

RISK AVERSION: AS PERCEIVED BY U.S. AND
SWEDISH OFFICERS

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General Studies

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ABSTRACT

RISK AVERSION AS PERCEIVED BY U.S. AND SWEDISH OFFICERS, by Major Fredric Westerdahl, 141 pages.

People in modern societies are generally becoming more risk averse. Whether risk is perceived to include uncertainty or not, form two differing schools of thought within literature and doctrine. Risk aversion is viewed as a challenge in most previous works from the U.S. and Swedish Military Colleges. However, others present risk aversion as the good alternative to risk seeking.

This study addresses perceptions of risk aversion through the question “How do perceptions of risk aversion in the conduct of the military profession compare between officers from the United States and Sweden?” which has been explored through surveying and interpreting perceptions of U.S. and Swedish officers.

The analysis shows these perceptions of risk aversion to differ noticeably by combining two theories, Dr. David Eberhard’s model for defining safety addiction and Professor Geert Hofstede’s model of cultural dimensions. Cultural differences between the U.S. and Sweden correlate with the differences in perceptions of risk aversion, with higher uncertainty avoidance and assertiveness in U.S culture compared to Swedish.

Due to the limited scope and depth of the survey in this study, it is unfeasible to determine degrees of risk aversion; furthermore all conclusions are tentative without validation by more extensive studies.

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A skeptical, realistic, view of the world, aspiring to see it as it is rather than as it could be, should guide perception. An idealistic ambition to leave the world a less evil place for those who shall inherit the future, should guide actions. My beloved family, Elena, Rickard and Gustav, has provided the wonderful possibility to do that. I owe them selfless service.

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ACRONYMS

AOO	Area of Operation
CAC	Combined Arms Center
CGSC	Command and General Staff College
CO PRT	Commanding Officer Provincial Reconstruction Team
COM KFOR	Commander Kosovo Force
COS	Chief of Staff
CSM	Command Sergeant Major
CYA	Cover Your Ass
FM	Field Manual
FOI	Totalförsvarets Forskningsinstitut, (Swedish Defence Research Agency)
IED	Improvised Explosive Device
JP	Joint Publication
KFOR	Kosovo Force
LTC	Lieutenant Colonel
MNC	Multinational brigade Centre
NCO	Non-Commissioned Officer
NTC	National Training Center
OIF	Operation Iraqi Freedom
QAO	Quality Assurance Office
SAF	Surface to Air Fires
U.S.	United States
UN	United Nations

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CHAPTER 1

INTRODUCTION

The Relevance of Risk Aversion

We are all going to die. The unavoidable fact that every life ends with death is something that people in modern societies seem to have more and more trouble coping with, making people generally more and more risk averse. Exposing people to lethal physical risks is becoming increasingly unacceptable in civilian society. The people inhabiting the modern societies of the world are as a consequence increasingly concerned with safety. This phenomenon is generally accepted and the causes for this evolution in society have been explained in several ways. Swedish psychiatrist and author Dr. David Eberhard even goes as far as to diagnose modern Western society with an addiction to safety (Eberhard 2006, 40).

As good interpreters of history have understood, including Prussian military theorist Carl von Clausewitz, every age and era must be interpreted and judged in its own right and context. The current age of the Western world has its peculiarities and distinguishing features as every other age. It is an age of risk. According to British Professor of International Relations Christopher Coker, the paramount threat to society might very well lie in its own preoccupation with risk (Coker 2009, xi). There is plenty of academic work claiming that risk aversion is a defining feature of contemporary Western society, some of which will be visited in this study.

Excessive risk aversion can be viewed as a consequence of addiction to safety. The analysis in this thesis works from the presumption that the judgment of contemporary Western society shared by Eberhard and Professor Coker amongst others is

generally correct. The consequence of this presumption is that at a collective level, the modern Western societies can be defined as being addicted to safety. However, the military profession comes with inherent physical dangers that do not go well together with modern Western society's increasing concerns about individual safety. Armed conflicts are dangerous by nature. To achieve missions while assuming acceptable risks has always been an aspect of the military profession. Risk-taking behavior is also especially pronounced amongst the young males that make up the majority of those who engage in the actual fighting (Coker 2009, xi). The psychological need to test and display skills and capacities drives this risk taking behavior. To balance the societal need for ever increasing safety for their citizens with the sometimes very risk-taking behavior of some of those citizens is not an easy task. Yet, as a leader of young soldiers that is part of the military officer's profession.

The increasingly risk averse society in general, amounts to what can be called safety addiction and affects the military, as we are a part of society. The ancient Chinese military philosopher Sun Tzu prescribes us to understand both ourselves and our enemies to succeed (Mair 2007, 87). It is therefore of value to study our perceptions of how risk aversion is affecting the conduct of the military profession in order to reach better understanding of ourselves. The circumstance that the military profession is often practiced in a multinational environment underlines the need to perceive and understand cultural differences, including also those that exist within what has been labeled the western world.

The Thesis and The Questions

In this study, comparisons will relate to the research on cultural behavior by Dutch social psychologist Professor Geert Hofstede focusing on masculinity and uncertainty avoidance. Comparison and analysis will also use the seven criteria Dr. David Eberhard uses to define addiction to safety by. To explore perceptions, a comparison that contrasts different perceptions of risk aversion can add perspectives to our knowledge. The military profession has many aspects, but in this study, the focus is specifically the conduct of operations as well as training. This study will address perceptions of risk aversion that may differ between officers from the United States and Sweden. Consequently, the primary research question is: How do perceptions of risk aversion in the conduct of the military profession compare between officers from the United States and Sweden?

The thesis of this study is that experiences from the practice of the military profession can show how perceptions of risk aversion differ noticeably between officers from the United States and Sweden in terms that can be related to cultural values. These differences in cultural values relate to competitiveness vis-à-vis nurturing, assertiveness vis-à-vis modesty, and also, if to a lesser degree, in uncertainty avoidance through reliance on strict rules and safety measures.

This primary research question is addressed through three secondary questions: How do a select number of U.S. officers perceive how risk aversion has affected the conduct of their profession? How do a select number of Swedish officers perceive how excessive risk aversion has affected the conduct of their profession? How do these perceptions compare? The first two questions will be addressed to selected officers from

the United States and Sweden in the form of specific questions asking the officers to describe their experience of risk aversive decision-making by their superiors, their subordinates and by themselves respectively.

A key dilemma lies in defining what behavior is risk averse. A good portion of this study will therefore be devoted to define risk aversion. This definition begins from the assumption that risk aversion becomes unnecessary when it prevents or hinders fulfillment of the overall purpose intended to be achieved in the first place. Risk in itself can be defined in many ways depending on the context. Thus, this study focuses on physical risk and related safety.

What are the risks with risk aversion? If everything that is not safe should be avoided how can people then succeed with what they wish to accomplish in life? How did previous generations survive? How did today's adults survive their own childhood given the lack of safety measures in place then compared to today? It is actually very possible to survive with a lot less safety than people in modern Western societies aspire to nowadays. A further presumption in this study is that people in Western societies would benefit if they were to question all safety measures perceived as excessive. Safety in excessive amounts can be dangerous, both to individuals and to societies. Addiction to safety will result in excessive risk aversion and lead to inability to take initiative. Overly cautious inactivity pacifies people and is generally more dangerous than activity.

Some risk aversion on the part of military decision makers can, to an extent, be good and support the overall mission. Risk taking may result in casualties that cause evaporation of the political or popular will to continue fighting. Unacceptable losses will jeopardize the whole mission and result in the mission being aborted. Excessive risk

aversion can on the other hand prevent accomplishment of the mission, as it may inhibit a force to assume the risks necessary.

Being cautious in one aspect will expose you to risks in other aspects. Regulations that are too rigorous are in themselves a risk (Sunstein 2005). A tyranny of small steps comes into play where many minor risk averting measures collectively add up to overly time consuming procedures that hinder efficiency. Each minor risk averting measure might in itself seem perfectly logical and reasonable. Put together they may have a paralyzing effect on the performance of units. An organization may hinder itself from accomplishing the primary mission through implementing too many minor safety measures.

The scope of this study is to compare perceptions of risk aversion only between officers from the United States and Sweden, excluding all other cultural and organizational areas from the study. The study is further limited by a selection of officers attending either the Swedish National Defence College or the U.S. Army Command and General Staff College in 2010 in order to make the survey research feasible.

The most paramount limitation to this study lies within the capacity of the researcher. All interpretation of the data is made through the researcher's cultural lens. The result is a perspective on the topic, with no claim of being the only possible perspective.

The next chapter provides a closer review of some of the abundant literature on risk. The chosen methodology for the analysis is clarified in chapter 3. Chapter 4 holds the actual analysis of the sampled experiences. Conclusions from the analysis are

summarized in the final fifth chapter. This introduction has already touched upon some of the literature where as the next chapter provides more depth.

CHAPTER 2

LITERATURE REVIEW

To address differing perceptions of risk aversion and answer the question of how perceptions of risk aversion in the conduct of the military profession compare between officers from the United States and Sweden, it is appropriate to examine how risk and risk aversion previously have been defined. Perspectives on risk and risk aversion present in literature that surrounds officers from the United States and Sweden are investigated in this chapter.

In the first section of this chapter, Theoretical Perspectives on Risk and Risk Aversion, selected writers are reviewed and examined. The selection of writers has been guided by the relevance to the study's theoretical framework for analysis, since the selection must be limited enough to allow reasonable examination. In the second section, Previous Works Regarding Risk at U.S. and Swedish Military Colleges, the academic works on the topic of risk during the last two decades are reviewed. These essays have been collected from the Swedish National Defence College, the U.S. Army Command and General Staff College, the U.S. Marine Corps Command and General Staff College and the U.S. Army War College. The selection is limited to the last two decades in order to portray views of currently active personnel. Their perspectives on risk and risk aversion are examined, in order to clarify how risk and risk aversion previously has been defined by officers from the United States and Sweden. In this chapter's third section, Doctrine on Risk and Risk Aversion in the U.S. and Sweden, current doctrines will be examined, as to how they relate to these issues. The examination of doctrine will primarily concern U.S. doctrine as Swedish Defence doctrine is currently in flux, with

very limited amount of new doctrine validated and previous doctrine no longer valid. Having reviewed the different perceptions of risk and risk aversion, this chapter's fourth section, the Summary of Literature Review and Definitions of Risk and Risk Aversion, will finally arrive at a definitions of the key concept of Risk Aversion that is used in the survey and in the thesis's following analysis.

Theoretical Perspectives on Risk and Risk Aversion

Frank Furedi

Frank Furedi is Professor of sociology at University of Kent at Canterbury and addressed risk in *Culture of Fear* (1997). He stated that Western people enjoy unprecedented personal safety and have, compared to previous generations, or people from other parts of the world, much less experiences of pain and suffering. In spite of this, Western people seek more and more protection.

Furedi defines risk as the probability of hazard, but concedes that no definition can exhaust the meaning of risk as a concept. Furthermore the usage of the term risk is changing over time (Furedi 1997, 17). Risk taking is according to Furedi no longer seen as admirable, but instead as a problem. The view of risk in previous times was one where positive and negative outcomes were weighed against each other. In contemporary western society only the adverse outcome is associated with risk and any positive perception of risk-taking has been replaced with condemnation (Furedi 1997, 18).

Furedi argues that striving for safety at any price is a compulsive behavior rather than a virtue. Taking risk is part of life. A society that fears taking risk will not celebrate heroism but rather victimhood. Safe passivity rather than bold activity becomes the esteemed virtue (Furedi 1997, 13). The many precautions risk-averse people display are

overreactions, but are often interpreted as sensible reactions. Perceptions of risks are treated as equal to real risks (Furedi 1997, 46). Furedi defines the *Precautionary Principle* as “avoidance of unnecessary risks by playing safe” (Furedi 1997, 107). Western societies fear of taking risks and transforming safety into virtue is the central theme in Furedi’s thesis. He links the growth of risk consciousness to the decline of traditional values. The growth of risk aversion and regulation in Western society has marginalized traditional morality. (Furedi 1997, 153f) The value of risk aversion means to not put people at risk and to regulate behavior. The main difference compared to traditional morality lies in the individualistic orientation of risk aversion (Furedi 1997, 163)

Ulrich Beck

German Professor of sociology Ulrich Beck’s thesis is the West has had a radical change in social politics and cultural experience which define a new age in modernity. Beck’s theoretical risk society perspective is pervaded by an extraordinary degree of anxiety about the future; a view he expanded on in 1992 in *The Risk Society: Towards a New Modernity*. Beck has also written extensively on risk in *World Risk Society* (1999). Risk is described as the modern way to control the future consequences of actions and is closely linked to a technical administrative decision making process (Beck 1999, 3f).

A central theme of Beck’s risk society is fabricated uncertainty. Risk threatens destruction and can be defined as the gap between security and destruction. It is the perception of risk that guides decisions and actions. As culture frames perception it is ultimately the cultural perception that constitutes what risk is (Beck 1999, 135f).

When perceptions of risks become dominant in how people view a situation, the alarm they bring may easily lead to lack of action. This is true, as risks points to what should not be done rather than towards what should be done (Beck, 1999, 141f).

Deborah Lupton

Deborah Lupton published the book *Risk* in 1999. She is Associate Professor in Cultural Studies and Cultural Policy and Director of the Centre for Cultural Risk Research at Charles Sturt University Australia. As a constructivist she examines how the concept of risk has been constructed over time. In spite of the fact that she does not mention war at all in her supposedly comprehensive book on risk, she does offers a broad overview of how the concept of risk has been used.

The concept of risk attempts to reduce uncertainty, but often has the effect to increase anxiety about risk (Lupton 1999, 13). Western modernity differentiates uncertainty from risk by means of whether probability is unknown or known. Risk, should be calculable, as opposed to uncertainty (Lupton 1999, 7). The cultural symbolic perspective on risk is primarily represented by Mary Douglas' research, where risk perception is viewed in social context rather than individualistic (Douglas 1985, 3). The key theme is that risk perception is a subjective process that depends more on value judgment than on facts. Perceptions of risk are culturally linked to groups and communities (Lupton 1999, 57). The different epistemological approaches to risk span between Realist and strongly Constructionist. A Realist views risks as objective hazards while Constructionists view risks as subjective products of social and cultural processes (Lupton 1999, 35). Lupton supports the latter view.

Paul W. Glimcher and Aldo Rustichini

Scientists Glimcher and Rustichini published the article “Neuroeconomics: The Consilience of Brain and Decision” in *Science* 2004. There they claim that the willingness of people to assume risks correlates to their status of wellbeing. The authors suggest the better off people are in terms of welfare, the less willing they are to take risks. Further, in addressing interdisciplinary research, the mixing of psychology, economics and medicine is similar to the Darwinian terms of the survival of the fittest. The most cautious will in the long run be more successful in securing their existence. The research defines risk averse personalities as the opposite of risk seeking personalities (Glimcher 2004, 448). This scientific definition gives risk aversion a rather positive meaning.

Cass R. Sunstein

Distinguished Service Professor of Jurisprudence, Law school and Political Science at the University of Chicago, Cass R. Sunstein addressed risk in *Laws of Fear: Beyond the Precautionary Principle* (2005). He explores the relationship between fear, danger and law, attacking the ever more influential *Precautionary Principle*, which stipulates that regulations should be made to protect against potential dangers, even if it is uncertain what causes these dangers to come into effect, which he argues is incoherent. Rather he argues risks can actually be created by applying the *Precautionary Principle*. How risks are perceived is also decided by culture. European countries are not more precautionary than the U.S. but there is a difference as to what risks are treated most precautionous (Sunstein 2005, 34). Substitute risks sometimes arise as a result of regulations intended to remove other risks (Sunstein 2005, 32).

Regarding decision making when uncertainty prevents probability to be assessed but outcomes can be identified, Sunstein argues that the course with the least bad worst case outcome is chosen, which he terms as applying a maximin principle (Sunstein 2005, 60). Sunstein further argues that the Precautionary Principle leads to spending resources on risks that are uncertain at the expense of risks that are better understood. Alarm is in itself harmful due to its secondary effects (Sunstein 2005, 61).

Geert Hofstede

Professor Hofstede is a renowned Dutch social psychologist and the author of *Cultures and organizations, software of the mind*. Hofstede's view on risk is essential to this study, as the analysis in this study uses fragments of theory from Hofstede's model explaining cultural behavior (Hofstede 2005, 172f). Hofstede's theory is that every person carries a culture in the form of mental programs in terms of patterns of thinking, feeling and acting. The source of a person's culture, or mental programs, lies in the social environment which has surrounded that person. Culture is always something that is shared with the social environment and is the unwritten rules of collective programming that distinguishes one group of people from another (Hofstede 2005, 3ff).

Studying differences in culture demands a position of cultural relativism where the different ways of thinking, feeling and acting are not considered superior or inferior to each other. Hofstede's theory of cultural relativism analyzes culture on five scales. The terms Hofstede uses for these scales are Power Distance, Individualism, Long-Term Orientation, Uncertainty Avoidance and Masculinity. In the two latter scales Hofstede ascribes the differences in cultural values to be the greatest between the United States and Sweden. This review therefore focuses on these two aspects. Masculinity relates to what

degree a culture is assertive or nurturing. Even if these latter terms might better convey what Hofstede relates to, this review uses the original terms of feminine and masculine culture.

Hofstede describes key differences between feminine and masculine societies. In a feminine culture modesty is highly valued in both women and men. In a masculine culture, men are expected to be assertive, ambitious and tough (Hofstede 2005, 131ff). In a feminine culture, being responsible, decisive, ambitious, caring and gentle is for women and men alike. In a masculine culture, men are expected to be responsible, decisive and ambitious, while women are expected to be caring and gentle (Hofstede 2005, 134ff). The ideal way to resolve international conflict differs between solutions through negotiations and compromise or more through masculine show of strength or fighting (Hofstede 2005, 115ff). In feminine culture, being average is the norm while in masculine culture being the best is the norm. In feminine Scandinavian culture, what is commonly referred to as ~~the~~ "the Law of Jante," prescribes modesty in that one should not think one is better than anyone else (Hofstede 2005, 137).

Management differs depending on culture. A masculine culture primarily considers work, while a feminine culture primarily considers people. What primary focus that best will lead to mission accomplishment in the long run is an open argument. Consensus in decision making marks a feminine culture, where problems are discussed and common solutions are sought together with others. In a masculine culture decisions are more typically made by individuals alone (Hofstede 2005, 143).

Hofstede defines uncertainty avoidance as separate from risk avoidance. Risk is equated with probability while uncertainty is a diffuse feeling like anxiety with no

probability attached. When uncertainty instead becomes possible to express as risk in terms of probability it no longer causes anxiety but may cause fear. Risk may also be accepted as routine rather than cause fear. Higher uncertainty avoidance is to result in urgency, leading to a priority to save time rather than lives. Lower uncertainty avoidance is to result in less sense of urgency and increased acceptance of unfamiliar risks such as engaging in activities without rules.

According to Hofstede, cultures with higher uncertainty avoidance are more willing to engage in risky behaviors in order to reduce ambiguity, such as initiating a fight with a potential adversary rather than to wait and see how things develop. Familiar risks, such as physical risks related to known activities are not avoided in uncertainty avoiding cultures. Hofstede defines risk as “the chance that an action will have an undesirable but known outcome” (Hofstede 2005, 403)

David Eberhard

Dr. David Eberhard is a Swedish psychiatrist and author who defines addiction to safety by comparing it to other forms of addiction. He expands on the subject of safety addiction in his book from 2006 *I trygghetsnarkomanernas land*, which translates as In the land of safety addicts. If three or more of the following seven criteria are in play, the condition is defined as safety addiction:

1. Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety.
2. Abstinence symptoms appear when something is pointed out as unsafe.
3. Safety is being applied in larger doses than reasonably necessary.
4. There are failed attempts, or at least a wish, to limit the desire for more safety.

5. Much time and effort is spent seeking different forms of safety.
6. Important functions are abandoned due to fear of lacking safety.
7. Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided (Eberhard 2006, 40).

Essentially Eberhard's concept of safety addiction is synonymous to risk aversion, as they both verbally describe the same phenomena but from different perspectives. That is, in that the concepts each relate the same phenomena, but respectively to safety or to risk. Applying his analysis to individual and organizational as well as national levels, Eberhard arrives at the conclusion that western societies suffer from safety addiction. He reaches this conclusion after diagnosing society as suffering from national panic. He defines national panic as characterized by the following symptoms:

1. Attempting to make people avoid potentially dangerous situations without considering the actual risks
2. National paralysis in cases of real disasters
3. Governmental denial of our mortality
4. Excessive care about people resulting in reduced individual freedom of action
(Eberhard 2006, 23)

Modern Western people are unwilling to risk their own lives, even more so to sacrifice their own lives. Western secularization is assumed to enhance this individualistic focus, which in particular differentiates Western people from other cultures (Eberhard 2006, 44). In summary, Eberhard concludes that too much safety is dangerous. Analogous with the statement that all things are good in moderation, risks are

also good in moderation. Everything dangerous should not be avoided (Eberhard 2006, 316).

Zygmunt Bauman

Professor of sociology Zygmunt Bauman defines risks as calculable dangers in *Liquid Fear* (2006). When people believe they can calculate the probability of a negative outcome it is not the same as certainty, but the next best thing. Having calculated the risk offers reassurance in terms rationally avoiding hasty and reckless decisions. Focusing on risks rather than dangers is also a way to focus our attention on calculating probabilities that we might do something about rather than worry about dangers that we cannot mitigate (Bauman 2006, 10f). Risk as a concept presumes the world to be one of regularity. Only in a repetitious environment of reoccurring routines does risk as calculable danger make sense. Events must reoccur often enough to lend themselves to meaningful calculations of probability, cost and benefit. Dangers that are not calculable are uncertainties instead of risks (Bauman 2006, 98f).

Azar Gat

National Security Professor Azar Gat of Tel Aviv University described risk aversion on a societal level in *War in Human Civilization* published 2006. He criticizes Clausewitz' description of politics as being idealistic or even simplistic, as it defines politics as "representative of all interests in the community" (Clausewitz 1976, 606f). Gat argues that politics rather represents the ruling interests of a society. How well the ruling interests represent the interests of the people may vary. An elite minority may enjoy all the benefits of war while other parts of the population suffer the risks of war. When those

expected to fight perceive that the risks are not matched by benefits they try to avoid taking those risks. Imposing involuntary military service upon people who perceive they gain few benefits from the risks they are to take may therefore lead to risk aversion (Gat 2006, 666). Gat links risk aversion to individuals not perceiving their benefits to match the risks.

In *A History of Military Thought* Gat states that the unwillingness of individuals and public society to accept casualties, have become an imperative that governments in modern societies must face. This leads to modern western warfare being indecisive due to self imposed restrictions. The limited war has become the norm because of the nature of society and its cultural sensibilities (Gat 2001, 827f). Risk aversion regarding activities that will involve casualties has, according to Gat, become an imperative in modern societies.

Christopher Coker

British Professor of International Relations Christopher Coker claims in his book, *War in an Age of Risk*, that the paramount threat to society might very well lie in its own preoccupation with risk (Coker 2009, xi). His thesis is that, for western societies, war has evolved into risk management. Western societies are very self critical because they internalize risks since they can no longer externalize risk (Coker 2009, 6). Risks are real, but also social constructions, as people perceive and compare risks. Europeans are perceived as being more risk averse than Americans, being more inclined to take precautions and less willing to risk all in the management of security (Coker 2009, 100). Militaries deployed by western societies are not entirely risk averse, but they are expected

to assume risk in a more informed way (Coker 2009, 164). Risks are estimated and the consequences of actions anticipated (Coker 2009, 130).

Coker relates military risk taking and risk aversion to confidence and trust. Confidence is usually risk averse, trust is risk-taking. Trust emerges from actions and builds from social capital. Trust is different from confidence. Confidence depends on routines and can be lost if routines or procedures are found to be flawed (Coker 2009, 167) Trust encourages sensible risk taking and defies the risk averse dynamics that modern social norms create (Coker 2009, 168)

Decentralization is important in avoiding risk aversion. It gives soldiers incentive to share information and come up with solutions that are unaffected by bureaucratic filters likely to influence information to fit the political climate or the internal demands of the organization. Referring to Clausewitz, Coker claims that only through trusting in intuition, can the decisions risk management demands be made based on the big picture, “Militaries can overcome excessive risk aversion by adapting fast” (Coker 2009, 168f).

Amanda M. Kelley, William D.S. Killgore, Jeremy R. Athy,
and, Michael Dretsch

Researchers Kelley, Killgore, Athy, and Dretsch from the U.S. Army Aeromedical Research Laboratory conducted the study “Risk Propensity, Risk Perception, and Sensation Seeking in US Army Soldiers: A Preliminary Study of a Risk Assessment Task Battery” in 2009. One of the claims of this study is that risk taking behavior can be linked to changes in the perception of risks. Having been through deployments perceived as very risky or dangerous, soldiers are more likely to have a perception of risk that later allows them to take more risks (Kelley 2009, 3).

Summary of Reviewed Theoretical Perspectives

The reviewed selection of theoretical perspectives on risk aversion is, of course, a narrow selection of the voluminous written knowledge on the subject. Eberhard views taking risk, in moderation, as something good while he identifies safety addiction and the related risk aversion as major problems in contemporary Western society. This view is essentially shared by Coker, who also argues that risk aversion should be avoided. Risks are defined as something that can be estimated, which does not mean that risks necessarily have to be able to be expressed in terms of probability. The school of thought that Coker and Eberhard represent has a rather broad definition of risk, including also unknown or unquantifiable uncertainties. The common denominator for this school of thought is that risk aversion is a defining feature of contemporary Western society and a major challenge to be overcome. Sunstein belongs to the same school of thought, linking risk to uncertainty, arguing that the Precautionary Principle that prevails in Western society leads to uncertain risks being avoided even more. How risks are perceived is, according to Sunstein, also linked to culture.

Close to this view is Beck, who defines risk as the gap between security and destruction and ultimately as being a cultural perception. Beck links the concept of risk to the modern Western decision making process that aspires to control the future consequences of actions. Lupton views risk, in a Constructionist way, as a subjective product of social and cultural processes, as opposed to the Realist view of risks as an objective hazard. Breaking off from the school of thought described above is Furedi, as he excludes uncertainty in his definition of risk. Furedi defines risk as the probability of hazard, but he recognizes that the use of the term risk changes and that no definition can

exhaust the meaning of risk as a concept. In essence Furedi sees risk aversion as a problem for modern society and links risk aversion to the decline of traditional values in face of rising individualism and regulation.

Representing a completely different school of thought is Glimcher, who presents risk aversion as being good, as opposed to risk seeking. The study by Kelley et al. aligns with this view, as risk taking, not risk aversion, is communicated as being the problem. This view is represented by researchers Glimcher and Kelley et al., who are closely connected to the fields of psychology and medicine. They presume risk taking to be the problem, a presumption reached without much apparent reflection on why that should be the case.

Hofstede, true to cultural relativism, does not address risk taking and risk aversion in terms of good or bad. Hofstede's definition of risk is positivistic, equaling risk with probability of a known negative outcome. In terms of how Hofstede defines risk itself he represents the same school of thought as Glimcher. Detaching uncertainty from risk, to represent what cannot be expressed in probabilities, gives risk a more narrow meaning. Bauman represents the same school of thought as he defines risks as calculable dangers, separating uncertainty from risk. Uncertainties are dangers that are not calculable and consequently fall outside of his definition of risks.

Gat does not provide an explicit definition of risk, but he links risk aversion to individuals not perceiving their benefits to match the risks. Risk aversion regarding activities that will involve casualties has become an imperative in modern societies.

Theses Regarding Risk at U.S. and Swedish Military Colleges

Lieutenant Colonel Alan Walter (US Army)

U.S. Army Lieutenant Colonel Alan Walter wrote *Understanding Risk* in 1990 at the U.S. Army War College. His study aimed to develop an understanding of risk and its effects in relation to uncertainty, doctrine and boldness, by analyzing the nature of risk and risk taking. Walter concludes that risk is a term used more often than it is understood or discussed and that risk takers need to be developed. In this he relates to the development of tolerance of risk by study and experience, defining risk taking as a developed skill, even if it correlates to certain personality traits (Walter 1990, 1f). A firm understanding of one's self is of ultimate importance in this development.

Walter argues for a definition of risk that includes uncertainty as well as potential gains or losses. He argues for allowing risk taking based on knowledge but not for its own sake and consequently argues for allowing learning from mistakes, which is necessary if risk takers are to be developed. To enable understanding of risk, the tolerance of risk should be clearly stated (Walter 1990, 54f).

The concept of risk is viewed differently by military thinkers due to unique institutional and social context. Lives are at risk and the risks are balanced against mission accomplishment. Walter links this view to the statement by Clausewitz that "War is a special activity, different and separate from all other pursued by man" (Clausewitz, 1976, 187). Risk is linked to uncertainty when it comes to warfare, as most factors in war ~~are~~ wrapped in a fog of greater or lesser uncertainty" (Clausewitz. 1976, 101). Risks must be taken under uncertain conditions, but doing things according to doctrine is not

considered as risk taking by Walter, as he argues that doctrine, in many respects, “inhibits creativity” (Walter 1990, 5f). Walter’s point is that risk takers have to be developed.

It has been believed that by eliminating uncertainty risk can be reduced. However it has been pointed out, by military theorist Martin van Creveld amongst others, that uncertainty will always be a part of warfare. Modern command systems do not “consistently produce more certainty than their predecessors” (Creveld 1985, 257). As certainty will not replace risk, uncertainty will have to be dealt with by bold risk taking. However, risk taking boldness must be made with a purpose. Walter concludes that risk must be defined as “a bold proactive action, a potential loss or gain” (Walter 1990, 13). There is however two categories of risk, Apart from the above described non-systemic risk, that a leader has influence over, there is also systemic risk that is independent from the influence of leaders, commonly called fate or luck. (Walter 1990, 15) Furthermore, in military operations there is risk of losing lives and risk of failing to achieve desired effects or accomplish the mission. Measuring the risk of failure in percentage is however nonsense, as there are too many incalculable factors in warfare.

A key theme with Walter is the paradoxical nature of risk. Consequently, avoiding risk actually means taking risk. Those who do not understand this paradox become predictable and unsuccessful in warfare. It has however been claimed that “careerist conformity is a greater guarantee of advancement than brilliant individualism [which] reinforces risk-avoiding behavior” (Leader, Charles A. “Risk Aversion and the Absence of Moral Courage” *Marine Corps Gazette*, August 1983, 67).

In conclusion, Walter recommends a definition of risk that “includes uncertainty, hazards, proactive actions, and potential gains or losses” (Walter 1990, 54). Using the

Webster definition of risk as a starting point for his discussion of how to define risk, this actually opens the definition to variation regarding whether the degree or probability of hazard is included in risk or not. In Webster risk is defined as; possibility of loss or injury, or; someone or something that creates or suggests a hazard (Merriam-Webster 2011).

Major T. S. Mundy (USMC)

United States Marine Corps Major T. S. Mundy wrote “Casualty Aversion: Dispelling the Myth” at the Army Command and General Staff College in 1999. Mundy’s thesis is that the perception amongst officers “is that casualty aversion limits the military’s ability to perform its mission” (Mundy 1999, ii). In effect the risk taking is being limited which affects the boldness with which the military carries out operations. According to Mundy the American public is however willing to accept casualties even in limited conflicts. It is only amongst the senior military and political leadership that casualty aversion becomes a reality, due to their incorrect conclusions about the public support (Mundy 1999, 30ff). The ensuing “top-down perception causes subordinates to attempt avoid suffering any casualties during operations and is driving boldness out of the U.S. military” (Mundy 1999, ii).

Referring to research by Benjamin C. Schwarz and published by RAND in *Casualties, Public Opinion, and U.S. Military Intervention: Regional Deterrence Strategies* 1994, Mundy claims that the American public, once committed is likely to accept casualties in order to win (Mundy 1999, 15). The technological advantages the United States holds can actually limit casualties, but has also led to expectations that the military can almost avoid casualties completely (Mundy 1999, 22). The attempts to limit

casualties have been perceived as an exploitable weakness. Mundy exemplifies this with Vietnamese leader Ho Chi Minh claiming to be able to endure ten times the casualties and still win the long war (Mundy 1999, 28-29). Perceptions based on myth cause commanders to try to justify every casualty, this casualty aversion threatens to drive choices and hinder mission accomplishment (Mundy 1999, 45). Indirectly, Mundy uses a definition of risk aversion that equals casualty aversion, as he links risk taking to boldness.

Major Jonathon R. Moelter (US Army)

United States Army Major Jonathon R. Moelter wrote “Effects of Foreign perceptions of U.S. Casualty aversion on U.S. International Relations” in 2002. Moelter’s thesis is that perceptions of the U.S. as being prone to casualty aversion challenge the U.S international credibility and leadership. The starting point for Moelter’s discussion is the assumption that there is an “international perception that Americans are unwilling to risk casualties” (Moelter 2002, 1). His conclusion from this is the “perception that America is casualty averse has the potential of undermining the goals of the national security strategy of the United States and future allied support” (Moelter 2002, 2). Writing in 2002, Moelter uses case studies from Yugoslavia and Somalia, but relates his thesis to the operations in Afghanistan 2001 and 2002, where casualty aversion is portrayed as the motivation to not risk substantial forces on the ground, but instead rely primarily on airpower. Referring to a survey in 1999 by Triangle Institute for Security Studies (TISS) Project on the Gap Between the Military and Civilian Society, Moelter claims that senior military and senior civilian leaders are more casualty averse than the American public (Moelter 2002, 85).

Peter Feaver, the co-principal investigator of the TISS Project on the Gap Between the Military and Civilian Society, is an associate professor of political science at Duke University and writes about his conclusions in the *Washington Post* together with Christopher Gelpi an assistant professor of political science at Duke. They recommend that policymakers start listening more carefully to the expressed--not mythical--views of the American people” (Feaver and Gelpi 1999).

Moelter examines the risk to the national security strategy of the United States that stem from perceptions that Americans are unwilling to risk casualties. In doing this he uses risk, as a concept relating to a possibility of loss of life as well as something that creates a hazard to mission accomplishment in a larger framework.

Major Justin W. Dyal (USMC)

United States Marine Corps Major Justin W. Dyal wrote “Commanders' Perception of Risk: Enabling Boldness” in 2008. Dyal’s thesis is that decision making concerning risk is negatively affected by current perceptions of safety and force protection. Mission accomplishment is placed at risk due to safety and force protection policies and the prevailing emphasis on avoiding casualties. Practices used concerning safety and force protection leads to risk aversion. Dyal claims that the institutional counterweights that support bold decisions are present but diminishing” (Dyal 2008, iii).

Major Trent A. Gibson (USMC)

United States Marine Corps Major Trent A. Gibson wrote “Hell-bent on Force Protection: Confusing Troop Welfare with Mission Accomplishment in Counterinsurgency” in 2009. Gibson concludes that success in counterinsurgency is

determined by effectiveness at accepting near term risks. To achieve long term security it is necessary to take near term risks. However, Senior leadership, military as well as civilian, have false notions about the American people being risk averse which affects the conduct of operations. Separation of the troops from the population they should be engaging and protecting is the effect achieved by “armorizing,” application of heavy fire power and operating from large bases. Gibson argues that military leaders at all levels must have the fortitude necessary to embrace the near term risks that follows with implementing counterinsurgency doctrine, specifically the concept “clear-hold-build.” Gibson concludes that military leaders must accept the inevitability of increased casualties that accompany assuming greater risks.

Gibson relates casualty aversion to force protection fetishism, a term borrowed from Dr. Jeffery Record (Record, 2000). Gibson calls the conventional notion of force protection, the physical security is achieved by risk averse procedures and material solutions. Referring to FM 3-24 Gibson reinforces the point that “The more you protect your force, the less secure you may be” (Gibson 2009, 7). A casualty averse military force shifts the burden of risk to the population they are supposed to protect. (Gibson 2009, 21) Gibson argues that in order to achieve long term success we must embrace short terms risks, explicitly those related to engaging closely with the population by living in their villages rather than in large bases (Gibson 2009, 20).

Major Per Gottfridsson (Swedish Armed Forces)

Swedish Major Per Gottfridsson wrote about risk in the thesis “Alla soldater ner - alla hem”: riskbedömning vid tjänstgöring i utlandsstyrkan; en fallstudie av insatserna i KOSOVO,” which translates as “A soldiers that go get to go home”: risk assessment in

international deployments; case study of operations in KOSOVO. Gottfridsson states that risk management is a natural part of both training and operations. He describes the methods used by the Swedish Armed Forces in risk management, which includes building a culture where risk management is a part of the military profession. Force protection is highly prioritized, but not put before mission accomplishment (Gottfridsson 2006, 45). Risk is generally defined as the probability of a negative event that affects the possibility to achieve set objectives. Risk management is defined as a tool to mitigate risks and related consequences. Risk management is defined as consisting of risk analysis and risk mitigation. Risk analysis in turn consists of identification, definition, valuation and quantification. Risk mitigation, the second part of risk management consists of developing strategies to address the risks. For the purpose of his study Gottfridsson defines risk as the probability of bodily injury while pursuing mission accomplishment (Gottfridsson 2006, 6). The military profession includes weighing risks and utility, which might mean that casualties must be accepted in order to achieve a higher purpose (Gottfridsson 2006, 9).

Major Claes Ivgren (Swedish Armed Forces)

Swedish Major Claes Ivgren wrote a thesis called "Jag tar risken! Vad tar jag då?," which translates as I take the risk! What do I take? in 2008. Ivgren clarifies the concept of risk in relation to how the Swedish Armed Forces employs it. A comparison is made between the Operational Risk Management, which is a widely used concept and the Swedish Armed Forces risk management model. Ivgren defines risk in terms of something that can be assessed, calculated and structured. Risk is composed of probability and severity; simply put, the chance of negative outcome. Measurement is

made in level of risk. Ivgren compares risk management models used by the Swedish Armed Forces, the United States Marine Corps (USMC) and the Federal Bureau of Investigation (FBI). He concludes they are rather similar but with some differences, mainly that the Swedish model leans heavier on the intelligence function while the USMC model more integrates the whole staff in risk management (Ivgren 2008, 41). He assesses that the Swedish risk management model demands huge resources from the staff and would benefit from better integration in the operational planning process. Ivgren also believes that changes should be made to more scientific calculation of risks in terms of probabilities. As he recognizes that this would require even more work and staff resources, such as time and personnel, his recommendation comes across as being a bit awkward (Ivgren 2008, 43).

Major Richard Gray (Swedish Armed Forces)

Swedish Major Richard Gray's thesis from 2009 is called *–Stupad för fosterlandet: en analys av medvetenheten om strategiska risker till följd av Sveriges militära medverkan i dagens konflikter,*” which translates as *Fallen for the Fatherland: an analysis of the awareness of strategic risks resulting from Sweden's military participation in today's conflicts*. Gray concludes that Sweden is running a risk of becoming strategically vulnerable due to limited awareness of the risks connected to using military means. Gray explores the question of how Swedish political decision makers would cope with increased casualties that are bound to follow increased Swedish participation in Afghanistan (Gray 2009, 28). The fundamental complication lies in that western populations have expectations that casualties will be few (Gray 2009, 29).

Gray uses a definition of risk that connects that concept to the concepts of threats and vulnerabilities. A threat is defined as something dangerous that has not yet occurred. Risk can have the same meaning as threat or mean the probability that a threat will come true. With this second meaning risk becomes something predictable. Vulnerability relates to what is threatened or at risk (Gray 2009, 26).

Summary of Reviewed Military Theses

The reviewed previous works related directly to risk or risk aversion written at the U.S. and Swedish Military Colleges in the last two decades are actually not that many. It is worth noting that only one thesis has been written at the U.S. Army Command and General Staff College on the subject of risk or risk aversion during the last two decades. This limited treatment of the topic of risk justifies a need and an obligation to remedy this gap in knowledge.

Risk aversion is addressed as a problem that needs to be attended to by all writers examined above, with one possible exception. Ivgren's recommendations might be interpreted as if he presumes that all risks should in some way be mitigated or eliminated. Ivgren appears to be convinced that all risks should be scientifically calculated in terms of probabilities. All the other writers approach the issue of risk aversion as being connected to contemporary society and as posing a challenge to the conduct of the military profession.

Swedish Majors Gottfridsson and Gray both define risk in terms of probability. They define risk as either probability of bodily injury while pursuing mission accomplishment or as the probability that a threat will come true. Gray also mentions a second definition of risk as being synonymous to threat. The Swedish writers come

across as being much less concerned with risk aversion than the U.S. writers. The U.S. Marine Corps majors, Dyal and Gibson, do not define risk in terms of probabilities. Instead, they use the term risk in a context similar to that of the school of thought represented by Coker and Eberhard above. Risk is used in a broader sense to include also unquantifiable uncertainties. Their message seems to be that war not only has to be expected to be bloody, but also chaotic and unpredictable. A view they share with military theorist Carl von Clausewitz. U.S. Marine Corps major Mundy uses a definition of risk aversion that equals casualty aversion, as he links risk taking to boldness.

U. S. Army Major Moelter examines the risk to the national security strategy of the United States stemming from perceptions that Americans are unwilling to risk casualties. In doing this he uses the concept of risk, as relating to both a possibility of loss of life as well as something that creates a hazard to mission accomplishment. U. S. Army Lieutenant Colonel Walter argues for a definition of risk including uncertainty. Calculable probability is then not required. What is required to constitute risk with his definition is a hazard with potential gains or losses. In reference, the Webster dictionary's definition of risk talks about possibility, but possibility does not necessarily have to be calculable. When it comes to military operations, it makes sense to regard measuring the risks in percentages as nonsense. The incalculable factors in warfare are by nature simply far too many.

Doctrine on Risk and Risk Aversion in the U.S. and Sweden

Swedish Armed Forces Doctrine

Swedish Armed Forces Doctrine is very brief in relating to risk. Striving to provide concise and comprehensive guidance, without becoming prescriptive, Swedish Armed Forces Doctrine is generally brief compared to U.S. doctrine.

The Swedish Armed Forces Risk Management model is in comparison with other similar models relatively easy to comprehend and use for its main purpose, international missions (FOI 2008, 46). Although not formally doctrine, it contains a number of methodical steps to ensure an organizationally shared and documented view on risks and related decisions. Risk is defined in very technical terms as the product of the probability that a given threat causes damage. The consequences of damages are measured from negligible to exceptionally severe, equaling ten or more killed (Försvarsmakten 2007). However, the Swedish Armed Forces Risk Management model places final responsibility with the relevant decision maker without providing specific methods for prioritizing risk mitigation measures (FOI 2008, 46).

The Swedish Armed Forces doctrine for joint operations, *Doktrin för gemensamma operationer*, and the doctrine for land operations, *Doktrin för markoperationer* are the only two truly doctrinal Swedish documents selected to be reviewed. Little other formal doctrine relating to land operations have been published. The usage of risk and related concepts reveal what meanings that are given to risk.

Swedish doctrine for joint operations states that when information is lacking assumptions must be made and risks taken, in order not to lose tempo (Försvarsmakten 2005a, 42). It views analysis of centers of gravity as linear analysis. As war is perceived

as a non-linear phenomenon, the analysis primary aim is to enable concentration of friendly resources and reducing the risk of division of effort (Försvarmakten 2005a, 65). As resources always are limited, calculated risks must usually be taken when allocating resources to strike at enemy critical vulnerabilities and protect one's own (Försvarmakten 2005a, 69). Interaction between offensive and defensive efforts, considering points of culmination and taking risk is regarded as vital for durable use of forces (Försvarmakten 2005a, 71).

The need for coordination may come into conflict with the need for tempo. When considering risks in prioritizing, good tempo is generally perceived as more important than thorough coordination (Försvarmakten 2005a, 80). Sequencing an operation by phases is further regarded as creating the risk of losing flexibility (Försvarmakten 2005a, 81). Commanders are expected to follow up on execution and make decisions regarding massing of effects and risk taking (Försvarmakten 2005a, 91). The doctrine for land operations, *Doktrin för markoperationer*, states that in assessment of risk taking, friendly as well as enemy conditions are identified that lead to problems or opportunities. A well made risk taking is expected to include difficult decisions, but render increased opportunities to capitalize on arising situations and take initiatives (Försvarmakten 2005a, 92).

Calculated risks must be taken, but the commander must be aware of what risks are necessary to take in order to accomplish the mission (Försvarmakten 2005b, 36). Massing of effects means to take risks in other directions. Deception, enabling surprise, is viewed as best accomplished by reinforcing perceptions of the expected. Correct estimation of what the enemy expects is therefore needed and the risk that we are being

deceived must be considered (Försvarsmakten 2005b, 38). The direct method entails striking directly at the enemy's strength, the center of gravity, which may lead to swift success, but which may also lead to an attritional struggle requiring numerical and logistical superiority. The indirect method is generally preferable and is also perceived as more usable against abstract ends, such as the coherence of an alliance (Försvarsmakten 2005b, 60). Reading Swedish doctrine one might easily get the impression that Swedish military operations include a lot of risk taking. This study's survey results may give some answers as to in what degree this is anywhere close to reality. In Swedish doctrine, as opposed to in the Swedish Armed Forces Risk Management model, risk is not always something calculable, but risk also include uncertainties. When it refers to taking risk, it is generally viewed in relation to the actions and reactions of a creative opponent.

U.S. Armed Forces Doctrine

U.S. doctrine relates to risk in almost every publication. In order to present a fair overview of how risk is defined and used as a concept within the rather voluminous available U.S. doctrine, a selective number of publications are reviewed. The selection has been guided by the publications relevance to the topic of risk and their contemporary relevance to ongoing operations. With these criteria the following six publications, listed in reversed chronological order, have been chosen: Field Manual (FM) 3-24, *Counterinsurgency*, FM 3-07, *Stability Operations*, FM 3-0, *Operations*, Joint Publication (JP) 5-0, *Joint Operation Planning*, JP 3-0, *Joint Operations*, and FM 3-100.12, *Risk Management*. As words actually matters to as how terms are defined and perceived, a considerable amount of quotes from doctrine will be included in the analysis to provide further understanding of how U.S. officers relate to risk and its aversion.

Field Manual 3-24, *Counterinsurgency*

FM 3-24, *Counterinsurgency*, dating from 2006, aimed to fill the doctrinal gap regarding counterinsurgency operations by providing principles and guidelines. It propagates risk taking and uses the concept of risk in ways that seem to include, rather than exclude, uncertainty. FM 3-24 claims that “killing every insurgent is normally impossible” as “it risks generating popular resentment, creating martyrs that motivate new recruits, and producing cycles of revenge” (Department of the Army 2006, 1-23).

Several paradoxes of counterinsurgency are explained. One paradox is that “The More Successful the Counterinsurgency Is, the Less Force Can Be Used and the More Risk Must Be Accepted” in order “to maintain involvement with the people” while exercising “increased restraint” (Department of the Army 2006, 1-27). When Field Manual (FM) 3-24 refers to sharing risk it obviously refers to physical risk rather than risk concerning mission accomplishment; which reflects in the paradox that “Sometimes, the More You Protect Your Force, the Less Secure You May Be,” instead “risk [must be] shared with the populace” (Department of the Army 2006, 1-27). “Risk takes many forms” and “in COIN operations, commanders may need to accept substantial risk to de-escalate a dangerous situation” is a key message (Department of the Army 2006, 7-3).

Field Manual (FM) 3-24 states that accepting and taking “risk to minimize harm to noncombatants,” “is an essential part of the Warrior Ethos” (Department of the Army 2006, 7-5). However, “combatants are not required to take so much risk that they fail in their mission or forfeit their lives” (Department of the Army 2006, 7-5). “Soldiers and Marines may take actions where they knowingly risk, but do not intend, harm to noncombatants,” at least “as long as their use of force is proportional to the gain to be

achieved and discriminates in distinguishing between combatants and noncombatants” (Department of the Army 2006, 7-5). Taking risk is consequently used as the opposite of possibility for mission failure. Physical risk of loss of lives is clearly intended with this use of the concept of risk. Mission accomplishment requires taking risks with people’s lives, giving risk the meaning of a necessary bad.

Field Manual 3-07, *Stability Operations*

FM 3-07 is the keystone doctrine for stability operations (Department of the Army 2008). Addressing risk, FM 3-07 places how risk pertains to mission accomplishment in focus. An illustrative passage is that “while some level of corruption is common to many cultures, its existence can unhinge reform efforts and put the entire mission at risk” (Department of the Army 2008, 3-14). Risk is thus not primarily addressed as risk to the force but to the mission, which differs from the other reviewed doctrinal publications.

FM 3-07 states that “plans account for the interdependent relationship among initiative, opportunity, and risk” and that; “successful plans combine the three to reduce or counter the effects of complexity using the commander’s intent to foster individual initiative and freedom of action” (Department of the Army 2008, 4-2). When framing the concept of operations’ sequence of actions, it prescribes assessing “what risks are associated with that sequence of actions, and how can they be mitigated” (Department of the Army 2008, 4-6). How risk pertains to mission accomplishment is thus at the center of FM 3-07 usage of risk.

Field Manual 3-0, *Operations*

General William Wallace states in the foreword of Field Manual (FM) 3-0, *Operations* that the manual is “a revolutionary departure from past doctrine,” as it aims to describe an operational concept to “seize, retain, and exploit the initiative, accepting prudent risk to create opportunities to achieve decisive results” (Department of the Army 2008). In essence, the strategic importance of risk is that the American people’s perception of legitimacy, and thereby their will to support the mission “depends on their assurance that American lives are not being placed at risk needlessly or carelessly” (Department of the Army 2008, A-4).

Risk in FM 3-0 is placed within the key direction to a force, in the commander’s intent. In addition to the desired end state and concise purpose of the operation, the intent “also includes where the commander will accept risk during the operation” (Department of the Army 2008, IV-25). That risk aversion can come to dominate decision making is accepted in FM 3-0. Risk averse tendencies should be handled by just “providing a clear, actionable, and achievable intent,” ensuring that execution “is unhampered by overly cautious approval and control procedures” (Department of the Army 2008, 7-3). Control, as such, is by FM 3-0 defined as “action taken to eliminate a hazard or reduce its risk” (Department of the Army 2008, Glossary-5). The acceptance of risk in the commander’s intent is made to avoid risk aversion, such as excessive approval and control procedures. FM 3-0 is a doctrine most positive to purposeful risk taking, and thus contrasts starkly to Risk Management doctrine.

FM 3-0 defines taking risk essentially as an art when stating that “[k]nowing when and how to accept risk, prioritizing myriad requirements, and balancing limited

resources all require military art” (Department of the Army 2008, 4-5). FM 3-0 further gives a clear purpose to taking risks. Aiming to “seize, retain, and exploit the initiative, accepting prudent risk” has the supporting purpose “to create opportunities to achieve decisive results” (Department of the Army 2008, 3-1). Furthermore FM 3-0 states that “[r]isk and opportunity are intrinsic in seizing the initiative. To seize the initiative, commanders evaluate and accept prudent risks,” but goes on by stating that “Opportunities never last long” and that “Unless commanders are willing to accept risk and then act, the adversary is likely to close the window of opportunity and exploit friendly inaction” (Department of the Army 2008, 3-3). Commanders are instructed by FM 3-0 to “anticipate and accept risk to create opportunities to seize, retain, and exploit the initiative and achieve decisive results” (Department of the Army 2008, 5-3). FM 3-0 further perceives “that land warfare is chaotic and unpredictable and that action is preferable to passivity,” it therefore encourages acceptance of “calculated risks to create opportunities, while providing intent and control that allow for latitude and discretion” (Department of the Army 2008, 5-4).

Without providing separating definitions, FM 3-0 states that “[r]isk, uncertainty, and chance are inherent in all military operations” (Department of the Army 2008, 6-19). It further states that “good operational design considers risk and uncertainty equally with friction and chance” (Department of the Army 2008, 6-19). However, no clear definition is provided by FM 3-0 as to whether risk includes or excludes uncertainty, although the separate mentioning of uncertainty above indicates that risk is viewed as being separate from, and thus not including, uncertainty.

The principle of Economy of Force is in FM 3-0 defined as being “the reciprocal of mass” (Department of the Army 2008, A-2). “Taking calculated risks is inherent in conflict,” as allocating minimum resources necessary to shaping and sustaining operations enable massing for the decisive operation and “[t]his requires accepting prudent risk” (Department of the Army 2008, A-2).

Taking risk is placed as a key factor to win, by stating that “[w]hen commanders accept risk, they create opportunities to seize, retain, and exploit the initiative and achieve decisive results” (Department of the Army 2008, 6-19). This key function is further explained with that “[r]isk is a potent catalyst that fuels opportunity. The willingness to incur operational risk is often the key to exposing enemy weaknesses that the enemy considers beyond friendly reach” (Department of the Army 2008, 6-19). In the perception of FM 3-0; “[u]nderstanding risk requires calculated assessments coupled with boldness and imagination. Successful commanders assess risk continuously throughout operations and mitigate it through creative operational design” (Department of the Army 2008, 6-19). The need for taking risk is put clearly as “[f]ull spectrum operations require leaders schooled in independent decision-making, aggressiveness, and risk taking in an environment of mission orders and mission command at every level” (Department of the Army 2008, 3-6).

In term of whether risk is ultimately calculated or estimated, which can be interpreted to pertain to whether application is being made within science or within art, FM 3-0 refers to the latter, estimation. Indirectly FM 3-0 gives risk the meaning of being the source of achieving surprise:

Reasonably estimating and intentionally accepting risk is fundamental to conducting operations. It is essential to successful battle command. Successfully applying military force requires commanders who assess the risks, analyze and minimize the hazards, and execute a plan that accounts for those hazards. Experienced commanders balance audacity and imagination with risk and uncertainty to strike at a time and place and in a manner wholly unexpected by enemy forces. This is the essence of surprise. It results from carefully considering and accepting risk. (Department of the Army 2008, 6-19)

Risk and uncertainty are here used together but mentioned separately. Surprise is perceived as being created by accepting risk and uncertainty in combination with audacity and imagination.

Joint Publication 3-0, *Joint Operations*

JP 3-0, *Joint Operations* provides doctrine to govern joint operations for interagency coordination and for US military involvement in multinational operations (Joint Chiefs of Staff 2006a, i). JP 3-0, like FM 3-0, places the assessment of risk within the realm of art rather than science, stating that “[o]perational art integrates ends, ways, and means and considers risk across the levels of war” (Joint Chiefs of Staff 2006a, xix). However, JP 3-0 also uses risk in a context more scientifically defined, with risks linked to threats. JP 3-0 states that “[r]isks may include a wide range of nonconventional threats” which aligns with the FM 3-100.12, *Risk Management*’s definition of risk as probability and severity of loss linked to threats (Joint Chiefs of Staff 2006a, VI-16).

Regarding risk management JP 3-0 states that “[r]isk is inherent in military operations,” and that “[r]isk management is a function of command and is based on the amount of risk a higher authority is willing to accept” (Joint Chiefs of Staff 2006a, III-13). Risk management is defined as “[t]he process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with

mission benefits” (Joint Chiefs of Staff 2006a, GL-24). It is to assist in; ~~avoiding~~ or mitigating unnecessary risk,” and ~~providing~~ reasonable alternatives for mission accomplishment” (Joint Chiefs of Staff 2006a, III-13). JP 3-0 states that the Security principle of joint operations includes applying ~~prudent~~ risk management, not undue caution” (Joint Chiefs of Staff 2006a, A-3). Risk management is explicitly stated to ~~not~~ inhibit commanders’ flexibility and initiative, remove risk altogether (or support a zero defects mindset)” (Joint Chiefs of Staff 2006a, III-13). There may be different reasons for stating what something does not do. One reason may be to counter existing perceptions about what risk management doctrinally and practically has entailed.

Joint Publication 5-0, *Joint Operation Planning*

JP 5-0, *Joint Operation Planning* provides doctrine for the joint operation planning of the U.S. Armed Forces and provides the joint doctrinal basis for coordination with other agencies and in multinational operations (Joint Chiefs of Staff 2006b, i) Conducting an initial risk assessment is one of the prescribed key steps of mission analysis together with developing the commander’s planning guidance and initial intent (Joint Chiefs of Staff 2006b, III-21). According to JP 5-0, the commander’s intent ~~includes~~ where the commander will accept risk during the operation,” in the form of an ~~assessment~~ of where and how much risk is acceptable during the operation” (Joint Chiefs of Staff 2006b, III-24).

During ensuing development of courses of action, ~~the~~ commander and staff continue risk assessment, focusing on identifying and assessing hazards to mission accomplishment” (Joint Chiefs of Staff 2006b, III-28-29). The resulting products should be valid courses of action, that in order to be acceptable ~~balance~~ cost and risk with the

advantage gained” (Joint Chiefs of Staff 2006b, III-28). When producing the operations plan, risk is included and defined as ~~the~~ probability and severity of loss linked to hazards (Joint Chiefs of Staff 2006b, C-2).

Risk in JP 5-0 is primarily used as a term pertaining to mission accomplishment rather than physical risks to the force itself. The definition of risk provided is however very close to that used in Risk Management, and since probability is part of the definition uncertainty becomes excluded from risk according to JP 5-0.

Field Manual 3-100.12, *Risk Management*

The purpose of FM 3-100.12, *Risk Management* is to provide multiservice reference. It facilitates multiservice interoperability by identifying and explaining the risk management process with the differences and similarities the services apply (Air Land Sea Application Center 2001, i) FM 3-100.12 uses the following definition of risk;”Risk is an expression of a possible loss or negative mission impact stated in terms of probability and severity” (Air Land Sea Application Center 2001, I-1). Since uncertainty cannot be stated in terms of probability, it is excluded from risk with this definition. FM 3-100.12 consequently defines risk management as ~~a~~ process that assists decision makers in reducing or offsetting risk (by systematically identifying, assessing, and controlling risk arising from operational factors) and making decisions that weigh risks against mission benefits” (Air Land Sea Application Center 2001, I-1).

The authors of FM 3-100.12 have deemed it appropriate to also address what Risk Management does not do. It states that Risk Management does not ~~re~~place sound tactical decision making,” or ~~in~~hibit the commander’s and leader’s flexibility, initiative, or accountability.” According to FM 3-100.12, Risk Management neither

~~to~~ remove risk altogether, or support a zero defect mindset.” There has apparently been some reason to vocally distance Risk Management as a concept or process from that of a zero defect mindset.

There are four basic principles for risk management. First: accept no unnecessary risk, Second: make risk decisions at the appropriate level, Third: accept risk when benefits outweigh the cost, fourth and finally; anticipate and manage risk by planning (Air Land Sea Application Center 2001, I-2). The doctrine for risk management presumes that no one intentionally accepts unnecessary risk, as it is ~~any~~ risk that, if taken, will not contribute meaningfully to mission accomplishment or will needlessly endanger lives or resources” (Air Land Sea Application Center 2001, I-2). Accepting necessary risk is consequently required to accomplish a mission. According to the doctrine for risk management, the ~~most~~ logical choices for accomplishing a mission are those that meet all mission requirements while exposing personnel and resources to the lowest acceptable risk” (Air Land Sea Application Center 2001, I-2).

Risk management is to identify threats and ~~reduce~~ or offset risk” (Air Land Sea Application Center 2001, I-2). FM 3-100.12 states that ~~the~~ appropriate level for risk decisions is the one that can make decisions to eliminate or minimize the threat, implement controls to reduce the risk, or accept the risk” (Air Land Sea Application Center 2001, I-2). According to this doctrine, commanders ~~must~~ elevate decisions to the next level in the chain of command” after ~~the~~ commander, leader, or individual responsible for executing the mission or task determines that controls available to them will not reduce risk to an acceptable level” (Air Land Sea Application Center 2001, I-2). Because of that, it is necessary ~~subordinates~~ know how much risk they can accept and

when to elevate the decision to a higher level” (Air Land Sea Application Center 2001, I-2). The “risk management process must include those accountable for the mission” (Air Land Sea Application Center 2001, I-2). From this the conclusion can be drawn that if there is any doubt as to what level of risk is acceptable, decisions are prescribed to be elevated to the next level of command. This procedure may become an overly cautious approval procedure, at least if the commander’s intent is unclear on what risk is acceptable.

According to FM 3-100.12, “weighing risks against opportunities and benefits helps to maximize mission success” and this subjective balancing act remains a decision for the leader (Air Land Sea Application Center 2001, I-2). With this statement the Risk Management doctrine departs from its general adherence to objective positive science and affirms the subjective nature of weighing risks and benefits. In order to anticipate and manage risk by planning, risk management has to be integrated into planning at all levels. As the doctrinal risk management process comes across as rather time consuming, this piece of doctrine sends the message that tempo will be sacrificed in order to reduce risks. The doctrine states that “[c]ommanders must dedicate time and resources to apply risk management effectively in the planning process” (Air Land Sea Application Center 2001, I-2). Further, “[i]ntegrating risk management into planning as early as possible provides leaders the greatest opportunity to make well-informed decisions and implement effective risk controls” (Air Land Sea Application Center 2001, I-2). Also, “[d]uring execution phases of operations, the risk management process must be applied to address previously unidentified risks while continuing to evaluate the effectiveness of existing risk control measures and modify them as required” (Air Land Sea Application Center 2001, I-2).

The application of Risk Management is made up of five sequential steps. Identify threats, assess threats, develop controls and make risk decisions, implement controls, and finally supervise and review. Within Risk Management, a threat is defined as “a source of danger with the potential to impact mission accomplishment negatively” (Air Land Sea Application Center 2001, II-1). Identifying threats is fundamental to the risk management process, as unidentified threats cannot be controlled. This uncontrollability of the uncertain is essentially why risk within the realm of risk management is used as a concept excluding uncertainty. Unidentified threats are by definition of their nature within the uncertain.

Risk management strives to identify threats, and thereby risks, associated with mission degradation, personal injury and property damage. The dual nature of risk, relating to both mission accomplishment and lives, is thus present. Identifying the root cause of a threat is important as “Risk controls may be more effective when applied to root causes” (Air Land Sea Application Center 2001, II-1). Assessing threats pertains to probability and severity. Probability “is the estimate of the likelihood” while severity “is the expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors” (Air Land Sea Application Center 2001, II-1). Risk assessment aims to allow prioritization of threats based on risk. “The number one risk is the one with the greatest potential impact on the mission” and as severity is determined by “potential impact on the mission,” the most severe threat should consequently be regarded as the number one threat (Air Land Sea Application Center 2001, II-2). This prioritization appear odd, as a less severe but much more probable threat is ranked lower,

and the method of prioritization thus sub-optimizes the use of resources towards worst case events.

FM 3-100.12 determines that “[p]robability may be determined through experienced-based estimates or derived from research, analysis, and evaluation of historical data from similar missions and systems” (Air Land Sea Application Center 2001, II-2). Probability is defined as the “likelihood that a hazardous incident will occur” and measured from frequent to unlikely (Air Land Sea Application Center 2001, Glossary-5). As uncertainty cannot be measured, probability is set apart from the realm of uncertainty.

Risk Assessment is completed by combining severity and probability to determine the level of risk. “The outcome of the risk assessment process is a prioritized list of threats” with the highest priority threat being “the most serious one to the mission” (Air Land Sea Application Center 2001, II-1). Many pitfalls must be avoided in risk assessment, such as; over optimism, misrepresentation, alarmism, indiscrimination, inaccuracy, enumeration of human behavior and prejudice such as subjectivity (Air Land Sea Application Center 2001, II-2f). This prioritization sub-optimizes towards worst case events, as less severe but more probable threat are ranked lower than more severe less probable threats.

For each and every threat identified, “one or more control options that either avoid the threat or reduce its risk to a level that meets the commander’s risk guidance” has to be developed. Apparently, the intention is to mitigate each and every possible threat that can be foreseen. This level of ambition to reduce risks can be presumed to be very time and resource consuming and therefore indicates a doctrinal unwillingness to

accept risks. The resulting approval and control procedures may become overly cautious and a contradicting discrepancy thus appear to exist between FM 3-100.12 and FM 3-0, which prescribes execution to be unhampered by overly cautious approval and control procedures.

Controls can be Engineering, Administrative, Educational, Physical or Operational. Controls can also be to avoid or delay the risk, or to assign redundant capabilities or transfer the risk to another unit ~~to~~ "better positioned, more survivable, or more expendable" (Air Land Sea Application Center 2001, II-1). Determining when the remaining risk ~~is~~ "acceptable to the commander or leader or cannot be further reduced" precedes making the risk decision" (Air Land Sea Application Center 2001, II-5). To make a Risk Decision means to compare and balance the risk against potential gain. The commander alone decides whether to accept the residual risk. If the risk level is too high the plan has to change or be rejected. Risk Management defines acceptable risk as the ~~pro~~ "portion of identified risk that is allowed to persist without further controls" (Air Land Sea Application Center 2001, Glossary - 4). Unacceptable risk is consequently defined as the ~~ris~~ "k that cannot be tolerated and must be eliminated or controlled" (Air Land Sea Application Center 2001, Glossary - 6) The doctrine's intention is that much effort is to be spent seeking different forms of safety through the meticulous process of developing risk mitigating controls. The risk management doctrine is not risk averse in itself, but the procedures it prescribes may seriously facilitate and contribute to risk aversion.

Implementing controls include informing about the results and decisions of the risk management process. Accountability is important to risk management and is determined by who approves the control measures. Supervise and review involves

—monitoring the effectiveness of risk controls; determining the need for further assessment of either all, or a portion of, the operation due to an unanticipated change; and capturing lessons learned, both positive and negative” (Air Land Sea Application Center 2001, II-6). —When a decision is made to accept risk, factors (cost versus benefit information) involved in the decision should be recorded,” since —proper documentation allows for review of the risk decision process” (Air Land Sea Application Center 2001, II-7). The reason for this is that —when a negative consequence occurs, the decision process can be reviewed to determine where errors in the process may have occurred” (Air Land Sea Application Center 2001, II-7). The output of this elaborative and rather time consuming risk management process ultimately arrives at documenting who erred. Whether this process in itself contributes to risk aversion in the behavior of commanders should be considered. Going back to the claims of the authors of FM 3-100.12 that Risk Management does not —[i]nhibit the commander’s and leader’s flexibility, initiative, or accountability” nor —support a zero defect mindset.” It appears convincing that Risk Management does not inhibit accountability. Flexibility and initiative may become affected by the demand on time and staff resources risk management requires. The required documentation of all the cognitive processes of risk decision making constitutes a huge demand on time and staff resources for this sole purpose alone.

Risk is defined as —[p]robability and severity of loss linked to threats” (Air Land Sea Application Center 2001, Glossary-5). This definition excludes uncertainty, which cannot be expressed in terms of probability. In a way though, the concept of risk used in FM 3-100.12 includes uncertainty, as unidentified risk is defined as the —risk that has not been identified” which is” unknown or immeasurable” (Air Land Sea Application Center

2001, Glossary-6). The “sum of identified risk and unidentified risk” is defined as Total risk (Air Land Sea Application Center 2001, Glossary-6). Total risk, as defined by FM 3-100.12, thus includes uncertainty as part of unidentified risks in which it is intrinsic.

Summary of Reviewed Doctrine in the U.S. and Sweden

The Swedish Armed Forces doctrine for joint operations, *Doktrin för gemensamma operationer*, and the doctrine for land operations, *Doktrin för markoperationer*, both use risk in ways that indicate the same meanings are given to risk as a concept. In these two parts of Swedish doctrine risk is not always something calculable, but risk also includes uncertainties. This concept of risk differs from that in the Swedish Armed Forces Risk Management model which links its definition of risk to probability that a given threat causes damage.

Amongst U.S. doctrine, the Army Field Manual 3-0, *Operations* shows the clearest awareness of that risk aversion can come to dominate decision making. A clear intent is to avoid excessively cautious approval and control procedures and thereby mitigate risk aversion. FM 3-0 define taking risk essentially as an art, but provide no clear definition as to whether risk includes uncertainty or not. However, as FM 3-0 talks of risk, uncertainty and chance, it appears as if these three are viewed as being separate from each other, if still related. Indirectly FM 3-0 gives risk the meaning of being the source of achieving surprise.

In FM 3-07, *Stability Operations*, risk is primarily addressed as risk to the mission, not to the force itself. This way of using risk as a concept differs somewhat from the other reviewed U.S. doctrinal publications. It is however similar, but reversed, to the usage of the risk concept in FM 3-24, *Counterinsurgency*. Taking risk in FM 3-24 is used

as the opposite of possibility for mission failure. Risk is here essentially perceived as the physical risk of loss of lives.

Joint Publication (JP) 3-0, *Joint Operations*, like FM 3-0, place the assessment of risk within the realm of art rather than science. However, JP 3-0 also uses risk in a context more scientifically defined, with risks linked to threats. JP 5-0, *Joint Operation Planning* defines risk as the probability and severity of loss linked to hazards, which is essentially the same definition as in FM 3-100.12, *Risk Management*.

FM 3-100.12, *Risk Management* views risk as “an expression of a possible loss or negative mission impact stated in terms of probability and severity” (Air Land Sea Application Center 2001, I-1) and defines risk as “[p]robability and severity of loss linked to threats” (Air Land Sea Application Center 2001, Glossary-5). With this definition linked to probability, uncertainty is excluded from risk, since uncertainty cannot be stated in terms of probability. However, the concept of risk used in FM 3-100.12 at the same time includes uncertainty in the form of unidentified risk. Risks that have not been identified are therefore unknown and so are immeasurable.

Calculable, identified risk is in FM 3-100.12 divided into two parts: acceptable risk and unacceptable risk. Controls are designed to eliminate any unacceptable risk. If there is lack of clarity about what level of risk is acceptable, decisions are prescribed to be elevated to the next level of command. This may become an overly cautious approval procedure, at least if the commander’s intent is unclear on what risk is acceptable.

The intention in FM 3-100.12 is to mitigate each and every possible threat that can be foreseen. This level of ambition to reduce risks can be presumed to be very time and resource consuming and therefore indicates a doctrinal unwillingness to accept risks.

The resulting approval and control procedures may also become overly cautious. A contradicting discrepancy thus appear to exist between FM 3-100.12 and FM 3-0, which prescribes execution to be unhampered by overly cautious procedures.

In both the United States and Sweden, the most positivistic definitions of risk are found in Risk Management documents. They equate risk with the probability of a negative outcome. Linking risk to calculable probability has the effect of detaching uncertainty from risk. This more positivistic definition is also found in the U.S. JP 3-0 and JP 5-0. A broader use of risk that also includes unquantifiable uncertainties is found in the Swedish Armed Forces doctrine for joint operations as well as the doctrine for land operations. This broader use of the risk concept is also found in the U.S Army publications FM 3-0, *Operations*; FM 3-07, *Stability Operations*; and FM 3-24, *Counterinsurgency*. With the use of risk in those doctrinal documents, risk can be estimated, but does not necessarily have to be expressed in terms of probability. In essence these differing doctrinal views on risk pertain to whether risk, and risk taking, is primarily perceived as part of science, or as part of the art of war.

Summary of Literature Review and Definitions of Risk and Risk Aversion

The main divider in terms of how risk is viewed as a concept is whether risk is perceived to include uncertainty or not. The literature review has identified these two different schools of thought regarding how risk itself is viewed and also two different schools of thought regarding how risk aversion is defined. Risk aversion is viewed as a challenge connected to contemporary Western society by writers as Eberhard and Coker, as well as in almost all the previous works from the U.S. and Swedish Military Colleges.

This school of thought addresses risk aversion as a major challenge to be overcome which aligns with the assumptions and purpose of this study. A second, different, school of thought, in this literature review represented by Glimcher and Kelley, presents risk aversion as the good alternative to risk seeking. Although this view may hold true in a medicinal sense at an individual level, it appears to fail to account for the implications risk aversion may have for mission accomplishment in a military context.

In defining risk itself, two schools of thought are present in the concluded literature review. First, a positivistic definition of risk, equating risk with probability of a known negative outcome has the effect of detaching uncertainty from risk. This narrow definition of risk requires uncertainty to be defined as a separate concept. This definition is found with Hofstede and Glimcher, as well as with Swedish Majors, Gottfridsson, Gray and Ivgren. This school of thought also appears to dominate military doctrine on Risk Management in both the United States and Sweden. Reviewed U.S. Joint Publications also define risk in ways that link risk to calculable probability and thus detaches uncertainty from risk. Second, there is a broader definition of risk including unquantifiable uncertainties. This school of thought is represented by Coker and Eberhard, as well as the U.S. Majors Dyal and Gibson. With their definition, risks can be estimated, but does not necessarily have to be expressed in terms of probability. This broader use of risk as a concept is also present in the Swedish Armed Forces doctrine and in the reviewed U.S Army Field Manuals. Risk is there something that can be estimated, but does not necessarily have to be expressed in terms of probability. The essential divider between these two schools of thought regarding what risk is pertain to whether risk, and risk taking, is primarily perceived as part of science or of art.

Risk is, for the purpose of this study, accepted to exist with at least two different definitions. With one of them risk is defined as the possibility, or even uncertainty, of a negative outcome. Risk consequently does not have to be expressed in terms of probability with that first definition. With the second, narrower, definition, risk is defined as the probability of a known negative outcome, where probability is something that can be calculated and expressed in percentage or other degrees of likelihood.

Risk aversion will essentially, for the purpose of this study, be equated to the outcome of safety addiction as described above by Dr. Eberhard. Essentially the concepts of safety addiction and risk aversion are synonymous, as they verbally describe the same phenomena but from different perspectives. In this study, risk aversion is specifically defined as a behavior indicated by applying safety in larger doses than reasonably necessary. In relation to mission accomplishment, risk aversion can also be expressed as continued search for more safety, in spite of knowing that the consequences of avoiding risks are more severe than the consequences of the risks themselves. The motive for choosing this definition of risk aversion is that it aligns with the concepts used by Coker and Eberhard described above. As their respective two theories form the basis for this study, it is appropriate to apply a definition of risk aversion that is largely similar to theirs, if not entirely equal.

The next chapter provides clarification of the chosen methodology for the analysis. As the methodology is based upon the work of Eberhard and Hofstede, the next chapter continues to develop the methodology from the theories reviewed in this literature review chapter but with some further depth in terms of the practical application

in this study. The next chapter also makes clear the points of departure from which the research and analysis starts out.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter provides the means and ways to achieve the end of the study, comparing perceptions of risk aversion between officers from the United States and Sweden. It also addresses how objectivity and interpretation are viewed, and what general method is used that constitutes the points of departure for the discussion. The models and pieces of theory selected to constitute the framework for the coming analysis are then presented in some more detail before key methodology points finally are summarized.

Points of Departure

As a researcher is a part of, rather than detached from, the world studied, there are no aspirations to claim any illusions of complete objectivity in this study. Instead, an awareness of how we as interpreters are subjective in relation to the studied phenomena is appropriate. Going through the interpreted perceptions analyzed in the study benefits from awareness of how and in what ways objectivity towards the subject is flawed by a certain perspective. All interpretations are based on the preconceptions we bring with us into this process of understanding. Where this study aims to go, there can be no absolute facts or truths, but only different perspectives.

This study is narrow in scope and only aspires to add another small brick to the house of knowledge. It is not a quantitative study and there is no intention to prove anything by means of statistics. The humble aim of this study is merely to explore how a small selection of military officers has perceived their experiences of risk aversion. The way to explore these perceptions is through qualitative comparative analysis of a few

shared experiences. The analysis centers on how a select number of officers from the United States and Sweden perceive how risk aversion has affected the conduct of their profession, concerning the conduct of both operations as well as training. The subject of risk aversion will be further explored through comparative analysis of these perceptions.

The core data analyzed in this study will be based on a qualitative survey. The selection of participants is limited to the class of 2009-2011 at the Swedish National Defence College and a roughly equal number of respondent officers from the 2010-2011 class at the U.S. Army Command and General Staff College. The selection is assessed to be evenly representative for the whole class, as the survey has been sent to entire sections.

Through the survey's questionnaire, specific but open ended questions have been presented to the selected U.S. and Swedish officers. Specifically, the questions have been formulated: "Have you perceived risk aversion in the decision making of your superiors? Is so, please give a brief description." Questions two and three address the same issue related to perceived risk aversion in the decision making of subordinates and of the officer personally. The exact formulation of the questions posed to the participants is stated in Appendix A. The intent has been to present the questions in a way that leads to answers with wordy elaboration suitable for qualitative analysis. Prior to presenting the questions themselves to the participants, a selected definition of risk aversion has been presented to the participants, so that they would have something to relate to when writing their answers. An informed consent statement has also accompanied the questionnaire. As participants have entered their answers anonymously through the Inquisitive survey tool, administrated and approved by the CGSC Quality Assurance Office, no confidential

data will be stored. The individual answers collected from the survey are all in listed in Appendix B.

To complement the perceptions drawn from the survey described above, other sources of information on how risk aversion is perceived are also utilized. Entries on the U.S. Combined Arms Center (CAC) blog illustrate perceptions on the subject. A professional discussion related to risk was initiated on the CAC blog by Lieutenant General Robert L. Caslen Jr, Commanding General of the Combined Arms Center. In response, several officers shared their candid thoughts and ideas.

The blog discussion's opening statement by Lieutenant General Caslen, Commanding General of the Combined Arms Center and Fort Leavenworth and also; Commandant of the Command and General Staff College; Deputy Commanding General for Combined Arms, U.S. Army Training and Doctrine Command; and Director of the Joint Center for International Security Force Assistance, was essentially:

Critical to decentralized operations are risk assessment discussions between the small unit leader and his or her more senior commander. A command climate must be present where subordinate commanders can come forward with the necessary candor to tell their boss what they feel is acceptable risk, or not. This command climate must create a degree of trust between these leaders. The special trust between leader and led is essential and is earned through integrity, competence, and nurturing relationships. (Caslen 2010)

The responses to this statement complement the perceptions of risk aversion in decision making collected by the survey and are used in the analysis of current U.S. perceptions. The interpretation of the blog discussions will also point to gaps in the survey's findings.

Framework for Analysis

The framework for analysis in this study combines two pieces of existing theories. The two fragments of theory combined are Dr. Eberhard's model for defining safety

addiction and Professor Geert Hofstede's model explaining cultural behavior. The experiences shared by the participating officers are viewed through the lens of the seven criteria which defines safety addiction:

1. Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety.
2. Abstinence symptoms appear when something is pointed out as unsafe.
3. Safety is being applied in larger doses than reasonably necessary.
4. There are failed attempts, or at least a wish, to limit the desire for more safety.
5. Much time and effort is spent seeking different forms of safety.
6. Important functions are abandoned due to fear of lacking safety.
7. Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided. (Eberhard 2006, 40)

Analyzing the experiences through the seven criteria may indicate safety addiction and related excessive risk aversion in the experienced behavior. Tertiary research questions are addressed by interpreting how the surveyed perceptions of risk aversion match the seven described criteria from Eberhard. Which criteria are indicated by the surveyed perceptions and how?

The comparative analysis of perceptions of risk aversion in the conduct of the military profession between officers from the United States and Sweden is made based on two of the Hofstede model's cultural dimensions. More explicitly, the two selected dimensions are those of masculinity and uncertainty avoidance, which have been selected since those are the two dimensions where the difference between the United States and

Sweden can be expected to be the most noticeable. According to Hofstede's Cultural Dimensions the U.S scores 62 in Masculinity compared to 5 for Sweden. In uncertainty avoidance the U.S scores 46 compared to 29 for Sweden, portraying as having a more masculine and uncertainty avoiding culture than Sweden (Geert Hofstede Cultural Dimensions website 2011).

Hofstede's model uses the term masculinity to measure how men's values differ from women's in a cultural context. "[M]en's values from one country to another contain a dimension from very assertive and competitive and maximally different from women's values on the one side, to modest and caring and similar to women's values on the other" (Geert Hofstede Cultural Dimensions website 2011). According to Hofstede's research, there should be a noticeable difference in values between Sweden and the United States. Modest and caring values can, in accordance with Hofstede's previous studies be expected to be more present in the Swedish officer's perception of risk aversion than assertive and competitive values. For the U.S. officers, the opposite should be expected (Geert Hofstede Cultural Dimensions website 2011). These expectations presume of course that Hofstede is correct and that the survey participants are culturally fairly representative. The interpreted differences in perceptions of risk aversion will be compared and contrasted using Hofstede's cultural dimensions.

Regarding uncertainty avoidance, Hofstede's research claims the difference in cultural values to be less noticeable between Sweden and the United States, but with Sweden displaying a lower level. Uncertainty avoidance measures tolerance for uncertainty and ambiguity, accordingly strict rules and safety measures indicate uncertainty avoidance (Geert Hofstede Cultural Dimensions website 2011). The

comparative analysis attempts to discover perceptions that relate to uncertainty avoidance with reliance on rules and safety measures.

The interpretation of other peoples' experiences is, knowingly or not, always subjected to the conceptions and intrinsic biases of the interpreter. The validity of the indications arrived at are therefore linked to the cultural values and perceptions of the beholder. The analysis in the next chapter will be made from a framework that combines the theories of Eberhard and Hofstede. The seven criteria developed by Eberhard to define and indicate safety addiction and risk aversion structures the analysis of the perceptions of risk aversion. The comparison between U.S. and Swedish perceptions of risk aversion is structured on Hofstede's cultural dimensions of masculinity and uncertainty avoidance.

Alternative interpretations as to which of Eberhard's seven criteria are indicated by the brief descriptions provided by the survey participants are of course possible. Several responses could also be interpreted to indicate more than one criterion. However, in order to provide some simplicity and brevity to the analysis, the interpretation is restricted to a maximum of one primary criterion per respondent answer.

All the responses to the questions in the survey are also found in Appendix B. The exact responses that have been interpreted to indicate a certain criteria are further quoted in the analysis. The readers of this thesis are thus enabled to make their own judgment as to how well the interpretation of the surveyed responses match the selected criteria. The next chapter provides the analysis, using the methodology outlined above based upon the works of Eberhard and Hofstede. Analysis and comparison of surveyed U.S. and Swedish perceptions of Risk Aversion using Eberhard's seven criteria is followed by a further

analysis of the differences in perceptions sing cultural dimensions. An expanded analysis using discussions on the topic published on the CAC blog serves to complement the picture of current U.S. perceptions of risk aversion.

CHAPTER 4

ANALYSIS

Criteria Indicating Risk Aversion

The analysis of the surveyed perceptions identifies indications of Eberhard's seven criteria of safety addiction. For the purpose of this study risk aversion is defined by its effects as a behavior indicated these seven criteria:

1. Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety.
2. Abstinence symptoms appear when something is pointed out as unsafe.
3. Safety is being applied in larger doses than reasonably necessary.
4. There are failed attempts, or at least a wish, to limit the desire for more safety.
5. Much time and effort is spent seeking different forms of safety.
6. Important functions are abandoned due to fear of lacking safety.
7. Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided. (Eberhard 2006, 40)

The comparison of surveyed U.S. and Swedish perceptions of Risk Aversion that follows uses Hofstede's cultural dimensions to analyze the differences. A further expanded analysis uses discussions about risk and risk aversion on the CAC blog to complement the picture of current U.S. perceptions of risk aversion and expose limitations of the survey to which 22 U.S. and 15 Swedish officers submitted their responses.

Surveys of U.S. and Swedish Perceptions of Risk Aversion

Swedish Perceptions of Superiors

The first question posed to respondents was, “Have you perceived risk aversion in the decision making of their superiors?” The participating Swedish officers provided brief descriptive answers that could be interpreted to indicate Eberhard’s criteria 3, 4, 5, 6, and 7; but not criteria 1 or 2. That does not necessarily mean that there was no “Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety” or no “Abstinence symptoms appearing when something is pointed out as unsafe.” Those criteria were however not indicated by the answers provided. The other five of Eberhard’s criteria were relevant as indicated by the following.

Criterion 3, “Safety is being applied in larger doses than reasonably necessary,” is indicated by this quoted descriptive answer from the survey:

It is a little difficult to define if the situations are risk aversion or risk management i.e. knowledge [or] well founded hunch of possible negative effects if the situation is not handled ASAP [as soon as possible]. First example; In Kosovo during the disturbances in 2003 nobody was allowed to leave KFOR [Kosovo Force] main [headquarters] even though they were not a part of units within KFOR main. This was interpreted as risk aversion as COM KFOR [Commander Kosovo Force] also was less supportive to enforced actions taken by MNC [Multinational brigade Centre] to handle the situation. Second example; In Afghanistan CO PRT [Commanding Officer Provincial Reconstruction Team] initially handled violent areas with black boxes rather than increased presence. This changed somewhat when the unit was provided with protected vehicles but again was restricted as a new CO PRT arrived. However in country I’ve met several superiors ‘choosing the easy way’ but this is without the operational environment, instead career planning. (Survey 2011)

Criterion 4, “There are failed attempts, or at least a wish, to limit the desire for more safety,” is indicated by this quoted descriptive answer from the survey:

In my line of work this has been a big issue and vividly debated in the planning process. Our orders are formed to include a certain section whereas you can find a level of risk with which you are delegated to achieve your mission goals. This level also tells you the amount of risk aversion the planning staff has included in the plan. I use the term risk aversion in terms of the amount of friction the staff can foresee (of course to an extent) and has also planned for in giving their orders. In the same line of work I've noticed differences in the willingness to accept risk. This I relate to culture on both branch, national and international levels. My community is, compared to other communities in the same branch, much more willing to accept risk and the friction that might arise from that. (Survey 2011)

This respondent appears to use the term risk aversion in a way almost synonymous with risk mitigation.

Criterion 5, “Much time and effort is spent seeking different forms of safety,” is indicated by three answers from the survey:

First:

Yes, demanding more and more staff work to be sure to make a decision according to regulations. (Survey 2011)

Second:

Yes, during a tour in Kosovo. The risk that my superior wanted to avoid was more related to the success of the unit itself than personal injury. If there was a risk that the reputation of the unit would be harmed, the amount of control increased dramatically. The risk of injuries from mines, IED: s [Improvised Explosive Device] or other threats were handled in a professional way. On the other hand if something would jeopardize the correctness of the unit, directions and caveats started to pop up and my freedom of action became limited. (Survey 2011)

Third:

During planning of a search operation in Kosovo 2005 questions came up from COS [Chief of Staff] concerning risks with the operation. He was very concerned about the risks [of] being shot at and apparently he was concerned with the risks for his own countrymen (one of the coy [companies] in the operation). This concern was (in my opinion) covered with concerns for the hard weather at the moment (cold and snow). For me and my countrymen, this was not an issue and we believed that the units was (or should have been) trained and ready for the operation. The benefits for a successful operation were large. In my opinion, COS concerns were more about the eventual possibility that he would have to present a single casualty from his own country than to be able to gain results in the AOO

[Area of Operation]. Even if the operation eventually was launched, COS spent a great deal of time and effort monitoring and seemed to be ready to abort if something should be dangerous. (Survey 2011)

Criterion 6, “Important functions are abandoned due to fear of lacking safety,” is indicated by no less than five different Swedish responses in the survey.

First:

Yes, mostly in taking action which could alter his career. It’s safe to use social patrols and intelligence units to get a good picture of the situation but acting on the intelligence is harder, [as] it risks both the lives of soldiers and the career of the commander. (Survey 2011)

Second:

Yes, instead of fulfilling the mission ‘to the bitter end’ with all hands and needs my superiors have started to decline in mission accomplishment by starting to become ‘personnel minded.’ My superiors stated that ‘you do not have to do this and that - we are close to the end of mission’ with the motivation that already accomplished efforts was good enough - in a national political view. The consequence, if I would have followed my superiors’ attitude [or] wishes, would be less motivated sailors which mean that the risk of accidents would increase - a higher risk of personal injury due to accidents and not a higher risk due to accomplishment of the mission. (Survey 2011)

Third:

Yes, but mainly during peace time service back home. I would claim that it’s fairly common amongst those officers that have a high career ambition, but no experience from service abroad [or overseas]. During peace time service ones notice this behavior while colleagues avoid to take decisions that in one way or another can be questioned. (Survey 2011)

Fourth:

In several situations [I] have experienced that force protection versus mission completion are totally out of balance. This is [in] regard to both enemy activity, weather [and] equipment etc.” (Survey 2011)

Fifth:

Yes. I have on several occasions ‘perceived unwillingness to act in order to not put resources and units at risk, and by that decision failed to accomplish the

mission in an optimal manner. This is most common when it comes to training and exercises (basic training as well as pre-deployment training. (Survey 2011)

Criterion 7, –Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided,” is indicated by three responses in the survey.

First:

I have, numerous times when asking to fly low with the C-130. The risk of hitting a bird is high but the probability of the hit actually causing flight safety issues is very low (both in numbers and by experience). The real risk and a known flight safety issue is to fly low when needed (tactical reasons or weather) but not being ready for it due to lack of practice and experience. (Survey 2011)

Second:

Yes, we were not able to operate our helicopters in Kosovo until they were fitted with either full protection against SAF [Surface to Air Fires] from ground or no protection at all. It was possible to adjust the mounting of shields for protection of the crew only. This would have made it possible to operate in a more hostile environment earlier in the mission than we did,[such as] rescue missions for instance. Tests were made before going abroad regarding flight safety in flying with different kinds of mountings of the shields. [N]othing indicated that there would be any problems in flying the choppers with semi protection due to flight safety. The decision taken was full protection or not at all. The effects of this were that our ability to operate with protection was delayed and we could initially only take missions with no or very low risks involved. (Survey 2011)

Third:

I have experienced superiors that have come up with suggestions to forbid movements with vehicle due to slippery roads during winter, instead of taking necessary actions to prevent accidents. I have also experienced suggestions that soldiers should use double ear protection during live firing despite that the safety instructions didn't regulated it. (Survey 2011)

U.S. Perceptions of Superiors

The first question posed to U.S. respondents was, –Have you perceived risk aversion in the decision making of their superiors??" The brief descriptive answers provided by the U.S. officer respondents were interpreted to indicate criterion 3, 5, 6, and

7; but not criterion 1, 2, or 4. Those criterion were not indicated by the answers provided, which does however necessarily not mean that they did not exist. The four criteria that were indicated will be closer examined below.

Criterion 3, “Safety is being applied in larger doses than reasonably necessary,” is indicated by two quoted descriptive answer from the survey.

First:

Yes, risk aversion is standard for most LTCs [Lieutenant Colonel] and above who believe they still have additional promotions left in the system. Training decisions are often affected by risk aversion because senior officers [are] afraid someone may get hurt or lose equipment, but one really can't re-create field conditions and war conditions without the possibility of lost [or] broken equipment, and some potential injuries. This attitude weakens our ability to train. (Survey 2011)

Second:

Yes, at the NTC [National Training Center] I have seen my superior officer and his CSM [Command Sergeant Major] decide to avoid actions without seriously applying mitigation measures that could be effective. In many cases it would have been a great coaching opportunity for subordinates to try to develop controls that would have effectively mitigated the identified risks in the activity. (Survey 2011)

Criterion 5, “Much time and effort is spent seeking different forms of safety,” is indicated by two answers from U.S. participants:

First:

Leaders I have served under relied on the Composite Risk Management system to identify and mitigate risk (tactical or accidental). Where I have seen a high-level of risk aversion is in garrison operations for returning units (often for good reason). Re-deploying units go to extremes with regard to checking, re-checking, and triple checking actions [and] behaviors of individual soldiers. Possibly creating more stress in the lives of all affected in the process of avoiding injury or loss to the force. (Survey 2011)

Second:

Yes, when some event happens, the unit commander tends to over-react and require excessive training for everyone instead of doing corrective training on a select group of individuals identified as high risk. I had a soldier burn down his

tent in the field because he decided to smoke in the tent. As a result the commander had everyone in the battalion do fire safety training. I could give 10 more examples of this by multiple commanders. They are too focused on corrective action to the entire unit versus realizing that some people are just stupid. (Survey 2011)

Criterion 6, “Important functions are abandoned due to fear of lacking safety,” is indicated by three different U.S. responses.

First:

Yes. Battalion Commander did not want to shoot live Artillery because he was afraid one of the howitzer sections would shoot out while the battalion commander was in command. The commander did not want a bad reputation for his unit by having a round impact where it should not land. With Artillery, units must get out and shoot live ammunition or else they lose all training value. (Survey 2011)

Second:

Yes, especially in the UN [United Nations] Peace Keeping Missions that I experienced. The commanders of Troop contributing Country (Force Protection) always try to work safely rather than protect local people in mission area. That’s why we rarely see countries contribute to the Chapter VII of UN Mandate which is the peace enforcement mission. (Survey 2011)

Third:

Yes. On nearly each of my deployments (7 in all to various locations and operations) I have seen Commanders implement controls such as no patrolling at night or stay out of specific areas IOT to avert risk when the unit nears redeployment. During left seat/right seat rides during the RIP I have seen areas considered ‘hot spots’ completely ignored and only ‘discussed’ with the incoming unit. In my opinion, this only provides a safe haven for insurgency before and during the RIP process and when the new unit has to enter the area they are unprepared. (Survey 2011)

Criterion 7, “Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided,” is indicated by two U.S. responses.

First:

Yes. Generally, in the implementation of horribly overwrought 'prevention' policies that, in reality, only serves to cover one's ass in the event of an accident. (Survey 2011)

Second:

Yes, our military has entered a 'CYA' [Cover Your Ass] mentality, where the leaders get the credit for good accolades and the subordinates take the blame for negative events. (Survey 2011)

The two quotes above further also make the link between command climate and risk aversion apparent.

Comparison between Perceptions of Superiors

The major difference in perceptions regarding decision making by Superiors is that Swedish perceptions addressed failed attempts, or at least a wish, to limit the desire for more safety (Criterion 4). However, this was not indicated in the U.S. perceptions surveyed. To a lesser degree the perception that important functions are abandoned due to fear of lacking safety (Criterion 6), is indicated by both U.S. and Swedish responses, but more explicitly so in the Swedish responses.

Similarities between U.S. and Swedish perceptions include safety being applied in larger doses than reasonably necessary (Criterion 3), much time and effort being spent seeking different forms of safety (Criterion 5), important functions being abandoned due to fear of lacking safety (Criterion 6), and Search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided (Criterion 7). Furthermore, neither U.S or Swedish perceptions surveyed are interpreted to indicate –Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing

general feeling of lack of safety” (Criterion 1) or –Abstinance symptoms appearing when something is pointed out as unsafe” (Criterion 2). That does not necessarily mean those Criterion did not exist, but they were however not indicated by the answers provided. The table below provides a simple graphic overview of the interpretation of the surveyed perceptions, highlighting the main difference between U.S. and Swedish perceptions of risk aversion by superiors.

Table 1. U.S. and Swedish Perceptions of Risk Aversion by Superiors		
Perceived risk aversion / Criterion	Swedes regarding Superiors	U.S. regarding Superiors
1. <i>Feel lack of safety. & need to increase</i>		
2. <i>Abstinance symptoms appear</i>		
3. <i>Safety applied unnecessarily</i>	X	X
4. <i>Wish to limit desire for more safety</i>	X	
5. <i>Much effort seeking safety</i>	X	X
6. <i>Important functions abandoned</i>	X	X
7. <i>Knowing risk aversion cause problems</i>	X	X

Source: Created by author.

Swedish Perceptions of Subordinates

The second question posed to respondents was, –Have you perceived risk aversion in the decision making of their subordinates?” The participating Swedish officers provided brief descriptive answers that could be interpreted to indicate criterion 3, 6, and

7; but not criterion 1, 2, 4, or 5. The most common answer from Swedish participants to the question if they had perceived risk aversion in the decision making of subordinates was actually no. Some attention will therefore be given to those negative answers.

Criterion 3, ~~“Safety is being applied in larger doses than reasonably necessary,”~~ is indicated by two answers.

First:

In late stages of tours abroad several subordinates showed increased risk aversion in their daily work. (Survey 2011)

Second:

Taking the matters to the next level will almost always result in risk aversion. (Survey 2011)

Criterion 6, ~~“Important functions are abandoned due to fear of lacking safety,”~~ is indicated by two different Swedish survey responses.

First:

I have experience[d] subordinates that have limited them self in using safety regulations to their benefit during live exercises. Sometimes exercises with live ammunition can be more realistic if safety regulations are followed. Instead some subordinates uses a bigger safety margin then needed. (Survey 2011)

Second:

Yes, flight technicians were not willing to work with maintenance of helicopters due to risks of doing a bad job and could therefore not guarantee flight safety. The problem was that the real reason for the unwillingness was not the risks itself. The ‘flight safety’ terms were used only to put pressure on the employer. Since flight safety is ‘untouchable’ as reason for not finish maintenance, missions could not be launched. This happened domestically and did not affect the mission in Kosovo. However, risk aversion can obviously be used for underlying purposes. (Survey 2011)

Criterion 7, “Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided,” is indicated by the following Swedish response:

Yes, due to lack of knowledge or bad [or] wrong training. This will always be the commanders’ problem. No matter how much you train in advance, you will most likely have someone in your crew that haven’t thought things through. What are we supposed to do and what is expected of every hand before the mission starts. My experience tells me that the only way around this is training before and during the mission – with the commanders’ aim clearly present at all times and in the context of the mission at all times. As a commander you have to set the mindset of the crew at all times and throughout the mission in order to avoid risk aversion from subordinate. An example is when one of my watch officers decided not to follow stated procedures during the launch of the ship’s boat with the consequence that no machine gun had a clear bearing towards the threat. His intention was a smooth launching, and in his opinion a safer launching for the crew, which as explained was completely wrong. He was also wrong about the launching hence we were able to launch the ship’s boat in much more severe sea state in safe manner in accordance with the stated procedures. (Survey 2011)

Most Swedish participants answered no to the question if they had perceived risk aversion in the decision making of subordinates. As risk aversion amongst the surveyed majors’ subordinates seems to be rare, it is of interest to look also at why some perceived risk aversion is considered uncommon. The following three survey answers have been selected to provide examples of why Swedes did not perceive risk aversion in their subordinates’ decision making.

First:

No, normally not. On the contrary, both in peacetime establishment training situations and during operations my sub-ordinates seem to need a leash rather than a whip. (Survey 2011)

Second:

More like exceptions and then because they are uncertain about what’s right or wrong. When you’re leading by example subordinates will realize that they are allowed to do mistakes as long as they try to do their best, this will also shape a model of working with risks and risk aversion. (Survey 2011)

Third:

Not automatically. It is my duty as Commanding Officer to set the risk that we are willing to accept and thus construct my orders accordingly. However it is vital that my closest subordinates are well familiar with the orders given to us. This gives me and my crew more eyes on the matter and more people able to reflect and act on possibilities that might arise and also to properly react to friction when it occurs. (Survey 2011)

U.S. Perceptions of Subordinates

The second question posed to respondents was, “Have you perceived risk aversion in the decision making of their subordinates?” The participating U.S. officers provided brief descriptive answers that could be interpreted to indicate only criterion 6, “Important functions are abandoned due to fear of lacking safety,” but no other criterion. Among the U.S. officers’ responses to whether they had perceived risk aversion in the decision making of their subordinates, no was a more common answer than yes. A negative answer to this question was for example;

No. Most subordinates I have seen take too many risks without considering the consequences. (Survey 2011)

Answers also explicitly stressed that risk aversion in the decision making of their subordinates had not been perceived –especially in the units below battalion level

The single indicated criterion 6, “Important functions are abandoned due to fear of lacking safety,” is interpreted to be represented by the following three U.S. survey responses:

First:

Yes, often NCOs [Non-Commissioned Officers] are afraid of getting in trouble for dispatching discipline and squad level decision making. This attitude has gotten some better since the war started, but is still prevalent in garrison. (Survey 2011)

Second:

Yes, NCO and LTs are often afraid to conduct specific types of weapons training or exhaustive training because they fear the repercussions if one of their soldiers messes up. They fear mass punishment. (Survey 2011)

Third:

Only on a small scale or when acting under assumptions that were incorrect. For example, while serving in Korea at one time the command environment was very concerned with not disturbing the locals to the extent that training was not conducted out of fear of screwing up. Often, young leaders would make bad decisions based on the belief that they shouldn't rock the boat. (Survey 2011)

The use and meaning of the term risk aversion, varies and appear to be vague and weakly defined in the perception of some respondents. This is indicated by responses like;

I would say safety is considered rather than risk aversion. But maybe there is no difference. (Survey 2011)

Other respondents use and define risk aversion in contrast to risk mitigation, as indicated by this quote;

I have not seen this as often as with senior leaders. I believe subordinates will follow the lead of their superiors and if they perceive shortcuts are being taken on the senior leader level then they will also take short cuts...if they perceive that their senior leaders are not taking short cuts then they will continue to do the right thing - which is to mitigate risk not avert it. (Survey 2011)

Comparison between Perceptions of Subordinates

There are substantial differences in the surveyed perceptions regarding decision making by Subordinates. Swedish perceptions include criteria 3 and 7; –Safety is being applied in larger doses than reasonably necessary” (Criterion 3) and –Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided” (Criterion 7). The U.S. perceptions surveyed did not include these two criteria.

A Similarity between U.S. and Swedish perceptions is that both include perceptions that “important functions being abandoned due to fear of lacking safety” (Criterion 6). Further similarities are found in that no indication has been found in either U.S. or Swedish perceptions of criteria 1, 2, 4, or 5. The table below provides a simple graphic overview of the interpretation of the surveyed perceptions, highlighting the main difference between U.S. and Swedish perceptions of risk aversion by subordinates.

Table 2. U.S. and Swedish Perceptions of Risk Aversion by Subordinates		
Perceived risk aversion / Criterion	Swedes regarding Subordinates	U.S. regarding Subordinates
1. <i>Feel lack of safety. & need to increase</i>		
2. <i>Abstinence symptoms appear</i>		
3. <i>Safety applied unnecessarily</i>	X	
4. <i>Wish to limit desire for more safety</i>		
5. <i>Much effort seeking safety</i>		
6. <i>Important functions abandoned</i>	X	X
7. <i>Knowing risk aversion cause problems</i>	X	

Source: Created by author.

Swedish Perceptions of Themselves

The third question posed to respondents was, “Have you perceived risk aversion in your own decision making?” The participating Swedish officers provided brief descriptive answers that could be interpreted to indicate criterion 6 and 7. Consequently

the interpretation of the responses has not found indication of criteria 1, 2, 3, 4, or 5. As previously stated this only means that no indications of these criteria are interpreted to be present in the survey responses.

Criterion 6, “Important functions are abandoned due to fear of lacking safety,” is indicated by two different Swedish survey responses:

First:

Yes, mostly when I don't know the lawful implications of an action. And taking the matter to the next level will almost always result in risk aversion. (Survey 2011)

Second:

Yes, pending on the level of experience of my sub-ordinates. The more inexperienced the sub-ordinate, the more restrict[ions] in his [or] hers freedom of action they have been given. The same goes with units. The more a unit has trained together and the better they are (my unit or subordinate units) the more complicated performance I have allowed. This means that I have stopped actions at one time, which I have allowed at other times. The personal knowledge also has a big impact on what I allow or not. Generally, I feel that I have restricted my sub-ordinates more than they have restricted me. The same goes for my superiors. I normally have felt more restricted by their decisions than with my own. (Survey 2011)

Criterion 7, “Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided,” is indicated by this response:

Yes, in order to rest the crew during a transit to the supply ship and avoid replenishment during the dark hours I decided to reduce the speed. The vessel got caught in a bad weather and the replenishment had to be conducted during a higher sea state than recommended in order not to run completely dry on fuel oil with the increased risk of personal injury. After this experience I would say that a much wiser decision would have been to increase speed and conduct the replenishment as soon as possible and in the dark (which is not a problem at all, but demands a few extra hands) and then let the crew rest. (Survey 2011)

U.S. Perceptions of Themselves

The third question posed to respondents was, “Have you perceived risk aversion in your own decision making?” The participating U.S. officers provided brief descriptive answers that could be interpreted to indicate criteria 3, 5, 6, and 7. Consequently the interpretation of the responses has not found indication of criteria 1, 2, or 4.

Criterion 3, “Safety is being applied in larger doses than reasonably necessary,” is indicated by two responses by U.S. participants.

First:

Yes in that my decisions as a staff officer must reflect the decisions of my bosses, so I can only plan things that I know will get approved or I am just wasting army time. (Survey 2011)

Second:

Possibly, when my immediate superior had such influence as to affect my decision making in a risk averse manner. (Survey 2011)

Criterion 5, “Much time and effort is spent seeking different forms of safety,” is indicated by these following two answers.

First:

Yes. I’ve had to carefully consider for events, “what is the worst possible outcome?” Based on this, what appropriate actions were. This may include not conducting operations or tailoring them. I have sometimes perceived that my superiors would not back my acceptance of a level of risk (based on outcomes). (Survey 2011)

Second:

Because of the way we use risk aversion in decision making, I have found myself doing the same thing for my family when it comes to our vacations, long distance driving. (Survey 2011)

The second quote is peculiar as it relates to safety being sought not on the job but during holiday.

Criterion 6, “Important functions are abandoned due to fear of lacking safety,” is indicated by three U.S. survey responses:

First:

Yes. Towards the end of a deployment I choose to put less of my personnel on convoys while the new unit was replacing us. I wanted less of my troops on the roads and more of the replacing unit’s troops on the road. I was concerned an incident would happen and wanted less of my troops on the roads days within our redeployment. (Survey 2011)

Second:

Yes, on one occasion recently in Iraq, I did not support the conduct of a mission to observe an Iraqi unit conducting a live fire exercise, due to the route not being recently patrolled or controlled by U.S. forces. (Survey 2011)

Third:

While deployed to Iraq in 2003-2004, fratricide avoidance was stressed. The policy to keep weapons on safe and ammunition just out of reach while conducting operations on the FOB was the closest to risk aversion. (Survey 2011)

It is also worth noticing that the term risk aversion is used by some U.S. officers in a quite positive and casual manner. This conception of risk aversion as something good that is consciously and regularly used is exemplified by two statements;

First:

Yes, in everything I do. I weigh the possible hazards and ensure I do everything that is within reason to eliminate them or reduce the possibility of something bad happening. (Survey 2011)

Second:

As a company commander I had to make the decision to pull vehicles, during OIF III [Operation Iraqi Freedom], from patrols. I used risk aversion in the decision of Soldiers going on leave as well. (Survey 2011)

A commonly appreciated definition of risk aversion, providing a definition as to whether it is generally good or bad and whether risk aversion should be applied routinely appear to be lacking.

Criterion 7, “Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided,” is indicated by this thorough response:

This is something that every leader struggles with, particularly when in a combat zone. As a senior leader I have not struggled with this but when I was a junior leader (NCO) I did. . . . I perceived that my chain of command was averting risk in much of the units operations towards the end of the deployment and this practice resonated all the way down to the squad level...we just wanted to do the minimum and go home safely. I found myself being pressured by my soldiers when we would go out on patrols to just go somewhere safe and sit. On several occasions I caved to the pressure if we did not have any specific orders from higher to accomplish a specific task or mission (often times we were just on presence patrols with no specific guidance). I find that averting risk only tends to create more risk for the incoming unit. Leaders must mitigate risk where possible, accept risk when necessary, and avoid averting risk at the expense of others who follow in their path. Risk is an inherent part of our profession and I believe each soldier understands it and even embraces it. As a profession, we should not allow those [read public] who have little to no understanding of what we do and why we do it to persuade us to do the wrong thing. (Survey 2011)

Comparison between Perceptions of Themselves

There are substantial differences also in the surveyed perceptions regarding U.S. and Swedish perceptions of risk aversion in their own decision making. Both U.S. and Swedish perceptions include criterion 6 “Important functions are abandoned due to fear of lacking safety” and indications of criteria 1, 2, and 4 is lacking in the perceptions amongst both surveyed groups. In the Swedish, but not in the U.S., perceptions there are indications of criterion 7; “Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided.” As mentioned, the U.S. perceptions surveyed do not include that

criterion, but do include perceptions that match criteria 3 and 5, which is not interpreted to be included in the Swedish responses. The table below provides a simple graphic overview of the interpretation of the surveyed perceptions, highlighting the main difference between U.S. and Swedish perceptions of risk aversion in their own decision making.

Table 3. U.S. and Swedish Perceptions of Risk Aversion by Themselves		
Perceived risk aversion / Criterion	Swedes regarding Themselves	U.S. regarding Themselves
1. <i>Feel lack of safety. & need to increase</i>		
2. <i>Abstinence symptoms appear</i>		
3. <i>Safety applied unnecessarily</i>		X
4. <i>Wish to limit desire for more safety</i>		
5. <i>Much effort seeking safety</i>		X
6. <i>Important functions abandoned</i>	X	X
7. <i>Knowing risk aversion cause problems</i>	X	X

Source: Created by author.

Overall Comparison of Surveyed Perceptions of Risk Aversion

U.S. officers' perceptions regarding their own decision making includes safety being applied in larger doses than reasonably necessary (Criterion 3), and much time and effort being spent seeking different forms of safety (Criterion 5). Swedish perceptions do not include those criteria. On the other hand, U.S. and Swedish officers' perceptions

regarding both their own and their subordinates' decision making include search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided (Criterion 7). U.S. officers' perceptions include that criterion (7) regarding themselves but not regarding their subordinates. Swedish perceptions regarding their subordinates decision making also included safety being applied in larger doses than reasonably necessary (Criterion 3). The U.S. perceptions did not. Swedish perceptions regarding their superiors included failed attempts, or at least a wish, to limit the desire for more safety (Criterion 4). The U.S. perceptions did not.

The table 4 provides a combined graphic overview of the interpretation of the surveyed perceptions, highlighting the main difference between U.S. and Swedish perceptions of risk aversion. The following table also serves to summarize the findings of the survey analysis.

Using Ebehard's criterion for safety addiction, risk aversion appears to be indicated by three or more criteria in responses from both Sweden and the U.S. regarding the decision making of superiors as well as the respondents' themselves. Regarding the decision making of subordinates less than three criteria indicate risk aversion in both Swedish and U.S responses, which comes up short of indicating safety addiction according to Ebehard's model.

Table 4. Comparison of U.S. and Swedish Perceptions of Risk Aversion						
Perceived risk aversion / Criterion	Swedes regarding Superiors	U.S. regarding Superiors	Swedes regarding Subordinates	U.S. regarding Subordinates	Swedes regarding Themselves	U.S. regarding Themselves
1. Feel lack of safety & need to increase						
2. Abstinence symptoms appear						
3. Safety applied unnecessarily	X	X	X			X
4. Wish to limit desire for more safety	X					
5. Much effort seeking safety	X	X				X
6. Important functions abandoned	X	X	X	X	X	X
7. Knowing risk aversion causes problems	X	X	X		X	X

Source: Created by author.

The interpretations made of all the surveyed answers have not in any case found indication of criteria 1 or 2; –Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety” (Criterion 1) or –Abstinence symptoms appearing when something is pointed out as unsafe” (Criterion 2). This does not, however, necessarily mean those criteria did not exist, but they were not indicated by the answers provided. These two criteria have, in terms of analysis, proved less useful than the other five and this constitutes a condition that calls for some reflection.

As these two criteria relate to complex perceptions of how people feel about safety and how people react to a perceived lack of safety, a possible explanation to the lack of indications may be that the descriptive answers are not elaborative enough to indicate such perceptions. It may be that interactive interviews in more depth would have had to be conducted in order to find indication of these two more complex criteria.

Analysis of Differences in Perceptions Using Cultural Dimensions

U.S. and Swedish officers' perceptions differ. U.S officers perceive that 'Safety is being applied in larger doses than reasonably necessary' and that 'Much time and effort is spent seeking different forms of safety' in their own decision making, as opposed to Swedish perceptions of both their own and their subordinates' decision making, that 'Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided.' This difference and the implications thereof can possibly be given further interpretation by applying comparative analysis using Hofstede's cultural dimensions. This might further be linked to the difference that Swedish perceptions included subordinates having safety being applied in larger doses than reasonably necessary and superiors making failed attempts, or at least a wish, to limit the desire for more safety. U.S. perceptions did not include these criterion regarding subordinates and superiors respectively.

What can these differences regarding decision making be interpreted to reflect regarding cultural dimensions? Are these perceptions reflecting similar risk aversive behavior but with varying degrees of how self-criticism is verbalized? Or, does the U.S. officers' perceptions that safety is being applied in larger doses than reasonably necessary and that much time and effort being spent seeking different forms of safety reflect a

lesser degree of risk aversion compared to the Swedish perceptions? There is definitely a more upfront admittance of practicing risk aversion reflected by the Swedish officers' perception that search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided.

To determine whether the U.S perceptions reflect a lesser degree of self-criticism or if they reflect a lesser degree of risk aversion is ultimately not credibly feasible from the material in this study. It is however possible that this difference indicates a relative correlating difference with U.S. assertiveness and Swedish modesty. A simplistic interpretation could be that the U.S. officers come across as wanting to take more risk while the Swedish officers come across as knowing that they do some things wrong. This may be the same problem perceived differently due to differing cultural dimensions. According to Hofstede's dimensions, Swedish culture, as all Scandinavian culture, prescribes modesty, while U.S culture is supposedly more assertive and ambitious when it comes to male behavior (Hofstede 2005, 131ff). It appears as a viable interpretation that this cultural difference is also reflected in the differing perception of risk aversion in the officers' own decision making.

When Swedish officers relate to risk aversion there is more explicit verbal attention to personnel than to mission accomplishment. The opposite is true regarding U.S. officers, generally giving more explicit verbal attention to mission accomplishment than to personnel. This may be interpreted as an indication of differences between U.S. and Swedish officers regarding caring values as opposed to competitive values. According to Hofstede's dimensions, assertive values will generally be placed higher than caring values amongst males within U.S. culture. In Swedish culture assertiveness

and caring are more equally placed values (Hofstede 2005, 131ff). Furthermore, according to the differences between U.S. and Swedish culture in the Hofstede model, U.S. culture will primarily consider work while Swedish culture will primarily consider people. All these cultural differences appear to match the interpretation made of differing perceptions related to risk aversion.

Regarding the second chosen cultural dimension, uncertainty avoidance, the difference is more noticeable than expected. The Hofstede website portrays the difference between the United States and Sweden to be less regarding uncertainty avoidance than regarding masculinity (Geert Hofstede Cultural Dimensions website 2011). Uncertainty avoidance can be indicated by strict rules and safety measures, something several U.S. officers relate to. Swedish officers on the other hand repeatedly relate to the absence of strict rules or strict safety measures. The consequence of this absence of strict rules is an uncertainty as to what is allowed.

When comparing uncertainty avoidance using U.S and Swedish officers' perceptions of risk aversion, it is important to consider that the term uncertainty avoidance is separate from risk avoidance and not the same thing. Risk in terms of probability is not defined as uncertainty. Risks may become accepted as routine and not cause fear. Familiar risks, such as physical risks related to known activities are not avoided in uncertainty avoiding cultures. Having a culture of lower uncertainty avoidance is linked to less sense of urgency and higher acceptance of engaging in activities without rules. Higher uncertainty avoidance on the other hand is linked to higher sense of urgency and prioritizing to save time rather than lives. The cultural difference, with higher U.S uncertainty avoidance, is interpreted to match well with the differences in perceptions

indicated by the survey. The U.S. officers' generally giving more explicit verbal attention to mission accomplishment than to personnel can also be related to higher uncertainty avoidance with a higher sense of urgency. According to Hofstede, a culture with comparably higher uncertainty avoidance will cause higher willingness to engage in risky behaviors in order to reduce ambiguity, such as initiating a fight with a potential adversary rather than wait and see. This description does seem to match the way in which U.S. and Swedish officers relate to the use of force and associated risks. The interpretation that differences in perceptions of risk aversion can be linked to differing cultural values' regarding uncertainty avoidance is however purely qualitative in nature.

The perceptions of risk aversion differ noticeably between officers from the United States and Sweden and these differences can be interpreted to relate to differing cultural values. However, this study seems to provide indications of differing degrees of uncertainty avoidance through reliance on strict rules and safety measures. Indications of differences in assertiveness vis-à-vis modesty relate to the cultural aspect of masculinity and so do also differences in competitiveness vis-à-vis caring.

Expanded Analysis Using Discussions the CAC blog

All the quotes in this expanded analysis refer to the Combined Arms Center (CAC) Blog at [dhttp://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx](http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx), accessed February 15, 2011 and will for brevity therefore only be referenced by author's name and year when quoted.

Growing Feeling of Lack of Safety

The first of Eberhard's criterion, "Collective or individual need to continuously increase the amount of safety in order to feel safe combined with a growing general feeling of lack of safety," was not indicated in the interpretation of the survey responses above. However, parts of the discussion on the U.S. Army Combined Arms Center (CAC) blog can be interpreted to indicate perceptions of increased need of safety.

Ross Kilburn argues that "the American Paradigm has changed and is influencing our perception of risk and risk aversion (Kilburn 2010). His perception is that "[t]he willingness of the American people over the last several decades to sacrifice blood over treasure has severely diminished" and that these changed conditions consequently affects whether "the standards [have] changed for what constitutes risk aversion" which is "crucial to developing the discussion of acceptable risk" (Kilburn 2010).

Kilburn rhetorically asks whether there is an expectation that "the America can fight wars, conduct dangerous operations and fight insurgencies without the sacrifice of Soldier's lives?" and if so "does the military need to educate the public, or does the Army need to redefine what is acceptable risk?" (Kilburn 2010). The perception of a collective, national, need to increase the amount of safety in order to feel safe is certainly there.

Kilburn's recommendations relate to junior and senior leaders. Senior leaders should "have the discussion on the decision making that led to an order, including the risk discussion" and promote a command climate that "reward moral courage and honesty" (Kilburn 2010). Junior leaders "must enhance critical thinking and analysis skills in order to better discuss risk factors and mitigations" and with that "provide candid observations and discussion," requiring them to "possess moral courage" (Kilburn 2010). It appears

that the experience level and character of the junior leaders, combined with command climate is pivotal in this perception.

Uncertainty in itself appears to lead to a feeling of lack of safety. Bob Kiser comments that “it has been some time since we as an Army have been able to anticipate every possible branch and sequel to a given problem set” and that “there is not a policy solution or risk mitigation strategy that can hope to apply to the array of circumstances that will face our young leaders in the years to come” (Kiser 2010). These comments are interpreted to portray an increased need of safety to feel safe related to the current operational environment and societal development.

Majors Browne, Knotts and Calderon also give voice to the feeling that risk has increased significantly and that lack of safety has consequently also increased by stating that “tactical risk is increased significantly when you conduct decentralized operations” and that “this enhanced risk is compounded with the significant amount of RESPONSIBILITY pushed down to the platoon and squad level” (Browne, Knotts and Calderon 2010). Browne, Knotts, and Calderon further argue that:

Due to risk accepted at the highest levels, platoon and squad leaders are forced to operate and make decisions under conditions that can have significant tactical, operational, or even strategic impact. With such accepted risk, we must also accept the decisions our junior leaders must make under the conditions created by said accepted risk. These junior leader decisions must be accounted for as part of the risk assessment conducted by commanders at the highest levels. (Browne 2010)

Their argument can be interpreted to indicate a growing general feeling of lack of safety due to conducting more decentralized operations and the related phenomena of strategic impact of tactical decision making.

Indications of collective or individual needs to continuously increase the amount of safety are provided by these comments on the CAC blog. As indications of Eberhard's first criterion could not be identified in the interpretation of the survey responses, the indications provided by the CAC blog gives additional depth to the analysis, providing verbal descriptions of perceptions that can support further understanding of how risk and risk aversion is perceived. Uncertainty, rather than increased physical risk as such appear to be the root cause to the perceived feelings of lacking safety. Familiar risks, such as the physical risks of combat, are not primarily avoided. Instead it is avoiding uncertainty that is the primary focus. Primarily avoiding uncertainties rather than the physical risks themselves, relates well both to Hofstede's cultural aspects as well as to the U.S. risk management model focus on identifying risk by which uncertainties are reduced.

Wishing to Limit the Desire for Safety

The interpretation of surveyed U.S. perceptions have not indicated criterion 4, that "There are failed attempts, or at least a wish, to limit the desire for more safety." The discussion on the CAC blog does however provide such indications. There are explicit attempts to limit the desire for more safety and steer away from risk aversive behaviors. Major Rich Moore believes that the U.S. Army is "becoming more risk averse," and specifically so "at the junior officer ranks" (Moore 2010). According to Moore, the "first factor to an increasingly risk averse Army can be traced to a faster promotion system at the junior officer level" (Moore 2010). He also concludes that "risk aversion is not a result of one factor but a compilation of many factors" and that "[c]ommand climate and culture is the one factor that can be influenced immediately" (Moore 2010). The perception voiced by Moore is interesting to this study, as it sees risk aversion as

specifically significant in the junior ranks. This contradicts the surveyed perceptions, where subordinates were generally perceived as less risk averse than superiors or the participants themselves. Moore also provides the factors that he perceives explain this increasing risk aversion.

Moore's first factor explaining why junior leaders are becoming more risk averse is as follows; "Lieutenants are being promoted at a faster rate and are losing out on valuable platoon leader time. Company level commanders, in turn, have missed out on opportunities to further develop prior to taking command. The inexperience can increase the risk aversion mentality" (Moore 2010). Moore's second factor explaining increased risk aversion" is the presence of a negative command climate and culture within some units" (Moore 2010). Moore's third factor explaining increased risk aversion is increased operational tempo. "The result of more deployments is a reduction in the training time back at home station" reducing training opportunities "where the junior leaders should be allowed to make the mistakes and test their decision making processes" (Moore 2010). It appears that Moore's first and third factors are closely related as they both center on inexperience. The second factor however focuses on command climate, and thus relates to superiors' decision making and leadership. In itself, Moore's perceptions are indications of a wish to avoid risk aversion and limit the desire for more safety. The conditions Moore is pointing to indicate a collective or individual need to continuously increase the amount of safety as found in Eberhard's criterion 1.

Robert Gable concurs with Rich Moore on "that we are becoming more risk adverse at the junior level" (Gable 2010). Increased risk aversion at the junior level is further perceived as possibly being "a result of command climate and culture" (Gable

2010). However, the Special Forces units conducting Direct Action missions ~~are~~ not risk averse; they are trained for and welcome risk, as long as it can be mitigated during planning, rehearsing, and control implementation” (Gable 2010)

It is primarily this type of special unit that ~~provides~~ the illusion of grandeur, the unrelenting warrior ethos story excerpts, and the almost mythical characters that promote the warrior ethos to much of the public” (Gable 2010). Gable goes on to comparing Special Forces units to other units and perceives that Special Forces units are able to minimize existing risks more efficiently. ~~Because~~ of the standards of discipline, training, technology, assets usage, and actionable intelligence, these units are able to minimize the risk with planning, rehearsals, and control implementation” (Gable 2010). Gable also perceives that there is also a difference in what risk is acceptable. ~~Although~~ the true risk is ...minimized, the residual risk is still most likely beyond an acceptable limit” as compared to what would be perceived as acceptable with other units (Gable 2010)

Gable asserts that the regular ~~Army~~ unit is becoming more risk averse at the junior leader level because they are being asked to execute larger and more complex missions with less technology, lesser quality assets, and less training in comparison with their ~~specialized~~” brothers-in-arms” (Gable 2010). Gable believes that the current risk aversion can be removed. ~~As~~ the more advanced training trickles down to the ranks of the ~~strategic corporal,~~” and the standards of discipline increase throughout the Army, the Army will be able to overcome a greater amount of mission risk with minimal concern” (Gable 2010). The perceptions Gable voices further reinforce those of Moore, and thus the indications of criteria 1 and 4 derived. It is worth noting that Gable sees the causes of risk aversion in regular forces in comparison with Special Forces. No comparison is made

with what risks were being taken by regular forces in previous decades of fighting. Consequently societal developments are not perceived as part of the explanation of increasing risk aversion.

A wish to limit desire for more safety is portrayed in the notion that fear of failure is contributing to risk averse decision making and that this needs to be addressed. Major Green suggests that “Leaders must discuss risk factors with their staff, peers, and Soldiers to fully develop their plan. In doing so, our army will reduce risk as much as possible and achieve success on the battlefield instead of inhibiting it with fear of failure” (Green 2010).

Further reinforcement of perceptions wishing to limit the desire for more safety is also provided by Major Cogger. He perceives that the root cause of the Army becoming risk averse may lie in three things; “promotion rates of our officers and NCOs, command climate (mission command vs. direct command) and personal responsibility” (Cogger 2010). Cogger agrees with Moore in that he perceives the Army as becoming more risk averse. This perception of increasing risk aversion is linked to the perception that the U.S. Army is “putting officers in command of company level units who may not be ready. There are some that are ready for this challenge, but they are few in numbers” (Cogger 2010).

Lieutenant Colonel Christopher Brewer addresses whether the U.S Army has “pushed risk too far down and how do we avoid a risk adverse climate” (Brewer 2010). Brewer argues that “by its nature the COIN environment will be broad and decentralized” and that “given this OE [Operational Environment] we have to push

responsibility and thus risk down to the root of the tactical level” (Brewer 2010). He provides a valuable insight in how risk and risk aversion can be perceived:

Regarding risk mitigation versus risk aversion, we have to ensure that leaders feel they are operating in a climate that will allow everyone to learn from mistakes and if necessary underwrite these mistakes. The more we see derogatory actions taken against leaders the stronger our risk aversion fears will be realized. COIN [Counterinsurgency] and asymmetrical warfare environments demand a healthy balance of risk taking along with proven TTP [Tactics, Techniques and Procedures]. We won't find the proven TTP without some leaders taking chances and occasionally failing to determine what won't work and why. To get this balance I feel it is critical that senior Army leadership underwrite some of this risk and ensure leaders at all levels know reasonable risks will be accepted. When mistakes are made due to incompetence or blatant disregard it should be communicated very clearly to the entire force why derogatory action was necessary. Attempts to take action against leadership for recent incidents are creating an environment that fosters a risk adverse mentality. If derogatory action was called for, I don't think the field knows exactly why. With the exception of a few illegal or immoral incidents I have not heard investigation results that would warrant ruining leader's careers and reputations even though I have heard some results that indicate mistakes were made. I have heard some of these mistakes were compounded at different levels of command. Holding lower level leaders responsible when it is also found senior levels were making similar or contributing mistakes is bound to create concern within the ranks. This is especially true among leaders operating in an environment that is constantly changing and challenging TTP, constrained resources, and emerging doctrine. To turn this around we must make it clear that risks taken at lower levels will be underwritten at higher levels. (Brewer 2010)

The recent events LTC Brewer refers to can be presumed to relate to the Battle of Wanat in Afghanistan. It appears that Brewer attempts, as well as wishes, to limit risk aversion from increasing within the U.S Army with his recommendations. However, it can further also be read into how he describes the underwriting of risks that he envisions risks to be identifiable. He also, in line with the risk management doctrine, appears to exclude uncertainty from the concept of risk.

On the CAC blog Jeffrey Fenlason also —address the implications of trying to lead Soldiers in a complex environment if a leader is constantly worried that someone will

hold them criminally liable for their judgments” (Fenlason 2010). Both this comment and other comments relate to legal issues related to taking risk and the risk aversion that may cause.

Where risk mitigation turns into risk aversion is not always obvious. Scott Gill suggests that; “We can ensure that risk mitigation does not become risk aversion by “not eating our young.” By that I mean, don't be too quick to make an example of someone who is a contributing factor in an accident” (Gill 2010). The point could be interpreted as that by making an example of a leader contributing to a negative outcome, risk averse behavior may become increased as “this could have the unintended consequence of destroying Command trust as well as make Soldiers fearful of conducting missions” (Gill 2010).

Valuable insight into how some U.S. officers think about the need to limit the desire for more safety is provided on the CAC blog. The absence of perceptions indicating criterion 4 in the survey stands in contradicting contrast to these comments on the blog. Multiple attempts, or at least wishes, to limit the desire for more safety do indeed seem to be present within the U.S Army. Command climate, specifically a zero defect mentality that basically doesn't allow for mistakes, is perceived to contribute to increasing risk aversion. The reoccurring theme of leaders being held criminally liable for their judgments appears to be linked to this perception of mistakes not being allowed and is thus also linked to increasing risk aversion. Avoiding action seem to be perceived as entailing less physical as well as less legal risk.

Another prevalent perception is that increased risk aversion is primarily caused by inexperience due to fast promotion rates for junior leaders. The relationship between

command climate in the forms of either mission command or direct command could however be tied to the experience levels of subordinate leaders. Successful execution of mission command relies on subordinates experienced enough to take more initiatives than direct command does. In that aspect the choice of in what degree mission command can be exercised is guided by the subordinates' level of experience. The fast promotion rates of junior leaders cause inexperience and inclines superiors to exercise more direct command. The implicit solution to slow down promotions rates for junior leaders is however never explicitly suggested on the CAC blog, which is reasonable as the personnel requirement is driven by demands beyond direct military control.

Much Effort Spent Seeking Safety

Eberhard's criterion 5, "Much time and effort is spent seeking different forms of safety" is present in the U.S. officers perceptions regarding both themselves and their superiors. Still it is worth adding a few more perspectives presented on the CAC blog that expands on this. Major Eric Jamison makes it very clear that "the Army has gone to extreme measures to provide junior leaders the training experiences that can accelerate their capability to moderate risk" (Jamison 2010). Jamison is however of the opinion that "risk management at the company grade officer level" should be further improved (Jamison 2010). Jamison appears to have no wish to limit the desire for more safety, but rather the opposite.

Another Major who believes more effort should be put into seeking more safety is Scott R Gill. He believes that the "current doctrine for composite risk management is sufficient for risk mitigation at the appropriate levels" and that it is "crucially important that Higher level Commanders review and mentor [subordinate] leaders on their risk

mitigation plan” (Gill 2010). He is further concerned that we may have pushed too much risk to the lower levels” as “decentralized operations in Command Climates where a CRM [Composite Risk Management] mentoring system does not [exist]” result in “Company Commanders . . . underwriting risk that really require a Battalion or even a Brigade level approval” (Gill 2010). Gill believes that as “we conduct decentralized operations, it is vital that we are careful to not decentralize the risk as well” (Gill 2010). How well the reviewing of subordinates’ risk mitigation plans will fit within the concept of mission command is not discussed by Gill. It appears as if Gill argues from the presumption that it would be best if subordinates were not just told what to do but also how to do it, especially regarding risk mitigation.

Whether investigations are causing increased risk aversion is a topic addressed by LTG Robert L. Caslen Jr., Commanding General of the Combined Arms Center on the CAC blog. There he posed the question: “Do you feel as a result of these investigations that find commanders derelict in duty, that our Army is moving (or will move) toward becoming ‘risk adverse’?” (Caslen 2010). In response to that question, referring to the investigations related to the Battle of Wanat, Ross Kilburn comments that he does “not believe that investigation results will make Army leaders more risk adverse, with the caveat that the decisions of the investigating body are clear, logical and made available to all. If those criteria are met with each case, then it becomes a guidepost for what is acceptable risk and what are proper risk mitigation procedures” (Kilburn 2010). These comments indicate that much effort is spent seeking different forms of safety, more specifically it is not only physical safety that is being sought, but also safety from investigations of dereliction of duty regarding how well physical risks were mitigated.

Search for Safety Continues in Spite of Knowing the Risk Aversion is Excessive

Eberhard's criterion 7, "Search for more safety continues in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided" is not interpreted to be present in the survey of U.S. perceptions regarding themselves or their subordinates. This differs from the interpretation of Swedish perceptions. However, the CAC blog comments provide insight and indications that contradict the survey results.

The somewhat anonymous blogger Jduplechin claims to have "often witnessed leaders at BDE [Brigade] level feeling the need to 'armchair quarterback' daily company level operations" (Jduplechin 2010). Jduplechin goes on to claim that if the U.S. Army "continue to micromanage operations in this fashion just to mitigate risk, we are doing leaders at the company level a severe disservice and are hindering their professional development as leaders" (Jduplechin 2010). These comments are interpreted to constitute a harsh criticism of the prevalent command climate and methods. The current risk management and mitigation is perceived as micromanaging. This blogger also chose to be somewhat anonymous. The junior leader inexperience, previously discussed as a root cause of risk aversion, is in this perception itself being compounded by the hindering of professional development through micromanagement.

Gregory Gaweda comments that command climate relates to risks as "[r]emoving the elements of candor and trust with the essential conduit of 'two way' communication destroys the intentions of the most well meaning commander," will often lead to failure to acknowledge risks (Gaweda 2010). Discussing risk requires candid two way communication. According to Colonel Gaweda the "problem is whether anyone in a

position of leadership applies what the Army espouses as appropriate command climate” (Gaweda 2010). His comments reinforce the interpretation that a well functioning command climate is essential to manage risks well.

The issue of command climate related to risk is reoccurring on the CAC blog. Patrick Rood comments that “in regards to a command climate where commanders felt comfortable enough to discuss risk with higher headquarters, I have seen both sides of the coin over the course of two deployments” and that “it comes down to which units emphasis mission-command and which units emphasis detail-command” (Rood 2010). He thereby provides further support for the perception that mission command is advantageous regarding how well risk is to be communicated.

UAVs, BFT, and nightly CPOF briefs have once again convinced commanders they can control platoon operations. We discuss de-centralized operations but we are really referring to units who are out of mutual support but whose actions are analyzed and controlled at a much higher level than necessary. As increasing technology allow units to exercise more detail-command, higher headquarters begin to feel they understand the ground truth more than ground commanders. At that point, it becomes increasingly more difficult for lower level leaders to discuss how much risk they are willing to assume since superior commanders believe they have a better understand of how much risk is actually involved. In a mission-command climate, the company commander who is developing his own operational plans understands the risks involved and can effectively communicate those risks to higher. (Rood 2010)

This comment can be interpreted to point out that the detailed exercising of control by higher headquarters is having a negative impact on command in general and specifically regarding risk decisions. Risk aversion is likely to be increased by these conditions. Rood believes that “as lower level leaders are increasingly becoming forced to assume risk they did not sign up for, the Army is increasingly becoming a risk adverse organization” (Rood 2010).

A comment strongly indicating that search for safety in spite of knowledge that the resulting risk aversion is excessive is made by Rood regarding garrison safety. According to Rood –Risk management has become a monster and it starts in garrison” as –Army leaders think that Officers can prevent all risk, not just tactical risk but also accidental risk” (Rood 2010). The excessive risk aversion consists of that –This has lead us to develop controls that make no sense nor prevent risk like five forms of paper to fill for a weekend pass or safety briefs that are so routine that no one listens to them” (Rood 2010).

Whether these presumably well intended safety measures are the causes of greater problems than the risk they avoid cannot be determined in this narrow study. What would be interesting to study further is, however, in what degree the ambition to prevent all, also accidental, risks is affecting the ability to perform missions. Increased risk aversion in general could be one consequence, but also the effect of time consuming safety procedures would be of value to study closer. However these aspects are beyond the reach of this limited study and would require another research.

Comparative Summary of the CAC blog in relation the Survey Analysis

The perception of a –Growing feeling of lack of safety,” indicating Eberhard’s criterion1, can be found in the discussions on the CAC blog. No indication of that criterion was derived from the Survey. As this criterion relates to complex perceptions of how people feel about a possible explanation is that the blog contains more descriptive and elaborative comments that manage to portray and indicate such complex perceptions.

The Survey provided indications of U.S. perceptions of “Wishing to limit the desire for safety” (Criterion 4), “Much effort spent seeking safety” (Criterion 5), and “Search for safety continues in spite of knowing the risk aversion is excessive” (Criterion 7). These perceptions were, however, regarding the decision making of superiors and of the U.S. respondents themselves and not regarding subordinates. As no such indications regarding subordinates are interpreted from the surveyed perception, it is interesting to find that the discussions on the CAC blog indicate perceptions of these criteria especially regarding subordinates. The increasing risk aversion of subordinate, junior, officers is the focus in many of the comments on the CAC blog. The discussion and comments on the CAC blog offer ample indications that U.S. subordinates are perceived to spent much effort seeking safety (Criterion 5) as well as search for safety continues in spite of knowing the risk aversion is excessive (Criterion 7).

The differences between the surveyed perceptions and the perceptions present on the CAC blog discussed above point out the limited scope and depth of the survey. The lack of comprehensiveness implied by these differences in turn limits the survey’s research value as it obviously fails to indicate important perceptions. Any conclusions and recommendations drawn from the survey analysis must therefore be understood as having caveats in consequence of the limitations discovered.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study addresses perceptions of risk aversion. The primary research question, ~~How do perceptions of risk aversion in the conduct of the military profession compare between officers from the United States and Sweden?~~ has been explored through surveying and interpreting how a select number of U.S. and Swedish officers respectively perceive how risk aversion has affected the conduct of their profession. How these perceptions compare and differ has been the focus of the analysis. The thesis of this study, that experiences from the practice of the military profession can show how perceptions of risk aversion differ noticeably between officers from the United States and Sweden in terms that can be related to cultural values, is confirmed by the analysis. The primary research question has been addressed through three secondary questions: How do a select number of U.S. officers perceive how risk aversion has affected the conduct of their profession? How do a select number of Swedish officers perceive how excessive risk aversion has affected the conduct of their profession? How do these perceptions compare?

The secondary research question ~~How do a select number of U.S. officers perceive how risk aversion has affected the conduct of their profession?~~ has been thoroughly analyzed. Significant findings, worthy of repeating, are that U.S. officers' perceptions regarding their own decision making include safety being applied in larger doses than reasonably necessary (Criterion 3), as well as much time and effort being spent seeking different forms of safety (Criterion 5). Furthermore, U.S. officers'

perceptions of risk aversion in their own decision making, but not regarding their subordinates, include “search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided” (Criterion 7). The U.S. perceptions regarding their subordinates’ decision making did, however, not include safety being applied in larger doses than reasonably necessary (Criterion 3). Neither did U.S. perceptions regarding perceptions of risk aversion in the decision making of superiors include failed attempts, or at least a wish, to limit the desire for more safety (Criterion 4)

The secondary research question “How do a select number of Swedish officers perceive how risk aversion has affected the conduct of their profession?” has also been thoroughly analyzed. The significant findings regarding Swedish perceptions are that Swedish perceptions regarding their subordinates’ decision making include safety being applied in larger doses than reasonably necessary (Criterion 3), and that regarding perceptions of the decision making of superiors Swedish perceptions include failed attempts, or at least a wish, to limit the desire for more safety (Criterion 4). Furthermore, Swedish officers’ perceptions of risk aversion in their own decision making, as well as regarding their subordinates, include “search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided” (Criterion 7). On the other hand, Swedish officers’ perceptions regarding their own decision making does not include safety being applied in larger doses than reasonably necessary (Criterion 3), or “much time and effort being spent seeking different forms of safety” (Criterion 5).

The secondary research question “How do these perceptions compare?” has been answered with noticeable differences between Swedish and U.S. officers perceptions interpreted from the surveyed responses. Regarding their subordinates’ decision making, Swedish perceptions include safety being applied in larger doses than reasonably necessary (Criterion 3). The U.S. perceptions did not. This difference indicates that U.S. officers’ are less critical in their perceptions of risk aversion in the decision making within their own command structure compared with the Swedish officers.

Regarding perceptions of risk aversion in the decision making of superiors, Swedish perceptions include failed attempts, or at least a wish, to limit the desire for more safety (Criterion 4). The U.S. perceptions did not, which points to a difference in to what degree risk aversion is perceived as a problem that has to be addressed. U.S. officers’ perceptions regarding their own decision making includes safety being applied in larger doses than reasonably necessary (Criterion 3), as well as “much time and effort being spent seeking different forms of safety” (Criterion 5). Swedish perceptions do not include those criteria. This lack of Swedish perceptions of criteria 3 and 5 can be interpreted as a more significant self awareness regarding the presence of risk aversive behavior on the part of the U.S. officers compared to the Swedish.

U.S. officers’ perceptions of risk aversion in their own decision making, but not regarding their subordinates, include “search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater problems than the risks avoided” (Criterion 7). Swedish perceptions regarding both themselves and their subordinates included that criterion (7). This further supports the conclusion that U.S. officers’ are less critical in their perceptions of risk aversion in the

decision making within their own command structure compared with the Swedish officers.

Using Eberhard's seven criteria for safety addiction, risk aversion appears to exist in the surveyed perceptions of decision making by both superiors and the respondents themselves. Regarding decision making by subordinates, the interpretation of the surveyed responses show fewer criteria that indicates risk aversion. The thesis of this study matches the interpretation of the surveyed perceptions as it shows how perceptions of risk aversion differ noticeably between officers from the United States and Sweden. These differences can further be interpreted in terms that relate to cultural values. These differences in cultural values relate to aspects such as competitiveness vis-à-vis nurturing, and uncertainty avoidance.

As shown by the literature review, the way risk is viewed as a concept is separated into two schools of thought regarding whether risk is perceived to include uncertainty or not. These differing definitions of risk are also reflected in doctrine, where the meaning and use of the term risk differs depending on whether uncertainty is included in risk or not. The influence doctrine has on how officers view risk may thus vary accordingly.

Cultural dimensions, as described by Hofstede, can provide further interpretation of the differences in perceptions between U.S. and Swedish officers. These differences regarding decision making can be interpreted to reflect similar risk aversive behaviors, but verbalized with varying degrees of self-criticism. The admittance of ongoing practice of risk aversion is most upfront in perceptions that search for more safety continuing in spite of existing knowledge that the resulting risk aversion is excessive and causes greater

problems than the risks avoided. This type of obvious admittance is present in Swedish perceptions regarding superiors, the respondents themselves, as well as subordinates, but not in U.S. perceptions of subordinates.

With the limited scope of this study, it is not credibly feasible to determine whether the U.S. perceptions reflect a lesser degree of self-criticism, or if they reflect a lesser degree of risk aversion. As this differing degree of self-criticism correlates with cultural differences reflecting relative U.S. assertiveness and Swedish modesty, the interpretation of differing degrees of self-criticism cannot be ruled out. According to Hofstede, Swedish culture, as all Scandinavian cultures, prescribes modesty, while U.S. culture is more assertive and ambitious, especially regarding male behavior (Hofstede 2005, 131ff). To determine whether it is Swedish or U.S. officers that are most affected by risk aversion is beyond the scope of this study and therefore no definite conclusion can be reached regarding the degrees of self-criticism. A very simple interpretation to sum up the differences is that the U.S. officers want to take more risk, while the Swedish officers know that they are too risk averse. Differing cultural values could result in the same problem, risk aversion, being perceived and verbalized differently. A viable conclusion is that cultural differences are reflected in the differing perception of risk aversion in decision making.

Cultural differences between the U.S. and Sweden correlate with the interpreted differences in perception. According to Hofstede, the U.S. culture will primarily consider work, while Swedish culture will primarily consider people. Assertive values will generally be placed higher than caring values amongst males within U.S. culture, while assertiveness and caring are more equally placed values in Swedish culture (Hofstede

2005, 131ff). The expected difference in caring and assertive values correlates with Swedish officers relating to risk aversion with more explicit verbal attention to personnel than to mission accomplishment and U.S. officers, generally giving more explicit verbal attention to mission accomplishment than to personnel. Furthermore, the nature of this differing attention indicates that the differences in perceptions of risk aversion relate to cultural values.

Uncertainty avoidance is a cultural dimension where Hofstede portrays the difference between the U.S. and Sweden to be less than regarding masculinity. The difference between surveyed perceptions is more noticeable than expected, as it is at least as noticeable as the differences regarding assertive and caring values. Strict rules and safety measures indicate uncertainty avoidance, and are related to by several U.S. officers, while Swedish officers often refer to an absence of strict rules and strict safety measures.

Uncertainty avoidance is, however, not the same as risk aversion or risk avoidance. Having a culture of lower uncertainty avoidance is linked to less sense of urgency and higher acceptance of engaging in activities without rules. According to Hofstede, a culture with comparably higher uncertainty avoidance will cause higher willingness to engage in risky behaviors in order to reduce ambiguity, such as initiating a fight with a potential adversary rather than wait and see what happens. Familiar risks, such as physical risks related to known activities are not avoided in uncertainty avoiding cultures. Higher uncertainty avoidance is instead linked to higher sense of urgency and prioritizing to save time rather than lives. The cultural differences, with higher U.S. uncertainty avoidance, are interpreted to link to the differences in perceptions indicated

by the survey. The generally more explicit verbal attention to mission accomplishment than to personnel expressed by U.S. officers can be interpreted to partly relate to higher uncertainty avoidance through a higher sense of urgency. The perceptions of risk aversion differ and this relates to differing cultural values.

The survey did not indicate U.S. perceptions regarding subordinates wishing to limit the desire for safety, spending much effort seeking safety, or continuing searching for safety in spite of knowing the risk aversion is excessive. CAC blog comments, on the other hand, indicate perceptions of these things, especially regarding subordinates, as the increasing risk aversion of subordinate, junior, officers is the focus of many discussions. The cause of increased risk aversion is linked to inexperience due to fast promotion rates for junior leaders according to several CAC blog comments. These differences between the surveyed perceptions and the perceptions present on the CAC blog show limitations to the comprehensiveness the survey.

Command climate, manifest as either mission command or direct command, logically in part depends on the experience levels of subordinate leaders. Successful mission command relies on subordinates experienced enough to take initiatives in a higher degree than direct command. Fast promotion rates of junior leaders cause inexperience and might thus make superiors less inclined to exercise mission command. The notion that command climate, especially a zero defect mentality that does not allow for mistakes, is perceived to contribute to increasing risk aversion in discussion on the CAC blog but this does not appear evident from the survey. The survey does however support the notion that risk aversion often takes the form of doing nothing as it is perceived to entail less physical as well as less legal risk.

The perception of a growing feeling of lack of safety is interpreted to be present amongst U.S. officers from the discussions on the CAC blog. There were no indications of such perception interpreted from the survey, which could be a result of the survey containing less descriptive and elaborative comments that are unable to portray such complex perceptions of how people feel. Differences between the surveyed perceptions and the perceptions present on the CAC blog point out the limited scope and depth of the survey. Due to the limited scope and depth of the survey in this study, all conclusions are to be considered tentative conclusions. Thus conclusions should be validated by more extensive studies.

This study does not provide ultimate conclusive proof that attempting to avoid all risk is eventually more dangerous than accepting risk. It does, however, provide indication that experiences from the practice of the military profession show how perceptions of risk aversion differ noticeably between officers from the United States and Sweden in terms that can be related to differing cultural values, specifically related to the cultural dimensions of uncertainty avoidance and masculinity.

Recommendations

Both U.S. and Swedish surveyed perceptions of decision making by both superiors and the respondents themselves indicate several criteria that define risk aversion. A recommendation of this study is therefore to conduct more research on how risk aversion affects the execution of the military profession in today's societies. The common perception of risk aversion in the decision making of superiors regarding the conduct of training give reason to recommend investigating how that is affecting

mentalities and performances of cautiously trained units and personnel on later operations.

A further recommendation, this one derived from the literature review, is to study how the ambition of current risk management doctrine, to reduce all risks, is affecting the ability to perform missions and whether it is compatible with the operations doctrine, which tends to view the concept of risk differently. Increased risk aversion in general could be a consequence of this apparent doctrinal mismatch. The overall cumulative effect of time-consuming safety procedures would also be of value to study closer.

As neither U.S. nor Swedish doctrine provides a uniform definition of risk, it is recommended that a definition be developed that corresponds with the actual usage of the term risk in doctrine. As the operational doctrines appear to use the term risk in a way that includes rather than excludes uncertainty, it is further recommended that a definition of risk be developed that gives risk a meaning that allows inclusion of uncertainty. Steering the use of the term risk away from definitions associated with ambitions to prevent all risks, should also support a mission command climate that does not favor zero defect mentality but instead accepts taking risk.

GLOSSARY

Risk. Two main definitions are addressed in the thesis. 1) The possibility of a negative outcome, 2) The possibility, or even uncertainty, of a negative outcome

Risk Aversion. In this study risk aversion is defined by its effects as a behavior indicated by applying safety in larger doses than reasonably necessary. In relation to mission accomplishment, risk aversion can be expressed as continued search for more safety, in spite of knowing that the consequences of avoiding risks are more severe than the consequences of the risks themselves.

In reference, Websters dictionary does not provide a uniform definition of risk aversion, but does provide several definitions of risk, such as; *something that creates or suggests a hazard or possibility* or alternatively; *possibility of loss or injury*. Websters further provides several definitions of aversion, such as; *a feeling of repugnance toward something with a desire to avoid or turn from it*. (Merriam-Webster 2011).

APPENDIX A

SURVEY

The survey was approved by QAO, and below the survey is included with approved survey number CGSC-QAO- 11-030. The CGSC Inquisitive survey read:

The purpose of this survey is to study how officers perceive that **risk aversion** is affecting the conduct of the military profession. This is of value since the military profession comes with physical dangers that do not go well together with modern Western society's increasing concerns about individual safety.

Risk is in this study defined as the possibility, or even uncertainty, of a negative outcome.

Risk aversion is in this study defined as applying safety in larger doses than reasonably necessary. In relation to mission accomplishment, risk aversion can also be expressed as continued search for more safety, in spite of knowing that the consequences of avoiding risks are more severe than the consequences of the risks themselves.

By participating in this survey, you are giving your kind consent to include your anonymous response in research. It is completely voluntary to participate and not doing so will render no negative consequences or penalties other than possibly a bad conscience.

I kindly ask you to take the time to share your experiences by answering the following three questions:

- 1) Have you perceived risk aversion in the decision making of your superiors? If so, please give a brief description.
- 2) Have you perceived risk aversion in the decision making of your subordinates? If so, please give a brief description.
- 3) Have you perceived risk aversion in your own decision making? If so, please give a brief description.

Specific names, times and places are not of use for the study.

Answering the questions in this survey will take between 10 to 30 minutes.

This survey has been approved by the Command and General Staff College, Quality Assurance Office with control number CGSC-QAO- 11-030.

If you have any questions regarding this survey, please contact major Fredric Westerdahl, fredric.westerdahl@us.army.mil

1) Have you perceived risk aversion in the decision making of your superiors? If so, please give a brief description.

2) Have you perceived risk aversion in the decision making of your subordinates? If so, please give a brief description.

3) Have you perceived risk aversion in your own decision making? If so, please give a brief description.

If you have any questions regarding this survey, please contact Major Fredric Westerdahl, fredric.westerdahl@us.army.mil

Thank You for your participation.

Do not forget to click the "Finish"-button.

APPENDIX B

ANSWERS COLLECTED FROM THE SURVEY

The participants' responses in the paragraphs below are sorted by Question and Nationality. All responses to the survey are exactly, by the letter, as the participants submitted them. Nothing has been corrected, added or withdrawn, and consequently all original misspellings and grammatical error are as they were.

U.S. Responses

Question 1) Have you perceived risk aversion in the decision making of your superiors?

yes

Yes. Battalion Commander did not want to shoot live Artillery because he was afraid one of the howitzer sections would shoot out while the battalion commander was in command. The commander did not want a bad reputation for his unit by having a round impact where it should not land. With Artillery, units must get out and shoot live ammunition or else they lose all training value.

Yes, risk aversion is standard for most LTCs and above who believe they still have additional promotions left in the system. Training decisions are often affected by risk aversion because senior officers afraid someone may get hurt or lose equipment, but one really can't re-create field conditions and war conditions without the possibility of lost/broken equipment, and some potential injuries. This attitude weakens our ability to train.

As a company commander I had to make the decision to pull vehicles, during OIF III, from patrols. Due to certain factors, I made the decision to keep the Bn commander's vehicle from going on patrol during OIF III. Risk aversion was used to make the decision, as with all vehicles going out on patrol.

Yes. Generally, in the implementation of horribly overwrought 'prevention' policies that, in reality, only serve to cover one's ass in the event of an accident.

Yes, at the NTC I have seen my superior officer and his CSM decide to avoid actions without seriously applying mitigation measures that could be effective. In many cases it would have been a great coaching opportunity for subordinates to try to develop controls that would have effectively mitigated the identified risks in the activity.

Yes, especially in the UN Peace Keeping Missions that I experienced. The commanders

of Troop contributing Country (Force Protection) always try to work safely rather than protect local people in mission area. That's why we rarely see countries contribute to the Chapter VII of UN Mandate which is the peace enforcement mission.

Yes, our military has entered a 'CYA' mentality, where the leaders get the credit for good accolades and the subordinates take the blame for negative events.

Generally speaking 'no.' Leaders I have served under relied on the Composite Risk Management system to identify and mitigate risk (tactical or accidental). Where I have seen a high-level of risk aversion is in garrison operations for returning units (often for good reason). Re-deploying units go to extremes with regard to checking, re-checking, and triple checking actions/behaviors of individual soldiers. Possibly creating more stress in the lives of all affected in the process of avoiding injury or loss to the force.

No

yes, some superiors are afraid about the possible outcomes of some decisions, especially combat situations where the life of several people are involved. It's difficult to balance risk - mission accomplishment but as commander we have to take risks.

n/a

I have not seen risk aversion in decision making. I have seen an aversion to High risk Training by some commanders.

not at all. If anything I have perceived my superiors to be more cautious than usual

Yes. I am an aviation officer. The Afghanistan Tactical Directive in practice impacted the ability of armed aircraft to fire, even when followed correctly. The Brigade commander placed the weapons release authority at his level. In several instances, aircrews had to contact the Brigade commander for his permission to fire while ground units were in contact.

No

Not at all

Absolutely. Frequently while deployed, the details of a mission would be determined by risks associated with weather, rest and target location.

Yes. On nearly each of my deployments (7 in all to various locations and operations) I have seen Commanders implement controls such as no patrolling at night or stay out of specific areas IOT to avert risk when the unit nears redeployment. During left seat/right seat rides during the RIP I have seen areas considered 'hot spots' completely ignored and only 'discussed' with the incoming unit. In my opinion, this only provides a safe haven

for insurgency before and during the RIP process and when the new unit has to enter the area they are unprepared.

Yes, The second heavy snow the command decided to be cautious and keep students off the frozen roads. That was much better than the first snow when the command decided to bring everyone in when the roads and walks had not been blowed or cleared. First snow no risk aversion; second snow risk aversion.

Yes, when some event happens, the unit commander tends to over-react and require excessive training for everyone instead of doing corrective training on a select group of individuals identified as high risk. I had a soldier burn down his tent in the field because he decided to smoke in the tent. As a result the commander had everyone in the battalion do fire safety training. I could give 10 more examples of this by multiple commanders. They are too focused on corrective action to the entire unit versus realizing that some people are just stupid.

Not directly, but I believe there is a mentality that we go to war in order to 'win the fight' and return home to our families rather than to die honorably for our nation/way of life. However, those who do make the ultimate sacrifice are highly revered and considered to be heroes.

Question 2) Have you perceived risk aversion in the decision making of your subordinates?

Yes

No. Must subordinates I have seen take too many risks without considering the consequences.

Yes, often NCOs are afraid of getting in trouble for dispatching discipline and squad level decision making. This attitude has gotten some better since the war started, but is still prevalent in garrison.

As a company commander I had to make the decision to pull vehicles, during OIF III, from patrols. I used risk aversion in the decision of Soldiers going on leave as well.

No.

Only on a small scale or when acting under assumptions that were incorrect. For example, while serving in Korea at one time the command environment was very concerned with not disturbing the locals to the extent that training was not conducted out of fear of screwing up. Often, young leaders would make bad decisions based on the belief that they shouldn't rock the boat.

I have not, especially in the units below battalion level.

Not really.

No.

No

yes, sometimes my subordinates did not follow my orders because they were afraid of the outcome also. but with the subordinates you have the advantage that they have to follow the orders, and if you are a good commander your orders will be logical, measuring risk with mission accomplishment.

n/a

No

Subordinates are more willing to spend excessive amounts of money on frivolous things regardless of their financial situations and how it could possibly affect their clearances in the future. Their mind-set is I earned it and I can't take it with me.

No. I tried to train them to use their best judgment.

No

Not at all

Yes, we always took risk into account either formally or informally with a risk assessment and a casevac plan.

I have not seen this as often as with senior leaders. I believe subordinates will follow the lead of their superiors and if they perceive shortcuts are being taken on the senior leader level then they will also take short cuts...if they perceive that their senior leaders are not taking short cuts then they will continue to do the right thing - which is to mitigate risk not avert it.

I have no subordinates here.

Yes, NCO and LTs are often afraid to conduct specific types of weapons training or exhaustive training because they fear the repercussions if one of their soldiers messes up. They fear mass punishment.

I would say safety is considered rather than risk aversion. But maybe there is no difference...

Question 3) Have you perceived risk aversion in your own decision making?

Yes

Yes. Towards the end of a deployment I choose to put less of my personnel on convoys while the new unit was replacing us. I wanted less of my troops on the roads and more of the replacing unit's troops on the road. I was concerned an incident would happen and wanted less of my troops on the roads days within our redeployment.

Yes in that my decisions as a staff officer must reflect the decisions of my bosses, so I can only plan things that I know will get approved or I am just wasting army time.

Because of the way we use risk aversion in decision making, I have found myself doing the same thing for my family when it comes to our vacations, long distance driving.

Yes. I've had to carefully consider for events, what is the worst possible outcome? Based on this, what appropriate actions were. This may include not conducting operations or tailoring them. I have sometimes perceived that my superiors would not back my acceptance of a level of risk (based on outcomes).

Possibly, when my immediate superior had such influence as to affect my decision making in a risk averse manner.

I have not. Because risk always exists; however, how to mitigate the risk must be considered accordingly.

No.

Yes, on one occasion recently in Iraq, I did not support the conduct of a mission to observe an Iraqi unit conducting a live fire exercise, due to the route not being recently patrolled or controlled by U.S. forces.

No

Yes, as commander you have to find balance between the mission and risk, so you have to relay in the intelligence and planning to find out if your decisions worth the risks.

n/a

No

in my relationships I am more willing to do things without consensus or permission.

No. I just take the ass chewing.

Sometimes based on constraint and limitation set by higher HQ.

When using helicopter to travel rather than by ground or by staying on the FOB rather than travel somewhere without a good reason.

This is something that every leader struggles with, particularly when in a combat zone. As a senior leader I have not struggled with this but when I was a junior leader (NCO) I did exactly what I discussed in question #2. I perceived that my chain of command was averting risk in much of the units operations towards the end of the deployment and this practice resonated all the way down to the squad level...we just wanted to do the minimum and go home safely. I found myself being pressured by my soldiers when we would go out on patrols to just go somewhere safe and sit. On several occasions I caved to the pressure if we did not have any specific orders from higher to accomplish a specific task or mission (often times we were just on presence patrols with no specific guidance). I find that averting risk only tends to create more risk for the incoming unit. Leaders must mitigate risk where possible, accept risk when necessary, and avoid averting risk at the expense of others who follow in their path. Risk is an inherent part of our profession and I believe each soldier understands it and even embraces it. As a profession, we should not allow those [read public] who have little to no understanding of what we do and why we do it to persuade us to do the wrong thing.

Yes, in everything I do. I weigh the possible hazards and ensure I do everything that is within reason to eliminate them or reduce the possibility of something bad happening.

Yes. Am sometimes afraid of how my training/decisions will be scrutinized despite KNOWING its good for the unit. An example would be doing competitive sports. If one soldier get injured then I would have to go to the commander to explain why.

While deployed to Iraq in 2003-2004, fratricide avoidance was stressed. The policy to keep weapons on safe and ammunition just out of reach while conducting operations on the FOB was the closest to risk aversion.

Swedish Responses

Question 1) Have you perceived risk aversion in the decision making of your superiors?

Yes, during a tour in Kosovo. The risk that my superior wanted to avoid was more related to the success of the unit itself than personal injury. If there was a risk that the reputation of the unit would be harmed, the amount of control increased dramatically. The risk of injuries from mines, IED:s or other threats were handled in a professional way. On the other hand if something would jeopardize the correctness of the unit, directions and caveats started to pop up and my freedom of action became limited.

Yes, instead of fulfilling the mission to the bitter end with all hands and needs have my superiors started to decline in mission accomplishment by starting to become personnel minded. My superiors stated that you do not have to do this and that - we are close to the end of mission with the motivation that already accomplished efforts was good enough - in a national political view. The consequence, if I would have followed my superiors' attitude/wishes, would be less motivated sailors which mean that the risk of accidents would increase - a higher risk of personal injury due to accidents and not a higher risk due to accomplishment of the mission. This description must be seen from the view that the operation itself was of policing character.

The Commander did not assess the real situation but used older Intel for his assessment which ended in a not fortunate force composition ending up in a greater risk than needed.

Yes, mostly in taking action which could alter his career. It's safe to use social patrols and intelligence units to get a good picture of the situation but acting on the intelligence is harder, it risks both the lives of soldiers and the career of the commander.

It is a little difficult to define if the situations are risk aversion or risk management i e knowledge/well founded hunch of possible negative effects if the situation is not handled asap. First example In Kosovo during the disturbances in 2003 nobody was allowed to leave KFOR main even though they were not a part of units within KFOR main. This was interpreted as risk aversion as COM KFOR also was less supportive to enforced actions taken by MNC to handle the situation. Second example In Afghanistan CO PRT initially handled violent areas with black boxes rather than increased presence. This changed somewhat when the unit was provided with protected vehicles but again was restricted as a new CO PRT arrived. However in country I've met several superiors choosing the easy way but this is without the operational environment, instead career planning

In my line of work this has been a big issue and vividly debated in the planning process. Our orders are formed to include a certain section whereas you can find a level of risk with which you are delegated to achieve your mission goals. This level also tells you the amount of risk aversion the planning staff has included in the plan. I use the term risk

aversion in terms of the amount of friction the staff can foresee (of course to an extent) and has also planned for in giving their orders. In the same line of work I've noticed differences in the willingness to accept risk. This I relate to culture on both branch, national and international levels. My community is, compared to other communities in the same branch, much more willing to accept risk and the friction that might arise from that.

Yes I have. Numerous times when asking to fly low with the C-130. The risk of hitting a bird is high but the probability of the hit actually causing flight safety issues is very low (both in numbers and by experience). The real risk and a known flight safety issue is to fly low when needed (tactical reasons or weather) but not being ready for it due to lack of practice and experience.

Yes, but mainly during peace time service back home. I would claim that it's fairly common amongst those officers that have a high career ambition, but no experience from service abroad/over seas. During peace time service ones notice this behavior while colleagues avoid to take decisions that in one way or another can be questioned.

In several situations have I experienced that force protection versus mission completion are totally out of balance. This is regard to both enemy activity, weather, equipment etc.

Yes. I have on several occasions perceived an unwillingness to act in order to not put resources and units at risk, and by that decision failed to accomplish the mission in an optimal manner. This is most common when it comes to training and exercises (basic training as well as pre-deployment training).

Then I not have any experience of combat I only can relate to live exercises. Two example: I have experience superiors that have come up with suggestions to forbid movements' whit vehicle due to slippery roads during winter, instead of taking necessary actions to prevent accidents. I have also experience suggestions that soldiers should use double ear protection during live firing despite that the safety instructions didn't regulated it.

During planning of a search operation in Kosovo 2005 questions came up from COS concerning risks with the operation. He was very concerned about the risks for being shot at and apparently he was concerned with the risks for his own countrymen (one of the coy in the operation). This concern was (in my opinion) covered with concerns for the hard weather at the moment (cold and snow). For me and my countrymen, this was not an issue and we believed that the units was (or should have been) trained and ready for the operation. The benefits for a successful operation was large. In my opinion, COS concerns was more about the eventual possibility that he would have to present a single casualty from his own country than to be able to gain results in the AOO. Even if the operation eventually was launched, COS spent a great deal of time and effort monitoring and seemed to be ready to abort if something should be dangerous.

Yes, we were not able to operate our helicopters in Kosovo until they were fitted with either full protection against SAF from ground or no protection at all. It was possible to adjust the mounting of shields for protection of the crew only. This would have made it possible to operate in a more hostile environment earlier in the mission than we did, rescue missions for instance. Tests were made before going abroad regarding flight safety in flying with different kinds of mountings of the shields. nothing indicated that there would be any problems in flying the choppers with semi protection due to flight safety. The decision taken was full protection or not at all. The effects of this was that our ability to operate with protection was delayed and we could initially only take missions with no or very low risks involved.

YES. DEMANDING MORE AND MORE STAFFWORK TO BE SURE TO MAKE A DECISION ACCORDING TO REGULATIONS.

Yes, Occasionally. Most of the time it has been during occasions when we have been using new equipment or implemented new procedures not known to the superiors. This kind of friction I assume always will be present in some form. A way to minimize it would be to ensure that superiors to a larger extent are allowed, both with regards to money and time, the possibility to take part in the day to day activity on the tactical level. This friction could also be minimized if there was a larger presence on the superior levels of command of people with the knowledge necessary to advice superiors.

Question 2) Have you perceived risk aversion in the decision making of your subordinates?

No, normally not. On the contrary, both in peacetime establishment training situations and during operations my sub-ordinates seem to need a leash rather than a whip (concerning risk aversion). During Live Fire exercises my sub-ordinates has showed a tendency to use the possibilities of the safety regulations rather than the opposite. Occasionally they have even found loopholes in the strive to make the exercise as realistic as possible. This does not mean that everybody is taking unnecessary risks. When junior inexperienced officers gets to hard exercises, they are happy to say so and they can get additional support or the exercise can be modified. In operations my experience is similar. My sub-ordinates have presented a strong will to succeed with the given task and are also demanding in the type/quality of task they are given. I have never been hampered in an operation by sub-ordinates that are unwilling to take a risk. I have not conducted a high-intensity/high-risk operation, like Afghanistan today.

Yes, due to lack of knowledge or bad/wrong training. This will always be the commanders' problem. No matter how much you train in advance, you will most likely have someone in your crew that haven't thought things through. What are we supposed to do and what is expected of every hand before the mission starts. My experience tells me that the only way around this is training before and during the mission – with the commanders' aim clearly present at all times and in the context of the mission at all times. As a commander you have to set the mindset of the crew at all times and throughout the mission in order to avoid risk aversion from subordinate. An example is when one of my watch officers decided not to follow stated procedures during the launch of the ship's boat with the consequence that no machine gun had a clear bearing towards the threat. His intention was a smooth launching, and in his opinion a safer launching for the crew, which as explained was completely wrong. He was also wrong about the launching hence we were able to launch the ship's boat in much more severe sea state in safe manner in accordance with the stated procedures.

No, or at least very rarely.

No not in a operations but in training situations where they rather be approved than trying to develop a new method

Not automatically. It is my duty as Commanding Officer to set the risk that we are willing to accept and thus construct my orders accordingly. However it is vital that my closest subordinates are well familiar with the orders given to us. This gives me and my crew more eyes on the matter and more people able to reflect and act on possibilities that might arise and also to properly react to friction when it occurs.

No

More like exceptions and then because they are uncertain about what's right or wrong. When you're leading by example subordinated will realize that they are allowed to do mistakes as long as they try to do their best, this will also shape a model of working with risks and risk aversion.

In late stages of tours abroad several subordinates showed increased risk aversion in their daily work.

No

I have experience subordinates that have limited them self in using safety regulations to their benefit during live exercises. Sometimes exercises with live ammunition can be more realistic if safety regulations are followed. Instead some subordinates uses a bigger safety margin then needed.

No

Yes, flight technicians were not willing to work with maintenance of helicopters due to risks of doing a bad job and could therefore not guarantee flight safety. The problem was that the real reason for the unwillingness was not the risks itself. The 'flight safety' terms were used only to put pressure on the employer. Since flight safety is 'untouchable' as reason for not finish maintenance, missions could not be launched. This happened domestically and did not affect the mission in Kosovo. However, risk aversion can obviously be used for underlying purposes.

NO.

Very rarely. It is more often the case that my level of command, or higher, sets the level of acceptable risk involved in solving the assigned tasks. When it has happened it has almost always been a case when the subordinates has not really understood the importance of the assigned task. This falls back on my level of command - not having explained the importance of the mission and the level of acceptable risk involved in solving them.

Question 3) Have you perceived risk aversion in your own decision making?

Yes, pending on the level of experience of my sub-ordinates. The more inexperienced the sub-ordinate, the more restrictive in his/hers freedom of action they have been given. The same goes with units. The more a unit has trained together and the better they are (my unit or subordinate units) the more complicated performance I have allowed. This means that I have stopped actions at one time, which I have allowed at other times. The personal knowledge also has a big impact on what I allow or not. Generally, I feel that I have restricted my sub-ordinates more than they have restricted me. The same goes for my superiors. I normally have felt more restricted by their decisions than with my own.

Yes, in order to rest the crew during a transit to the supply ship and avoid replenishment during the dark hours I decided to reduce the speed. The vessel got caught in a bad weather and the replenishment had to be conducted during a higher sea state than recommended in order not to run completely dry on fuel oil with the increased risk of personal injury. After this experience I would say that a much wiser decision would have been to increase speed and conduct the replenishment as soon as possible and in the dark (which is not a problem at all, but demands a few extra hands) and then let the crew rest.

The risk is always at hand and the training of your subordinates is in a multinational context not always something you can choose. I have ordered people without suitable training to conduct operations or actions their superiors confirmed they were suited for. Lucky enough everything ended with a positive outcome.

Yes, mostly when I don't know the lawful implications of an action. And taking the matter to the next level will almost always result in risk aversion.

No I hope not

Yes, see previous answers. In eyes of other I would probably be seen as a risk seeker. However that might also be a product of the tactical arena in which I must fight. People is likely to perceive a tactically offensive individual as less prone to be risk averse. They could not be more wrong, I am of the opinion that such individuals have a highly developed risk aversion process but are also more suited and trained to react on frictions when they occur.

No and the reason for that is that we never have real operational needs. I've never been in the situation where risk is necessary for achieving the goal.

Of course I have, but first of all shaped by experience. One of the best examples is from operations in heavily mined areas. Before I understood how dangerous the situation was I gave several warning orders to/within my platoon and conducted tasks that was implied needless risks. Fortunately other colleagues were the ones to draw the experiences for me to learn from, but from those incidents I've learnt a lot, hence this will sometimes hamper you to see possibilities, just because of unaware risk aversion. I believe that

officers with experience from commanding positions abroad/operations in general have a much more mature way of handling all kind of risks, not least 'risks' that you will face as an staff officer in peace time.

Yes, mainly in an environment their I know that I will have no support in the case of failure.

No

Not what I can recall

No

Yes, as responsible for my subordinates health and safety, conducting ordinary work. when we were given orders about closing down our Heli unit in Sweden, we were still on readiness for conducting rescue missions at sea. since flight operations can be looked at as a system, we identified some workers around the helicopters that were feeling very sad and angry with the decision taken. They were going to lose their jobs, their identity etc etc. during this period there were several occasions when I perceived risk aversion in my own decision making regarding the missions we were assigned.

YES, CONCERNING SAFETY-REGULATIONS.

A tricky question. It all depends on how important the assigned tasks are and that is always to some extent a case open for interpretation. I do my best in trying to interpret the importance of assigned tasks and in the end of the day it is up to me to make the final call. I don't think that I can remember any cases of risk aversion in my own decision making when it has been clear to me the importance of the task. Given the fact that normally, if not always, I am assigned more missions then what I can solve with the resources and time I have available, I always have to prioritize and in that process I am sure that I sometime have made, and will continue to make the wrong call on occasion. But, the more clear a mission statement is and the more clear it is to me the level of importance, the more easy it is for me to make the right call.

REFERENCE LIST

- Air Land Sea Application Center. 2001. FM 3-100.12, MCRP 5-12.1C, NTTP 5-03.5, AFTTP(I) 3-2.34, *Risk management*. Langley AFB, VA: Air Land Sea Application Center.
- Bauman, Zygmunt. 2006. *Liquid fear*. Cambridge: Polity Press.
- Beck, Ulrich. 1992. *The risk society: Towards a new modernity*. Cambridge: Polity Press.
- . 1999. *World risk society*. Cambridge: Polity Press.
- Brewer, Christopher. Combined Arms Center Blog, comment posted 16 August 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Browne, Desmond F. Combined Arms Center Blog, comment posted 6 August 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Caslen, Robert L. Jr. Combined Arms Center Blog, comment posted 7 July 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- . Combined Arms Center Blog, comment posted 17 August 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Clausewitz, Carl von. 1976. *On war*. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press.
- Cogger, Chuck. Combined Arms Center Blog, comment posted 12 November 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Coker, Christopher. 2009. *War in an age of risk*. Cambridge: Polity Press.
- Combined Arms Center Blog. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed October 10, 2010)
- Crevelde, Martin van. 1985. *Command in war*. Cambridge, MA: Harvard University Press.
- Department of the Army. 2006. Field Manual (FM) 3-24, *Counterinsurgency*. Washington, DC: Government Printing Office.

- . 2008a. Field Manual (FM) 3-0, *Operations*. Washington, DC: Government Printing Office.
- . 2008b. Field Manual (FM) 3-07, *Stability operations*, Washington, DC: Government Printing Office.
- Douglas, Mary. 1985. *Risk acceptability according to the social sciences*. New York: Russell Sage Foundation.
- Dyal, Justin W. 2008. Commanders' perception of risk: Enabling boldness. Master's Thesis, Marine Corps Command and Staff College, Quantico, Virginia.
- Eberhard, David. 2006. *I trygghetsnarkomanernas land*. Stockholm: Prisma
- Eriksson, Johan. 2006. *Kampen om hotbilden Rutin och drama i svensk säkerhetspolitik*. Stockholm: Santérus.
- Feaver, Peter D., and Christopher Gelpi. 1999. A look at . . . casualty aversion. How many deaths are acceptable? A surprising answer. *The Washington Post*. 7 November. <http://www.washingtonpost.com/wp-dyn/content/article/2005/06/30/AR2005063000881.html> (accessed 4 December 2010).
- Fenlason, Jeffrey. Combined Arms Center Blog, comment posted 8 July 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-i-n-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- FOI, Totalförsvarets Forskningsinstitut, Swedish Defence Research Agency. 2008. *Risk management in the Swedish Armed Forces. A description of the model and comparison with risk management models in civilian authorities*. Stockholm: FOI.
- Försvarsmakten. 2005a. *Doktrin för gemensamma operationer*. Stockholm: Försvarsmakten.
- . 2005b. *Doktrin för markoperationer*. Stockholm: Försvarsmakten.
- . 2007. *Försvarsmaktens gemensamma riskhanteringsmodell*. Metodanvisning, remiss utgåva 2. Stockholm: Försvarsmakten.
- Furedi, Frank. 1997. *Culture of fear*. London: Continuum.
- Gat, Azar. 2001. *A history of military thought*. Oxford: University Press.
- . 2006. *War in human civilization*. Oxford: University Press.
- Gable, Robert. Combined Arms Center Blog, comment posted 9 August 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-i-n-a-complex-operational-environment.aspx> (accessed 15 February 2011).

- Gaweda, Gregory. Combined Arms Center Blog, comment posted 9 August 2010.
<http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Geert Hofstede Cultural Dimensions. Compare your home culture with your host culture.
http://www.geert-hofstede.com/hofstede_dimensions.php?culture1=95&culture2=86#compare (accessed 15 February 2011).
- Gibson, Trent A. 2009. Hell-bent on force protection: Confusing troop welfare with mission accomplishment in counterinsurgency. Master's Thesis, United States Marine Corps Command and Staff College, Quantico, VA.
- Gill, Scott R. Combined Arms Center Blog, comment posted 9 August 2010.
<http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Glimcher, Paul W., and Aldo Rustichini. 2004. Neuroeconomics: The consilience of brain and decision. *Science* 306, no. 5695 (October 2004): 447-452.
- Gottfridsson, Per. 2006. *Alla soldater ner-alla hem: Riskbedömning vid tjänstgöring i utlandsstyrkan; en fallstudie av insatserna i KOSOVO*. Stockholm: Försvarshögskolan. http://www.annalindhbiblioteket.se/Global/Uppsatser/chp%2004-06/gottfridsson_67761.pdf (accessed 10 October 2010).
- Gray, Richard. 2009. *Stupad för fosterlandet: en analys av medvetenheten om strategiska risker till följd av Sveriges militära medverkan i dagens konflikter*. Stockholm: Försvarshögskolan. http://www.annalindhbiblioteket.se/Global/Uppsatser/chp%2007-09/gray_richard.pdf (accessed 10 October 2010).
- Green, Joe. Combined Arms Center Blog, comment posted August 4 2010.
<http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Hofstede, Geert. 2005. *Cultures and organizations, software of the mind*. New York: The McGraw-Hills Companies.
- Ivgren, Claes. 2008. *Jag tar risken! Vad tar jag då?* Stockholm: Försvarshögskolan. http://www.annalindhbiblioteket.se/Global/Uppsatser/chp%2006-08/ivgren_143071.pdf (accessed 10 October 2010).
- Jamison, Eric. Combined Arms Center Blog, comment posted 5 August 2010.
<http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Jduplechin. Combined Arms Center Blog, comment posted 4 August 2010.
<http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).

- Joint Chiefs of Staff. 2006a. Joint Publication (JP) 3-0, *Joint operations*. Washington, DC: Government Printing Office.
- . 2006b. Joint Publication (JP) 5-0, *Joint operation planning*. Washington, DC: Government Printing Office.
- Kelley, Amanda M., William D. S. Killgore, Jeremy R. Athy, and Michael Dretsch. 2009. *Risk propensity, risk perception, and sensation seeking in US Army Soldiers: A preliminary study of a risk assessment task battery*. Fort Rucker, AL: U.S. Army Aeromedical Research Laboratory
- Kilburn, Ross. Combined Arms Center Blog, comment posted 9 September 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Kiser, Bob. Combined Arms Center Blog, comment posted 12 July 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Leader, Charles A. 1983. Risk aversion and the absence of moral courage. *Marine Corps Gazette* (August): 65-69.
- Lupton, Deborah. 1999. *Risk*. Abingdon: Routledge.
- Mair, Victor H. 2007. *The art of war, Sun Zi's military methods*. New York: Columbia University Press
- Moelter, Jonathon R. 2002. Effects of foreign perceptions of U.S. casualty aversion on U.S. international relations. Master's Thesis, Army Command and General Staff College, Fort Leavenworth, Kansas.
- Moore, Rich. Combined Arms Center Blog, comment posted 25 July 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Mundy, T. S. 1999. Casualty aversion: Dispelling the myth. Master's Thesis, Command and General Staff College, Fort Leavenworth, Kansas:
- Record, Jeffrey. 2000. Force-protection fetishism sources, consequences, and (?) solutions. *Aerospace Power Journal* (Summer): 4-12.
- Rood, Patrick. Combined Arms Center Blog, comment posted 4 August 2010. <http://usacac.army.mil/blog/blogs/frontier6/archive/2010/07/07/leading-in-a-complex-operational-environment.aspx> (accessed 15 February 2011).
- Schwarz, Benjamin C. 1994. *Casualties, public opinion, and U.S. military intervention: Regional deterrence strategies*. Santa Monica, CA: RAND

Sunstein, Cass. 2005. *Laws of fear: Beyond the precautionary principle*. Cambridge: Cambridge University Press

Walter, Alan. Understanding risk. Research Project, U.S. Army War College, Carlisle Barracks, Pennsylvania.

Webster Dictionary. <http://www.merriam-webster.com/dictionary/risk> (accessed 15 February 2011).

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