary.

Because emotion regulation has both conscious and subconscious elements, the extent to which people can improve their ability to regulate emotions is unknown. Scholars who study emotional intelligence have suggested that people can develop their emotional capabilities through specific interventions (e.g., Dulewicz & Higgs, 2004; Hopfl & Linstead, 1997). Elfenbein (2006), for instance, provided evidence that accurate feedback improved the ability to accurately perceive emotions. Lopes, Côté, and Salovey (2006) also discussed emotion-related skill development with respect to Gross's (1998) model of emotion regulation. They suggested that people can be trained to question overly negative thoughts in order to prevent rumination.

Leaders can also be instrumental in helping their teams develop and hone their regulatory abilities. At least one study supports the idea that leaders can help followers enact emotion regulation strategies, such as reappraising emotionally evocative events (Thiel, Connelly, & Griffith, 2012). Moreover, depending on the discrete emotion at hand, some strategies may be more effective than others. Sometimes, cognitive reappraisal or the act of helping others to reinterpret a situation aids in lessening the negative emotional impact of that situation. Other times, such as when cognitive resources are scarce, distraction or situation selection may be a better way to minimize negative emotions and their impact.

Perspective taking

Miller and Steinberg (1975) noted that people assess others on three levels: psychological, sociological, and cultural. Psychological assessments are based on an individual's personality, such as whether a person is kind or mean, hard working or lazy, anxious or calm. Sociological assessments are based on group membership; in other words, one may assume that a person is politically liberal based on his or her association with a worker's union. Finally, cultural assessments are based on stereotypical associations with a person's ethnic, racial, or national background. For example, the fact that someone is fun-loving may be attributed to the fact that he or she is Australian.

When hostile or unresolved conflicts occur between individuals from different cultures, such negative experiences are often attributed to the cultural backgrounds of the individuals rather than their individual personalities. This, in turn, leads to generalization of similar attributions to all members of the culture, which undermines trust and weakens the potential to

develop stable, working relationships with people from that culture. When considering the extent to which Soldiers work with people from other cultures, trust becomes relevant in determining expectations, building relationships, and interpreting others' behavior within both isolated and ongoing situations.

When people make negative attributions about people from another culture, it undermines perceptions that people from the host culture act with integrity, are competent in their work, have others' best interest in mind, or are dependable and relationship-oriented. Further, undermining perceptions of integrity affect the perceptions of the culture's values of justice and fairness. Although these values are not universal (Han, 2008), expectations that they are shared in similar ways are affected when trust is reduced, which can exacerbate and escalate future conflicts. Soldiers should be encouraged to employ more contextual or situation-based judgments when making attributions as to the cause of an event, particularly when that event is negative. For example, taking into consideration why the other person behaved the way he or she did, or recognizing that other, unseen circumstances may have motivated the action will help Soldiers address and mitigate otherwise frustrating or confusing situational concerns.

LONG-TERM COPING

While many strategies are appropriate for facilitating recovery immediately following a negative experience, others are better served for recovery in the long term. Generally speaking, long term intervention becomes more difficult when additional stressors tax the cognitive capabilities of personnel. Executive functions (i.e., the parts of the brain responsible for higher-order processes, such as judgment and decision-making) are particularly susceptible to cognitive load (Haisfield, 2012), making effective intercultural interactions that much more difficult due to the limited cognitive resources available for processing information in ways that could otherwise prevent further negative experiences. To help alleviate this strain on executive functioning, long term recovery strategies should be utilized, though careful attention should be paid to ensure that such strategies are not causing the individual more harm than good. The following discussion on one particular strategy, known as catharsis, illustrates this point.

Catharsis

Catharsis, defined as the uncovering of repressed feelings by releasing them through an intense action or response (e.g., yelling, punching, swearing), is often used as part of the debriefing process to facilitate recovery from a negative experience. This type of processing has been widely studied to determine precisely which behavioral responses are effective in reducing negative affect and which behaviors tend to exacerbate emotional aggression. Bushman, Baumeister, and Phillips (2001) found that people who were encouraged to believe that catharsis and venting were useful approaches to managing anger displayed more aggression than people in a control group. However, those people in the manipulation did not act aggressively when given a fake "mood-freezing" pill; in other words, when people believed their emotions were medically

attenuated, they did not act aggressively. In a related study, Bushman (2002) compared three groups of people who were angered by someone. The first group—the rumination group—was asked to think about the offender while punching a bag. The second group—the distraction group—was asked to think about becoming physically fit while punching the bag. The third group served as a control. Following this manipulation, people in the rumination and distraction groups were allowed to administer a loud blast toward the offender that had angered them, which served as an expression of aggression toward the offender. People in the rumination group reported more anger and were more aggressive in their use of the loud noise than people in either the distraction or the control group. Bushman concluded from this research that distraction was more effective in reducing anger than being given the opportunity to vent.

These results have implications for how debriefing during recovery sessions is managed. For instance, allowing Soldiers to openly vent or to respond aggressively toward the target—or toward a surrogate for the target—seems to only further increase anger and aggression rather than reduce it. Aggression in Soldiers can also be influenced through vicarious means. For example, Bushman, Baumeister, and Stack (1999) found that pro-catharsis media messages served to increase aggression in the readers, especially when they were allowed to actually carry out aggressive action, such as hitting a punching bag, whereas anti-catharsis media messages reduced aggression. This research suggests that vicarious representations of aggression toward people from another culture, whether through the media, eyewitness, or other indirect means, may serve to increase Soldiers' aggressive and negative responses about the other culture, even when they themselves are not directly involved in the aggressive situation. As such, care should be taken when determining what types of strategies or representations are selected in helping Soldiers recover from negative cross-cultural experiences.

V. FUTURE DIRECTIONS

The current operational environment will increasingly require Soldiers to interact more frequently with other individuals with whom they lack a shared cultural, national, or professional background. In turn, the number of opportunities for these cross-cultural interactions to turn adverse or hostile will also increase. Despite these odds, Soldiers must still be able and willing to perform their assigned duties to ensure that primary missions are accomplished. Furthermore, to the extent that it is possible, such experiences should provide Soldiers with the means to hone and develop their culturally-relevant skills, so that future cross-cultural interactions can be carried out more effectively.

Based on the research reviewed in this report, there are a number of factors that contribute to whether a Soldier is able to accomplish this goal or not. Some of these factors are inherent to the person and the context in which he or she is operating, whereas others are transient and can be enacted while one is “in the moment”. Some factors, such as one’s level of motivation and desire for learning, readily facilitate skill development, while others, such as poor leadership or environmental stressors, lead to cognitive closure and culturally intolerant attitudes and behavior. Clearly, there is no one “perfect” combination of traits, contexts, strategies, and predilections that will guarantee an individual success when operating in another culture. At the same time, however, the research findings presented here suggest that there are indeed areas worthy of future inquiry with regard to how Soldiers might best be able to learn and develop following negative cross-cultural experiences. Future directions for research in the topical areas covered in this report are presented below.

INDIVIDUAL DIFFERENCES

By and large, the ways in which individual differences influence how one learns from negative experiences has been the focus of few research studies. As such, research is needed in a number of areas to better understand how dimensions inherent to the individual impact the processing and interpretation of cross-cultural situations. This includes investigating how personality, cognitive ability, prior experience, and identity influence learning from negative experiences. For example, which personality traits are related to one’s ability to successfully circumvent the effects of negative cross-cultural experiences? Are these personality traits different from those that predict successful cross-cultural performance in other, less challenging cultural contexts? Also important to the discussion is the impact of prior cross-cultural experience on learning and skill development. Whereas previous research examining the effects of positive prior cross-cultural experience has resulted in mixed findings, is the relationship between prior experience and performance more apparent when those experiences are negative?

Research is also required to determine the relationship between negative emotionality, motivation to learn, and one’s ability to learn from negative experiences. While the motivation to learn certainly does more to facilitate learning than it does to hinder it, are there aspects of the

self or of one's beliefs about the self that moderate this relationship when negative experiences are involved? How is one's motivation to learn impacted by repeated negative cross-cultural experiences? How do motivation and one's level of self-efficacy influence perceptions of the event itself?

Finally, although a number of strategies and practices exist that have the potential to help Soldiers learn from negative experiences, few studies have either evaluated their effectiveness or focused on how individual learning processes influence their effectiveness. Research is therefore needed to investigate how individual processes influence the effectiveness of strategies and practices such as those reviewed in the present report.

GROUP-LEVEL FACTORS

A critical next step with regard to the role group-level factors play in the processing of negative experiences is to advance some of the underexplored theoretical gaps by engaging in a rigorous empirical investigation of group learning and the development of collective efficacy, with particular attention to the underlying social, psychological, and behavioral processes that unfold as a consequence of learning from such experiences. The present review also illustrates the need and critical importance of examining the relationship between exposure to external events or stimuli and group learning using a multi-level perspective that takes into account the influence of forces operating at the individual, team, organizational, and socio-cultural levels of analysis.

There are a number of additional areas and key themes that may be fruitful for future research. For example, Bliese and colleagues (2011) recently concluded that "toward the end of World War II, it was clear that a focused effort to reduce mental health problems by selecting only resilient individuals for service was not particularly effective" (p. 103). This conclusion is even more applicable in today's military given the volunteer nature of the force. So, while it would be naive to believe that there are selection and training solutions to enhancing Soldier resilience, it would be equally shortsighted to believe that they cannot play a role (Bartone, Roland, Picano, & Williams, 2008; Maddi, Matthews, Kelly, Villarreal & White, 2012). Therefore, the question as to which Soldiers can be selected, placed, and/or trained so as to maximize their resilience in the face of negative events remains open. A corollary to this is whether there are individual differences that predispose some individuals to be more responsive to resilience-oriented interventions than others.

There are also several unanswered questions with regard to the effects of unit cohesion on learning and development following negative experiences. Although it is clear that developing cohesive units pays dividends in many ways, including helping to build and support Soldier resilience, there remain many questions as to how this can be optimized. For example, are there particularly beneficial (or detrimental) experiences that facilitate or maximize unit cohesion? Are units particularly responsive to certain interventions, or susceptible to undermining factors, at

different developmental periods? What is the influence of salient role models for unit cohesion and supportiveness? For example, if a unit contains a Soldier who is particularly jaded from previous experiences, will it prove toxic for the entire group? Alternatively, if the unit includes a Soldier who has successfully endured traumatic negative events in the past, might s/he be a positive influence on others? Does it matter what positions or roles such individuals occupy, or does it hinge more so on other personal characteristics? Are there preparatory experiences or training methods that might help to inoculate unit members from the effects of potential future events? If so, what types of interventions will likely be most effective (e.g., situational discussions, testimonials from experienced Soldiers, role plays, training exercises, etc.)?

The role of leaders is also an area that deserves additional exploration. While this review highlighted many of the features inherent to good leadership that serve to facilitate learning and development in organizational contexts, little is still known about how leaders influence these processes following a negative cross-cultural event. In particular, research needs to address what leaders are doing to create a climate of cultural awareness and openness both within the Army and in cross-cultural settings. Furthermore, is there consistency in the command climates and at different organizational levels with respect to diversity and cultural awareness? In other words, are the attitudes, beliefs, and behaviors portrayed by one's immediate leader or supervisor consistent with the attitudes, beliefs, and behaviors portrayed by other leaders? By Army policy and doctrine? It will also be important to determine how leaders can facilitate the development of Soldier perceptions, skills, and capabilities so as to better prepare Soldiers before they face negative cross-cultural events. Similarly, how can leaders promote Soldier learning and adaptation once a negative cross-cultural event has occurred?

IN SITU PROCESSING

The processing of negative cross-cultural experiences, as they are happening, has yet to be explored in the organizational and military literatures. As such, a number of questions remain unanswered that are critical to understanding the greater process of learning from negative events. First, how do traits or enduring characteristics, such as one's personality, level of cognitive ability, and prior history with cross-cultural experiences, in general, affect in situ processing of negative events? Is there a learning curve with regard to understanding how to manage negative or potentially negative events, such that more frequent exposure to such events leads to more efficient in situ processing? How does cognitive ability affect in situ processing? Are more cognitively able individuals better or worse at effectively managing a negative cross-cultural situation as it is unfolding?

On the other hand, what aspects of situational understanding can be influenced by training or other educational interventions? To what extent does mindfulness, reflection in experience, attributional reasoning, trust, and emotional labor impact one's ability to process a situation? Are there some strategies that work better than others, or work better in certain situations or for certain types of people?

Finally, a thorough investigation into the sources and types of negative cross-cultural experiences is warranted. Though one can generally ascertain where and why conflict is likely to arise during a cross-cultural interaction, the range, frequency, and severity of such conflicts is still largely unknown. Research aimed at identifying and typifying negative cross-cultural experiences will not only shed light on what kinds of negative experiences Soldiers encounter, but also provide a framework off of which future research in this domain can be based.

RECOVERY

There has been a substantial amount of research, largely within the field of clinical psychology, that has focused on the applications of strategies for remedying stress and reactions to negative events. While this research is likely to be informative to the topic at hand, there are still a number of lingering questions that deal with Soldiers reactions to cultural stressors, in particular. For example, are the interventions used to help individuals recover from negative experiences that are not cross-cultural in nature equally as useful in helping individuals recover from negative experiences that are? What role does catharsis play in interventions? How does one reinforce non-aggressive reactions to events in a culture or climate that condones or encourages aggression, such as in the military? Do some Soldiers have a propensity toward verbal aggression, and can this behavior be influenced by training? How can Soldiers become more effective at emotional regulation, especially across cultural contexts? How long and how frequently do recovery techniques need to be implemented to successfully ward off the harmful effects of negative experiences?

Though these questions reflect only a fraction of the potential areas of exploration related to development following negative cross-cultural experiences, they nonetheless address concerns that are as important as they are increasingly necessary for the military to examine. Provided that Soldiers continue to maintain a presence overseas, so, too, must research continue to explore means by which to enhance their performance and ability to complete the mission.

REFERENCES

- Abbe, A., Gulick, L. & Herman, J. (2007). *Cross-cultural competence in Army Leaders: A conceptual and empirical foundation* (Study Report 2008-01). Arlington, VA: US Army Research Institute for the Behavioral and Social Sciences.
- Adler, A. B., McGurk, D., Stetz, M. C., & Bliese, P. (2004). *Military occupational stressors in garrison, training and deployed environments*. Washington, DC: Walter Reed Army Institute of Research
- Ahronson, A., & Cameron, J. E. (2007). The nature and consequences of group cohesion in a military sample. *Military Psychology*, 19, 9-25.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Ancona, D. G., & Caldwell, D. F. (1992). Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly*, 37, 634-666.
- Argote, L., Gruenfeld, D., & Naquin, C. (1999). Group learning in organizations. In M. E. Turner (Ed.), *Groups at work: Advances in theory and research*. New York: Erlbaum.
- Ashby, S., & Deacon, S. (2000). Strategic rivalry and crisis management. *Risk Management*, 2, 7-15.
- Avolio, B. J. (1999). *Full leadership development*. Thousand Oaks, CA: Sage Publications.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10, 125-143.
- Bandura, A., (1997). Self-efficacy: Toward a unifying theory of behavioral social change. *Psychology Review*, 84, 191-21.
- Bandura, A., Reese, L., & Adams, N. E. (1982). Microanalysis of action and fear arousal as a function of differential levels of perceived self-efficacy. *Journal of Personality and Social Psychology*, 43, 5-21.
- Baran, B. E., & Scott, C. W. (2010). Organizing ambiguity: A grounded theory of leadership and sensemaking within dangerous contexts. *Military Psychology*, 22, 42-69.
- Barber, B. (1983) *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.
- Barrios, B. A. (1983). The role of cognitive mediators in heterosexual anxiety: A test of self-efficacy. *Cognitive Therapy and Research*, 7, 543-554.
- Barsade, S. G. (2000). *The ripple effect: Emotional contagion in groups* (Working Paper 98). New Haven, CT: Yale University, School of Management.

- Barsade, S. G., Ward, A. J., Turner, J. D. F., & Sonnenfeld, J. A. (2000). To your heart's content: A model of affective diversity in top management teams. *Administrative Science Quarterly*, 45, 802–836.
- Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47, 644–675.
- Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology*, 18, 131-148.
- Bartone, P. T., Adler, A. B., & Vaitkus, M. A. (1998). Dimensions of psychological stress in peacekeeping operations. *Military Medicine*, 163, 587–593.
- Bartone, P. T., Johnsen, B. H., Eid, J., Brun, W., & Laberg, J. C. (2002). Factors influencing small-unit cohesion in Norwegian Navy officer cadets. *Military Psychology*, 14, 1-22.
- Bartone, P. T., Roland, R. R., Picano, J. J., & Williams, T. J. (2008). Psychological hardiness predicts success in US Army Special Forces candidates. *International Journal of Selection and Assessment*, 16, 78-80.
- Bartunek, J. M., Krim, R. M., & Necochea, R., & Humphries, M. (1999). Sensemaking, sensegiving, and leadership in strategic organizational development. *Advances in Qualitative Organization Research*, 2, 37-71.
- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bechtold, M. N., Rohrman, S., DePater, I. E., & Beersma, B. (2011). The primacy of perceiving: Emotion recognition buffers negative effects of emotional labor. *Journal of Applied Psychology*, 96, 1087-1094.
- Bell, C., & Song, F. (2005). Emotions in the conflict process: An application of the cognitive appraisal model of emotions to conflict management. *International Journal of Conflict Management*, 16, 30-54.
- Benet-Martinez, V., Lee, F., & Leu, J. X. (2006). Biculturalism and cognitive complexity: Expertise in cultural representations. *Journal of Cross-Cultural Psychology*, 37, 386-407.
- Bhaskar-Shrinivas, P., Harrison, D. A., Shaffer, M. A., & Luk, D. M. (2005). Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. *Academy of Management Journal*, 48, 257-281.
- Black, J. S., & Gregersen, H. B. (1991). Antecedents to cross-cultural adjustment for expatriates in Pacific Rim assignments. *Human Relations*, 44, 497–515.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston, TX: Gulf Publishing.

- Bliese, P. D., Adler, M. B., & Castro, C. A. (2011). Research-based preventive mental health care strategies in the military. In A. B. Adler, P. D. Bliese & C. A. Castro (Eds.), *Developmental Psychology: Evidence-based strategies to promote mental health in the military*. Washington DC: American Psychological Association.
- Bobbitt-Zeher, D. (2011). Gender discrimination at work: Connecting gender stereotypes, institutional policies, and gender composition of workplace. *Gender and Society*, 25, 764-786.
- Bornstein, R.F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968–1987. *Psychological Bulletin*, 106, 265–289.
- Bresman, H. (2010). External learning activities and team performance: A multimethod field study *Organization Science*, 21, 81-96.
- Brett, J., Behfar K., & Kern, M. (2006). Managing challenges in multicultural teams. National culture and groups. *Research on Managing Groups and Teams*, 9, 233-262.
- Burgoon, J. K. & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs*, 55, 58-79.
- Bushman, B. J. (2002). Does venting anger feed or extinguish the flame? Catharsis, rumination, distraction, anger, and aggressive responding. *Personality and Social Psychology Bulletin*, 28, 724-731.
- Bushman, B. J., Baumeister, R. F., Phillips, C. M. (2001). Do people aggress to improve their mood? Catharsis beliefs, affect regulation opportunity, and aggressive responding. *Journal of Personality and Social Psychology*, 81, 17-32.
- Bushman, B. J., Baumeister, R. F., & Stack, A. D., (1999). Catharsis, aggression, and persuasive influence: Self-fulfilling or self-defeating prophecies? *Journal of Personality and Social Psychology*, 76, 367-376.
- Cai, D. A., & Hung, C. J. F. (2005). Whom do you trust? A cross-cultural comparison. In G. Cheney & G. A. Barnett (Eds.), *International & multicultural organizational communication* (pp. 73-104). Cresskill, NJ: Hampton Press.
- Caligiuri, P. M. (2000). The Big Five personality characteristics as predictors of expatriate's desire to terminate the assignment and supervisor-rated performance. *Personnel Psychology*, 53, 67-88.
- Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, 3, 23–43.

- Cantor, N., Markus, H., Niedenthal, P. & Nurius, P. (1986). On motivation and the self-concept. In R. Sorrentino & E. Higgins (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (pp. 96-121). New York: Guilford Press.
- Cascio, W. F. (2003). Changes in workers, work, and organizations. In W. C. Borman, D. L. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology*. (Vol.12, pp. 401-422). Hoboken, NJ: Wiley.
- Castro, C. A., & Adler, A. B. (Autumn 1999). OPTEMPO: Effects on Soldier and unit readiness. *Parameters*, 29, 86-95.
- Choi, I., Nisbett, R. E., & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin*, 125, 47-63.
- Cohen, W., & Levinthal, D., (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-152.
- Coleman, L. M., Jussim, L., & Abraham, J. (1987). Students' reactions to teacher evaluations: The unique impact of negative feedback. *Journal of Applied Social Psychology*, 17, 1051-1070.
- Colquitt, J., LePine, J., & Noe, R. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85, 678-707.
- Connelly, S., Gilbert, J., Zaccaro, S. J., Threlfall, K. V., Marks, M., & Mumford, M.D. (2000). Exploring the relationship of leader skills and knowledge to leader performance. *The Leadership Quarterly*, 11, 65-86.
- Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review*, 30, 509-530.
- Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrative review. *Annual Review of Psychology*, 51, 171-200.
- Curseu, P. L., Boros, S., & Oerlemans, L. A. G. (2012). Task and relationship conflict in short-term and long-term groups: The critical role of emotion regulation. *International Journal of Conflict Management*, 23, 97-107.
- Dekel, R., Solomon, Z., Ginzburg, K., & Neria, Y. (2003). Combat exposure, wartime performance, and long-term adjustment among combatants. *Military Psychology*, 15, 117-132.
- DeShon, R.P. & Gillespie, J.Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology*, 90, 1096-1127.

- Digman, J. M. (1990). Personality structure: Emergence of the five factor model. *Annual Review of Psychology*, 41, 417-440.
- Drach-Zahavy, A., & Freund, A. (2007). Team effectiveness under stress: A structural contingency approach. *Journal of Organizational Behavior*, 28, 423-450.
- Dulewicz, V., & Higgs, M. (2004). Can emotional intelligence be developed? *International Journal of Human Resource Management*, 15, 95-111.
- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry*, 6, 267-285.
- Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132.
- Edmonson, A. C. (1999). Psychological safety and learning behaviors in work teams. *Administrative Science Quarterly*, 44, 350-383.
- Edmonson, A. C. (April 2011). Strategies for learning from failure. *Harvard Business Review*, 89, 48-59.
- Ekman, P., & Friesen, W. V. (1975). *Unmasking the face*. Englewood Cliffs, NJ: Spectrum-Prentice Hall.
- Elfenbein, H. A. (2006). Learning in emotion judgments: Training and the cross-cultural understanding of facial expressions. *Journal of Nonverbal Behavior*, 30, 21-36.
- Foldy, E. G., Goldman, L., & Ospina, S. (2008). Sensegiving and the role of cognitive shifts in the work of leadership. *The Leadership Quarterly*, 19, 514-529.
- Fredrickson, B. L. & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60, 678-686.
- Germer, C. K. (2005a). Mindfulness: What is it? What does it matter? In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 3-27). New York: Guilford Press.
- Germer, C. K. (2005b). Teaching mindfulness in therapy. In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 113-129). New York: Guilford Press.
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12, 433-448.

- Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5, 95–110.
- Grandey, A., Foo, S. C., Groth, M., & Goodwin, R. E. (2012). Free to be you and me: A climate of authenticity alleviates burnout from emotional labor. *Journal of Occupational Health Psychology*, 17, 1-14.
- Grice, R. L., & Katz, L. C. (2005). *Cohesion in Military and Aviation Psychology: An Annotated Bibliography and Suggestions for U.S. Army Aviation*. Arlington, VA: US Army Research Institute for the Behavioral and Social Sciences.
- Griffith, J. (2002). Multilevel analysis of cohesion's relation to stress, well-being, identification, disintegration, and perceived combat readiness. *Military Psychology*, 14, 217-239.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2, 271-299.
- Gross, J. J. (Ed.). (2007). *Handbook of emotion regulation*. New York: Guilford Press.
- Gwartney-Gibbs, P. A., & Lach, D. H. (1991). Workplace dispute resolution and gender inequality. *Negotiation Journal*, 7, 187-200.
- Hackman, J. H. (1992). Group influences on individuals in organizations. In M. D. Dunnette and L. M. Hough, *Handbook of industrial and organizational psychology* (2nd ed., Vol. 3, pp. 199-267). Palo Alto, CA: Consulting Psychologists Press.
- Haisfield, L. (2012). *Interracial contact and self-disclosure: Implicit trust, racial categorization, and executive functioning* (Doctoral dissertation). Temple University, Philadelphia, PA.
- Hajjar, R. M. (2010). A new angle on the U.S. military's emphasis on developing cross-cultural competence: connecting in-ranks' cultural diversity to cross-cultural competence. *Armed Forces and Society*, 36, 247-263.
- Han, B. (2008). *A cross-cultural study of the effect of empathy on the moral judgment of distributive justice principles: Need versus equity* (Doctoral dissertation). University of Maryland, College Park, MD.
- Hargadon, A., & Sutton, R.I., (1997). Technology brokering and innovation in a product development firm. *Administrative Science Quarterly*, 42, 716-749.
- Haslam, S. A., & Ellemers, N., (2005). Social identity in industrial and organizational psychology: concepts, controversies and contributions. *International Review of Industrial and Organizational Psychology*, 20, 39–118.

- Hatfield, E., Cacioppo, J., & Rapson, R. L. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Heilman, M. E., & Eagly, A. H. (2008). Gender stereotypes are alive, well, and busy producing workplace discrimination. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1, 393-398.
- Hermann, C. F. (1972). *International crises: Insights from behavioral research*. New York: Free Press.
- Hirst, G., Van Knippenberg, D., & Zhou, J. (2009). A cross level perspective on employee creativity goal orientation, team learning behavior, and individual creativity. *Academy of Management Journal*, 52, 280–293.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140.
- Holton, E. F., Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11, 333-360.
- Hopfl, H., & Linstead, S. (1997). Introduction: Learning to feel and feeling to learn: Emotion and learning in organizations. *Management Learning*, 28, 5-12.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Leadership, culture, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage Publications.
- Huff, L., & Kelley, L. (2003). Levels of organizational trust in individualist versus collectivist societies: A seven-nation study. *Organization Science*, 14, 81-90.
- Hülsheger, U. R., Lang, J. W. B., & Maier, G. W. (2010). Emotional labor, strain, and performance: Testing reciprocal relationships in a longitudinal panel study. *Journal of Occupational Health Psychology*, 15, 505-521.
- Hülsheger, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 16, 361-389.
- Humphrey, R. H., Pollack, J. M., & Hawver, T. (2008). Leading with emotional labor. *Journal of Managerial Psychology*, 23, 151-168.

- Hunter, J. E. (1986). Cognitive ability, cognitive aptitude, job knowledge, and job performance. *Journal of Vocational Behavior*, 29, 340–362.
- Infante, D. A., & Wigley, C. J. (1986). Verbal aggressiveness: An interpersonal model and measure. *Communication Monographs*, 53, 61-69.
- Ito, T., Larsen, J., Smith, K., & Cacioppo, J. (1998). Negative information weighs more heavily on the brain: The negative bias in evaluation categorizations. *Journal of Personality and Social Psychology*, 75, 887-900.
- Jacobs, S., & Blustein, D. (2008). Mindfulness as a coping mechanism for employment uncertainty. *The Career Development Quarterly*, 57, 174-180.
- Janis, I. L. (1983). *Victims of groupthink*. Boston, MA: Houghton Mifflin.
- Jones, E. E., Kannouse, D. E., Kelley, H. H., Nisbett, R. E., Valins, S., & Weiner, B. (Eds.). (1972). *Attribution: Perceiving the causes of behavior*. Morristown, NJ: General Learning Press.
- Jordan, S., Messner, M., & Becker, A. (2009). Reflection and mindfulness in organizations: Rationales and possibilities for integration. *Management Learning*, 40, 465-473.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724.
- Kane, A. A., L. Argote, J. M. Levine. (2005). Knowledge transfer between groups via personal rotation: Effects of social identity and knowledge quality. *Organizational Behavior and Human Decision Processes* 96, 56–71.
- Kavanagh, D. J., & Bower, G. H. (1985). Mood and self-efficacy: Impact of joy and sadness on perceived capabilities. *Cognitive Therapy and Research*, 9, 507-525.
- Killgore, W. D. S., Stetz, M. C., Castro, C. A., & Hoge, C. W. (2006). The effects of prior combat experience on the expression of somatic and affective symptoms in deploying Soldiers *Journal of Psychosomatic Research*, 60, 379-385.
- Kirke, C. (2010). Military cohesion, culture and social psychology. *Defense & Security Analysis*, 26, 143-159.
- Klein, K., & Kozlowski, S. W. J. (2000). Multilevel theory, research and methods in organization. San Francisco: Jossey-Bass.
- Kohls, L. R. (2001) *Survival kit for overseas living* (4th ed.). Boston, MA: Nicholas Brealy.
- Kolodner, J. L. (1992). An introduction to case-based reasoning. *Artificial Intelligence Review*, 6, 3-34.

- Kozlowski, S., & Hulst, B. (1987). An exploration of climates for technical updating and performance. *Personnel Psychology*, 40, 539-563.
- Kramer, R. M. (1998). Paranoid cognition in social systems: Thinking and acting in the shadow of doubt. *Personality and Social Psychology Review*, 2, 251-275.
- Kramer, R. M., & Lewicki, R. J. (2010). Repairing and enhancing trust: Approaches to reducing organizational trust deficits. *The Academy of Management Annals*, 4, 245-277.
- Krantz, J. (1985). Group processes under conditions of organizational decline. *Journal of Applied Behavioral Science*, 21, 1-17.
- Kray, L., George, L., Liljenquist, K., Galinsky, A., Tetlock, P. (2010). From what might have been to what must have been: Counterfactual thinking creates meaning. *Journal of Personality and Social Psychology*, 98, 106-118.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77, 1121-1134.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518-530.
- Lepore, L., & Brown, R. (1997). Category and stereotype activation: Is prejudice inevitable? *Journal of Personality and Social Psychology*, 72, 275-287.
- Levitt, B., & March, J., (1988). Organizational learning. *Annual Review of Sociology*, 14, 319-340.
- Lievens, F., Harris, M. M., Van Keer, E., & Bisqueret, C. (2003). Predicting cross-cultural training performance: The validity of personality, cognitive ability, and dimensions measured by an assessment center and a behavior description interview. *Journal of Applied Psychology*, 88, 476-489.
- Lin, M. H., Kwan, V. S Y., Cheung, A., & Fiske, S. T. (2005). The stereotype content model explains prejudice for an envied outgroup: Scale of Anti-Asian American stereotypes. *Personality and Social Psychology Bulletin*, 31, 34-47.
- Lin, C., & Peng, T. (2010). From organizational citizenship behavior to team performance: The mediation of group cohesion and collective efficacy. *Management and Organization Review*, 6, 55-75.
- Lind, W. S., Nightengale, K., Schmitt, J. F., Sutton, J. W., & Wilson, G. I. (October 1989). The changing face of war: Into the Fourth Generation. *Marine Corps Gazette*, 22-26.

- Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performance spirals: A multilevel perspective. *Academy of Management Review*, 20, 645–678.
- Lopes, P. N., Côté, S., & Salovey, P. (2006). An ability model of emotional intelligence: Implications for assessment and training. In V. U. Druskat, F. Sala, & G. Mount (Eds.), *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups* (pp. 53-80). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lyons, A., & Kashima, Y., (2001). The reproduction of culture: Communication processes tend to maintain cultural stereotypes. *Social Cognition*, 19, 372-394.
- Lyubomirsky, S. (in press). Hedonic adaptation to positive and negative experiences. In S. Folkman (Ed.), *Oxford handbook of stress, health, and coping*. New York: Oxford University Press.
- March, J. G. (1976). The technology of foolishness. In J. G. March & J. P. Olsen (Eds.), *Ambiguity and choice in organizations* (pp. 69-81). Bergen, Norway: Universitetsforlaget.
- Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- MacGregor, A. J., Han, P. P., Dougherty, A. L., & Galarneau, M. R. (2012). Effect of dwell time on the mental health of US military personnel with multiple combat tours. *American Journal of Public Health*, 102(Suppl 1), S55–S59.
- MacNab, B., & Worthley, R. (2012). Individual characteristics as predictors of cultural intelligence development: The relevance of self-efficacy. *International Journal of Intercultural Relations*, 36, 62– 71.
- Maddi, S. R., Matthews, M. D., Kelly, D. R., Villarreal, B., & White, M. (2012). The role of hardiness and grit in predicting performance and retention of USMA cadets. *Military Psychology*, 24, 19-28.
- Major, D., Turner, J., & Fletcher, T., (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of Applied Psychology*, 91, 927-935.
- Mathieu, J. E., & Chen, G. (2011). The etiology of the multilevel paradigm in management research. *Journal of Management*, 37, 610-641.
- Mathieu, J. E., & Martineau, J. W. (1997). Individual and situational influences in training motivation. In J. K. Ford & Associates (Eds.), *Improving training effectiveness in work organizations* (pp. 193-222). Mahwah, NJ: Lawrence Erlbaum Associates.

- Mathieu, J. E., Tannenbaum, S. I., & Salas, E. (1992). The influences of individual and situational characteristics on measures of training effectiveness. *Academy of Management Journal*, 35, 828-847.
- Matsumoto, D. (2006). Are cultural differences in emotion regulation mediated by personality traits? *Journal of Cross-Cultural Psychology*, 37, 421-437.
- Maurer, T. (2002). Employee learning and development orientation: Toward an integrative model of involvement in continuous learning. *Human Resource Development Review*, 1, 9-44.
- Maurer, T. & Lippstreu, M. (2008). Expert vs. general working sample differences in KSAO 'Improvability' ratings and relationships with measures relevant to occupational and organizational psychology. *Journal of Occupational and Organizational Psychology*, 81, 813-829.
- Maurer, T., Lippstreu, M., & Judge, T. A. (2008). Structural model of employee involvement in skill development activity: The role of individual differences. *Journal of Vocational Behavior*, 72, 336-350.
- Maurer, T., Weiss, E., & Barbeite, F. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational and age variables. *Journal of Applied Psychology*, 88, 707-724.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.
- McCloskey, M. J., Grandjean, A., Behymer, K. J., & Ross, K (2010). *Assessing the development of cross-cultural competence in soldiers* (Technical Report 1277). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- McCrae R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120, 323-337.
- Mikulincer, M., & Nizan, B. (1988). Causal attribution, cognitive interference, and the generalization of learned helplessness. *Journal of Personality and Social Psychology*, 55, 470-478.
- Miller, G. R., & Steinberg, M. (1975). *Between people*. Chicago, IL: Science Research Associates.
- Mitroff, I. I., Shrivastava, P., & Udwadia, F. E. (1987). Effective crisis management. *Academy of Management Executive*, 1, 283-292.

- Mol, S. T., Born, M. P., Willemsen, M. E., & Van Der Molen, H. T. (2005). Predicting expatriate job performance for selection purposes: A quantitative review. *Journal of Cross-Cultural Psychology*, 36, 590-620.
- Moynihan, D. P. (2009). The network governance of crisis response: Case studies of incident command systems. *Journal of Public Administration Research and Theory*, 19, 895- 915.
- Mumford, M. D., & Connelly, M. S. (1991). Leaders as creators: Leader performance and problem solving in ill-defined domains. *The Leadership Quarterly*, 2, 289-315.
- Mumford, Peterson, Robledo, & Hester, (2012). Cases in leadership education: Implications of human cognition. In S. Snook, N. Noria, and R. Khurana (Eds.), *Handbook for teaching leadership: knowing, doing, and being* (pp. 21-33). Thousand Oaks, CA: Sage Publications.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management*, 24, 391-419.
- Newell, S. E., & Stutman, R. K. (1991). The episodic nature of social confrontation. In J. A. Andersen (Ed.), *Communication yearbook 14* (pp. 359-392). Beverly Hills, CA: Sage Publications.
- Noe, R., & Wilk, S. (1993). Investigation of factors that influence employees' participation in development activities. *Journal of Applied Psychology*, 78, 291-302.
- Obodaru, O. (2012). The self not taken: How alternative selves develop and how they influence our professional lives. *Academy of Management Review*, 37, 34-57.
- Overdale, S., & Gardner, D. (2012). Social support and coping adaptability in initial military training. *Military Psychology*, 24, 312-330.
- Palthe, J. (2004). The relative importance of antecedents to cross-cultural adjustment: implications for managing a global workforce. *International Journal of Intercultural Relations*, 28, 37-59.
- Payne, S.C., Youngcourt, S.S., & Beaubien, J.M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92, 128-150.
- Perrow, C. (1984). *Normal accidents: Living with high-risk technologies*. New York: Basic Books.
- Poole, M. S., & Garner, J. T. (2006). Perspectives on work-group conflict and communication. In J. G. Oetzel & S. Ting-Toomey (Eds.), *The SAGE handbook of conflict communication* (pp. 267-292). Thousand Oaks, CA: Sage Publications.

- Porter, S., & Peace, K. A. (2007). The scars of memory: A prospective, longitudinal investigation of the consistency of traumatic and positive emotional memories in adulthood. *Psychological Science*, 18, 435-441.
- Pratt, M. G. (1998). 'To be or not to be: central questions in organizational identification'. In D.A. Whetten and P. C. Godfrey (Eds), *Identity in organizations: Building theory through conversations* (pp. 171–207). Thousand Oaks, CA: Sage Publications.
- Pratto, F. & John, O.P., (1991) Automatic vigilance: The attention grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61, 380-391.
- Pruitt, D. G., & Rubin, J. Z. (1986). *Social conflict: Escalation, stalemate, and settlement*. New York: Random House.
- Pulakos, E., Donovan, M. , Plamondon, K. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85, 612-624.
- Pulakos, E., Schmitt, N., Dorsey, D., Arad, S., Borman, W., Hedge, J. (2002). Predicting adaptive performance: Further tests of a model of adaptability. *Human Performance*, 15, 299-323.
- Reiter-Palmon, R., & Ilies, J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *The Leadership Quarterly*, 15, 55-77.
- Roloff, M. E., & Soule, K. P. (2002). Interpersonal conflict: A review. In M. L. Knapp & J. A. Daly (Eds.), *Handbook of interpersonal communication* (3rd ed., pp. 475-428). Thousand Oaks, CA: Sage Publications.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In Berkowitz, L. (Ed.), *Advances in experimental social psychology* (pp. 173–220). New York: Academic Press.
- Rouiller, J. Z., & Goldstein, I. L. (1993). The relationship between organizational transfer climates and positive transfer of training. *Human Resource Development Quarterly*, 4, 377-390.
- Salazar, M. R., Lant, T. K., Fiore, S. M., & Salas, E. (2012). Facilitating innovation in diverse science teams through integrative capacity. *Small Group Research*, 43, 527-558.
- Salter, M. S., & Klein, G. E. (2007). *After action reviews: Current observations and recommendations*. Vienna: VA: Wexford Group International, Inc.

- Schartau, P. E. S., Dalglish, T., & Dunn, B. D. (2009). Seeing the bigger picture: Training in perspective broadening reduces self-reported affect and psychophysiological response to distressing films and autobiographical memories. *Journal of Abnormal Psychology, 118*, 15–27.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review, 32*, 344-354.
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14*, 449-464.
- Seibert, K. (1999). Reflection in action: Tools for cultivating on the job learning conditions. *Organizational Dynamics, Winter, 27*, 54-65.
- Shaffer, M. A., Harrison, D. A., & Gilley, K. M. (1999). Dimensions, determinants, and differences in the expatriate adjustment process. *Journal of International Business Studies, 30*, 557–582.
- Shaffer, M. A., Harrison, D.A., Gregersen, H., Black, J. S., & Ferzandi, L.A. (2006). You can take it with you: Individual differences and expatriate effectiveness. *Journal of Applied Psychology, 91*, 109-125.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science, 4*, 577–594.
- Sheldon, K. M., Ryan, R., & Reis, H. T. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin, 22*, 1270-1279.
- Sherman, J. W., Stroessner, S. J., Conrey, F. R., & Azam, O. A. (2005). Prejudice and stereotype maintenance processes: Attention, attribution, and individuation. *Journal of Personality and Social Psychology, 89*, 607-622.
- Shipman, A., Friedrich, T., Vessey, B., Connelly, S., Day, E., Douglass, A., Schroder, J. & Ruark, G. A. (2010). *A model of emotion management for the U.S. Army* (Research Product 2011-03). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Shipman, Byrnes, & Mumford, (2010). Leader vision formation and forecasting: The effects of forecasting extent, resources, and timeframe. *The Leadership Quarterly, 21*, 439-456.
- Sims, R. and Schraeder, M. (2004). An examination of salient factors affecting expatriate culture shock. *Journal of Business and Management, 10*, 73-87.

- Strauss, K., Griffin, M. A., Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology*, 97, 580-598.
- Swap, W. C. (1977). Interpersonal attraction and repeated exposure to rewarders and punishers. *Personality and Social Psychology Bulletin*, 3, 248–251.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J.C. (1986). The social identity theory of intergroup behaviour, In S. Worchel and W. G. Austin (Eds.), *Psychology of inter-group relations* (pp. 7-24). Chicago: Nelson-Hall.
- Takeuchi, R., Tesluk, P. E., Yun, S., & Lepak, D. P. (2005). An integrative view of international experience. *Academy of Management Journal*, 48, 85-100.
- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilization minimization hypothesis. *Psychological Bulletin*, 110, 67-85.
- Thiel, C., Connelly, S., & Griffith, J. (2012). Leadership and emotion management for complex tasks: Different emotions, different strategies. *The Leadership Quarterly*, 23, 517-533.
- Thomas, K. W. (1976). Conflict and conflict management. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 889-935). Chicago, IL: RandMcNally.
- Thomas, K. W. (1992). Conflict and negotiation processes in organizations. In M. Dunette (Ed.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 3, pp. 651-717). Palo Alto: CA: Consulting Psychologists Press.
- Todorova, G., & Dursin, B., (2007). Absorptive capacity: Valuing a reconceptualization. *Academy of Management Review*, 32, 774-786.
- Tracey, J. B., Hinkin, T. R., Tannenbaum, S. I., & Mathieu, J. E. (2001). The influence of individual characteristics and the work environment on varying levels of training outcomes. *Human Resource Development Quarterly*, 12, 5-23.
- Tracey, J. B., Tannenbaum, S. I., & Kavanagh, M. J. (1995). Applying trained skills on the job: The importance of the work environment. *Journal of Applied Psychology*, 80, 239-252.
- Tracey, J.B., & Tews, M.J. (2005). Construct validity of a general training climate scale. *Organizational Research Methods*, 8, 353-374.

- Tucker, J. S., Sinclair, R. R., Mohr, C. D., Adler, A. B., Thomas, J. L., & Salvi, A. D. (2009). Stress and counterproductive work behavior: Multiple relationships between demands, control, and soldier indiscipline over time. *Journal of Occupational Health Psychology*, 14, 257-271.
- Van Dyck, C., Frese, M., Baer, M. & Sonnentag, S. (2005). Organizational error management culture and its impact on performance: A two-study replication. *Journal of Applied Psychology*, 90, 1228-1240.
- Volkema, R. J., Farquhar, K., & Bergman, T. J. (1996). Third-party sensemaking in interpersonal conflicts at work: A theoretical framework. *Human Relations*, 49, 1437-1454.
- Weick, K. E. (1979). *The Social psychology of organizing* (2nd Ed.). Reading, MA: Addison Wesley.
- Weick, K.E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage Publications.
- Weiner, B. (1974). *Achievement motivation and attribution theory*. Morristown, N.J.: General Learning Press.
- Wilson, J., Goodman, P., & Cronin, M. (2007). Group learning. *Academy of Management Review*, 32, 1041-1059.
- Wong, S.S., (2004). Distal and local group learning: Performance trade-offs and tensions. *Organization Science*, 15, 645–65.
- Wurf, E. & Markus, H. (1991). Possible selves and the psychology of personal growth. *Perspectives in Personality*, 3, 39-62.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, 1–27.