Running head: THE PSYCHOCULTURAL ROOTS OF GENOCIDE AND WAR

UNIVERSITY OF CENTRAL OKLAHOMA Edmond, Oklahoma Jackson College of Graduate Studies and Research

The Comparative Similarities of the Psychocultural Roots of Genocide and War

A THESIS

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements

for the degree of

MASTER OF ARTS IN EXPERIMENTAL PSYCHOLOGY

By Kimberly Collins

Edmond, Oklahoma

2007

The Comparative Similarities of the Psychocultural Roots of Genocide and War

A THESIS APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

November 29, 2007

By Willeam & F.

Čommittee Chairperson

Gabrid Committee Member

Committee Member

TABLE OF	CONTENTS
----------	----------

Abstract	4
Introduction: The Crisis of "Grand Expansion"	5
The Events in Rwanda	6
The Escalation of Genocide	7
The Causal Role of Consciousness	10
The "Self versus Others" Bias	12
Intergroup Distinctiveness and Differentiation	13
Social Interdependence Theory	14
Theories of Hate and Evil	14
Understanding Persecution and Genocide	18
Cultural-Societal Roots of Violence	19
Why the Mind is Designed to Kill	21
Why People Kill: The Evolution of Evil	22
The Sentience of Human Nature	24
Hypothesis	24
Method	25
Participants	26
Materials	27
Design	28
Procedure	29
Results	31
TABLE 1 Data for questions with significance, failing to reject the	
null hypothesis	31
TABLE 2 Data for questions without significance, demonstrating the	
hypothesis	34
TABLE 3 Questions with significance between participant gender	
and paired samples	36
TABLE 4 Differences between groups 1, 2, 3	38
Discussion	39
References	43
Appendix A: War Questionnaire	45
Appendix B: Genocide Questionnaire	46
Appendix C: Informed Consent Form	47
Appendix D: Demographics Form	48
Appendix E: Debriefing Form	49
Appendix F: Research Design	50
Appendix G: F-test results for significance between participant sex and question	51

Abstract

This study investigated the comparative similarities between war and genocide, the hypothesis being that there are similarities. The participants included 138 students from the University Central Oklahoma general psychology pool. These were both male and female, with an average age of 21. A 2 x 3 between-within subjects design was used with a test-retest order. Two questionnaires were given to each of the 3 groups in random orders. Each questionnaire had 25 questions, answered on an 8-point Likert Scale. A paired samples t-test was administered to find significance between parallel questions. Of the 25, 10 were found to support the hypothesis that there will be differences in rating for a number of items on questionnaires when statements with the only difference being the two terms war and genocide; the remaining 15 questions were found to have significant differences. This research will hopefully be useful for further replication and future research on similar topics.

The Crisis of "Grand Expansion"

Nonviolence is the answer to the crucial political and moral questions of our time; the need for mankind to overcome oppression and violence without resorting to oppression and violence. Mankind must evolve for all human conflict a method which rejects revenge, aggression, and retaliation. The foundation of such a method is love. –Martin Luther King Jr. (1964)

Throughout history man has survived through means of war, genocide, and massacres. In the past century alone approximately 85 million have been killed. There were the most publicized—Armenia, the Holocaust, Rwanda—yet these are just the tip of the iceberg. Psychosocially speaking, their stories are all the same. Even more appalling are the comparative similarities between what we have termed *war* and *genocide*. All of these large massacres have had similar escalations leading up to their beginnings. The histories of population growth, depletion in resources per capita, and other variables are *all* similar as well.

What these all have in common involve the idea of pseudospeciation. In war this became extremely evident with the cartoons during World War II depicting the enemy as a ravenous monster. Pseudospeciation is "the ability to convince ourselves that the members of other groups of human beings are not really humans. That innate capacity has played a major part in wars, racism, and genocide. Our understanding of such major historical events as slavery, imperialism, segregation, and the Holocaust—to name a few—would be greatly enhanced by taking our tendency toward pseudospeciation into account" (McElvaine, 2002). Although there is a considerable lack of knowledge regarding these tragic events, the few that have received the most attention have served as examples for the millions who have died (and continue to die) without and recognition. The lack of information to the majority of the human population is a growing problem in our various societies.

There have also been some scientific studies that serve as some of the best resource for understanding the massacres in other nations. Some of the best understanding can be found by information on the current genocide in Darfur, Sudan by Eric Reeves. He has been researching this area for almost two years, since the beginning of their killings. McGill (2004) has also provided sociological insight to the military massacres in Ethiopia. Similarly, the Rwandan genocide received little attention at the time of the attacks. Although it received much media coverage at the time, it was widely ignored. Ten years later, awareness in this area expanded as the Rwanda genocide was remembered through film.

The Events in Rwanda

It has been almost 14 years since the tragic deaths of at least 850,000 Rwandans. While this was one of the most violent episodes in the twentieth century, it appears that the world leaders have done little to learn from it. We have, which will be discussed more later, Khartoum's current genocide in Darfur, which will without a doubt continue, unless there is humanitarian intervention. It appears to be that a surprisingly small part of the population of the world even is made aware of these killings. Those who know simply stand by. David Norman Smith was among the first researchers to review the Rwandan genocide. In his "The psychocultural roots of genocide: legitimacy and crisis in Rwanda" (1998), Smith gives his theories into the causes of genocide and massacre.

An article by Smith (1998) is very informative of the history of the people and the land in Rwanda over the past 150 years. The article, however, imposes a "historybook" feeling that leaves much in question. Some areas which need more attention can be grouped as the escalation of genocide; the causal role of consciousness; the "self versus others" bias; intergroup distinctiveness and differentiation; social interdependence theory; theories of hate and evil; understanding persecution and genocide; cultural-societal roots of violence; why the mind is designed to kill; the evolution of evil; the sentience of human nature; and other evolutionary theories related to war and genocide which will be used to lay the foundation for the comparative similarities between war and genocide. This article was written a short time after the genocide, when there was already a great deal of literature in place, mostly as a result of the Holocaust. Smith does mention several valid theories, but is brief in these discussions. He also neglects to mention several aspects of other theories. Smith (1998) begins by asking "Why did events in Rwanda take such an extreme turn?" He mentions the misleading part that the media played. The various roles of the media will be discussed later. Upon Smith's inspection,

The April genocide proves to have been an event of startling complexity, and its sources were specifically modern, far removed from 'tribalism' and 'primordial hatreds.' Even the Tutsi-Hutu divide, though real, is neither 'ethnic' in the strict sense nor causally decisive. More significant, ultimately, was a constellation of deep-lying sociopolitical and psychocultural factors. (Smith, 1998)

Smith goes on to argue that these factors are acute. This assention not only contradicts some of his later statements, but that of other research as well. These factors may be present, but in different ways than Smith believed. These are the same factors which prelude many other killings. Buss (2005) is quick to point out that "murder is not a single homogeneous phenomenon; different types of murders require different types of explanations." Smith's article helps show that even large massacres such as that is Rwanda may be a prime example of the complexities of murder and aggression. Smith may denounce that there were ethnic divides, but later reminds us that one reason for the Belgians separating the groups when colonizing Rwanda in the early 1900s was based on skin color, as well as their unique heritages.

The Escalation of Genocide

Smith also questions the legitimacy of the genocide. He points out that the very name Rwanda means "Grand Expansion." The growth of Rwanda began around 1894 when German explorers first entered the nation. The original dynasty of kings were said to personify

"*Imana*, the dynamic principle of life and fertility." This dynamic remained until 1931, when, in World War I, colonial power was transferred from Germany to Belgium. This transfer of power was a factor that would later prove critical, in that the Belgiums also helped to conquer the northwest for the kingdom, the same northerners that were later key actors in the genocide. Belgium later withdrew in 1962. The new powers, the Kayibanda, "alienated the landowners who dominated the Northern provinces." This army, the Akazu, became the "Second Republic" and 20 years later killed almost one million Rwandans after assassinating their own leader. The leader's wife was a key player in these actions. As Smith states, "By the mass murder of the Tutsis and dissidents, they hoped to decimate their enemies—peasants as well as politicians—and forge a deadly new solidarity among the killers, for whom the state would remain the ultimate authority" (1998). The Akazus, as well as other Hutus, felt that this planned genocide was the only solution to their problems. Smith depicts this process differently.

Smith's next observations are on what he calls the "Paradoxes of Genocide." He is very brief on his opinions of the stereotypes of genocide. He states that the "stereotype of the genocide, which began as soon as the murders began, is that irrepressible hatreds between ancient foes burst into violence on April 7, 1994, one day after the Hutu president, Habyarimana, died in a plane crash that was blamed on the Tutsis. Most of the killers, it is said, were Hutu peasants who spontaneously killed their Tutsi neighbors." Smith's research says that much of this is inaccurate, noting for example, that the president's death was "almost certainly" ordered by his own insiders. "Almost certainly" is a very broad term. This vagueness is dangerous when the defense provided against a stereotype contradicts earlier parts of an article. Regardless of the immediate cause for the president's murder, the effect was a landslide of pseudospeciation. Smith describes how many ordinary Rwandans joined in the killings, but then goes on to say that "Neither Tutsis nor Hutus have been tribal peoples for centuries, and until this century antagonism between them was rare, and 'ethnic' only in a tenuous sense." This phenomenon may be due to the survival instincts—why the mind was designed to kill. Although Smith says that the ethnic diversity of the tribes was weak, this is still different from earlier claims that there was no ethnic variable.

To understand the actual genocide, research should be noted such as Smith's ethnohistorical observations. Linguistically, neither "Tutsi" nor "Hutu" denote any single unified group. "Tutsi" actually means "newcomer." "That is, Tutsis were not a unique ethnic group, but rather were outsiders who cam to the Great Lakes in waves long ago." Each group, mainly after the 15th century, in the chiefdoms, was a people unto itself, "who became 'Hutus' when they were conquered by cattle-herding 'Tutsi' warriors." 'Hutu' literally means 'subjects' or 'vassals.' These Hutus, according to Smith, were taxpayers and subordinates, not tribespeople.

Tutsi and *Hutu* soon became terms for class status." However, "Ultimately, even the Tutsi-Hutu stereotype began to degrade as a sign of class difference.... European influence reversed this trend. The Belgians in particular were devoted to the idea that Tutsis and Hutus are elementally opposed, not only socially, but racially. Certain that the Tutsi nobles, as 'bronze Caucasians,' were superior to Bantu farmers, the Belgian rulers imposed a kind of apartheid on Rwanda in which Hutus were denied all privileges. Although they never found a reliably 'racial' basis for this policy—ultimately defining a Tutsi as anyone who owned 10 or more cows!—the Belgians were sternly opposed to Hutu equality. (Smith, 1998)

This new form of polarization, invented by the Belgians, became widely internalized by the Rwandans. This polarization, in turn, bred a new form of conflict. This hatred for the Tutsis peaked in the early 1960s when the Hutu chauvinists drove most of the wealthier Tutsis into exile. Afterwards, a seeming of harmony followed, but despite appearances, when the genocide began, many ordinary citizens joined in as well. Next, Smith (1998) discusses this culture in disarray in a psychocultural view. He asks the question: "Why, then, did a shadowy 'ethnicity' prompt so much apparent ethnocentrism?" He believes that there are several factors which appear to be significant: "These factors include propaganda, sexual projectivity, aspects of traditional religion, authoritarianism in child rearing, and the widely remarked anomie of jobless youth in urban areas." Most Rwandans were unmoved by these forces, yet others, according to Smith, were spurred to violence by some combination of these factors. These are exactly some of the factors found cross-culturally in other genocides and wars before the mass murders begin.

The factor of official propaganda has received a great deal of attention. Radios were full of coarse, violent, jocular anti-Tutsi demonology. They were reviled as "vipers, drinkers of untrue blood." Rwandans were told that "Tutsi friends, neighbors, and even relatives were not to be trusted or tolerated; they were all, actually or potentially, traitors and mass murderers." The propaganda was that Tutsis were said to be plotting the wholesale slaughter of innocent Hutus. This persuasive technique is a common media tactic today when reading or watching news about the "other."

Another factor that Smith believes to have been at work was projective sexual envy. This explanation is still the testimony of many survivors today. "Tutsi women were focal points for violent sexual fantasy. Said to be uncommonly beautiful and desirable, they were also accused of being proud and inaccessible.... But many Tutsi women were raped with projective accusations of this kind ringing in their ears." The truth was that Tutsis and Hutus commonly married each other. Notice how this sexual exploitation is also the catastrophic result of war throughout history.

The Causal Role of Consciousness

Authoritarianism was common and widespread throughout Rwanda. Smith notes an analysis of 90 preindustrial societies which found that "exceptionally intense violence is likely with significantly greater frequency in cultures where children are routinely physically or emotionally abused or denied affection." Of course, in cultures such as this, the authoritarianism is most likely recognized only after a great tragedy. Another study of the psychology of 'sanctioned massacres' showed that "an authoritarian impulse to blindly obey orders is a leading motive for people who say that, under orders, they would 'shoot all inhabitants of a village suspecting of aiding the enemy, including old men and women." One of the taboos, it seems, with labeling some of these genocide theories, is that these same theories could apply logically to why "modern" societies go to war. Unfortunately, the world is being taken over by guessers. Thinkers are only found in the humanities' textbooks. Logic has become an artifact.

This authoritarian impulse may well have links to the child rearing of that person or group. As researchers note, "Evolutionary psychologists frequently recapitulate the theme that adaptive behaviors are guided by unconscious processes servicing genetic selection in individual organisms. Among many other examples, such 'blind' fitness-enhancing algorithms include those that are devoted to... child rearing" (Bering & Shackelford, 2004). To adapt in a society such as Rwanda's, there is some sense that "only the strong will survive." Strong, in Rwanda, might have meant staying alive. This, of course, emerged over at least several hundred years.

Smith also neglected to mention any genetic variables associated with genocide in relation to aggression and murder.

In light of evolutionary psychology metatheory, what appear to be senseless acts of violence begin to reveal predictable patterns of aggression and conflict. Although such behaviors are rightfully maligned and constitute and enormous societal ill in most parts of the world today, frequently underlying homicidal behaviors and ideation are fitness-enhancing mechanisms designed to increase the replication of the perpetrator's genes. (Bering & Shackelford, 2004) Could these horrific acts of violence be nature's form of population control? If so, then the successful genes would become those of the perpetrators. It seems then, that eventually our world would be filled with only those who are genetically predisposed to violence. Bering & Shackelford go into more detail regarding the biosocial point on information-regulatory mechanisms and homicide. "Because increased status is linked to greater acquisition of resources that facilitate reproductive opportunities, assaults to one's reputation and status are likely to engender feelings of hostility and vengeance that may be channeled into actual aggression." This may show why there was a period in Rwanda with little aggression up until the genocide—the calm before the storm. While there had only been a brief war, there was merely channeled aggression. This may have been channeled into working, mainly in the coffee industry. Once the famine and recession began, these channels became invalid. The reputations of each "tribe" were once again attacked. The underlying aggression could have been passed from generation to generation over several centuries. This supports many biosocial theories which will be focused on anon.

The "Self versus Others" Bias

There is growing research in the area of self-perception and social perception. This may be in part due to the increase in violence in modern societies, across all cultures. Pronin, Gilovich, and Ross (2004) argue "that people readily detect or infer a wide variety of biases in others while denying such biases in themselves." These biases are in a sense natural, in that, without these biases there would be no existence of complementarity. This objectivity may have helped to foster the aggression in the Rwandans for so many years. These same biases may have also aided so many in the world to stand by and take no action. Pronin et al's analysis "further suggests that blindness to bias in the self is also produced and maintained by people's willingness to take their introspections about the sources of their judgments and decisions for face value—that is, to treat the lack of introspective awareness of having been biased as evidence that one is innocent of such bias." Individual and group biases not only affect how we see the world, but how we do not see the world. This has become the unfortunate truth of all societies. Some of these biases may also help explain gaps in research, including Smith's.

Intergroup Distinctiveness and Differentiation

In a similar study regarding intergroup distinctiveness and differentiation, the problem of categorizing people into "us" versus "them" becomes clearer. "Group distinctiveness is defined as the perceived difference or dissimilarity between one's own group and another group on a relevant dimension of comparison" (Jetten, Spears, & Postmes, 2004). The firmly grounded social identity theory reasons that group members strive to differentiate their own groups from relevant comparison groups. This same study also considers the conditions under which group members display differentiation. We see that "individuals must have internalized their group membership as an aspect of their self-concept: they must be subjectively identified with the relevant ingroup." Based on previous notes, it was made aware that in regards to genocide and aggression, biases are objectively based, and thus the need to become the ingroup.

Unfortunately, in Rwanda, these groups had been established over a long period of time, by several factors, including outside forces. This would give "self-concept" a whole new dangerous meaning because of the unavoidable influences contributing to the concept. Jetten et al (2004) also argued that those who are strongly committed to the group are likely to perceive low intergroup distinctiveness as threatening. Perhaps the Akazus felt threatened for many years leading up to the death of the president. Regardless of when they planned the murders, the Hutus may have very well felt some sort of threat was approaching. They were losing their distinctiveness, and with this loss would come the loss of power. This process is all supported by many ethological theories. With the history of these people, the actual ideals of equality would pose a threat to both sides. It may not have mattered to them which group they were in, as long as they had their sense of belonging.

Social Interdependence Theory

Another award-winning psychologist, David W. Johnson, approaches interrelationships with the social interdependence theory. He states that:

The essence of a group is the interdependence among members, which results in the group being a dynamic whole so that a change in the state of any member or subgroup changes the state of any other member or subgroup. Group members are made interdependent through common goals. As members perceive their common goals, a state of tension arises that motivates movement toward the accomplishment of goals. (Johnson, 2003)

There has been much research on this social interdependence theory. This theory has an extensive history and has been carefully formulated to explain cooperative and competitive relations among individuals. Unfortunately, in certain societies, these goals are set by the minority, who may in fact wish some sort of harm to others, being physical, emotional, financial, etc. If the minority is a ruling power in that society, it seems to be only a matter of time before these goals make their way through the rest of the group. What is it then, that would drive these goals of harming others?

Theories of Hate and Evil

No matter what theory is used to study genocides and mass killings, hate is rarely mentioned. The last decade of the 20th century saw massacres and genocides in record numbers. Hate is proposed by some to be one of the contributing causes of many, although certainly not all, massacres and genocides. Robert J. Sternberg (2003) of Yale University asked the question, "What, exactly, is a genocide?" There is actually no one universally accepted definition. This lack of agreed upon definition has caused some genocides to be labeled otherwise. Consequently, many incidents rarely make the news, even when hundreds of thousands are slain. Some blame has been shifted to the United Nations, which will hopefully persuade them take some sort of future actions. Sternberg does make note that "according to the United Nations Convention on the Prevention and Punishment of the Crime of Genocide, the key element is 'the intent to destroy in whole or in part a racial, ethnic, religious, or national group as such, by killing members of the group or imposing conditions inimical (detrimental) to survival." The definition given is not limited to death, but also includes causing serious bodily or mental harm. Similarly, this could also be the definition of war, only war has *intent* as well as casualties. Sternberg's research appears to be some of the most complete regarding different aspects of genocide. Besides reviewing the recorded history of genocide, he is able to give some astounding facts. These were some specifics that were not included in the Smith research. He calls the Rwandan genocide one of the 20th century's most wretched: "In this genocide, teachers killed their students, doctors killed their patients, and family members killed their spouses and other family members. Appeals were made to many governments, including that of the United States, and to the United Nations, and these entities did nothing despite a full awareness of what was going on" (Sternberg, 2003). Sternberg (2003) also gives an interesting side note, in that, "An equally tragic genocide occurred in Bosnia, where 7,000 people were killed as 'peacekeepers' from the United Nations watched." Peacekeeper trials are still occurring almost monthly in war-torn third-world countries. This failure to intervene is an important feature of genocide, where, almost invariably, many people know what is going on but refuse to intervene, or they intervene only after the killings are mostly complete. This same failure is possibly an example of a conscious effort by some "respected" people of the world to take place in mass killings.

The roles of evil and hate are reluctantly mentioned by some, including Smith. Perhaps this omission is for fear of limiting research in the area of war and genocide to theories which have seldom been explored themselves—almost a taboo of sorts. Sternberg, however, continues to state clear examples for both possible causes. In regards to the role of evil, one study (Sternberg 2003) notes that "a rather ordinary individual could find himself in a situation which he could become responsible for the cold-blooded murders of large numbers of people. The situation thus drove evil behavior." Sternberg also reminds us of the famous Milgram obedience experiments, which "revealed that ordinary people, given the chance, would administer what they believed to be painful and even life-threatening shocks to another individual..." Sternberg also gives great detail about stereotypes and the evolution of evil. Some of these observations would have been a good contribution to the Smith article. Most of the literature which Sternberg uses would have been available to Smith as well.

It seems that some are reluctant to discuss "evil" human behavior when it could apply to them. If these perpetrators continue to be labeled as evil monsters, then there may never be a true understanding for their actions. Sternberg gives extensive review on the subject of the evolution of evil. He points out that "the evolution of evil starts with the frustration of basic human needs and the development of destructive modes of need fulfillment." Certain conditions then tend to precipitate genocide as well, such as "the evolution of collective violence, the devaluation of a cultural group, an obedient orientation to authority, and a mentality of aggression as 'defensive.'" These factors would all certainly play a role in the threat to basic human needs.

Bering and Shackelford (2004) mentioned the evolving of the perpetrator to some extent, but Sternberg helps to elaborate on the idea that perpetrators tend to use "just-world thinking," which means that they "explain and interpret their violence toward others as a response to the actions, intentions, or character of their victims." As their aggressive actions continue, they are likely to increasingly devalue their victims. At the extreme, they may engage in a kind of 'moral execution' whereby the moral standards and values that they believe apply to everyone else are seen as no longer applying in behavior toward their victim." As we have seen throughout history, the society can ultimately change as a whole in such ways that aid even more hateful and harmful acts. This phenomenon is something that mankind as a whole should be aware of in everyday life. If one looks at any given society, there could be several risk factors for severe violent episodes.

Another interesting observation is how both the perpetrator groups and the target group may hold the negative stereotypes about the target group. Sternberg, referencing Bandura's works, maintains

moral disengagement that leads to inhumanity stems from a series of variables, including the cognitive restructuring of inhumane conduct into allegedly benign or worthy conduct by moral justification, sanitizing language, disavowal (rejection) of a sense of personal agency by diffusion or displacement of responsibility, disregarding or minimizing the injurious effects of one's actions, and attribution of blame to, and dehumanization of, those who are victimized.

(Bering & Shackelford, 2004)

Hate is a definite underlying variable in the Rwanda genocides. What is not clear, and may never be, is how long the hate was there before the genocide began. The hate in the Rwanda genocide was a hate that was carefully nurtured and shaped to accomplish ends that were mindfully, planfully, and systematically conceived. The shifting of powers throughout Rwanda's history made them an unstable nation. It appears at a glance that some of the greatest harm may have come from the period of Belgium rule and influence.

To more carefully understand the roots of evil and violence which might be a basis for hate, we will look at four proposed causes (or roots).

The first is an ideologically based belief that one's own side is good and the side of the enemy is evil.... The second basis is the desire for revenge over injustices and humiliations one (or one's group) has experienced.... The third basis is greed, lust, ambition, and other forms of self-interest in instances in which a rival is standing in the way of what one wants. The fourth root, sadism, can precipitate brutal violence but typically may be less relevant to hate. (Sternberg, 2003)

After reviewing a brief account of the history of Rwanda leading up to the genocide, one can see that any four of these bases for hate could have been rooted in the beliefs of the Rwandans. This hatred toward other groups may come to pass either irrationally, due to long-standing, deep-seated prejudices of one group towards another, or rationally, because of the other group being viewed as taking away some type of resource. The Rwandans had long-standing hate, and the sudden lack of resources, although not any groups fault, was blamed mostly the Tutsis, who were the main laborers until that time.

Many of these same variables are found with other mass killings, whether termed wars, genocides, or otherwise. These certain predictors seem certain yet inevitable preceding these horrible events in history. As much research shows, these beliefs could be engrained in humans genetically, being passed on for survival purposes perhaps. While most would like to be more conscious of their actions, that may be easier said than done when faced with the concept of kill or be killed.

Understanding Persecution and Genocide

Throughout evolution we are able to see that not only humans, but other primates as well, attack other groups of their own species. Smith also failed to evaluate this perspective. This aggression is considered innate for adaptive purposes. "Evolutionary psychologists can explain how such ingroup-outgroup biases derive from strategies that improve reproductive fitness: the group can maximize the survival of its own DNA if it can monopolize the resources of the 'alien' genes from entering its pool" (Suedfeld, 1999). This process was most evident in the Holocaust, as it seemed to be a main conscious reason for their murders. In other genocides and mass killings, these same ideas may only be voiced by the group-leaders, without even realizing that the survival of certain genes is adaptive quality in each human. Throughout history of Homo sapiens, we see that "inhibitions against violence may erode when people see respected figures, such as uniformed military officers or physicians, endorse and practice it" (Suedfeld, 1999). This phenomenon is often referred to as the "false consensus" effect. The media often plays a large role in this. Other experiments in the past have reported how groupthink may lead to unthinking approval of immoral and disastrous decisions. Groupthink (Janus, 1972) is essentially a combination of ingroup pride, conformity, and some type of leader-worship. Groupthink takes a considerably short time to form once the ideas and leaders take some sort of action. This has been evident in groups smaller then Rwanda, such as in cults and militias.

Cultural-Societal Roots of Violence

Both cultural characteristics and social conditions exert a large amount of influence to large-scale or widespread violence in a society. These are the two primary roles in the cultural-societal roots of violence. "Genocidal violence is a societal process. To understand its origins and evolution, we must consider beyond individual psychology group psychological processes and their roots in cultural, societal conditions, and societal institutions" (Staub, 1996). This is another theory that formulates around the daunting fact that any society is at risk for this type of tragedy. The best way to establish the role of culture and social conditions is to look at the unfortunate pattern that the history of genocide portrays. As Staub (1996) maintains, "The road to mass killing or genocide frequently begins with difficult life conditions in a society. These include severe economic problems, intense political conflict, substantial and rapid technological and social change, and combinations of all these conditions. They create social disorganization and powerfully activate basic human needs in members of society." There are many psychological theories proposing that humans have basic needs fundamental for functioning in this world. Among these needs which may be a role of social condition in the roots of genocide are needs for security, identity, effectiveness and control, understanding one's place in the world, and

connection and support from others. These needs are commanding sources of feelings, thoughts, and actions when not properly fulfilled. "Members of different subgroups of a society can respond to difficult life conditions and their effects on the individual by joining together to solve problems. Frequently, however, group psychological and social processes emerge that are the starting points for intense violence." One example of this is the process of elevating the group by diminishing the other group. This process is very psychologically functional. It functions by serving to fulfill basic life needs created by difficult life situations. Staub also believes that these particular cultural characteristics can be best understood in terms of their functions, with regard to fulfilling both basic individual needs and group needs, such as security and stability. In fact, the method of devaluing another group represents a starting point for violence against the ideological enemy:

As a group turns against and begins to harm members of another group, an evolution begins. Less harmful acts of discrimination or violence change the perpetrators and make more harmful acts possible and probable. As the victims are harmed, both perpetrators and bystanders engage in just world thinking, which suggests that people who suffer deserve their suffering. This and other psychological processes lead to further devaluation of the victims and ultimately to their exclusion from the moral universe. (Staub, 1996)

Strangely and sadly enough, the perpetrator will become progressively more committed to his or her ideology, perspective, and course of action. More harm to the victim will result in less chances of change to the perpetrator. The bystanders are the only ones able to influence any stop to the evolution of the extreme violence. Unfortunately, whether these bystanders are part of the population or not, they will usually remain passive. This diffusion of responsibility could be a large scale form of bystander apathy.

There are also cultural characteristics that affect the probability of group violence. "Certain characteristics of a group's culture and social institutions make it

more likely that the group will respond to difficult life conditions by turning against others" (Staub, 1996). The pattern of devaluation has taken its roots in the history of genocide. The devaluation of a group is a definite core influence: "When the devalued group is relatively successful,... [it is] usually also seen as manipulative, exploitative, dishonest, and generally morally deficient, characteristics that are claimed to have brought them wrongful gains at the expense of the dominant group. It is one further step to see the devalued group as a threat to the survival of one's own group." Staub is very compelling as he goes on to mention that a number of origins of cultural devaluation can be specified from a functional perspective.

Devaluation justifies social stratification, exploitation, discrimination, and the overall improper treatment of a group. Once this devaluation becomes a part of a culture, including literature, art, and media, as well as being perpetuated in social institutions, it is highly resistant to change. "A history of cultural devaluation makes opposition by internal (part of the population) bystanders less likely. The life problems lead them to focus on their own concerns and increase their need for connection to their groups. The devaluation they learned diminishes their concerns about the victims' welfare and deprives them of the motivating force required to oppose their own group." The long history of devaluation and aggression between one's own group and other groups makes aggression seem normal, appropriate, and even desirable and valuable as a way of resolving the groups' differences.

Why the Mind is Designed to Kill

The unfortunate indication by most research is that human beings have a predisposition to kill as a means for survival. This survival is threatened as the existence of the basic human needs, as mentioned earlier, are threatened. Shackelford not only wrote about the causal role of consciousness, but collaborated with David Buss to write an article proposing an evolutionary psychological account of human aggression. "The psychological mechanisms underlying aggression are hypothesized to be contextsensitive solutions to particular adaptive problems of social living" (Buss & Shackelford, 1997). To support this assertion, they proposed seven adaptive problems for which aggression might have evolved as a solution—"co-opting the resources of others, defending against attack, inflicting costs on same-sex rivals, negotiating status and power hierarchies, deterring rivals from future aggression, deterring mates from sexual infidelity, and reducing resources expended in genetically unrelated children." Many of these are the resources that were threatened in Rwanda, as well as most of the other documented historical attacks.

Although most of us have had our resources threatened, we do not all see ourselves as being designed to kill. This phenomenon is because we are also designed to do many other things. Buss is most well-known for arguing that killing is fundamentally in our nature.

Because over the aeons of human evolution, murder was so surprisingly beneficial in the intense game of reproductive competition, our minds have developed adaptations to kill.... In anthropological accounts of tribal warfare we find powerful evidence that killing raids have historically been a strategic means of winning the merciless competition for survival and reproduction. (Buss, 2005)

History has shown us the pride of fighting in groups. From Shakespeare's *Henry V* "Band of Brothers" scene, to the film itself, there seems to be a romantic feeling of war. *Why People Kill: The Evolution of Evil*

To understand more on why the human mind is designed to kill, we must look at the evolution that designed the mind. To help put this into perspective, we must look at these massacres as *mass homicides*. We must break down the Cartesian-like model which Johnson described, and understand the individuals of the human species. This is the only way to understand the whole. Buss's theory of evolution of evil sees killing as prototypically evil. This evil is the infliction of fitness costs—one's death becomes his rival's gain. According to theory of the evolution of evil, "humans have adaptations to inflict these costs—adaptations to steal rivals' resources, adaptations to damage rivals' reputations, adaptations to physically injure rivals, and adaptations to steal their mates" (Duntley & Buss, 2004). This explanation all fits in with Buss's own Homicide Adaptation Theory which shows that humans are also likely to have evolved these adaptations to kill. "Homicidal behavior is not under the control of a simple 'ON-OFF' switch that can be manipulated with a push from a single factor. The activation of evolved psychological mechanisms requires the presence of co-occurring sets of circumstances…" (Duntley & Buss, 2004). With more understanding of how our minds operate, we may be able to close the gap caused by pseudospeciation. We would be able to see that we all are not only capable of what is portrayed as savage, but we may be part of the society which contributes more harm than good to them. Through reducing the presence of the circumstances, we can keep the switches off.

Buss further describes evil with a doctrine coined by Rousseau as Noble Savage. "According to this doctrine, humans in a state of nature are peaceful, harmonious, and above all, fundamentally good. Evil and depravity come not from nature, but from the distortion and corruption of a good nature by a bad culture, imposed from the outside" (Buss, 2001). This is seen in many of the war-torn countries today. Rwanda, for instance, had tribal differences for hundreds of years. It was not until, most likely, the influence of the Belgiums, that lead to the extreme forms of segregation and degradation in their society. Buss (2001) goes on to summarize this doctrine with the words of anthropologist Melvin Konner who said that we "have never quite outgrown the idea that somewhere, there are people living in perfect harmony with nature and one another, and that we might do the same were it not for the corrupting influences of the Western culture." No matter where the corrupting influences lie, they have definitely become the social parasites of today.

The Sentience of Human Nature

The human species is not the only sentient species. The world around us is beginning to feel the effects of the pain and suffering inflicted to our own species on a daily basis. We are crucifying our own species over resources whose exploitation is destroying our own planet. There is evidence showing that this violence may get worse before it ends—if it does. Until then the sciences must unite consiliently and study not just the past tragedies, but the present and potential as well. There is a growing trend to accept these genocides as indifferent to the rest of the world. We must realize that this will one day be the rest of the world.

Edward Wilson saw the causes of the Rwandan genocide as rooted in environment and demography. He stated that "Rwanda is a microorganism of the world" (Wilson, 1998). We must start to learn from the history of these massacres, wars, and genocides our species has inflicted upon itself. We may never reach an end to this horrific violence. One goal societies and cultures can implement is to avoid portraying these acts as normal. We know what to look for as warning signs to possible mass violence. Our own government, as well as the United Nations, spends millions of dollars protecting us, yet their involvement always seems to come too late. It seems that those who know the most seem to do the least. Smith and others have begun to do their part to help inform those who will listen. There is, however, a strong central message in all of the research pertaining to genocide: someone needs to do something. Time and time again these massacres are overlooked. As long as it is the "other" group, no one seems to mind. If Wilson is correct, then war could be termed a macro-genocide, and genocide a micro-war. They are both themed around an arms race. Genes of the "other" may not be the key factor; it only makes it easier to see them as insentient.

Hypothesis

My hypothesis is that there will be differences in rating for a number of items on questionnaires when statements with the only difference being the two terms *war* and

genocide. Research has shown little more than accumulated statistics when it comes to war, genocide, and other large massacres. When comparing the research from various fields there are too many similarities to ignore. These similarities are the factors which could be studied scientifically in order to better understand this facet of human nature. This consideration of multiple factors is the beginning of what will hopefully be studied for many more years, each study building on another. The significance in similarities will be found using factors gathered from the meta-analyses of literature related to war and genocide, such as "defensive" and "pride." Participants will help to show these comparative similarities between genocide and war categories.

There is a growing romanticism of war which ignores the problems leading up to the war, the violence and murder during the war, and the consequences from the war. The lack of education regarding genocide is staggering. So many aspects of war and genocide continue to be swept under the carpet by world leaders. With enough research, perhaps future generations will have a greater understanding of this devastating part of human nature. This understanding will also hopefully create a basis for future respect among human beings.

Method

A 2 x 3 between-within subject design (Appendix F) was used with the test-retest order serving as the independent variable and the time between tests as the dependent variable. There were three different groups, each consisting of a different test-retest order (see *Materials* section). For each group, there was a two week period between their test and retest (see *Materials* section). Political and religious demographic questions (Appendix D) were also administered at the end of the second test for measuring any extraneous variables. This was to help understand any variances in overall findings. While some of these may have been significant, the main use of the demographics is to fine-tune any future research.

Participants

One hundred thirty-eight University of Central Oklahoma students from the general psychology pool, ranging mostly from approximately 18 to 25 years old, with a mean age of 21, served as volunteers. Volunteers received a participation voucher for each of the two sessions completed. These vouchers were to prove their participation in psychological research to their professor. Participation is one option given for a portion of the grade, but is not an ultimatum. Should the participant have attended the first session, and chose not to complete the questionnaire for any reason, a voucher was still be issued for the first session. Students were not punished if they choose not to participate in the completion of the study. They were also made aware that should they choose not to participate in all of both or either sessions that this would not reflect poorly on them.

These participants (N = 138) were randomly assigned into three groups. Group one had slightly more participants with fifty-four (N = 54). Group two had forty (N =40) participants, and group three had forty-four (N = 44) participants. Some of the variation in group size was due to several days of extremely icy weather on the day of each trial. Each group size was still within the range for statistical power.

Electronic sign-up sheets were offered via Experimentrak (a university based experiment program) to all of the participants (N=138) for several experiment sessions, giving instructions for them not to sign up on more than one sheet for this experiment. Each experiment according to Experimentrak would equal one of the three groups for the actual experiment. Randomization occurred as the participants (N=138) signed up for one of three different groups, without knowing to which group they were assigned. Time placements for each session were very similar as to eliminate any extraneous variables. Although there were several participants for each group, it was not necessary for all of them to meet at the exact same time. Data was able to be gathered on a number

of students at a time, which allowed for easier administration and less participant distractions for the participant.

A demographics questionnaire (Appendix D) was used in order to help understand any possible correlation between individual differences and significant findings in the data obtained from this research. This information is to be presented as correlational data following along with significant results.

Materials

At the beginning of the first of two meetings, participants were provided a consent form (Appendix C). At the end of the experiment participants were given a debrief form (Appendix E) in order to inform them of the purpose of the research. The consent form issued at the beginning of the study stated that the debrief form would not be handed out until "tasks are completed." If the participant would have chosen at any time not to complete the study, a debrief form would have been submitted at the time of his or her termination.

This experiment used two questionnaires, one regarding war (Appendix A), and one regarding genocide (Appendix B). Each questionnaire consisted of 25 questions. Each set of questionnaires was designed specifically for this study in order to determine psychocultural comparative similarities between war and genocide. During extensive literature reviews, these questions were selected based on common factors and terminology used in war and genocide research across many fields of study. The questions are the same, only using minimal word change, such as interchanging the words "war" and "genocide."

Each participant (N=138) answered the questionnaire on an 8-point Likert Scale format ranging from 0(do not agree) to 7(strongly agree). Each participant completed both questionnaires by the end of the two-session experiment.

Answers were scored with a ruler in order to convert answers to as specific of raw scores as possible. The 8-point scale was measured at the intersection of the

horizontal scale line and the line made by the participant. Each numbered score was separated by 0.50 inch tabs. This was to provide consistency with answers, as not all participants made the exact kind of mark. Participants were also provided a number 2 pencil with an eraser for use on the questionnaire.

Also, each participant in each group was randomly assigned a participant number which was written on the questionnaire following their completion of each session. These numbers were assigned by Experimentrak as participant identification number. Each questionnaire was also coded with a group number (1, 2, or 3) and a session number (1 or 2). Questionnaires were kept in separate folders, organized by group number, session number, and participant identification number. Participants were given their participant identification number to keep in case of any future questions regarding the experiment. This number was and will be used in order to ensure confidentiality to the participants, as well as to keep the data organized. The questionnaires will also be kept for an undetermined amount of time in order to be consulted for future replication, or hopefully, for other research which might branch out from this study.

Design

The design of this experiment is a 2 x 3 between-within subjects design (Appendix F). There are two different questionnaires which were given to all three groups of students. All participants answered the same questions by the end of the second week, but in different orders. This makes the two questionnaires, war and genocide, the two levels of the first independent variable. The second independent variable is the test-retest order, consisting of three levels. The dependent variable of the experiment is the two weeks each group will wait between the test and retest.

The two questionnaires each consist of 25 questions. These questionnaires were to detect if this sample population distinguishes similarities or differences between war and genocide. The hypothesis being that there will be differences in rating for a number of items on questionnaires when statements with the only difference being the two terms *war* and *genocide*. One questionnaire is regarding war, and one regarding genocide. There is no title on the questionnaires, only brief directions (Appendices A & B) which were read aloud before the participants began any marking. Instructions were also written on the dry-erase board to reiterate the directions on each questionnaire. Participants were at no time told that there were similarities between the questionnaires or sessions. All questionnaires regarding subject matter were not answered until the participant had completed the experiment. Participants with questions regarding subject matter were instructed to answer to the best of their own knowledge regarding the given question.

Each group met for two separate sessions. The sessions were exactly two weeks apart, and even in the same location. The design of this experiment had three different levels of group (Appendix F). Group one (N = 54) completed both questionnaires at each session, and group two (N = 40) and group three (N = 44) only completed one questionnaire each session. The time interval between test and retest, exactly two weeks, allowed for extinction of previous wording on the first questionnaire administered. The questionnaires are also lined up perfectly by number (Appendices A & B). The allotment of time between test and retest was to help to avoid the participant focusing on the similarities of the questionnaire, and to improve their ability to focus on the given questionnaire. The control group (group 1), which was given both tests at test and both at retest, but in opposite orders (Appendix F), allowed more insight into this. As previously mentioned, the participants were randomly assigned based on when they signed up for the experiment.

Procedure

In order to participate (N=138) in the experiment, each student volunteered by electronically signing a list for the experiment via Experimentrak, designed especially for this. Upon arriving for the initial questionnaire, the participants were to first

complete a consent form (Appendix C). The participants were asked to read the consent form to themselves as it was read out loud to them. This requirement ensured that their information will be kept confidential as well as informed them of their ability to remove themselves from the research participation at any time.

The given order of the questionnaires was divided into three randomly assigned groups. Each group answered their assigned questionnaire(s), and then each participant (N=138) answered the next assigned questionnaire(s) two weeks later (Appendix F). Group one (N = 54) answered both questionnaires both times, the order reversing the second time; group two (N = 40) answered the genocide questionnaire first, and the war questionnaire after two weeks; group three (N = 44) answered the war questionnaire first, and then in two weeks the genocide questionnaire.

Questionnaires used an 8-point Likert Scale ranging from 0 (do not agree) to 7 (strongly agree). Decimal fraction scores were used and were rounded to the tenths place. These scores were determined using a ruler if needed; each number on the scale is separated by 0.50 inch. Participants were given as much time as needed to completed each questionnaire, although the average time was no more than thirty minutes for each participant.

At the end of the two weeks, following all questionnaire administration, a brief list of personal (demographic) questions was given to each participant (Appendix D). This procedure may be of help in further research, but was also used as a way to assess any socio-cultural influences the participant may have had. The participants' gender variable was found to impact significance and was thus added to analysis presentation. These demographics questions will also provide additional information of the population sample used for the research. After completing the experiment, participants were given a "debrief form" (Appendix E) explaining a summary of why this research was conducted. Any questions from the experiment regarding subject matter were answered following the completion of the experiment. For the questionnaires, a 2 x 3 between-within subjects (Appendix F) matching samples t-test for repeated measures was used to detect significance between groups and between questionnaires. The paired samples t-test was used to find significance between questions regarding war, and their parallel questions regarding genocide. For those with significance, a MANOVA (multiple analyses of variance) was conducted to see if some demographic variables impacted significance as well.

Results

Again, a paired samples t-test was used to derive scores between parallel questions. There were a total of 25 paired samples, derived from the 25 questions on each of the two questionnaires.

Of the 25 samples, 15 were found to be significant (Table 1). These variables were tested for significance with an alpha level of .05. These are the samples with the least amount of similarity.

Questions with	Means		Std. Deviations		t		
Significance	War	Genocide	War	Genocide	ratio	df	sig
1. War/Genocide occurs when there is a lack of resources.	4.044	3.227	1.920	2.045	2.841	88	0.006
 Wars/Genocides are fought out of necessity. 	3.683	2.298	1.975	2.045	4.679	88	0.000
 Wars/Genocides are used to increase territory. 	4.929	3.674	1.420	1.917	3.218	88	0.002
5. War/Genocide is used to benefit only one side or party involved.	4.526	5.303	1.761	1.660	-3.625	89	0.001

TABLE 1 Data for questions with significance, failing to reject the null hypothesis

	1						
6. War/Genocide may							
benefit everyone							
involved.	2.666	1.458	1.936	1.848	3.484	89	0.001
9. Those							
participating in							
War/Genocide see it	4 40 4	2 1 1 0	1 (22	0.040	1 500	00	0.000
as an honor.	4.484	3.119	1.623	2.042	4.522	89	0.000
10. War/Genocide is a							
way to oppress an							
outside or "other" group.	4.400	5.497	1.750	1.480	-4.972	89	0.000
		5.177	1.750	1.100	1.972		0.000
11. Wars/Genocides							
can be avoided.	4.899	5.381	1.831	1.857	-4.773	88	0.000
12. War/Genocide is							
part of human nature.	3.808	2.163	1.944	1.924	3.636	88	0.001
15. War/Genocide is							
an animalistic							
behavior.	4.373	4.839	1.810	1.983	-1.943	89	0.058
16. Wars/Genocides							
may occur without violence.	2.076	1.070	2 172	2 104	2 000	20	0.041
	2.976	1.868	2.172	2.104	2.099	89	0.041
18. In order to go to War/Genocide with							
another group there							
must be some sort of hate.	3.733	5.222	2.055	1.566	-5.939	88	0.000
19. War/Genocide is							
evil and savage.	4.248	5.721	2.042	1.580	-4.728	89	0.000
22. War/Genocide is a							
test of strength and							
virtue.	3.717	2.339	1.929	2.001	4.207	89	0.000

25. All human beings							
could be taught to fight in a							
War/Genocide if there							
was enough of a							
threat.	4.728	3.203	2.170	2.369	5.227	89	0.000

For question 1, "war/genocide occurs when there is a lack of resources," the scores were war (x=4.044, sd=1.920), genocide (x=3.227, sd=2.045), and paired samples (t=2.841, df=88, a=0.006). For question 3, "wars/genocides are fought out of necessity," the scores were war (x=3.683, sd=1.975), genocide (x=2.298, sd=2.045), and paired samples (t=4.679, df=88, a=0.000). For question 4, "wars/genocides are used to increase territory," the scores were war (x=4.929, sd=1.420), genocide (x=3.674, sd=1.917), and paired samples (t=3.218, df=88, a=0.002). For question 5, "war/genocide is used to benefit only one side or party involved," the scores were war (x=4.526, sd=1.761), genocide (x=5.303, sd=1.660), and paired samples (t=-3.625, df=89, a=0.001). For question 6, "war/genocide may benefit everyone involved," the scores were war (x=2.666, sd=1.936), genocide (x=1.458, sd=1.848), and paired samples (t=3.484, sd=1.848)df=89, a=0.001). For question 9, "those participating in war/genocide see it as an honor," the scores were war (x=4.484, sd=1.623), genocide (x=3.119, sd=2.042), and paired samples (t=4.522, df=89, a=0.000). For question 10, "war/genocide is a way to oppress an outside or 'other' group," the scores were war (x=4.400, sd=1.750), genocide (x=5.497, sd=1.480), and paired samples (t=-4.972, df=89, a=0.000). For question 11, "wars/genocides can be avoided," the scores were war (x=4.899, sd=1.831), genocide (x=5.381, sd=1.857), and paired samples (t=-4.773, df=88, a=0.000). For question 12, "war/genocide is part of human nature," the scores were war (x=3.808, sd=1.944), genocide (x=2.163, sd=1.924), and paired samples (t=3.636, df=88, a=0.001). For question 15, "war/genocide is an animalistic behavior," the scores were war (x=4.373, sd=1.810, genocide (x=4.839, sd=1.983), and paired samples (t=-1.943, df=89, a=0.058). For question 16, "wars/genocides may occur without violence," the scores

were war (x=2.976, sd=2.172), genocide (x=1.868, sd=2.104), and paired samples (t=2.099, df=89, a=0.041). For question 18, "in order to go to war/genocide with another group there must be some sort of hate," the scores were war (x=3.733, sd=2.055), genocide (x=5.222, sd=1.566), and paired samples (t=-5.939, df=88, a=0.000). For question 19, "war/genocide is evil and savage," the scores were war (x=4.248, sd=2.042), genocide (x=5.721, sd=1.580), and paired samples (t=-4.728, df=89, a=0.000). For question 22, "war/genocide is a test of strength and virtue," the scores were war (x=3.717, sd=1.929), genocide (x=2.339, sd=2.001), and paired samples (t=4.207, df=89, a=0.000). For question 25, "all human beings could be taught to fight in a war/genocide if there was enough of a threat," the scores were war (x=4.728, sd=2.170), genocide (x=3.203, sd=2.369), and paired samples (t=5.227, df=89, a=0.000).

Using the same paired samples t-test to derive scores between questions, 10 paired samples were found to not have significance (Table 2). These paired questions have the most similarity. These questions validate the null hypothesis.

Questions without	м	eans	Std. Deviations		td. Deviations t		
Significance	War	Genocide	War	Genocide	ratio	df	sig
2. War/Genocide occurs when there is an increase in							
population.	3.257	3.240	1.828	1.925	-0.446	88	0.657
 There are/is too many wars/too much genocide. 	4.974	4.424	1.884	2.149	0.763	89	0.449
8. War/Genocide is full of aggression.	5.426	5.543	1.387	1.569	-1.780	88	0.081

 TABLE 2 Data for questions without significance, demonstrating the hypothesis

13. Those who are not part of the war/genocide could not possibly understand it.	3.008	3.178	2.049	2.179	-0.995	87	0.325
14. All wars/genocides ultimately affect everyone in the world.	4.920	4.713	1.742	1.877	-0.439	88	0.663
17. War/genocide is political.	5.214	4.731	1.392	1.591	1.466	89	0.149
20. War/genocide enhances one group's survival by taking the lives of another group.	4.603	4.790	1.682	1.947	-0.936	88	0.354
21. War/genocide is often associated with ideas of love.	1.804	1.379	1.812	1.756	1.394	89	0.169
23. War/genocide is a form of competition of survival and reproduction.	4.055	3.516	1.688	1.936	1.711	87	0.094
24. War/genocide is under-reported and over- romanticized.	3.665	3.757	2.171	2.062	-1.171	88	0.247

For question 2, "war/genocide occurs when there is an increase in population," the scores were war (x=3.257, sd=1.828), genocide (x=3.240, sd=1.925), and paired samples (t=-0.446, df=88, a=0.657). For question 7, "there are/is too many wars/too much genocide," the scores were war (x=4.974, sd=1.884), genocide (x=4.424, sd=2.149), and paired samples (t=0.763, df=89, a=0.449). For question 8, "war/genocide is full of aggression," the scores were war (x=5.426, sd=1.387), genocide (x=5.543, sd=1.569), and paired samples (t=-1.780, df=88, a=0.081). For question 13, "those who are not part of war/genocide could not possibly understand it," the scores

were war (x=3.008, sd=2.049), genocide (x=3.178, sd=2.179), and paired samples (t=-0.995, df=87, a=0.325). For question 14, "all wars/genocides ultimately affect everyone in the world," the scores were war (x=4.920, sd=1.742), genocide (x=4.713, sd=1.877), and paired samples (t=-0.439, df=88, a=0.663). For question 17, "war/genocide is political," the scores were war (x=5.214, sd=1.392), genocide (x=4.731, sd=1.591), and paired samples (t=1.4660, df=89, a=0.149). For question 20, "war/genocide enhances one group's survival by taking the lives of another group," the scores were war (x=4.603, sd=1.682), genocide (x=4.790, sd=1.947), and paired samples (t=-0.936, sd=1.947)df=88, a=0.354). For question 21, "war/genocide is often associated with ideas of love," the scores were war (x=1.804, sd=1.812), genocide (x=1.379, sd=1.756), and paired samples (t=1.394, df=89, a=0.169). For question 23, "war/genocide is a form of competition of survival and reproduction," the scores were war (x=4.055, sd=1.688), genocide (x=3.516, sd=1.936), and paired samples (t=1.711, df=87, a=0.094). For question 24, "war/genocide is under-reported and over-romanticized," the scores were war (x=3.665, sd=2.171), genocide (x=3.757, sd=2.062), and paired samples (t=-1.171, *df*=88, *a*=0.247).

Some of the paired samples were impacted significantly by the gender of the participant (Table 3 & Appendix G). A total of 9 samples were impacted, 6 from the significant group and 3 from the non-significant group. This will hopefully narrow down some of the more important questions for future research.

			5 /
			sig of
Question	SS/MS	F	F
1. War/genocide occurs when there is a lack of resources.*	17.52	7.17	0.010
4. Wars/genocides are used to increase territory.*	20.65	9.59	0.003
8. War/genocide is full of aggression.	9.51	4.57	0.038

TABLE 3 Questions with significance between participant gender and paired samples (df=1)

9. Those participating in war/genocide see it as an honor.*	10.57	3.71	0.060
13. Those who are not part of the war/genocide could not possibly understand it.	10.05	3.59	0.065
14. All wars/genocides ultimately affect everyone in the world.	7.74	8.78	0.005
15. War/genocide is an animalistic behavior.*	14.58	5.63	0.022
22. War/genocide is a test of strength and virtue.*	41.03	19.76	0.000
25. All human beings could be taught to fight in a war/genocide if there was enough of a threat.*	18.72	8.36	0.006

* questions with significant paired samples

Again, 9 of the samples were found to have significance between participant gender and paired samples (Table 3 & Appendix G). Six of these were from the significant group of paired samples. For question 1, "war/genocide occurs when there is a lack of resources," when compared to participant gender was F=1, 7.17, and p=0.010. For question 4, "wars/genocides are used to increase territory," when compared to participant gender was F=1, 9.59, and p=0.003. For question 9, "those participating in war/genocide see it as an honor," when compared to participant gender was F=1, 3.71, and an almost significant p=0.060. For question 15, "war/genocide is an animalistic behavior," when compared to participant gender was F=1, 5.63, and p=0.022. For question 22, "war/genocide is a test of strength and virtue," when compared to participant gender was F=1, 19.76, and p=0.000. For question 25, "all human beings could be taught to fight in a war/genocide if there was enough of a threat," when

Once more, 9 of the samples were found to have significance between participant gender and paired samples (Table 3 & Appendix G). Three of these were from the non-significant group of paired samples. For question 8, "war/genocide is full of aggression," when compared to participant gender was F=1, 4.57, and p=0.038. For question 13, "those who are not part of the war/genocide could not possibly understand it," when compared to participant gender was F=1, 3.59, and an almost significant p=0.065. For question 14, "all wars/genocides ultimately affect everyone in the world," when compared to participant gender was F=1, 8.78, and p=0.005.

For any possible differences between groups, due to different order of administration of questionnaires, means and standard deviations were compared

TABLE 4 Differences between groups 1, 2, 3						
	War Geno			ocide		
Question	Mean	sd	Mean	sd		
1	3.99	0.61	3.19	0.32		
2	3.20	0.85	3.17	0.77		
3	3.66	0.61	2.29	0.24		
4	4.93	0.33	3.67	0.53		
5	4.55	0.30	5.26	0.34		
6	2.64	0.41	1.43	0.23		
7	5.00	0.28	4.40	0.31		
8	5.44	0.38	5.52	0.21		
9	4.49	0.25	3.18	0.47		
10	4.42	0.18	5.47	0.35		
11	4.94	0.49	5.31	0.56		
12	3.82	0.19	2.17	0.56		
13	3.00	0.37	3.19	0.80		
14	4.90	0.51	4.65	0.67		
15	4.43	0.58	4.87	0.29		
16	3.02	0.45	1.86	0.19		
17	5.23	0.25	4.73	0.22		
18	3.76	0.87	5.19	0.25		
19	4.30	0.60	5.74	0.22		
20	4.56	0.58	4.75	0.38		
21	1.82	0.80	1.38	0.07		
22	3.70	0.39	2.33	0.19		
23	4.01	0.58	3.44	0.54		
24	3.70	0.66	3.73	0.22		
25	4.70	0.37	3.31	1.11*		
* only possible question impacted between arouns						

between groups, including between the first group's two separate sessions. TABLE 4 Differences between groups 1, 2, 3

* only possible question impacted between groups

The only question with possible difference was question 25 on the genocide questionnaire, "All human beings could be taught to fight in a genocide if there was enough of a threat." Although there was only a small difference (sd=1.11), this question should be noted for future research as well.

Discussion

Significance found for 15 of the paired samples (TABLE 1) supports the hypothesis that there will be differences in rating for a number of items on questionnaires when statements with the only difference being the two terms war and genocide. The 15 paired samples with significance (TABLE 1) were found to be significant due to scores being far enough apart to yield an alpha score (a) of significance of less than 0.05. These findings leave 10 paired samples (TABLE 2) from the questionnaires that participants did not significantly find difference. These 10 paired samples (TABLE 2) should not be ignored in future research. These 10 paired samples (TABLE 2) support the null hypothesis that there should be similarities in questions regarding war and genocide, when the only differences in the questions are the words war and genocide. Participants seemed to find more in common with paired samples containing variables involving politics and mass media. Perhaps this is from information more readily available to the general population. Participants also seemed to find less in common with questions regarding biosocial theories, attritional factors, and other psychosocial theories. This could be attributed to a lack of awareness, not only amongst the given sample population, but society in general. Six of these 15 were found to be impacted significantly by participant gender.

For future replication, this experiment could be administered to the same age and student population, restricting participants to only certain countries. Other potential studies may be administered limiting the study to specific nationalities in order to better understand any significance. Future research should also focus on the 9 total paired samples impacted by participant gender, as well as all 10 paired samples supporting the hypothesis. Samples impacted by gender (TABLE 3 & Appendix G) should also be further explored for differences in response between male and female. There seems to be some implication that males have a more aggressive view of war and genocide, while females seemed to answer certain questions a little more altruistically. There is still extensive research to be done in the area of war and genocide. It appears that there is more needed social awareness of this as well. In regards to science, this approach to research from this study will hopefully set a sort of precedent for more future research. Focusing on some of the variables on this experiment will hopefully help. Besides focusing on the differences between paired samples with and without significance, more attention should be focused on differences in response between male and female participants. Future research could be more concentrated on the commonalities in questions with significance versus those without, and the same for participant gender differences in responses.

Research on events such as the horrific genocide in Rwanda and Darfur has helped scientists to gain more of a grasp for this type or human behavior. The human population as a whole seems to be becoming more aware of these tragedies, and what may possibly be done to help. The escalations of events prior to most large massacres are all strikingly similar. Ethnocentrism continues to dominate cultures ranging third world countries, to more modern civilizations. Much of this has to do with segregation not of ethnicity, which was more common in the past, but of segregation according to class status. This class-based stratification is a current growing trend globally, and will hopefully not be another precursor towards future wars or genocides.

Although many sanctioned massacres are still occurring—still supervised by UN officials—they are becoming less and less frequent. The United Nations has been forced by way of media coverage and popular demand to rethink the way these killings are handled. This may not be a means to and end, but is definitely a start. It seems that the only solution is for UN countries to interject; this means that killers are stopped by being killed. Perchance this never ending cycle is a way of nature controlling the population.

With so many similarities between the roots of war and genocide, it would appear that there would be fewer supporters of wars, no matter what "benefits" there might be. Regardless, there have become more outlets for raising awareness of these situations. All humans may have evolved to be able to kill. If our minds are truly designed this way, it is probably for a reason. Violence may never cease to exist, but the condoning of it should. Scientific research on wars, genocides, and large massacres may be one way of alerting people of what is going on in the world around them. It is time for the scientific community to risk taking a chance—taking a stand for that which they are passionate.

Many seem to not even be aware of what exactly genocide is. Genocide is still so rarely mentioned that most only know that it is *bad*. War, on the other hand, may be *good* or *bad*, depending on the context. With a growing number of survivors of war and genocide, the ability to further study this hypothesis is more available than ever. The goal of this particular experiment would be to elaborate on it by studying other cultures—particularly those recently recovering from large massacres. With wars and genocides dominating the history books, research could be infinite. This is another reason that scientists should help. Scientists possess an almost innate ability to narrow down the most useful information for the task at hand. For those which feel they possess this researching ability, bridging the gap between science and human nature should seem a sort of obligation to the world.

Mankind may not ever be fully understood. The human species is ever evolving. What behavioral scientists are always really studying is the past. Our ability to learn from this is what could hopefully ultimately affect the future. Studying the past helps to understand the present and possibly, hopefully predict the future. World peace is inevitably out of reach—a mere fairytale. But to give up on the *ideal* of world peace is not something most are willing to do.

One main point of this all is how much human beings are really all alike—in *good* and *bad* ways. Research has shown that most humans have thought about killing at some point in their lives. A majority would also be willing to go to war if needed,

even if killing were involved, which it usually is. Even for those not willing to take part in war or violence, there are certain daily actions which could condone or support the decisions made during war and other large attacks not necessarily termed war.

This study over genocide and war shows that there appear to be several common variables between war and genocide. There are also differences in both to consider. The research in this study is a start to separating the differences and similarities in genocide and war as viewed by society. This dividing is not to downplay either, but rather to show how much more awareness is needed in regards to both subjects. Perhaps neither war nor genocide is really that different. This awareness needs to be of not just what is going on, or what has happened, but what could possibly be in the process of occurring. Future replications or similar research may open the door for mass media awareness, or other data which politicians may be more willing to help them understand the crises in the world. Social scientists are often able to do much more in this world than is possibly realized. To some, research like this may seem minuscule. But to others it is a foundation of future research and hopefully some sort of resulting change.

References

- Bering, J. M., & Shackelford, T. K. (2004). The causal role of consciousness: a conceptual addendum to human evolutionary psychology. *Review of General Psychology*, 8(4), 227-248.
- Buss, D. M. (2005). *The murderer next door: Why the mind is designed to kill*. New York: The Penguin Press.
- Buss, D. M. (2001). Human nature and culture: An evolutionary psychological perspective. *Journal of Personality*, *69*(*6*), 955-978.
- Buss, D. M., & Shackelford, T.K. (1997). Human aggression in evolutionary psychological perspective. *Clinical Psychology Review*, 17(6), 605-619.
- Duntley, J. D. & Buss, D. M. (In press). The plausibility of adaptations for homicide. InP. Carruthers, S. Laurence and S. Stich (Eds.), *The structure of the innate mind*.
- Duntley, J.D., & Buss, D.M. (2004). The evolution of evil. In A. Miller (Ed.), *The social psychology of good and evil*. New York: Guilford. 102-123.
- Janus, Irving (1972). Victims of groupthink. Boston: Houghton Mifflin.
- Jetten, J., Spears, R., & Postmes, T. (2004). Intergroup distinctiveness and differentiation: a meta-analytic integration. *Journal of Personality and Social Psychology*, 86(6), 862-879.
- Johnson, D. W. (2003). Social interdependence: interrelationships among theory, research, and practice. *American Psychologist*, 934-945.
- McElvaine, R. S. (2002). Biology as a lens: The relevance of biohistory. *The Chronicle* of Higher Education: The Chronicle Review, 49(8), B10.

McGill, D. (2004, January 19). Ethiopian Genocide. In These Times.

Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: divergent perceptions of bias in self versus others [theoretical note]. *Psychological Review*, 111(3), 781-799.

Reeves, E. (2005, Winter). Genocide by Attrition: Agony in Darfur. Dissent Magazine

Reeves, E. (2005, February 16). Genocide by Attrition. In These Times.

- Reeves, E. (2004, May 6). Genocide in Sudan: The United Nations suppresses its own report on 'the world's greatest humanitarian crisis.' *In These Times*.
- Reeves, E. (2004, July 13). Too Little, Too Late: Colin Powell's visit to Darfur only highlights the United States' inaction. *In These Times*.
- Reeves, E. (2004, August 27). Deathly Silence: The growing genocide in Darfur testifies to the world's disgrace. *In These Times*.
- Reeves, E. (2004, September 30). Despairing for Darfur: Despite increasing coverage, the press has failed to impart the extent of the genocide. *In These Times*.
- Smith, D. Norman. (1998). The psychocultural roots of genocide: legitimacy and crisis in Rwanda. American Psychologist, 53(7), 743-753.
- Staub, E.. Cultural-societal roots of violence: the examples of genocidal violence and of contemporary youth violence in the United States. *American Psychologist*, 51(2), 117-132.
- Sternberg, R. J. (2003). A duplex theory of hate: development and application to terrorism, massacres, and genocide. *Review of General Psychology*, 7(3), 299-328.
- Suedfeld, P. (1999). Reverberations of the holocaust fifty years later: psychology's contributions to understanding persecution and genocide [Presidential Address]. *Canadian Psychology*, *41*(1).

Wilson, E.O. (1998). Consilience: The unity of knowledge. New York: Vintage Books.

Appendix A

Mark anywhere on the line from 0 (do not agree) to 7 (strongly agree)

1.	War occurs when there is	a lack of	resourc	ces.			
1.		2	3	4	5	6	7
2.	War occurs when there is	an increa	ase in po	opulation.			
	0 1	2	3	4	5	6	7
3.	Wars are fought out of ne	cessity.					
	0 1	2	3	4	5	6	7
4.	Wars are used to increase	territory			_		_
-	$\frac{0}{1}$	2	3	4	5	6	7
5.	War is used to benefit onl	$\frac{1}{2}$ by one side	-	ty involve		6	7
6.	War may benefit everyon	_	<u>3</u>	4	5	6	7
0.		2	.u. 3	4	5	6	7
7.	There are too many wars.		5	- T	0	0	
<i>.</i> .		2	3	4	5	6	7
8.	War is full of aggression.						
	0 1	2	3	4	5	6	7
9.	Those participating in wa	r see it as	s an hon	or.			
	0 1	2	3	4	5	6	7
10.	War is a way to oppress a	n outside	e or "oth	er" group			
	0 1	2	3	4	5	6	7
11.	War can be avoided.		-		_	_	_
10	$\underbrace{0 1}_{1 \dots 0}$	2	3	4	5	6	7
12.	War is a part of human na	ature.	2		-		-
12	U I	<u>Z</u>	<u> </u>	4	5	<u>6</u>	7
13.	Those who are not part of	the war		ot possibi	y undersi 5		7
14	All wars ultimately affect	Averyon	J o in tho	4 world	3	6	7
14.		2	3	4	5	6	7
15.	War is an animalistic beh	avior.	5	- T	0	0	
10.		2	3	4	5	6	7
16.	Wars may occur without	violence.					
	<u>0 1</u>	2	3	4	5	6	7
17.	War is political.						
	0 1	2	3	4	5	6	7
18.	In order to go to war with	another	group th	nere must	be some	sort of h	ate.
	0 1	2	3	4	5	6	7
19.	War is evil and savage.	•	•		-		-
20	$\underbrace{0 1}$	2	3	4	5	6	7
20.	War enhances one group'	-				-	_
21	0 1 War is often associated w	2 ith ideas	3	4	5	6	7
21.	0 1	2	3	4	5	6	7
22	War is a test of strength a				5	U	
	$0 \qquad 1$	2	. 3	4	5	6	7
23.	War is a form of competit	tion of su					
	$\underline{0}$ $\underline{1}$	2	3	4	5	6	7
24.	War is under-reported and			zed.			
	0 1	2	3	4	5	6	7
25.	All human beings could b				_		h of a threat.
	0 1	2	3	4	5	6	7

Appendix B

Mark anywhere on the line from 0 (do not agree) to 7 (strongly agree)

1.	Genocide occurs	when ther	e is a lack	c of resou	irces.			
	<u>0</u>	1	2	3	4	5	6	7
2.	Genocide occurs							_
2		1			4	5	6	7
3.	Genocides are fou 0	1	$\frac{1}{2}$	y. 3	4	5	6	7
4.	Genocides are use	_			-	5	0	<u> </u>
	0	1	2	3	4	5	6	7
5.	Genocide is used	to benefit			oarty invo	lved.		—
	<u>0</u>	1		3	4	5	6	7
6.	Genocide may be			-		-		-
7.	There is too much	1		3	4	5	6	7
7.		1 genociue 1		3	4	5	6	7
8.	Genocide is full o	-		5	-	0	0	<u> </u>
		1		3	4	5	6	7
9.	Those participatin	ng in geno	cide see i	t as an he	onor.			—
	<u>0</u>		2	3	4	5	6	7
10.	Genocide is a wa	y to oppre		-		_		_
11	$\frac{0}{1}$	1	2	3	4	5	6	7
11.	Genocide can be	avoided.	2	3	4	5	6	7
12	Genocide is a par	t of huma		3	4	5	0	<u> </u>
12.	0	1	2	3	4	5	6	7
13.	Those who are no	ot part of	the genoc	ide coulo	l not poss	sibly und	erstand it.	
	0	1	2	3	4	5	6	7
14.	All genocide ulti	-						
1.7		1		3	4	5	6	7
15.	Genocide is an a	_			4	=	(7
16	Genocide may or	1 cur with	2 ut violen	3	4	5	6	7
10.		1	2		4	5	6	7
17.	Genocide is polit		-		-	•	ů.	<u> </u>
	0		2	3	4	5	6	7
18.	In order to comm	it genocio	le against	another	group the	ere must l	be some s	ort of hate.
	<u>0</u>	1		3	4	5	6	7
19.	Genocide is evil			2	4	-	(-
20	<u>0</u> Genocide enhanc	1			4		6 another o	<u>7</u>
20.		$\frac{1}{1}$				5		-
21.	Genocide is ofter					U	v	<u></u>
	0			3	4	5	6	7
22.	Genocide is a tes	t of streng	gth and vi	rtue.				-
	0	1		3	4	5	6	7
23.	Genocide is a for							_
24		1				5	6	7
24.	Genocides are un 0				4	5	6	7
25	All human being	<u>1</u> s could be						
20.		1					_	7
								—

Appendix C

University of Central Oklahoma Department of Psychology Kimberly Collins Spring 2007

Informed Consent Form

Master's Thesis Psychology Experiment The Comparative Similarities of the Psychocultural Roots of Genocide and War

In this study you will complete questionnaires during two separate times, two weeks apart. There are no risks involved, and you may stop participating at any time without penalty. Should you feel uncomfortable with any of the experiment, and need to speak with someone, the UCO Student Services Counseling center is available at (phone number). You may also contact the researcher at any time with any questions regarding this experiment at (phone number). The supervising professor, Dr. Frederickson, may also be reached at (phone number). Your data will remain anonymous and confidential. When the tasks are done, you will receive a "debrief form" which will describe the reasons I am collecting data on these tasks. The experiment takes just under a half hour. General psychology students receive 1 extra credit point.

I hereby voluntarily agree to participate in the above listed research project and further understand the above listed explanations and descriptions of the research project. I also understand that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project ant any time without penalty. I have read and fully understand this Informed Consent Form. I sign it freely and voluntarily. I acknowledge that copy of this Informed Consent Form has been given to me to keep.

Printed Name_____ Date_____

Signature _____ Date_____

Appendix D

Please answer the following questions by filling in the blank or circling.

Age	
Sex M / F	
Religion (if any)	
Marital Status	
Annual Income	
Political Affiliation	
Last year of school completed	
Hours worked per week	_
Are you in the military? Y / N	
If Yes, what is your branch and ran	ık?

Please use the remaining space to give a few statements on how you feel regarding war and genocide. This may be as general or specific as you would like.

Appendix E

Debriefing Form

Master's Thesis Psychology Experiment

The Comparative Similarities of the Psychocultural Roots of War and Genocide

Thank you for participating in this experiment. Through much research, I have hypothesized that there are countless similarities throughout the massacres in history. This was a small study to begin looking at how societies view war and genocide. The goal of this study was to compare the answers given by the participants to see of there are any differences or similarities. There was no right or wrong answers. If you would like to look at any of the literature available, I can provide an annotated bibliography at your request.

Thank you again for you participation,

Kimberly Collins University of Central Oklahoma

Appendix F

Research Design

	Group 1 (N=54)	Group 2 (N=40)	Group 3 (N=44)
Test	G1	G2	G3
Retest	G1	G2	G3

Dependent variable is the two week period between test and retest.

Independent variable 1 is the questionnaire. The 2 levels are war and genocide.

Independent variable 2 is the actual order each group was administered the questionnaires (test-retest order). There are three different levels, as listed below.

Group 1 is the control group. Each of the questionnaires were given at both the test and retest times. During test, the order was war first, genocide second. During retest, the order was be genocide first, war second.

Group 2 completed the war questionnaire as test, and the genocide questionnaire as retest.

Group 3 completed the genocide questionnaire as test, and the war questionnaire as retest.

Appendix G

F-test results for significance between participant sex and question.

Cell Means and Standard Deviations Variable .. War_1 War occurs when there is a lack of resources. FACTOR CODE Mean Std. Dev. N 37 4.286 1.653 Sex female 2.107 Sex male 5.133 12 4.494 1.790 49 For entire sample Variable .. Gen_1 Genocide occurs when there is a lack of resources. Mean Std. Dev. N FACTOR CODE female3.7951.893male2.6752.428le3.5202.067 lemarc male 37 Sex Sex 12 For entire sample 49 Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares F Sig of F Source of Variation MS SS DF .34 1 .34 226.17 88 4.81 .34 .07 .792 Sex WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd .001 Sex Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares MS F Sig of F Source of Variation SS DF 39.43139.4316.1317.52117.527.17114.88472.44 .000 TESTS 7.17 Sex BY TESTS .010 WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd .256 Sex BY TESTS .132

Cell Means and Standard Deviations Variable .. War_4 Wars are used to increase territory. FACTOR CODE Mean Std. Dev. Ν female male Sex 5.054 1.214 35 2.094 4.942 12 Sex 5.026 1.463 For entire sample 47 Variable .. Gen_4 Genocides are used to increase territory FACTOR CODE Mean Std. Dev. N female 4.454 1.706 male 2.192 1.599 ire sample 3.877 1.938 35 Sex 12 Sex For entire sample 47 - - - - -Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation F Sig of F SS DF MS
 Sex
 25.21
 1
 25.21
 8.83
 .005

 WITHIN CELLS
 128.48
 88
 2.86
 Effect Size Measures Partial Source of Variation ETA Sqd .164 Sex Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares SS DF MS F Sig of F Source of Variation 50.14150.1423.28.00020.65120.659.59.00396.94452.15.003 TESTS Sex BY TESTS WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd TESTS .341 .176 Sex BY TESTS Cell Means and Standard Deviations Variable .. War 8 War is full of aggression. FACTOR CODE Mean Std. Dev. N female 5.532 1.142 37 Sex

male 4.967 1.593 Sex 4.967 1.373 5.394 1.273 12 For entire sample 49 - - - - -Variable .. Gen_8 Genocide is full of aggression. Mean Std. Dev. N FACTOR CODE .999 5.908 Sex female 37 male 1.957 5.025 12 Sex 5.692 1.332 49 For entire sample Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Siq of F 9.5119.514.57.03897.90892.08 Sex WITHIN CELLS _ _ _ _ _ _ _ _ _ _ _ _ Effect Size Measures Partial Source of Variation ETA Sqd .089 Sex Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F .85 .85 .397 TESTS 1 .73 Sex BY TESTS .46 1 .46 .39 .535 55.00 47 1.17 WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd .015 TESTS .008 Sex BY TESTS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Cell Means and Standard Deviations Variable .. War_9 Those participating in war see it as an honor. FACTOR CODE Mean Std. Dev. N 4.427 1.742 37 Sex female Sex male 4.800 1.887 12 4.518 1.765 For entire sample 49 Variable .. Gen_9 Those participating in genocide see it an honor, FACTOR CODE Mean Std. Dev. N 3.2302.1302.0751.750 Sex female 37 Sex male 12

2.947 2.087 49 For entire sample Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Siq of F
 Sex
 2.77
 1
 2.77
 .62
 .437

 WITHIN CELLS
 211.58
 89
 4.50
 Effect Size Measures Partial Source of Variation ETA Sqd .013 Sex Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 69.70169.7024.48.00010.57110.573.71.060133.82472.85 TESTS Sex BY TESTS WITHIN CELLS _ _ _ _ _ _ _ _ _ _ _ _ Effect Size Measures Partial Source of Variation ETA Sqd TESTS .342 Sex BY TESTS .073 Cell Means and Standard Deviations Variable .. War_13 Those who are not part of the war could possibly understand it. FACTOR CODE Mean Std. Dev. N female male 3.3751.9942.1001.5633.0561.961 Sex 36 Sex 12 48 For entire sample Variable .. Gen_13 Those who are not part of the genocide could not possibly understand it. Mean FACTOR CODE Std. Dev. Ν 3.4222.1483.6422.3533.4772.177 Sex female 36 male Sex 12 For entire sample 48 Analysis of Variance

Tests of Between-Subjects Effects.

AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F Sex 5.01 1 5.01 .89 .351 WITHIN CELLS 259.50 87 5.64 Effect Size Measures Partial Source of Variation ETA Sqd Sex .019 _ _ _ _ _ _ _ _ _ _ _ _ _ _ Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 1 TESTS 11.36 11.36 4.05 .050 10.05 Sex BY TESTS 10.05 3.59 1 .065 WITHIN CELLS 128.92 87 Effect Size Measures Partial Source of Variation ETA Sqd TESTS .081 .072 Sex BY TESTS Cell Means and Standard Deviations Variable .. War_14 All wars ultimately affect everyone in the world. FACTOR CODE Std. Dev. Mean N 37 Sex female 4.981 1.442 Sex male 5.664 1.669 11 1.507 5.138 48 For entire sample Variable .. Gen_14 All genocides ultimately affect everyone in the world. FACTOR CODE Mean Std. Dev. N Sex female 5.305 1.374 37 Sex male 4.636 1.965 11 5.152 1.532 For entire sample 48 Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Siq of F 1 .00 .00 .00 .988 Sex

88 3.67

WITHIN CELLS 168.66

Effect Size Measures Partial Source of Variation ETA Sqd Sex .000 Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 2.0912.092.37.1307.7417.748.78.00540.5888.88 TESTS Sex BY TESTS WITHIN CELLS _ _ _ _ _ _ _ _ _ _ _ - - - - - - - - - - - - -- - - - - - - - - -Effect Size Measures Partial Source of Variation ETA Sqd .049 TESTS .160 Sex BY TESTS Cell Means and Standard Deviations Variable .. War_15 War is an animalistic behavior. FACTOR CODE Mean Std. Dev. Ν female male 4.046 1.748 37 Sex 4.050 2.261 12 Sex 4.047 1.861 For entire sample 49 Variable .. Gen_15 Genocide is an animalistic behavior. FACTOR CODE Std. Dev. Ν Mean 5.065 1.666 3.275 2.064 4.627 1.914 female male 37 Sex 12 Sex For entire sample 49 _ _ _ _ _ _ Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 14.45 1 14.45 3.55 .066 191.30 89 4.07 Sex WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd .070 Sex

Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 1 .27 .748 .022 Effect Size Measures Partial Source of Variation ETA Sqd TESTS .002 Sex BY TESTS .107 TESTS Sex BY TESTS Cell Means and Standard Deviations Variable .. War_22 War is a test of strength and virtue. FACTOR CODE Mean Std. Dev. Ν 3.447 2.012 36 Sex female 5.1251.6923.8672.055 male Sex 12 48 For entire sample Variable .. Gen_22 Genocide is a test of strength and virtue. Mean Std. Dev. N FACTOR CODE female 2.833 2.045 male 1.492 1.899 .re sample 2.498 2.074 Sex 36 Sex 12 48 For entire sample Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F .51 1 .51 263.70 89 5.73 .09 .767 Sex WITHIN CELLS Effect Size Measures Partial Source of Variation ETA Sqd .002 Sex _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 81.18 1 81.18 39.09 .000 TESTS

41.03141.0319.76.00095.52892.08 Sex BY TESTS WITHIN CELLS - - - -_ _ _ _ _ _ _ _ _ _ _ _ _ Effect Size Measures Partial Source of Variation ETA Sqd .459 TESTS Sex BY TESTS .300 Cell Means and Standard Deviations Variable .. War_25 All human beings could be taught to fight in a war if there was enough of a threat. FACTOR CODE Mean Std. Dev. Ν female male 4.322 2.336 Sex 37 6.558 4.869 Sex 12 .504 For entire sample 2.257 49 Variable .. Gen_25 All human beings could be taught to fight in a genocide if there was enough of a threat. Mean FACTOR CODE Std. Dev. Ν female male 3.2462.4683.4502.0523.2962.354 37 Sex Sex 12 For entire sample 49 Analysis of Variance Tests of Between-Subjects Effects. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 26.99 26.99 3.53 .067 Sex 1 WITHIN CELLS 359.51 89 7.65 _ _ _ _ _ _ _ _ _ _ _ _ Effect Size Measures Partial Source of Variation ETA Sqd .070 Sex Analysis of Variance Tests involving 'TESTS' Within-Subject Effect. AVERAGED Tests of Significance for MEAS.1 using UNIQUE sums of squares Source of Variation SS DF MS F Sig of F 79.31 18.72 1 35.42 79.31 .000 TESTS 18.72 1 18.72 8.36 .006 105.23 89 2.24 Sex BY TESTS 8.36 .006 WITHIN CELLS _ _ _ _ _ _ _ Effect Size Measures Partial Source of Variation ETA Sqd TESTS .430 Sex BY TESTS .151