



## **Aggression, Risk Taking, and Leadership Effectiveness: Leadership Lessons From the Explanatory Styles of Civil War Generals**

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The present study applies explanatory style theory and the content analysis of verbatim explanation (CAVE) technique toward examining the leadership behaviors and effectiveness of key Civil War generals. The results of our study suggest that relatively optimistic explanatory styles may lead to aggressiveness and risk taking while relatively pessimistic explanatory styles may lead to passivity and risk aversion. Our findings also suggest that a pessimistic explanatory style could be related to leadership effectiveness in some situations as mediated by aggression and risk taking. In short, pessimism may result in greater leadership effectiveness by reducing excessive aggression and risk taking.

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**M**odern leadership theory and knowledge has often been enlightened by the study of leadership in historical contexts. The study of leadership in historical military contexts has been especially popular, and researchers have applied a variety of contemporary theories of leadership and psychology in the examination of historical military leaders and military leadership situations (e.g., Duncan, LaFrance, & Ginter, 2003; Pois & Langer, 2004; Taylor & Rosenbach, 2000; Wood, 1995; Wong, Bliese, & McGurk, 2003). Furthermore, it seems that leadership scholars have paid particularly close attention to military leadership in the context the American Civil War (e.g., Buell, 1997; Duncan et al., 2003). This attention appears to be fairly well-warranted. The Civil War is one of the more thoroughly documented wars in modern history and provides a rich backdrop for the study of leadership behaviors and tendencies.

In the current paper, we follow this established approach of applying contemporary theories and techniques within the historical context of the Civil War in order to expand our knowledge and understanding of leadership behaviors and processes. More specifically, the purpose of the present study is to apply explanatory style theory and the content analysis of verbatim explanations (CAVE) technique to examine the leadership behaviors and leadership

effectiveness of four prominent Civil War generals. Although these techniques have previously been applied toward understanding military leadership behaviors at the executive level (i.e., heads of state such as George H. W. Bush and Winston Churchill) in the 20th century (Satterfield, 1998; Satterfield & Seligman, 1994), we are the first to apply these techniques toward understanding military leadership at a different level (battlefield commander) and in a different historical context (the Civil War). The results of our study primarily will be of interest to leadership theorists and practitioners who may be able to apply some of our findings to other leadership contexts. Finally, our findings may also hold some interest for military strategists seeking to understand and predict the actions of modern military leaders as well as for Civil War historians seeking to better understand the behaviors and motivations of Civil War generals.

### Explanatory Style

The concept of explanatory style was developed as part of Abramson, Seligman, and Teasdale's (1978) reformulation of the learned helplessness theory. Learned helplessness occurs when, due to negative circumstances or experiences, people come to believe that they have no control over their outcomes. Such people believe that nothing they do matters and consequently become passive, indecisive, and depressed. The reformulated learned helplessness theory suggests that people have tendencies or habits for explaining positive and negative events (Abramson et al., 1978). An individual's habitual or preferred explanatory style helps to determine whether the individual will become passive, risk averse, and indecisive (i.e. "helpless") when faced with difficult and challenging situations (Gillham, Shatte, Reivich, & Seligman, 2001). A person with a pessimistic explanatory style tends to hesitate, give up, or retreat when faced with problems or the possibility of failure. In contrast, individuals with an optimistic explanatory style tend to persist, endure, or increase their efforts when faced with setbacks and challenges (Seligman, 1991). There are three primary causal dimensions that comprise explanatory style: permanence (i.e., stable vs. unstable causes), pervasiveness (i.e., universal vs. specific causes), and personalization (i.e., internal vs. external causes) (Gillham et al., 2001). People with a pessimistic explanatory style tend to see negative events as resulting from permanent, pervasive, and personal causes (e.g., "It will never get any better, it undermines everything I do, and it is entirely my fault"). In contrast, people with an optimistic explanatory style tend to see negative events as temporary and related to specific impersonal external causes (Seligman, 1991).

Research suggests that a person's explanatory style is relatively stable across both time and situation (e.g., Burns & Seligman, 1989; Nolen-Hoeksema, Girgus, Seligman, 1986; Peterson, Seligman, & Vaillant, 1988). However, unlike personality traits, which are generally considered to be well established after adolescence (e.g., Costa & McCrae, 1994), explanatory style is thought to be somewhat more malleable and amenable to reshaping with appropriate cognitive change interventions (Seligman, 1991). A person's explanatory style is developed in childhood on the basis of three primary influences (Dweck & Licht, 1980; Seligman & Elder, 1985). First, children whose parents, especially their mothers, provide largely optimistic causal explanations for everyday events tend to develop optimistic explanatory styles. Second, children who are criticized for their failings in terms of permanent and pervasive explanations tend to develop pessimistic explanatory styles. Third, children who experience early childhood traumas and losses that are in fact pervasive and permanent, such as the death of a parent, tend to develop pessimistic explanatory styles. The explanatory styles developed in childhood tend to follow

individuals into adulthood, shaping the way they interpret and explain the world around them, especially the negative events that they experience (Burns & Seligman, 1989).

Although a number of measures have been used in explanatory style research (see Reivich, 1995 for a complete review), the Attributional Style Questionnaire (ASQ) is the most widely used instrument for the measurement of explanatory style (Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982). The ASQ is a self-report instrument that scores an individual's explanatory style along the three causal dimensions outlined above. The ASQ presents 12 hypothetical events, half of which are good and half of which are bad. The subject is first asked to write one major cause for each hypothetical event before rating the causes on each of the three causal dimensions. However, because some people will not (as in the case of famous people such as politicians, sports figures, or movie stars) or can not (as in the case of historical figures who are no longer living) complete a questionnaire, the Content Analysis of Verbatim Explanations (CAVE) technique was developed (Schulman, Castellon, & Seligman, 1989). The CAVE technique calls for the extraction of verbatim explanatory statements from a subject's writings or recorded comments (e.g., a diary, newspaper quotations, an autobiography, a transcribed interview, etc.). Independent blind raters then rate the explanatory statements on each of the three explanatory style causal dimensions (permanence, pervasiveness, and personalization) to create an explanatory style score. CAVE explanatory style scores have good construct validity, correlating highly ( $r = .71$ ) with ASQ scores for the same subject (Schulman et al., 1989).

Much of the previous explanatory style research has dealt with the effects of explanatory style on various outcomes such as depression (Peterson & Seligman, 1984), illness (Peterson, Seligman, & Vaillant, 1988), and performance. Areas of performance include academics (Peterson & Barrett, 1987), athletics (Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1990), and insurance sales (Seligman & Schulman, 1986). Explanatory style has also been used to examine and explain important historical events. For instance, Zullo and Seligman (1990) used the CAVE technique to assess the explanatory style used by presidential candidates in their campaign speeches from 1900-1984 and found that the candidate with the more pessimistic explanatory style lost 18 of 22 presidential elections over that time period. Explanatory style research has also been extended to the examination of military leadership at the commander-in-chief level. For example, Zullo, Oettingen, Peterson, and Seligman (1988) reported that when Lyndon Johnson shifted to a more optimistic explanatory style in his Vietnam era press conferences, aggressive and risky military actions followed, while a shift to a more pessimistic explanatory style predicted passivity and risk aversion. Likewise, Satterfield and Seligman (1994) showed that relatively high levels of optimism in the explanatory styles of both George H. W. Bush and Saddam Hussein during the events surrounding the first gulf war predicted aggression and risk taking, while increased pessimism before a military event predicted caution and passivity. Similarly, Satterfield (1998) demonstrated a significant relationship between the relative explanatory styles for time periods preceding important military events and the levels of aggression and risk taking for Winston Churchill, Adolf Hitler, Josef Stalin, and Franklin D. Roosevelt during World War II.

### Explanatory Style and Leadership

Leadership has often been described as a process of influence toward the accomplishment of objectives (e.g., Bass, 1960; Katz & Kahn, 1966; Yukl, 1998). In order to better understand this complex process, leadership theorists have attempted to identify key leader characteristics and behaviors that may be associated with effective leadership. One such characteristic that has been advanced as a possible mechanism for overall leadership effective is an optimistic explanatory style. For example, Peterson, Walumbwa, Byron and Myrowitz (2007) reported a relationship between leaders' positive psychological traits of hope and optimism and firm performance. Similarly, Wunderly, Reddy, and Dember (1998) found that a sample of male business leaders had a lower mean score on pessimism than a normative group of non-leaders. These authors also reported that optimism was positively correlated with a scale measuring effective leadership practices and that pessimism was negatively correlated with a scale measuring adaptation and innovation. Likewise, Popper, Amit, Gal, Mishkal-Sinai, and Lisak (2004) argued that a proactive orientation as expressed by optimism was one of three psychological capacities necessary for leadership. In a study of 402 soldiers who were nearing the end of three months of basic training, peers' and commanders' evaluations of the soldiers' leadership capabilities were used to categorize subjects dichotomously as either leaders or non-leaders. The findings suggested that leaders have a higher internal locus of control, lower levels of anxiety, higher self-efficacy, greater capacity for developing interpersonal relationships and higher levels of optimism than their non-leader peers (Popper et al., 2004). Finally, in a similarly designed study, Chemers, Watson, and May (2000) found that optimism was positively associated with military science professors' ratings of leadership potential for a sample of military cadets.

### Research Hypotheses

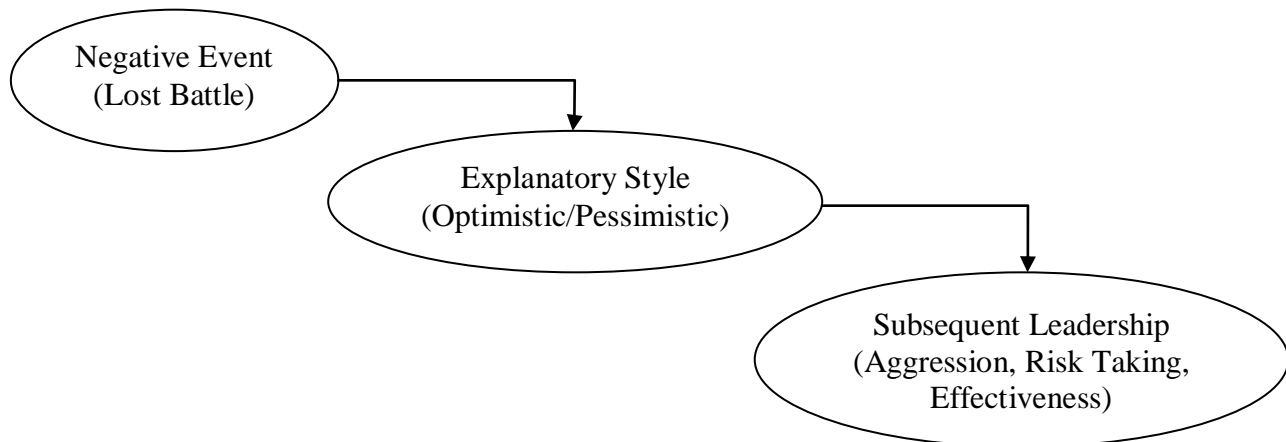
In the present study, we expand the existing line of explanatory style in military leadership research to a different time context (the Civil War) and to a different level of military leadership (field commander). In short, based on explanatory style theory and the previous empirical findings outlined above, we suggest that the explanatory style of key Civil War commanders in the days leading up to important military events will predict important leadership behaviors. More specifically, we expect that relatively optimistic explanatory styles in leaders will result in greater aggressiveness and risk-taking behaviors by those leaders, while relatively pessimistic explanatory styles will result in leader passivity and risk aversion. In addition, we suggest that the explanatory style of a commander will be related to overall leadership effectiveness for that commander, with an optimistic explanatory style related to leadership effectiveness and a pessimistic explanatory style related to leadership ineffectiveness.

- H<sub>1</sub>: Commanders with relatively optimistic explanatory styles will be more aggressive and take more risks than commanders with relatively pessimistic explanatory styles.
- H<sub>2</sub>: Commanders with relatively optimistic explanatory styles will be more effective leaders as compared to commanders with relatively pessimistic explanatory styles.

## Method

### *Overall Study Design*

The overall design for the present study is shown in Figure 1. As indicated in Figure 1, a negative event (a major battlefield defeat) was identified for each general, resulting in causal explanations that could be assessed to determine the explanatory style (pessimistic vs. optimistic) for each commander at that time. Leadership behaviors in a subsequent military campaign were then rated in terms of aggression, risk taking, and overall leadership effectiveness. Battlefield losses were chosen as the focal explanatory event in the current study for several reasons. Although both negative and positive events are often used to determine explanatory style (e.g., the ASQ), negative events may actually be more effective in determining an individual's levels of optimism and pessimism. Negative events tend to have a greater impact on people than positive events (Zautra & Reich, 1983), and people tend to respond more strongly to losses than to gains (Tversky & Kahneman, 1981). Indeed, prior research suggests that explanatory style for negative events is a better predictor of clinical depression than explanatory style for positive events (Peterson & Seligman, 1984). Explanatory style for negative events also tends to be more stable across both time and situation than explanatory style for positive events (Burns & Seligman, 1989). Moreover, using multiple events (both positive and negative) for each general would have been prohibitive due to the demands that such a design would have placed on the CAVE raters, leading to a greater risk of rater fatigue.



*Figure 1.* Overall study design

### *Subjects*

Braxton Bragg, John Bell Hood, Albert Sidney Johnston, and Robert E. Lee were chosen as subjects in the present study. These generals were chosen for inclusion because they commanded at the same level of military leadership (i.e., army commanders), and they all experienced a significant battlefield failure followed by another military action within three months.

*Military Actions*

Two major military actions involving key campaign and battlefield commands, orders, and decision-making were selected for each of the four commanders. Table 1 provides a summary of the paired military actions selected for each commander. The military actions were chosen utilizing the following criteria. First, the initial action had to result in a strategic military defeat or failure. Second, the army commander was held responsible for the defeat and was required to provide a battle report explaining the circumstances surrounding the failure. Third, the initial defeat was followed by another major military action within three months. In most cases, the causal explanations of the initial failure were written during this intervening period and serve as good indicators of the subject's levels of optimism or pessimism as they entered the subsequent campaign.

Table 1: Commanders and Paired Military Actions

Commander	Military Actions	Dates
Braxton Bragg	Perryville, KY	October 8, 1862
	Stones River, TN	December 31, 1862
John Bell Hood	Spring Hill, TN	November 29, 1864
	Franklin, TN	November 30, 1864
Albert Sidney Johnston	Fort Donelson, TN	February 11-16, 1862
	Shiloh, TN	April 6-7, 1862
Robert E. Lee	Antietam, MD	September 16-18, 1862
	Fredericksburg, VA	December 11-15, 1862

The following paragraphs provide a brief description of the military actions chosen for each commander. For additional and more detailed information regarding these campaigns, refer to Walter Geer's classic work, *Campaigns of the Civil War* (Geer, 1926/2001).

*Perryville and Stones River.* Confederate General Braxton Bragg's autumn of 1862 invasion of Kentucky had carried as far as the outskirts of Cincinnati and Louisville before he was forced to fall back and regroup in central Kentucky. On October 8, 1862, Union Major General Don Carlos Buell and his force of 55,000 attacked Bragg's army at Perryville. The armies battled throughout the day as the confederates were pushed back through the streets of the town. Bragg, outnumbered and undersupplied, withdrew during the night into East Tennessee, ultimately retreating to Murfreesboro, where he ordered his army into winter quarters. Less than three months later, on December 31, 1862, Union Major General William S. Rosecrans' army of 44,000 attacked Bragg's force of 37,000 in the battle of Stones River.

*Spring Hill and Franklin.* On the afternoon of November 29, 1864, Confederate General John Bell Hood's Army of Tennessee crossed the Duck River and raced toward Spring Hill, TN in an effort to cut off Union Major General John Schofield and his army from their supply lines in Nashville. In the late afternoon, a small union force at Spring Hill held off a piecemeal Confederate infantry assault. During the night, Schofield's entire army quietly passed within a few yards of the encamped Confederates, moving from Columbia, TN through Spring Hill to

take up entrenched positions in Franklin, TN. Schofield's maneuver is generally considered to be one of the most crucial non-combat events of the entire war. The following day, an incensed John Bell Hood ordered his army to attack the waiting Federals at the battle of Franklin.

*Fort Donelson and Shiloh.* Following the capture of Fort Henry on the Tennessee River on February 6, 1862, Union Brigadier General Ulysses S. Grant laid siege on Fort Donelson on the Cumberland River. Finally, on February 16, following a failed attempt to break through Grant's lines with an all-out attack, the entire 12,000 man garrison surrendered unconditionally, giving the Union armies control of both of the major waterways leading into Tennessee. Following the defeat at Fort Donelson, Confederate General Albert Sidney Johnston was forced to fall back to Corinth, MS. Grant mounted an offensive down the Tennessee River, stopping at Pittsburg Landing to await the arrival of Major General Don Carlos Buell's Army of the Ohio. In the early morning hours of April 6, 1862, Johnston launched a surprise assault in the battle of Shiloh.

*Antietam and Fredericksburg.* On September 17, 1862, Union Major General George B. McClellan attacked Robert E. Lee's Army of Northern Virginia at Sharpsburg, MD in what would become the single bloodiest day of the war. The fighting raged throughout the day as Lee and his army, outnumbered two-to-one, fought McClellan and the Union army to a virtual draw. Despite devastating losses, Lee and his troops continued to engage the Union army throughout much of the following day. That night, Lee withdrew his army across the Potomac and back into Virginia. President Lincoln claimed a great Union victory and took the opportunity to announce his famous emancipation proclamation. Less than three months later, Robert E. Lee and his army occupied the heights behind the town of Fredericksburg, VA. Union General Ambrose Burnside crossed the Rappahannock River and attacked Lee and his army in the battle of Fredericksburg.

### *Verbatim Materials*

Explanatory statements were extracted for each general from "The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies," or more commonly "The Official Records." The Official Records contain the detailed contemporary verbatim explanatory statements of civil war commanders in the form of battle reports, correspondence, orders, and other types of reports. It is considered the primary source for all Civil War historians and provides perfect source materials for the CAVE technique.

The explanatory statements used in the current study were taken exclusively from the official battle reports written by each general. Generals often wrote multiple reports explaining the outcome of a given battle, and the vast majority of the reports used to extract explanatory statements for the current study were addressed to Brigadier General Samuel Cooper, the Adjutant and Inspector General for the Confederate Army. Cooper, who reported directly to President Jefferson Davis, was the highest ranking general in the Confederate Army. A few reports were addressed directly to Jefferson Davis or to J. P. Benjamin, the Secretary of War for the Confederacy, but there is little doubt that all three men routinely read these reports and were the intended audience.

The approaches used by the four generals in writing the battle reports were very similar due to common backgrounds and training and to the close constraints under which the reports were written. All four generals graduated from the United States Military Academy at West

Point and served in the Army of the United States prior to the Civil War. All four subsequently were commissioned as generals in the Confederate Army and wrote their battle reports in the context of the requirements and expectations of that army. Finally, in the mid-nineteenth century, long before the advent of telecommunications, the written word was supreme. Detailed explanations were expected and given, making this time period and these reports particularly rich and compelling as source material for the CAVE technique. Details regarding the criteria and procedures for selecting the explanatory statements for each general are presented in the following section.

### *CAVE Analysis and Explanatory Style Score*

Explanatory statements were extracted from the Official Records for each subject in accordance with the “Guidelines for Extracting and Rating Spontaneous Explanations,” which is included as an appendix to Schulman et al.’s (1989) article describing the CAVE technique. Several conditions must be present in order for a statement to be extracted (Schulman et al., 1989). For example, the subject must be presenting his or her own explanation of the event and not simply agreeing with or quoting another person’s explanation. Likewise, there must be a clear causal relationship between explanation and event, rather than a mere description of a sequence of events that offers no explanation. The explanation must clearly precede the event as a primary cause as opposed to a simple proof or justification of the event. Schulman et al. included several examples of both acceptable and unacceptable extractions along with supporting discussion and commentary.

The authors of the present study extracted the explanatory statements that were used in subsequent analyses while adhering carefully to the guidelines described above. One of the authors has considerable knowledge and expertise in the area of Civil War history while the other author is well-versed in explanatory style theory and the CAVE technique. Together the authors were able to identify battle reports written by each commander following his battlefield defeat and to select a total of 35 explanatory statements from among these verbatim explanations. A sample statement for each general is listed in Appendix A.

Extractions were individually coded and randomized. Next, a panel of seven independent raters, who were blind to any information regarding the identity of the generals or the details of the circumstances surrounding the explanatory statements, scored each statement on the explanatory style dimensions of permanence, pervasiveness, and personalization using a basic 7-point scale. The raters received a 2-hour training session based on the “Guidelines for Extracting and Rating Spontaneous Explanations” (Schulman et al., 1989) that included a basic overview of explanatory style theory along with detailed information about the CAVE rating technique. More specifically, the trainer explained each of the three dimensions (internal vs. external, stable vs. unstable, universal vs. specific) in detail and provided sample explanatory statements that were representative of differing points on the 7-point scale for each dimension. This effectively provided the raters with rating “anchors” that helped to establish a common frame of reference for their subsequent individual ratings. Refer to the “Guidelines for Extracting and Rating Spontaneous Explanations” (Schulman et al., 1989) for more detailed information on the sample statements used in the training.

Although there are numerous methods for assessing interrater reliability and agreement, we chose to use James, Demaree, and Wolf’s (1984)  $r_{WG(J)}$ , which represents the within-group interrater reliability for judges’ mean scores based on  $J$  items. Values for  $r_{WG(J)}$  range from 0 to 1



with values above .70 generally representing acceptable levels of interrater agreement to warrant aggregation of individual ratings to create a single score based on the average of multiple ratings. This method of assessing interrater reliability has been widely used in behavioral research and has generally been viewed as an acceptable and effective means of determining the appropriateness of data aggregation (e.g., LeBreton, James, & Lindell, 2005; LeBreton & Senter, 2008; Lindell & Brandt, 1999).

The interrater reliability for the seven raters in the present study was quite good ( $r_{WG(J)} = .977$ ). The ratings were therefore aggregated by averaging the ratings of the seven raters on each of the three causal dimensions: internal vs. external, stable vs. unstable, universal vs. specific. An overall composite score for pessimism (PES) in explanatory style for each general was calculated by averaging the aggregated scores for each of the three causal dimensions. A hopelessness (HLN) score (Satterfield & Seligman, 1994) was also calculated in a similar manner for each general. The hopelessness score excludes the internal/external or personalization (i.e., blaming) causal dimension and represents the average of the two remaining dimensions of permanence (stable vs. unstable) and pervasiveness (universal vs. specific).

#### *Aggression, Risk taking, and Leadership Effectiveness Scores*

Adapting previously established methods (Satterfield, 1998; Satterfield & Seligman, 1994), two noted Civil War historians, who were blind to the explanatory style scores assigned by the other raters, rated the specific actions taken by each general in the second of the paired military actions on a 5-point scale in order to determine an aggression score and a risk-taking score for each general. More specifically, the raters were asked to respond to the question "To what extent was Lee aggressive in his actions and orders at Fredericksburg?" on a scale ranging from 1 (*not at all aggressive*) to 5 (*extremely aggressive*) and the question "To what extent did Lee take risks in his actions and orders at Fredericksburg?" on a scale ranging from 1 (*no risk taking*) to 5 (*extreme risk taking*). The questions were adapted and repeated for each general. Because of the historians' familiarity and knowledge of the focal battles and the actions of the generals in question, they were especially well-qualified for assessing the level of aggression and risk taking demonstrated by each general. Although the aggression and risk-taking constructs are theoretically distinct from one another (e.g., Satterfield & Seligman, 1994), they were highly correlated ( $r = .93$ ) in the current data and were therefore combined into a single aggression and risk-taking (AGG/RISK) variable for subsequent analysis.

The two historians also assessed the leadership effectiveness of each general using an adapted version of the General Leadership Impression (GLI) scale (Lord, Foti, & DeVader, 1984). The adapted scale consisted of three items that were rated on a 5-point scale with anchors ranging from "extreme amount" to "nothing." Scale items included "How much did Lee contribute to the effectiveness of his army?" "How much leadership did Lee exhibit?" and "If you had to choose a new leader for an army, how willing would you be to vote for Lee as the leader?" The scores on this adapted scale were used to create a leadership effectiveness score for each general. The interrater reliability for the two raters was excellent ( $r_{WG(J)} = .993$ ). The ratings were therefore aggregated by averaging the ratings of the two raters to create a single aggregate AGG/RISK and leadership effectiveness score for each general.

## Results

Explanatory style, aggression/risk taking, and leadership effectiveness scores are shown in Table 2. Higher overall pessimism scores (PES) indicate a more pessimistic and less optimistic explanatory style for each general in his explanation of the battlefield failure. Of the four generals, Bragg was the most pessimistic, and Hood was the most optimistic. The hopelessness score (HLN) excludes the internal/external “blaming” dimension of explanatory style. Once again, Hood was the most optimistic while Bragg was the more pessimistic or “hopeless” of the four generals. Hood scored the highest of the generals in aggression and risk taking (AGG/RISK), while Lee scored the lowest in this category. Finally, Lee was rated highest in terms of leadership effectiveness (LE) while Hood was rated as the least effective leader among the generals.

Table 2: Explanatory Style, Aggression, Risk taking, and Leadership Effectiveness Scores

	PES	HLN	AGG/RISK	LE
Lee	3.11	3.33	2.50	4.50
Bragg	3.56	3.38	4.00	2.33
Johnston	2.93	3.29	3.50	3.50
Hood	2.62	2.79	4.50	1.83

*Note.* PES = Overall Pessimism, HLN = Hopelessness, AGG/RISK = Aggression and Risk taking, and LE = Leadership Effectiveness. PES and HLN scores are reported on a seven-point scale based on the aggregate (average) ratings of seven independent raters. AGG/RISK and LE scores are reported on a five-point scale based on the aggregate (average) ratings of two independent raters.

Pearson correlations among the variables are shown in Table 3. Pessimism (PES) and hopelessness (HLN) scores were both negatively correlated to aggression/risk taking (AGG/RISK) scores. In addition, aggression/risk taking (AGG/RISK) was negatively correlated to leadership effectiveness (LE). Finally, pessimism (PES) and hopelessness (HLN) were both positively correlated with leadership effectiveness (LE). As anticipated, our analysis lends some support to Hypothesis 1, which stated that commanders with relatively optimistic explanatory styles will be more aggressive and take more risks than commanders with relatively pessimistic explanatory styles. Contrary to expectations, however, our findings do not support Hypothesis 2, which suggested that commanders with relatively optimistic explanatory styles will be rated higher in overall leadership effectiveness as compared to commanders with relatively pessimistic explanatory styles.

Table 3: Pearson Correlations Among the Variables of Pessimism, Hopelessness, Aggression/Risk taking, and Leadership Effectiveness ( $N = 4$ )

	1	2	3	4
1. Pessimism	-			
2. Hopelessness	.82	-		
3. Aggression/Risk taking	-.24	-.64	-	
4. Leadership Effectiveness	.14	.61	-.99*	-

\* $p < .05$ .

### Discussion

We utilized explanatory style theory and the CAVE technique to examine the leadership behaviors and leadership effectiveness of four prominent Civil War generals. As expected, our analysis indicated that generals with more optimistic explanatory styles were more aggressive and took greater risks than those with a pessimistic explanatory style. Hood and Johnston were rated highest in optimism by the blind raters and also rated very high in risk taking and aggression by the Civil War experts. In contrast, Lee's explanatory style was judged to be more pessimistic than his fellow generals, and he was subsequently rated much lower in aggression and risk taking by the experts.

Our analysis also revealed an unanticipated outcome. We found that a pessimistic explanatory style was positively correlated with leadership effectiveness. Hood was the most optimistic of the four generals but was rated lowest in overall leadership effectiveness. Similarly, Lee was relatively more pessimistic and yet was rated as the most effective leader among the four generals. This finding seems somewhat counterintuitive and conflicts with existing empirical research examining optimism and military leadership (e.g., Chemers et al., 2000; Popper et al., 2004). One possible explanation of this unexpected result involves the role of aggression and risk taking as mediators of the relationship between pessimism and leadership effectiveness. As shown in Table 3, the negative correlation between pessimism and both aggression and risk taking appears stronger than the positive relationship between pessimism and leadership effectiveness. Likewise, the negative relationships between aggression and risk taking and leadership effectiveness appear quite strong. These strong negative relationships between pessimism, aggression and risk taking, and leadership effectiveness suggests that aggression and risk taking may be fully mediating the positive relationship between pessimism and leadership effectiveness as demonstrated in Figure 2. In other words, pessimism may result in leadership effectiveness only by limiting excessive aggression and risk taking.

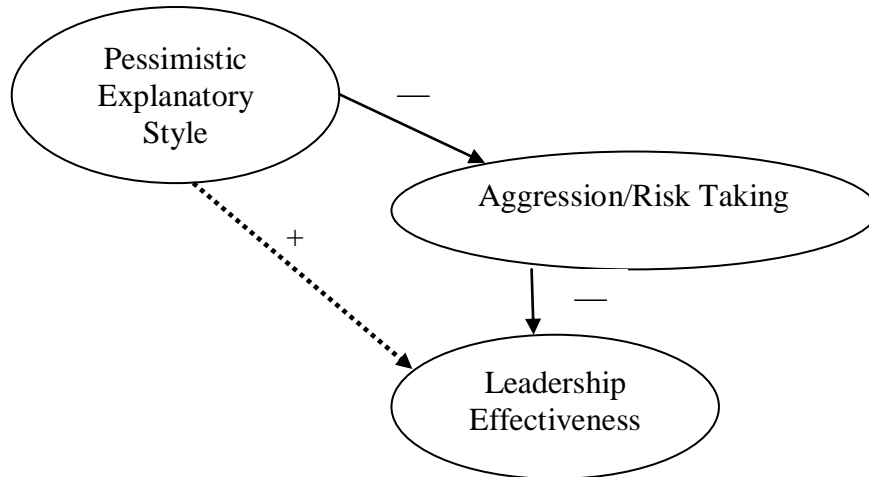


Figure 2. A model of explanatory style and leadership effectiveness.

The results of this study suggest some interesting implications for leadership theory, especially in the context of military leadership. Although optimism is generally recommended as a key mechanism for leadership effectiveness (e.g., Peterson et al., 2007), an excessively optimistic explanatory style may not be appropriate for leaders, especially if it leads to recklessly aggressive behaviors or risky actions. Indeed, as Seligman (1991) suggested, “Optimism is no panacea...it has its limits...it may sometimes keep us from seeing reality with necessary clarity” (p. 291). This concept may be especially important to military leaders or others in leadership roles whose actions could lead to potentially negative outcomes for their followers. Although modern organizations, including the military in many western countries, are much less autocratic and hierarchical than were the armies of the 19<sup>th</sup> century (e.g., Mutch, 2006), unbridled optimism in leadership resulting in unwarrantedly reckless and aggressive actions may still have detrimental consequences for followers, even in today’s dominant organizational environments characterized by autonomy and empowerment.

A number of contemporary theories of psychology and leadership may further help to interpret these findings. For example, the concept of defensive pessimism (e.g., Norem, 2001; Norem & Cantor, 1986a, 1986b) has been used to explain the use of pessimism as a cognitive strategy for avoiding potential hazards and increasing motivation. People using this strategy set low expectations for future outcomes, despite having performed well in similar past situations. They reflect extensively on all possible future outcomes, paying special attention to potential problems and pitfalls. This seems to allow them to channel their anxieties into energy and motivation while creating an overall feeling of control leading to actual performances far better than their negative predictions. Defensive pessimism may help to explain Robert E. Lee’s leadership behavior at Fredericksburg, where the commander’s deliberate caution and patience resulted in a decisive victory for his outnumbered force.

Similarly, the concept of narcissistic leadership may also help to elucidate our results. Narcissistic leaders are characterized by grandiosity, arrogance, self-absorption, entitlement, fragile self-esteem, and hostility (Rosenthal & Pittinsky, 2006). These leaders tend to be motivated more by a drive for power and admiration than by any genuine concern for their followers. John Bell Hood and his leadership actions, particularly those surrounding the Battle of

Franklin, have sometimes been described in narcissistic terms (e.g., Sword, 1992). Some have suggested that Hood's self-righteous arrogance and blaming rage in reaction to the Spring Hill debacle, focused on what he saw as cowardice and ineptitude among his officers, was the critical factor that clouded his judgment in ordering the recklessly aggressive attack on the fortified federal positions at Franklin, which led to more than 6,000 Confederate casualties including five Confederate generals (e.g., McDonough & Connelly, 1983; Sword, 1992).

Likewise, the increasingly popular concept of authentic leadership may lend itself toward helping to explain why excessive optimism may at times become a detriment to effective leadership. Authentic leadership involves, among other key components, a greater self-awareness, relational transparency, and a balanced processing of information (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Self-awareness includes a realistic understanding of one's own strengths and weaknesses, which could be distorted by an unwarranted optimistic viewpoint. Relational transparency involves promoting trust in others by presenting an authentic self as opposed to an artificial or false self. Excessive optimism could lead to distortions in the self that one presents to others. Finally, balanced processing refers to the objective analysis of all relevant data before making a decision. Once again, an unusually optimistic outlook may hinder a truly objective examination of a given situation. Taken together, these factors suggest that extremely optimistic people may lose some of their credibility as authentic leaders, which may in turn affect their overall leadership effectiveness.

Although our findings suggest some important possibilities regarding the relationships between optimism/pessimism and leadership effectiveness, the results reported here are subject to several limitations and should be viewed with some degree of caution. First, only four generals were examined in the present study, resulting in a very small sample size. Given the small sample size, only one correlation in Table 3 rose to the level of significance. This clearly limits the generalizability of our findings. However, it would have been difficult to have included more subjects in the present study because it would have resulted in an excessively large number of explanatory statements to be rated, leading to a greater risk of rater fatigue and inaccuracies. Likewise, the number of Civil War army commanders who experienced a major battle loss followed by another major campaign within three months is quite small. Second, Hood's explanatory statements of the events at Spring Hill were actually written after the Battle of Franklin, the second of the paired military actions. Nevertheless, it seems likely that the optimistic explanations provided by Hood after the fact represent his state of mind in leading his army into the Battle of Franklin. Third, Hood's pair of battles occurred in 1864, while the other paired battles all occurred in 1862. It is possible that some systematic bias relating to the overall course of the war at the given time may have tainted the generals' outlook. However, according to this supposition, one would expect Hood's explanations to be more pessimistic, given the increasingly grim situation facing the Confederacy by 1864. To the contrary, Hood's explanations were more optimistic than those of the generals explaining events in 1862. Fourth, the four generals were all relatively optimistic in their explanations (scores ranging from 2.62 to 3.56 on a 7-point scale with lower scores representing greater optimism), leading to concerns of a social desirability or halo effect corrupting the accuracy of the written battle reports. Such an effect, however, would have acted similarly on all four generals, and although the scores were skewed toward optimism, there was enough variation in the scores to effectively conduct our analysis. Finally, factors other than explanatory style could have affected the leadership approach taken by each general in the subsequent military action. Although one could argue that the four generals were operating within substantially similar contexts (e.g., the same superiors who would

presumably react fairly consistently to each commander's report of a battlefield loss, outnumbered by the enemy, undersupplied, etc.) making the external influences acting upon them roughly equivalent, it is possible nevertheless that some other influence or influences played a greater role than explanatory style in shaping subsequent leadership actions. For example, the fact that all four commanders were Confederate generals suggests the possibility of a systematic bias based on culture and heritage. In their book "Attack and Die: Civil War Military Tactics and the Southern Heritage," McWhiney and Jamieson (1982) argued that some southern generals were excessively aggressive and took great risks largely because of their Scots-Irish heritage.

In closing, our analysis has provided an important first step toward understanding the relationships between pessimism/optimism, aggression/risk taking, and leadership effectiveness. Future research should be designed to continue to investigate the relationships suggested here in a variety of other contexts, both military and non-military, using larger sample sizes when possible. In particular, the role of aggression and risk taking as mediators of the relationship between pessimism/optimism and leadership effectiveness should be more directly examined. By learning from the past, we can continue to inform our understanding and knowledge of leadership effectiveness well into the future.

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## Appendix

### Sample Explanatory Statements

General John B. Hood:

“The enemy was at this time moving rapidly along the pike, with some of his troops formed on the flank of his column to protect it. Major General Cheatham was ordered to attack the enemy at once vigorously and get possession of this pike, and, although these orders were frequently and earnestly repeated, he made but a feeble and partial attack, failing to reach the point indicated. Had my instructions been carried out there is no doubt that we should have possessed ourselves of this road.”

General Braxton Bragg:

“The campaign here was predicated on a belief and the most positive assurances that the people of this country would rise in mass to assert their independence. No people ever had so favorable an opportunity, but I am distressed to add there is little or no disposition to avail of it. Willing perhaps to accept their independence, they are neither disposed nor willing to risk their lives or their property in its achievement.”

General Robert E. Lee:

“One great embarrassment is the reduction of our ranks by straggling, which it seems impossible to prevent with our present regimental officers.”

General Albert S. Johnston:

“...and nearly all the stores would have been saved but for the heavy and unusual rains, which have washed away the bridges, swept away portions of the railroad, and rendered transportation almost impossible.”