THE STRESS REVOLUTION: AN EXAMINATION OF ACCULTURATIVE STRESS AND AN

EMERGING MODERN HUMAN STRESS RESPONSE

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Proposal

I. Intent of Project

The intent of my senior project is to obtain a better understanding of the types of stressors and how they manifest themselves, psychologically and physiologically, in the modern world in relation with the phenomena of spending extensive time abroad in foreign cultural surroundings. I aim to establish the existence of a culturally evolved modern stress response in which modern society is so engrained in social and economic institutions that life or death becomes based on artificial creations. As opposed to the fight or flight response, my "promotion and devotion" response suggests that chronic biological responses are being activated by socially created stressors leading to increased risks in other health aspects. I have always been both fascinated with and a victim to the daily stresses of life and a broad literature supports the widespread effects of "culture shock" when traveling abroad. When I went abroad I found that the culture I was immersed had different concepts of stress and provided different daily stressors than I experience in the United States. This has led me to want to establish a better understanding of the acculturative meaning of stress. One benefit of this research is that it will lead to a better understanding of stress and stress management. Also, I hope to benefit the community of experienced and aspiring travelers as my results will be shared with the Cal Poly IEP office in order to help prospective students deal with what it means to live and study abroad. By studying the stressors involved in a wide array of traveling, from airports and air travel to going grocery shopping in the foreign culture, I can help others better understand the stress involved in traveling which will hopefully lead to an greater ability of stress management amongst this group of intrepid travelers. The primary research question is: How has the development of human societies altered the way in which humanity perceives stressors especially when dealing with modern capabilities such as global travel and studying abroad?

II. Research

I will be gathering research from a variety of sources. I am, of course, going to draw much from own times abroad and use my own thoughts and observations in the framework of my ethnography. Yet, to begin my 'hard' research I will spend a majority of the time dealing with literature in both modern stress and traveling. While it may be hard to find research pertaining to both of these together, I hope to take from different sources and combine them to achieve knowledge on stress and traveling, as a whole. In doing this, I hope to synthesize all research on stress and traveling in the modern world in order to

further illustrate that the "promotion and devotion" response is a real, emerging stress response system. I aim to then interview and survey students who have studied abroad in order to understand the stressors experienced while abroad and how the novel experience of traveling is a prime example of modernity and modern stressors.

III. Thesis

With all of this initial thought, I want to condense it into one thesis. It is through this research that I hope to be able to better understand stress. I want to be able to gain a better sense of the wide variety of different stressors that people are facing in this modern world. I hope to help people understand that the way they experience life and stress isn't the only way to do so and that it is, in fact, highly contingent on the culture they are surrounded in. This is shown when individuals are immersed in a foreign culture that has it's own stressors and the clash of the home stressors with the new culture. In doing so, I hope to both help students who are prospective study abroad participants and to help the world understand the variability in humanity and human societies and how these societies can create ultimate artificial institutions.

Annotated Bibliography

International Students' Reported English Fluency, Social Support Satisfaction, and Social Connectedness as Predictors of Acculturative Stress

      In this article, a survey was taken on international students who were studying abroad in America in order to assess their acculturative stress. Acculturative stress, in this study, "refers to the distinctive type of stress associated with individuals' cross-cultural encounters, which can manifest in physical, social and psychological problems. By handing out three different questionnaires, the researchers were able to gather enough information to deem that English fluency, social support and connectedness were all significant factors contributing to acculturative stress. English fluency is critical when studying in America, as it is the official language. Students who had low levels of fluency were more affected by acculturative stress as they felt uncomfortable with things such as asking questions in class or ordering food at a restaurant. The researchers found that students from European countries had an easier time with fluency levels as not only were most them fairly fluent in English, but many American cultural norms and behaviors are based from Europe so there was minimal adjustment. Also, social connectedness and support was important as many students from Asia, Africa, and Central/Latin America come from lives that value a close connection to important people in their lives. When coming to study in America they deal with acculturative stress as they have to adjust to the individualistic nature of American culture. These hypotheses fit greatly into my research as I am looking at acculturative stress cross-culturally and I really want to put an emphasis on those students who are studying in America.

Yeh, J. C., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly, Vol. 16 (No. 1).* Retrieved from http://www.tandfonline.com/doi/abs/10.1080/0951507031000114058.

Cultural and Gender Differences in Perceiving Stressors: a Cross-Cultural Investigation of African and Western Students in Chines Colleges

      In this article, a study was done on African and Western students who were studying abroad at Chinese colleges. The researchers wanted to find if perceived stressors while abroad were in any way correlated to stressors felt at home. This was evaluated by looking at four 'stress' categories: Interpersonal, Intrapersonal, Environmental, and Academic sources of stress. The surveys came back indicating that interpersonal problems were the most prevalent stressors affecting these students while abroad. African students found more stress in the difficulties of the Chinese language, conflict with parents and disagreements with room-mates. Western students found more stress in conflicts with their parents or room-mates, messy living conditions and serious arguments with instructors. The researchers also did this same study comparing stressors felt by male and female students. They found that interpersonal stresses were the most prevalent in these two groups as well. The researchers found that conflict with parents was the most straining of the daily stresses. While this study was done to see whether stress management programs would be necessary, it also shows how most of the highest rating

stressors felt when abroad could be present while the students were back in their home university. Conflict with parents and room-mates are both stressors that the American college student experiences in their chosen four-year university. This study is relevant to my research as it pertains to my cross-cultural look at acculturative stress and it has allowed me to relate some of my daily stressors to those felt by these African and Western students.

Hashim, H., I., & Zhiliang, Y. (2003). Cultural and gender differences in perceiving stressors: a   cross-cultural investigation of African and Western students in Chinese colleges. *Stress and Health, Vol. 19.* Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/smi.978/abstract.

Anxiety and Health Problems Related to Air Travel

In this article a study was done on air-travel passengers to determine how anxiety affects travel and how it correlates to travel related health problems. This study was done by doing surveys on passengers who either went to travel agencies for their planning or had gone to a travel clinic because of their complex travel plans. In order to find out how anxiety levels affected air travelers, the researchers determined what sort of ailments might be associated with anxiety. They compared short term (less than five hours) flights with long term (greater than five hours). They found two odd correlations. One, which makes sense, is that take-off and landing tended to be the most anxious part of the flight. Take-off and landing are the two highest risk parts of the flight so associated anxiety can be expected. Two other anxious moments in air travel were with travel delays and baggage claim. This is interesting because these two aspects of travel don't have any associated safety concerns. The researchers took this one step further to break down which types of delays cause the most anxiety. Aircraft faults, for example, caused very high anxiety as passengers related with this with the possibility of a plane crash. Then, they determined the coping mechanisms used by these travelers in order to alleviate anxiety. The studies concluded that those passengers with extremely high levels of anxiety turned towards alcohol more frequently. These individuals who used alcohol similarly smoked cigarettes, also, in order to alleviate anxiety. This pertains to my research in that I am going to be looking at stress associated with all aspects of travel and air travel is, in my opinion, one of the forms of travel associated with the most perceived stress.

McIntosh, B. I., et. al. (1998). Anxiety and Health Problems Related to Air Travel. *Journal of Travel Medicine, Vol. 5 (No. 4).* Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1708-8305.1998.tb00507.x/pdf.

Cross-Cultural Transitions and Wellness: Dealing with Culture Shock

In this article, the author aims to shed light on specific ideas behind culture, cultural transition, and culture shock. Although this isn't so much a study, it does a great job at defining and explaining key aspects of culture. It discussed how the anthropologist Kalervo Oberg introduced the concept of cultural shock as a mental illness. The article discusses how culture is a set of behaviors, expressions, and understanding that allows a person to be able to communicate, respond to their surroundings, and just be able to handle life better in their specific paradigm. Culture shock thus is a stressor brought about as a person tries to adjust to a new surrounding and paradigm. The author suggest that this 'shock' is brought about as a person tries to cope with the fact that all that they have learned to survive

in their particular environment won't work in the new one. These people making the cultural transition will, thus, have to try to learn the set of beliefs and norms associated with the new environment which bring about a lot of stress and readjustment. The author also brings up two terms that are associated with culture shock. Culture fatigue refers to the extreme tiredness brought about by the constant effort to making adjustments here and there to better live in the new cultural surroundings. Role shock is a stress response to when the expected role in the new cultural environment doesn't match what the actual role ends up being. Although this article was aimed at how counselors can help people prepare for culture shock, it is going to be really beneficial to my research. Considering that a sizable amount of my ethnography will be discussing culture shock and cultural adjustment, it is important to learn about what exactly is culture shock and ways that it is brought about and suppressed. I will be able to compare these with my own and others experiences with culture shock in order to better understand the stressors brought about by this transition.

Zapf, K. M. (1991). Cross-cultural transitions and wellness: Dealing with culture shock. *International Journal for the Advancement of Counseling, Vol. 14. Retrieved from* "http://wwwkrcmar.informatik.tu-muenchen.de/lehre %5Clv_materialien.nsf/intern01/632C3F776761A11BC1257871005959C6/$FILE/Paper %2021.pdf.

Stressors, Anxiety, Acculturation and Adjustment among International and North American Students

This article was a report of a study committed by researchers in an attempt to explain acculturation issues among European and Asian students temporarily living in the United States. They compared these two large groups to permanent US students while also breaking down each group regionally and making in-group comparisons. By administering various surveys and questionnaires, the researchers were able to gather information and make these comparisons. When comparing the broader groups of international versus US students, the gathered information came back with no statistical significance. When comparing European with Asian students, they found that Asian students had higher levels of anxiety, overall. Similarly, they found that Asian students found most difficulty with making new friends. On the other hand, European students had more cases of homesickness in that they perceived being away from family as the most difficult aspect. The authors conclude by discussing some answers as to why they found some of these results. One result that was of importance dealt with why Asian students had higher overall anxiety levels while being abroad. They contributed this to the more collectivist nature of Asian culture. The Asian students, inherently, had more pressure as they were representing not just themselves but their family and their home. Therefore, if they failed, it would be a reflection on more than just themselves which would add a lot of anxiety to the already stress-ridden aspect of acculturation. This article will be very useful to me as I want to base a lot of my work in doing cross-cultural analysis. Any studies I find, on top of my own, that address the different acculturative and stress experiences that international students undergo will be very beneficial and be used to support any of my original findings.

Fritz, V. M., Chin, D., & DeMarinis, V. (2008). Stressors, anxiety, acculturation and adjustment among international and North American students. *International Journal of Intercultural Relations, Vol. 32.* Retrieved from http://www.sciencedirect.com/science/article/pii/S0147176708000023.

Comparative Studies of Acculturative Stress

In this article, the authors did a study on four different groups that undergo acculturation in Canada. These four groups fall under those that are voluntarily there, Immigrants and Ethnic Groups, and those that are involuntarily there, Native Peoples and Refugees. The researchers also included a middle group, Sojourners, which were used as a comparatively mild sample group. This article was great in that it defined Acculturative Stress. The authors defined it as, "a reduction in the health status of individuals, and may include physical, psychological and social aspects; to qualify as acculturative stress, these changes should be related in a systematic way to known features of the acculturation process…" They found, as expected, that both of the involuntary groups, Native Peoples and Refugees, experienced the highest levels of acculturative stress. This research dives deeper into what is causing the stress as they take it beyond just the fact that the larger Eurocanadian culture is different from all of the groups who were studied. They found that education was an important predictor of stress. The higher the education of an individual the lower their acculturative stress. This was attributed to one notion that education is highly valued in European society; therefore those with high education already had sort of a 'head start' in the acculturation process. Another hypothesis as to why education was a significant predictor came from the fact that those with higher education will have a mindset that is enveloped around perceiving much of life in challenges and opportunity. This can correlate to those with higher education to viewing the acculturation process as a challenge or opportunity opposed to a stressor. A few other interesting predictors of low stress were associated with "push" and "pull" factors. Those who were pushed to leave due to harsh conditions at home may have high stress upon arrival because they didn't want to leave in the first place. However, those pulled to leave by the allure of travel and prestige also experience acculturative stress as their initial expectations could have been too high. Two other interesting predictors dealt with climate and food preference. The authors cited Minde (1985) as finding correlations between acculturative stress levels and the relationship and preference of food and climate. Minde found that those people who came to Canada where their home country had a similar climate as Canada had lower stress levels. Also, those who enjoyed Canadian food had lower stress levels and less of a tough time acculturating. This article is great in providing a lot of background information and support for the notion of acculturative stress. This will help greatly in my research as I now have predictors of acculturative stress and other groups of people to which it affects that will further my research into the cross-cultural examination of these travel associated stressors.

Berry, W. J., et. al. (1987). Comparative Studies of Acculturative Stress. *International Migration Review, Vol. 21 (No. 3).* Retrieved from http://www.jstor.org/stable/2546607.

Culture as a Stressor: A Revised Model of Biocultural Interaction

This article creates a depiction of how the idea of culture can actually buffer, not hinder, stressors on the individual. It discusses not how specific cultures lead to increased level of stressors, but how the concept and meaning of culture actually allocate risks on certain members of society. Here, an emphasis is placed on socioeconomic status as being greatly affected by the stressors brought on by culture. First, the article discusses four ways in which culture creates added stressors. One way is that culture leads to the invention of new materials. The authors discuss how societies, as they develop and create new goals and ideologies, create artificial materials such as DDT that can add physiological

stressors on to health. Another stressor comes in the form of culture leading to a concentration of natural resources. The authors use Lead and Mercury as an example. Both of these are naturally occurring materials, yet as societies form and cultural ideas are born, emphasis will be placed on resource gathering and production. This can lead to the emissions of Lead into the environment, and/or the buildup of Mercury in living things that then directly affect human health. The third stressor is the notion that culture changes the timing of which infectious diseases are exposed to populations. The example here is with the polio virus. As it was greatly effecting mass amounts of populations, societies began to sanitize and adjust their cultural norms and values to a more clean and sanitary environment. This lead to the polio virus to stop affecting infants as birthing became a more clean and artificial affair. However, this led to the polio virus affecting adolescents which caused more cases of paralysis than ever before. The fourth stressor is how these risks are allocated to different groups within the society, particularly pertaining to socioeconomic status. The authors then move on to focus on the notion of Risk Focusing. This is when risks of exposure to toxic and infectious agents are allocated to an individual, causing them to join a certain social/cultural group, which leads to further exposure. The example used in the article discusses how a toxic exposure can cause an individual to experience some disability which suppresses their ability to find good work which leads them to move socially downward. When this individual has been 'forced' into a lower social class their living arrangements change and they are often pushed into low sanitation, high risk environments that further increase their exposure to toxic and infectious materials. This article, while not particularly pertaining to acculturative stress, provides a good analysis on some biocultural effects of culture. While I most likely won't interview anyone who has experienced these physiological health constraints, it is good to know of how culture and society can effect an individual on such a physical level that it leads to a continuing cycle of increased risk and decreased social standing.

Schell, M. L. (1997). Culture as a Stressor: A Revised Model of Biocultural Interaction. *American Journal of Physical Anthropology, Vol. 102*. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9034039.

Cultural Shock and Adaptation

        In this article, Winkelman lays down the foundation to what is Culture Shock and provides a host of ways in which to best cope with it. First, he establishes and describes the four stages associated with culture shock. The first phase is the honeymoon phase. This is marked by increased excitement, sleeplessness and interest in the new and foreign environment. The honeymoon phase transitions into the second stage of crises and shock. This stage is brought out when minor problems become major problems. Irritability for the new culture begins to form and people begin to be preoccupied with the differences they notice in the new environment. If the individual makes it through this stress ridden second stage, a phase of adjustment and reorientation begins. This is when issues of cultural shock are resolved and the new culture makes sense. The final phase is the adaptation, or acculturation, stage. This is when the individual can manage the new surroundings and can actually resolve problems in the culturally appropriate ways. This final phase is marked by the individual understanding and feeling a part of their new cultural surroundings. The stressors brought about by culture shock come from a variety of sources. One of these causes is from cognitive fatigue. Cognitive fatigue is the stress brought out by the challenges of understanding the new culture. This is when the individual must make a conscious effort to interpret the language, understand the food, behave appropriate, and have successful

social interactions. This can lead to an "information overload" which can lead to great amounts of stress and exhaustion. Another cause of this stress is from personal shock. This is marked by the intense change in personal life when one travels. The individual often loses their sense of intimacy as they have left those they care most about behind. They also have self-esteem and identity issues as they are surrounded by all these uncomfortable and unknown. Winkelmen cites Rhinesmith as suggesting that, "cultural shock may induce a 'transient neurosis.'" Winkelmen then goes on to discuss some ways to manage and 'survive' this culture shock. One way is through predeparture preparation. When an individual is prepared for the effects of cultural shock, these effects will be lessened. This is a fairly simple managing strategy. Another way of managing is through personal and social relations. Not only can a person lessen their cultural shock by making friends with people living in the foreign environment, but these effects can be dampened also by maintaining contact with loved ones back home. Keeping up with and learning about happenings in their home environments, a person can still feel connected to their friends and family back home which could instill confidence needed to further their social lives in their new environment. When I discuss culture shock in my ethnography this will be a perfect article in which I can use to define and discuss the basic ideas and concepts that are behind the stressors brought about by cultural shock.

Winkelman, M. (Nov. 1994). Cultural shock and adaptation. *Journal of Counseling and Development, Vol. 73 (No. 2).* Retrieved from
http://www.ciee.org/studycenters/LinkClick.aspx?fileticket=o9jwtWwbdF%3D&tabid=362&mid=868.

Why Zebras Don't Get Ulcers

This book is all about the physiological factors that are associated with stress and stress related illnesses. Sapolsky does a great job at first talking about what happens inside the body when a person is exposed to a stressor. He does this by also comparing humanity's stress response with that of an animal, notably a zebra. He talks about how our stress response can lead to illness because we have prolonged stress responses to seemingly artificial situations such as who will you ask to the prom? Throughout the book, Sapolsky discusses how the stress response can lead to a variety of different effects and illnesses. However, he then concludes by discussing how one might limit their chronic stress and how to live a life with minimal prolonged stress. This book will be of incredible use in my research. I can use it when discussing the foundations behind stress, in general, to be able to establish how it affects the body. I will then be able to suggest ways in which the stress response is 'activated' when traveling and how the particular response will effect a person, physiologically, while in transit. Also, I will be able to use some of his conclusions in order to provide ways in which one can limit prolonged stress while traveling, specifically.

Sapolsky, M., R. (1994). *Why Zebras Don't Get Ulcers.* New York: St. Martin's Griffin.

Medical Anthroplogy: A Biocultural Approach.

Although this book focuses on medical anthropology as its own field, it has one chapter all devoted to stress. This chapter discusses the physiological effects of prolonged stress. It also delves into issues of how certain groups of people experience higher levels of stress and how it effects their

lives. It talks about people of lower socioeconomic deal with higher levels of prolonged stress while being completely out of the hands of the people living in these conditions. It also talks about what this means for that particular community and how it effects people at the level of the individual. It also mentions aspects of stress that pertain specifically to race and ethnicity. Similar to Sapolsky's work, this chapter discusses the types of illnesses that are associated with prolonged stress and how they are brought about. This is going to be of great use for my research. I can periodically turn to this book in order to gain a better framework on stressors in humanity. When introducing the topic of stressors and prolonged stress, I can use this book to better introduce some of the more 'behind-the-scenes' aspects that are associated with the stress response.

Wiley, S., A. & Allen, S., J. (2009). *Medical Anthropology: A Biocultural Approach*. New York: Oxford University Press.

Outline

Introduction – Overview of 'innate' human stress response system
  -fight or flight
    -only way to experience stress?
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    -"promotion or devotion"
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The Stress Revolution: An Examination of Acculturative Stress and an Emerging Modern Human

Stress Response

        Citizens of the modern, Western world are expected to live in a constant hustle and bustle. The non-stop rhetoric is everywhere. We're supposed to work as hard as we can, take on as much stress as we can, and then take a relaxing vacation or retire to a post-productive life of little stress and few worries. This is even generally reinforced in professional fields, where the most stressful jobs are often the ones that are most highly rewarded. Western society has justified and accepted these ideas with the scientific explanations that stress is a natural part of any organism and, in fact, that life forms have proven the universality of stress by having the perfect defense against it. This comes in the form of the fight-or-flight response, which even to this day is still used as a means to warrant highly stressful lives and even celebrate the ability to overcome each and every stressful challenge. While this paper will discuss the biological nature of stress and the physiological response to stressors, it will also argue that the fight-or-flight response is an archaic mechanism for humanity's modern world, and that, as a species, humans have moved to a whole new idea of what it means to stress and to an unprecedented level of complexity that leaves fight-or-flight responding to an environmental mismatch. This new response comes in the form of what I call, the 'promotion and devotion' stress response model. 'Promotion and devotion' is used to illustrate how humans are biologically responding to stressors that are created by the ideas and beliefs of the larger society. The name of this response system comes in light of the rigid and intense emphasis Western society has placed on individual success and having an established social role. In searching for examples of this modern stress response, one can look at urban development and it's associated stressors. It is also important to examine theories that attempt to explain the general patterns of stress and culture. One way of explaining modern stress is through Lifestyle Incongruity Theory, which suggests that chronic stress can occur when an individuals status doesn't match with socioeconomic standing of the larger society. Another far-reaching, and often overlooked, example of cultural stress that utilizes the Life Incongruity Stress theory is the idea of travel and especially studying abroad. Using experiences and data from my research on study abroad students, I will show how traveling and being a 'tourist' are completely modern phenomena that involve a host of natural and artificial experiences, such as the intermingling of multiple cultures, people, and

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personality. Along with it comes a clash of stress as personal, cultural, and new stressors collide and form an extreme potential of impacts on both the individual and the experience as a whole.

An easy way to begin a discussion of the biological side of stress is to look at the different emotions associated with it. And don't worry, I'm not about to tell you that stress makes you love your mom and want to kill your dad. The common words, or emotions, that one talks about and displays with under stress are usually: anxiety, absent-mindedness, tension, fatigue, nervousness, inattentiveness. While all of these are associated with stress and are usually emotions that no one likes to feel, one of these words is at the same time the perfect word to describe the feelings of stress and the inner workings to it; and that word is *nervous*. Feeling nervous is often a response to a life stressor and is experienced at the onset of feeling 'stressed.' Feeling *nervous* is associated with stress and the system within our bodies that initiates the stress response. That system is the autonomic nervous system. The nervous system is central to many actions in our body as it deals with the messages being issued by the brain. The nerves in our body are what receive these messages which then tell certain parts of our body to act a certain way. A clear example of this is with arm movements. You want to move your arm, your brain tells the nerves to then tell your arm muscles to go ahead and start waving.

The nervous system is further broken down between the sympathetic and the parasympathetic systems. This is a pair that is of upmost importance to stress. The sympathetic system is the active, go-getter of the group. When they exit the brain, sympathetic signals stretch to all corners of the body and deal with things like activation, arousal, and mobilization (Sapolsky 22). What makes this clearer is the association that the sympathetic nervous system has with adrenaline. Almost everyone can relate to adrenaline and know it's association with any high octane or high risk event. Adrenaline and Noradrenaline (also known as Epinephrine and Norephinephrine) both have their say when it comes to the stress response. Adrenaline is a hormone secreted that activates metabolic functions which then help to release and mobilize energy in an organism to give them the push they need to get through any apparently dangerous situation. Noradrenaline is a neurotransmitter which causes cardiovascular changes that are in direct response to the situation at hand (Goldstein 2010). These chemical releases from the sympathetic nervous system are responsible for many visible and non-visible functions of the stress response. Some things often associated with stress such as sweating and increased heart rate arise

from the messages delivered by adrenaline. Other reactions to the stress response, such as blood flow to the muscles and a decrease in appetite, are also associated with adrenaline releasing in the body (Wiley & Allen 2009). This all makes sense as in normal stressful situations, i.e. a life or death one, like those that honed our evolved stress response. In that situation, you aren't going to want to be eating or sitting around; you are going to want blood flowing to your muscles and to your heart to increase your personal mobilization while not thinking about wasteful activities such as eating. The parasympathetic is responsible for the much of the recovery after a stress response. This arm of the nervous system acts to slow down blood flow and heart rate and to kick digestion and appetite back into gear. Adrenaline and noradrenaline, while being critical for deployment during the onset of a stressor, are not the only hormones involved in the stress response. Other hormones are involved with the settling down of the body and in initiating things like appetite to kick back in.

Understanding the hormonal stress response, is important to understanding the effect that stress has on our lives. It is important because, as mentioned above, most of these hormones are excreted ultimately from the brain. While adrenaline and noradrenaline help the body mobilize during the stressful situation, the brain releases hormones that are more of a targeted response to the specific stress, which leads to some interesting outcomes. It is important to make this distinction because it is our brains that process life events and *perceive* stressors while simultaneously releasing hormones and sending messages to cope with the stress event. Hormones critical to our stress response are glucocorticoids, among which is cortisol. These are released in response to the brain sending the hypothalamus a message which goes on to the pituitary gland (Lupien et. al. 2005). The pituitary gland releases corticotrophins which stimulates the release of cortisol which has it's own set of receptors. These receptors bind to the receptors of critical organs that are either stimulated or suppressed in the stress response (Wiley & Allen 2009). This relates back to the earlier discussion on the nervous system. If you are running for your life, you don't want to be hungry. Therefore cortisol is the agent responsible for binding with your digestive tract to inhibit it and thus suppress appetite and digestion. Cortisol has a very interesting impact in the cool down period after a stress response.

While this paper doesn't have the aim to illustrate all the 'scares' of stress, it is important to note the impacts it can have on health. Cortisol is released before the recovery after the stress response.

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Whereas adrenaline and noradrenaline act in a matter of seconds to quickly get the body mobilized, glucocorticoids can take hours to work their magic (Sapolsky 2004). Glucocorticoids, then, take some time to mediate the stress response and help in the mobilization of energy for a fight-or-flight situation. This makes sense for any animal in a steady prey-predator chase where energy is continually needed to be used up. However, amongst humans, how does this effect the office worker thinking stressful thoughts on and off, therefore creating an almost nonstop release of these hormones?

The lingering of our biological response to stress in a world of cultural evolution has led to many unprecedented and unfortunate outcomes. Humans living in modern, developed societies are essentially using floppy disks to save files off a Macbook. The biological stress response is an outdated piece of human technology which is surviving in the modern world through humanity's ability to culturally buffer against natural calamities. As culture, society, and technology became increasingly developed, humanity was able to move past a wide array of dangers while not allowing their bodies to naturally evolve to catch up. This has led to the development of chronic stress, where the bodily stress response is trying to help the person by attempting to buffer against created stressors that are no longer about life or death. The prevention of proper biological evolution by cultural evolution has ultimately led to a mismatch of biology and environment where societal and mentally constructed stressors are causing the body to constantly utilize the stress response system. The health consequences of culturally buffered stress is emerging and creating linkages to issues that normally would be far removed from stress.

Take hypertension, diabetes, and arterial disease as a few of these 'scares'. While most, if not, all of these are often associated with eating habits of the Western world (rightly so), they are further made a problem through the stress response. Think back to the mobilization of the body during a stress response. The sympathetic nervous system hits right off the bat by increasing blood flow and heart rate. It also releases insulin which then continues to break down glucose for the energy the body needs. This is all great during a normal stress response, one that is over almost as soon as it starts. But, what happens when humans can think, analyze, and stress for hours on end? Chronic stress. This is characterized by on and off repetitive reactions to perceived stressors. Chronic stress can arise from obsessive compulsive tendencies and the constant worrying about simple things such as if the front

door was locked when you left home. It can also arise from someone jumping from stressor to stressor, like worrying about getting a paper turned in on time and then worrying about the person they have a crush on, then worrying about if they will have time to cook dinner or what to wear. Either way, chronic stress physiologically leads to the body constantly increasing blood flow, heart rate, the release of insulin, and appetite suppression. While the constant turning on and off of the stress response associated with societal ideals and motivation leads to rapid sympathetic action followed by rapid parasympathetic action. However, one thing that doesn't switch on and off are glucocorticoids, like cortisol.

If you constantly stress, to make a long story short, you are constantly releasing glucocorticoids as each activation of the stress response releases them, yet they take hours to do the work and get out of your system. If you continually have glucocorticoids telling your body to increase blood flow, that is going to lead to immense pounding on arterial walls. When the arteries are placed under constant strenuous work, they have to work harder themselves which usually leads to tearing of the arterial wall. The natural bodily response is to release antibodies for anti-inflammatory means. At the same time, other fat-heavy cells are migrating to this new crater and ultimately this 'stuff' accumulates in your damaged artery and leads to what is known as an atherosclerotic plaque (Sapolsky 2004).

Relating to the heart, this increase in blood flow and the subsequent increase in heart rate leads to other problems. With cortisol consistently elevating blood pressure and heart rate, more blood is returning to your heart. Blood exits the right side of the heart and it returns in the left side. With increasing amounts of blood entering the heart in the left ventricles, it leads to a lopsidedness which is known as left ventricular hypertrophy. If this doesn't sound bad enough, the elevated blood pressure that is associated with both of these impacts is, at its core, the cause of hypertension: chronically elevated blood pressure. Therefore, in the process of getting these plaques and a lopsided heart, you are also increasing your chances of hypertension (p. 42).

The same is true for diabetes. With chronic activation of the sympathetic nervous system and subsequent constant release of glucocorticoids your body is going to want to be consistently mobilizing energy to help with the fight-or-flight response. In order to do this, insulin is required to maintain energy storage for growth, development, and other metabolic functions (Porte 2006). This is done

through protein synthesis and glycogen storage. Both of these processes link long chains of amino acids (protein synthesis) and glucose molecules (glycogen) to make them easier to store and more able to be used in future times (Sapolsky 2004). Thus, during times of stress, glucocorticoids send the message out to these fatty cells to virtually ignore insulin so that they are broken down and mobilized to provide that needed energy to survive the incident. Have too much chronic stress and too much glucocorticoids and next thing you know your fatty cells have been told so regularly to ignore insulin that they stop paying attention to it all together. Robert Sapolsky, a noted anthropologist in the field of stress studies, sums this up in one quick and easy sentence, "Stress promotes insulin resistance" (64). The development of insulin resistance through chronic stress can be so great that the body both rejects and is completely resistant to insulin, which puts a person dangerously close to being diagnosed with Type-II Diabetes. As shown, stress is never the sole cause of any of these illness but is somewhat of a speed boost accelerating these issues to the forefront of being a deleterious disease that has effects on mortality. Don't let the negatives deter you from embracing the world of stress. It is crucial to understand the impacts of the stress response system to understand how humans differ from other animals and to realize the importance that the socially approved "super stressed" lifestyle has on everyday health.

The preceding discussion spent a lot of time detailing chronic stress. The ideas of wealth, success, and status being tied with ideas of constant productiveness has led most of Western society to assume that chronic stress is a normal aspect of life and that the negatives associated with it are also normal and, thus, natural. Yet, chronic stress is almost synonymous with cultural stress. In a natural environment, an animal perceives a threat, experiences the physiological response, and acts to preserve its life. It has just employed its fight-or-flight response to a natural stress. Modern humans, however, have their existence tied to the cultural environment. There is no humanity without culture. Tigers have agility, bears have strength, birds have wings, and humans have culture; that is our means to survival and that is our means to defense. We have made a trade off in our evolutionary trajectory. We are not the strongest or the biggest creature, but make up for those physical weaknesses with our overwhelmingly large brains and it's capacity to create culture. Thus, as we built buildings, constructed tools, discovered innovation, found meaning, applied symbols, and formed rules and societies; we were

ever attempting to survive and break away from the harsh natural environment that we did not evolve defenses against. Yet, this has shown the unexpected side effect that with the artificial creation of safety comes the artificial creations of danger and insecurity. Real dangers including famine and disease epidemics exist. While all of these existed without cultural creations, it is the fact that these dangers are also cultural creations in that they are responding to the artificiality that humans depend on for survival. Thus many of the stressors that most of us experience, as life-or-death as they seem, are mainly cultural creations on which societies place so much emphasis that they seemingly become life-or-death.

This is ultimately the "promotion and devotion" model. Humans less often need the fight-or-flight response. Fight-or-flight is a defense mechanism against physical threats. The human stress response is now responding mainly to cultural stress in the areas of social bonding and individual success, as these are the ways in which Western society finds a place for those 'fittest for survival.' One clear example of these cultural creations and the social/success driven stressors associated with them is with quite possibly the biggest creation of them all. A creation that encompasses all aspects of modern humanity and one that paints the clearest picture of created stressors that become life-or-death. That cultural creation is cities and all the urbanity associated with them.

City life has been historically and contemporarily heralded as a sanctity for the entrepreneur trying to make it big, for the corporate CEO to have an environment of constant consumerism, and for the deprived family seeking expanded opportunities in an economically unjust world. Urban environments are exciting. These are the universal human melting pots where people from all different ethnic, cultural, societal, and economic backgrounds mingle and intertwine creating a bastion for the best examples of human variation. One aspect of cities that most people don't often think about is the host of stressors that are particular to this artificial environment. Whether it is social, economic, or environmental (physically), the stressor will exist in the city. This is important to bring to light because urban life, and previous development, is a novel human experience. Only in the last 2% of human existence have we even began to have the means to create these human 'magnets.' For most of humanity's existence, life consisted of days spent finding food and relaxing.

Cities and city life, however, brought about the real concept of 'schedules' and became addicted with productivity and punctuality. Now, in these environments, people need to be up at 6:00am to make the kids breakfast, then get the kids ready and off to school, be at work by 9:00, go to lunch at 12:00, be back at work at 1:00, leave work at 5:00, and try to squeeze in going to the gym and grocery shopping before being home for dinner at 5:00, and so on until finally their head hits the pillow. City life has gotten rid of the concept of leisure time and to be a successful individual, a person must be as productive as possible, only relax and spend time with family on vacation, the weekend, or in retirement. Cities, historically, were developed to concentrate economic activity to one location, usually near a key resource, where the inhabitants constantly worked to produce the economic good for which that city existed for. This has all led to the development of unique stressors that are all products of what urban life has created which are not only artificial and unnecessary, but are also leading to hardships and contributing to those already in force against certain sub communities such as the effects of urban blight on adolescent female menarche.

One of the immediate stressors brought about by living the city life results from the notion of unfamiliarity. When a city begins to draw those from the periphery into its confines, it brings together individuals from all different backgrounds under 'one roof.' This led to a marked shift from knowing everyone in your community because they were all family, to a whole host of strangers converging and attempting to interact with each other. What developed from this is what I'm calling the "Hey, what're you looking at" stressor, which is one that I am personally and constantly affected by. Never before the advent of sedentary lifestyle and the subsequent urban explosion were humans exposed to others that they were unfamiliar with. Throughout human existence, people spent their lives surrounded by extended family in small groups where everybody knew everyone. While this crop up of strangers led to a host of very specific stressors, overall the idea of not knowing one's neighbor is a great stressor that everyone in the urban environment must deal with. To briefly look at the trail of stressors would be to begin with what the taken for granted concept of 'strangers' does to a person. Since this is an artificial concept created from the conglomeration of people in one densely packed place, humans still have trouble gripping this notion. Just think of the last time you were walking downtown at night and a stranger was walking towards you in the opposite direction. Did you think about how badly you wanted

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to give them a hug and share life stories? Or, more likely, did you think about crossing the street so you wouldn't cross paths with a potential burglar? Think back to the previous discussion on the physiological stress response. You see this stranger, you aren't sure of their motives; your sympathetic nervous system kicks into gear and releases adrenaline, elevating blood pressure and heart rate. Bingo, you've had a biological stress response to something that is utterly a human created concept. Now, how many times per day do you pass a complete stranger in the city or town you live in?

Now let's take a look at an urban stressor that is a little bit more physical. The economic situations brought about by globalization, trickling to larger societal trends, realized at the city level all contribute to the unique stressors experienced by the urban individual. These are known as distal stressors. Distal stressors are essentially stressors felt at the individual level that are products from distant and far away social and/or economic factors (Ensel & Lin 1996). This type of stressor is a perfect example of the "promotion and devotion" model as it shows how cultural ideas and creations effect those not involved in that particular idea or creation. A study by M. Bennet and David Miller aimed to show the effects of distal stressors on the individual life-stress experience. They examined the effects of larger societal changes, such as economic downturn and modes of production, on particular neighborhoods and the individuals that inhabit them. They suggest that when a large society takes a hit to their economy, it is the communities within that are affected. With a weakened economy, the job market will become more competitive as modes of production might change leading to a shift in job demands or open positions dwindle as industry becomes less lucrative. This can lead to, "increase in crime, drug trafficking, and other forms of illicit activity that may be the result of poverty, joblessness, and worker displacement…" (306). As crime and deviant behavior increases due to stress brought about by lack of jobs, the physical environment will begin to alter. As a neighborhood becomes economically successful because of larger societal trends, there will be a subsequent deterioration of the neighborhood itself as money can't go into necessary improvements (Bennett and Miler 2006). Living in and constantly being engulfed in a blighted community with dilapidated buildings, graffiti, broken windows, and sirens and gunshots leads to a constant feeling of threat. These feelings running rampant within the individual on a daily basis will lead to the stress response running rampant. There is a both a positive feedback and an accumulation of stress occurring in blighted environments where the

increase in crime and danger leads to a lack of attention given to the environment which in turn increases the crime and stress of that environment.

The continuation of perceived danger and insecurity of surrounding physical urban environments has led to changes in human life and development that is unprecedented in any other time. This shows the true force of culture and the ability of humans to not only effect their surroundings for survival, but also exemplifies how human culture is exceeding the bounds of biological evolution, at least where stress is concerned. Modern cultures of the Western world have created a society that places more emphasis on individual success and social belonging than it does on food acquisition. This has led to the issue of many not being able to find a place to 'fit in' in their own environments and societies. Because of these constructed roles, many people are constantly struggling for acceptance by their peers, as that is quite literally the modern way to survive. Many people don't have equal access to quality resources, which places them at a disadvantage and leads to chronic stress. More importantly, the capitalist mentality has so strongly pushed for individual success and accumulation of wealth that there is a lack of attention paid to the disadvantaged community leading to derelict neighborhoods and buildings and ultimately an impoverished sub-culture. Research has clearly shown the stress that is caused by the loss of hope perceived in abandoned and blighted buildings. These environments can lead to other consequences such as the stress felt by adolescent females. Living in these uncared for environments means living in an environment where safety, security, and survival are constantly in question. The stresses felt by children in these environments have been shown to lead to early menarche, or age at first menstruation, in females. Early menarche then leads to early sexual maturation and early pregnancy (Wiley & Allen 2009). Therefore, some of the issues surrounding teen pregnancies can be traced to the public sphere's lack of attention to these disadvantaged areas and the most unfortunate aspect of all of this is that the teenage girls, their friends, or their parents are often to blame in order to detract away from the societal problem of lack of equal attention and care to all. The importance of discussing the stressors associated with urbanization comes to light with it's connection to over-arching societal and global trends. A key starting point to further this connection is with the place widely regarded as the most infatuated with urbanization: America.

We all know what stresses us out most in America, and I believe it is the center of adapting the "promotion and devotion" stress response. The American way is proud of it's creation of seemingly endless choice, opportunity and interaction. Our society, in response to rising capitalist tendencies tracing back to the Industrial Revolution, has created a cultural institution where the social sphere is virtually everything. What an individual does in the eye of the public can literally make or break someone's standing and livelihood. We have a mentality of creating rigid socially acceptable behavior which simultaneously, and quite obviously, creates huge stigma against those that don't show these acceptable behaviors and ideals. This has led to the creation of very unique stressors.

One aspect of the Western stress environment is that the 'environment' is no longer a stressor. The natural world, which was once the main stressor leading to life or death, is now completely and utterly controlled by human existence. America, in particular, has made a point to eliminate these 'harsh realities' that life is challenging and is supposed to be a constant battle for survival and reproduction. Instead, by creating a society, and virtually a world, based on comfort has transformed much of our stressors to a human created concept of stress. And these concepts are engulfed in social situations which America deems as the most fundamental institution of life. If you go outside with unkept hair or you smell bad, that is greatly going to effect your social situation and could lead to impact things that, today, are key to survival such as having a job. The creation of a capitalist culture has led to a drastic shift in what humans view as being stressful and in an increasingly globalized world with trends heading towards capitalism, this is a vast phenomena.

The emerging global capitalist trends can leave one tricked into thinking it as the only way to live life, and rightfully so. Human created societal and economic factors are imprinted into every facet of life creating artificial and rapid stressors which effect local communities. However, this discussion of urban life and stress is not my way of saying that city life is "bad" and should be avoided. In contemporary times, with over half of the global population living in urban centers, something about it is obviously attractive to modern humans (WHO). In most industrial urban areas, people are concerned with involving themselves in the production sector in order to make a living, sometimes striving to be rich and sometimes just making ends meet. However, it is only because of a trend toward a single, global culture with societal patterns all around the world being formed on increasingly material and

individual success driven motives, that so much of an individual's happiness and health is centered around economic ideals where material success and individual desire for belonging becomes life or death. In these urban societies, a person strives for accumulating wealth in order to raise social status through material accumulation, while they also need wealth in order to afford medical attention and a high quality life. Yet, there are still societies in existence today that aren't so engrained in the material sector.

In India, such a society does exist. In the Indian state of Kerala, materially driven economic output is not the primary concern. Though, the overall trend of Indian society is increasingly toward development, industrialization, and a desire for material wealth. This economic trend has given rise to some massive urban areas such as Delhi and Mumbai that are the cultural, economic, and industrialized centers of the country. Delhi and Mumbai, with populations of roughly 28 million and 25 million respectively, are two of the top megacities in the world and controls more power than entire states, such as Kerala (Dash 2012). Obviously, inhabitants of these cities experience much of the urban stress previously mentioned, probably to a higher degree than most cities. So, Kerala is not a part of some unique nation that has decided not to be mainstream and abide by the 'pop-culture' of capital and development. It is a state that is a member to one of fastest growing economies in the world. Kerala is unique in that it seems to have separated itself from the larger mentality, and culture, of India that industrialization and materiality are the right direction for humanity. By economic, and most certainly Western, standards Kerala is economically poor and, "[its] per capita income is among the lowest in India..." (Wiley and Allen 2009). Therefore, we would expect to see socioeconomic related stressors such as poor nutrition and high crime rates. Yet, Kerala has been indexed as one of the healthiest states in India. Despite their low amounts of material 'contribution' to the world and their low amounts of material wealth of each individual, Kerala is doing remarkably well as an independent community. This has been attributed to things like strong social cohesion, strong labor unions, high female literacy, and accessible healthcare (Wiley & Allen 2009). While Kerala isn't necessarily a city, it is a representation of the variation that still exists in today's societies. Major urban centers are all exhibiting these capitalist, economically driven properties and the fact that entire states are exhibiting differing trends

shows the power of culture. Nonetheless, the power and culture of urbanization is a strong and present factor worldwide where people and the modern stress response converge under one 'roof.'

Setting Kerala aside as a powerful, positive example of alterations in modern stress, cities are still a great example point in this discussion of a world of emerging modern, artificial stressors. A city is a storehouse of human culture in that a city is both the intellectual foundation of meaning where the ideas of cities can be created and the physical foundation of concrete, electrical wiring, transportation, politics, and production that is all culture and culturally created. Cities are also a house to all things changing about humanity and our response to stress. Cities represent the upper echelon of artificial institutions and the created stressors associated with these institutions. It is in cities, and modern society, where the need to abide by a certain role and 'fit in' far exceeds in survival than that of safe shelter and an adequate food supply. Cities can be thought of as one of the first major turning points in humanity's shift away from fight-or-flight. Now, since humans have always existed and can only exist with culture, our ideas, beliefs, and perceived stressors have been shifting ever since the dawn of modern humans. And yet, it is the conglomeration of populations under a single system of production, politics, and cultures that the vast variety of human potential and ideas collide which ultimately creates unnecessary social institutions and inequality that bleeds into the artificial stressors we have created. A viable next step in this observation of a shifting stress response is to look at, once humans have established themselves in cities under the influence of larger societies and cultures, the effects of subsequent shifting, wide-sweeping changes (i.e. collapses) of these societies and their effects on the individual stress response.

Cities and large modern societies have had the ability to subdue and control the natural world by concentrating populations in confined, productive sector where natural events are kept at bay. This has led to a world where tornadoes, hurricanes, and tsunamis, while all inherently dangerous, can cause magnitudes more damage when striking an area of highly dense populations. In the natural environments, these climatic events leave behind seemingly barren landscapes. Yet, these landscapes are now the site of mass succession as species, both old and new, find the site habitable and begin to draw in other species eventually building a resilient, diverse ecosystem. This sort of change occurs when devastating events strikes large cities, yet it only concerns the artificiality of a dollar amount and

to how much it will cost the city and government to repair the damage. What is even more artificial and removed from the natural world, is that larger societies can create change that can sometimes leave it's inhabitants in worse conditions than from that of a natural event as these changes are often prolonged for years. These changes come in the form of digital stock numbers plummeting causing sheer panic and chaos. They can also be from governmental change or even an environmental event which opens the public's eyes to the inability or apathy of their government to respond and rebuild. Ultimately, modern society, having placed so much of livelihoods in economics and social integration, can instill change that is strictly economic or social – effecting people's health over the long term instead of the immediacy of a natural event.

These modern changes brought about from living in a large, modern, and artificial society have been shown to have profound effects on the psyche and health status of it's inhabitants. These effects are encompassed by the Lifestyle Incongruity (LI) stress theory. The LI theory deals with the way in which people respond to societal, cultural change and the stress associated with that response. Tom McDade sums up the definition of lifestyle incongruity by saying that it, "...emphasizes the disparity between material lifestyle, measured as the ownership of consumer goods and luxury items, and socioeconomic status, as a source of stress in populations exposed to modernizing influences." (Sorensen et. al. 2009). The changes brought about by stock market failure or by impeding transnational marketing doesn't lead to the annihilation of a population, but can lead to severe and stressful status changes. These status changes, while seeming trivial in the natural world, mean everything to those living in modern societies where everything important is placed into one's public standing. When status change occurs, materiality changes, resources change, and therefore lifestyle changes. Thus, a change in a large, highly interconnected society can lead to the wealthiest elite suddenly being left in an environment where material wealth doesn't matter, or can lead to the rural peasant desperately seeking higher material goods than they know they can afford. In these large societies, culture is the way in which everyone knows how to be accepted and have a place to fit in. When societies undergo artificially immense changes, the culture changes, and people are left in the fray hysterically trying to catch up or re-balance their lives. The subsequent result is lifestyle incongruity, where individuals respond to cultural change in which access to resources is thrust out of

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balance and the, "pursuit of these items may lead to a lifestyle that is inconsistent with household economic resources, potentially leading to increased stress" (Sorenson et. al. 2009). This inconsistency and subsequent stress can be observed in light of three societal changes that are strict modern phenomena. Two examples deal with the lifestyle incongruity brought about by the collapse of the Soviet Union in which wide-sweeping changes occurred throughout Europe mainly in Siberia and the former Czechoslovakia. The final example of lifestyle incongruity deals with rapid social and economic change that is knowingly short-lived but potentially stressful - that example is studying abroad and acculturative stress.

The reign and domination of the Soviet Union was one of the greatest spanning empires since the Romans. They were able to effectively control it's own, immensely large, landmass of Russia while simultaneously controlling and impacting nations through Europe, Central Asia, and Latin America. This near global domination led to many, once autonomous, nations succumbing to the culture, economics, and politics of one body of government. This involved nations, thousands of miles away undergoing distal stressors while being forced to produce goods for the Soviet Union, to abiding by the collectivist nature of Communist tendencies, and to abide by the norms and beliefs that the Soviet Union wanted them to abide by. When the Soviet Union collapsed, it involved these nations (including Russia) to being left, abruptly, without an established economy or culture. The lifestyle incongruity stress that followed is one that no former member of the Soviet Union was left without. One of the greatest effects of this was seen within their own borders in Eastern Siberia.

During the rule of the Soviet Union, many farming projects were converted to large, collective operations where members of the operations were appointed based on social standing and hierarchy. This meant that there would be an elite family overseeing the operations with rural peasants being forced to work the land with basically no incentives (Sorenson et. al. 2009). This is how life was during Soviet rule where one's economic status was matched with their determined social standing. Elites with no true knowledge or motivation for farming were tasked with overseeing large operations strictly because they were deemed socially elite by the Soviet party and therefore qualified to be in charge of this mode of production. The rural peasants, on the other hand, were put to work on these farms because their subsistence lifestyle was seen as socially inferior and deserving of hard labor at no

reward. During the year 1991, the Soviet Union experienced a rapid collapse, severing the networks linking the farming system with the cities leaving the distant rural communities immediately without the directive to run a collective farming operations which then experienced a subsequent crash.

This collapse of the collective farming system left rural communities with the sudden need to seek security and survival as the Communist network left them with no lasting rewards for running a large food production operations. Therefore, it was the once ruling elite who were now most at a loss as their "social qualifications" gave them no benefits to the new system they were suddenly stuck in. During Soviet times, the culturally determined ideas of success were tied to one's social standing and those with a higher standing tended be the urban, well-educated individuals (Sorenson et. al. 2009). When the Soviet Union came to an end and all of it's operations came to a sudden halt, so too did the ideas of social status and hierarchy. Those involved in the large-scale, collective farms strongly felt these effects as the trading systems that once connected them to the large cities were severed and the farms were left physically distant from anywhere where social status carried even the smallest meaning.

Lifestyle incongruity stress occurs during times such as these and can lead to physiological effects that can harm the health of individuals. As the collective farming system came to end, those involved in the operations realized that the only way to survive was to re-employ subsistence based activities in order to feed themselves. This left the rural peasants at an advantage as they had never stopped physically farming even throughout Soviet times. The once ruling elite, however, were left with a high degree of incongruity as, quite suddenly, they were left with a very high socioeconomic status in a cultural world where that didn't matter anymore. The elite had been raised on market ideologies where their highest skills were tied to wage-based, management operations (Sorenson et. al. 2009). Therefore, they had no skills in the lives they were left in. They had no power to rule over individuals as their social power now had no bearing on success and survival. Thus, according to the definition of lifestyle incongruity stress, the elite who once dominated because of the culture they were involved in were left out of balance as their perceived socioeconomic status didn't match with the ideals of the new surrounding culture. Those elites once belonged to a world where materiality and accumulation of wealth was their reward for being socially dominant (Sorenson et. al. 2009). The new

world of de-collectivization thrust them into a culture where having skills in physical food production was rewarded through the ability to survive.

The physiological 'proof' of lifestyle incongruity stress in looking at de-collectivization of Soviet era farming operations comes in the form of the appearance and severity of the Epstein-Barr virus (EBV). This virus, which is the common herpes virus, has infected near 90% of adults worldwide (Sorenson et. al. 2009). This virus is often associated with severe outbreaks relating to the stress levels of the individual. What is actually happening with this association traces back to the previous discussion on the biological stress-response system. Similar to the impacts of stress on insulin production and receptivity, the release of glucocorticoids during chronic stress also relates to the severity of the Epstein-Barr virus. The chronic release of glucocorticoids continually directs the body's cells to not respond to the immune functions of the body (Sorenson et. al. 2009). Therefore, massive cultural change leading to lifestyle incongruity and increasing stress levels inhibits the cells ability to fight off infection as chronic stress ultimately deteriorates the body's immune response.

When Soviet elites were left in a world where their high socioeconomic status and material wealth had little bearing on success and survival, they were left in a world of high, chronic stress. As their previous lifestyle didn't match with their current one, stress levels rose as they struggled to find their 'place' in the new world. This stress was effectively measured in the presence and severity of the Epstein-Barr virus. The study done by Sorenson and colleagues showed that those elites who were stuck in the de-collectivized farming communities had much higher levels of EBV compared with the rural community living alongside of them. This was only made worse with the fact that they were in far-removed places, away from urban centers, and from the rest of the world (64). Their previous arenas of social status and success were now severed from where they were now forced to live. The lifestyle incongruity coupled with the feeling of being trapped immensely increased stress levels being proven in the relatively increased rate of EBV infection amongst the once ruling elite. The effects of lifestyle incongruity, while being strongly felt within the confines of the Soviet Union, had impacts just as great in other areas once controlled by this 20th century empire.

As the Soviet Union began to crumble, many countries were beginning to taste what freedom was like. Now, this freedom was only in the sense of being free from Soviet rule and thus from

authoritarian rule. This freedom also meant a changing culture, economy, and society that, while ultimately for the betterment of these nations, left many individuals with lifestyle incongruity, as the immediacy of change came as a significant shock. The Czech Republic was one such nation thrust into this change in politics and economy as their ties with the Soviet Union diminished. This led to subsequent changes in stressors as the Czech people were left with remnant feelings of the authoritarian life while attempting to engage in a new political unit and subsequent economic goals.

Before its collapse, the Soviets ruled the countries within their union through authoritarian principles where the state controlled all facets of society and life. People were discouraged from creativity and a "equality for all" philosophy was heavily emphasized. While these played out to different degrees in different situations, one thing that is common about authoritarian rule is the use of anxiety to rule. Bettina Piko defines anxiety as, "an alarm that warns of impending problems...it enables a person to estimate, prepare, and deal with environmental threats" (277). She then connects this to stress by stating how stress essentially occurs when a person's 'alarm' and subsequent adaptation isn't sufficient for the perceived stress. Therefore, under Piko's definition, we can see how stress acts as the ultimate response to environmental threats as anxiety is meant to prepare one to potentially be able to avoid the threat, and then stress enables the person to act when the threat is perceived as being too overwhelming.

How, then, does a body of government utilize this psychological response system to gain utmost control? Control is gained through instilling chronic anxiety. If anxiety is an alarm warning of us impending threats, then chronic anxiety is the constant feeling that there are problems around that are out of the person's hands. Authoritarian governments control every facet of social life and social situations (Piko 2002). Life in any city or in any large population is grounded in social interactions and relationships as each day everyone is interacting with each other in the public sphere. When a government controls all of social life they turn an everyday aspect of life into something that each individual cannot control. Not being able to control social situations would lead to constant anxiety as everything about social life would be perceived as a problem that cannot be actively solved. This leads to individuals within an authoritarian society to acquire a learned helplessness. Piko describes how learned helplessness is a social process where it, "...is not an effective coping strategy, it can serve as a

type of 'adaptation' because it reduces anxiety and helps the person find peace of mind when he or she gives up a hopeless struggle" (278) When an entire society is raised under the social norm of learned helplessness it leaves them with a highly pessimistic view of life, and when that view is separated from the government it enables that authoritarian government to more easily exact control.

So, under Soviet rule the Czech Republic's (then Czechoslovakia) lifestyle consisted of this constant state of anxiety and helplessness. This greatly shaped their perceived stressors as they were all surrounding this lack of individual control over any social situation. Yet, as the Soviet rule began to crumble the Czech people, and much of Eastern Europe, was experiencing a change. This change brought the notion of individual autonomy back to these regions, and a change in lifestyle congruence. Yet, this rapid change, left people in sort of a 'social shock'. They were essentially indoctrinated to believe that helplessness was the way they were supposed to live. Therefore, when this autonomy was brought to the region, citizens were still living with, "...the lack of initiative or responsibility instead of self-actualization and self-esteem..." (Piko 279). This left the Czech people in quite an unfortunate situation where the lifestyle incongruity stressors were dealing with the difficulty of leaving behind an oppressed life for one of seemingly more opportunity. There lives, which were once clouded in chronic anxiety and a feeling of absolute no control, were now wide open to individual freedoms and personal choices. While the latter is something that is celebrated in America, this most likely was just as traumatizing as authoritarianism to the people of the region. They were immediately thrown into trying to adapt to the new system of personal autonomy and self-actualization. Just as with the farming communities in Eastern Siberia, the Czech people faced a mismatch in which their socioeconomic status once didn't matter when under Soviet but now were moving towards Western societal trends where social standing and material wealth are the things to be concerned about. As opposed to physiological, infection related, effects of lifestyle incongruity stress felt by the Siberians, those in the Eastern block experienced lifestyle incongruity stress in dealing with the questions of how to get their societies to where they wanted them to be while still trying to shed off the oppressive Soviet coat.

When nations, such as the Czech Republic, began to feel their freedom, their society was forever marked by authoritarian rule and left them with not better or worse stressors, but merely different stressors as their perceived environment underwent change. One stressor that many of these

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countries began to experience was that of dealing with trust. Under authoritarian rule, social relationships and interactions were strictly controlled by the government and were often made a penalty. Also, communities were severely destroyed as the government would pull people away for work, or would reorganize communities to fit the economic needs of the government (Piko 280). This means that almost the entire populations of these countries were living in unhealthy social situations that were almost non-existent. They were also raised in communities that placed an emphasis on production and made sure that social life wasn't an aspect of community life. When autonomy was achieved and social and community life began to be freely expressed and realized, everyone was unsure of how to go about it. They were raised in a society where social situations were thought to be negative. This led to widespread mistrust and stress about who to interact with and how to have a meaningful relationship. This is just one example of many, but it illustrates how something seemingly so wonderful as bringing autonomy to a region really creates a shift in stressors and doesn't necessarily mean any of them go away. It illustrates how perceived stressors are in total response to social, political and cultural changes and clearly depicts how something great on a grand scale can still be extremely distressful to the individual living his/her everyday life.

    As the Czech Republic experienced this shift in politics, they subsequently experienced a shift in their economy as the modes of production changed from authoritarian central allocation to a more free-market capitalism. To throw a curveball into this discussion on the changing economy of the Czech Republic I'm going to relate it to gender-specific stressors felt during these times. I feel that this will provide very clear examples of how varied stressors are from individual to individual. In a study done on Czech men and women during the economic times of 1990-1991, Joseph Hraba and his associates aim to use the stress-distress tradition of American men and women to examine if any nation heading in a capitalist direction experience the same gender-specific stressors. The stress-distress tradition of any society is essentially how individuals react to stressors and why certain stressors bring about certain reactions. The American stress-distress tradition, according to Hraba is that, "American women are stressed by network events and men by economic events outside of the home, with women internalizing distress symptoms and men externalizing them". This tradition is based on American history and development. Women traditionally, in America, didn't have too much of a place in the job

market and therefore their life was situated in the home where they formed social networks with other women. Men, who were often found in the public work sector, had more face-to-face interactions with the capitalist economic system, so therefore most of their stress was situated in the economy. This points out the first difference between Czech and American tradition. Because of communist rule, there was a lot more similarities in the social life of the genders. Women were expected to work and often worked just as much as men outside of the home, which exposed them to much of the economic stressors that men experienced. Furthermore, women experienced what Hraba calls a "role overload" in the sense that women were expected to work full-time while simultaneously care for all of the domestic matters at home (Hraba et. al. 1996). When the economy experienced change in post-Soviet years both women and men in the Czech Republic experienced the same effects of the economic hardships because they were both equally involved in that sector.

Hraba and his associates found some interesting information pertaining to gender differences in stress. The first conclusion they reached was that both Czech men and women experienced relatively the same economic and network stress. Neither sex reported more stress in either sector. The relationship between gender and distress were more prominent. Women reported more depression and anxiety. This is consistent with the American tradition where women tend to internalize their stress through feelings of depression. However, the study found that there was no significant different in expressions of hostility. Whereas American men more heavily react to stressors through outward hostility, in the Czech Republic both men and women reported roughly the same amounts of hostility and therefore women were just as likely to externalize their stress as men were (Hraba et. al. 1996). Next, Hraba looked at the ability of men and women to buffer against these stressors. They looked at one's personal mastery as an attribute to buffer against economic stress and looked at social support to buffer against network stress. They found that the genders were equally as likely to utilize these buffers for each stress situation considering that both Czech men and women were involved in both of these aspects of life. One of their more interesting findings was that while social support was used as a buffer for network stress, having social support actually made individuals react with hostility towards high network stress more often (Hraba et. al. 1996).

While the preceding discussion on gender-specific stressors in a changing society doesn't directly relate to lifestyle incongruity, it provides a good transition to the final topic at hand. This example of the stress-distress tradition, coupled with previous discussions on lifestyle incongruity help illustrate the penultimate ideas of stress in this paper. These ideas are ultimately that stress, just like all of humanity is contingent on culture. Whether it is based on far away big stressors trickling down to smaller communities, or if it is individuals who have had their stress response effected by economic and social institutions, it all comes down to the culture and environment that one grows up in. The modern world that has been developing over the last few centuries has allowed for examination of cultural stress in ways never thought possible. Through communications technologies and the continuation of ideas of material wealth, stress has become a response to artificial creations that no longer deal with life-or-death but, because of the meaning placed behind them, they basically mean life-or-death.

One exceptionally modern and unique phenomena dealing with cultures and cultural stress is through the concept of traveling and tourism. Traveling has opened the door to the world and allows for immediate exposure to, and immersion in, other cultures that just 400 years ago wouldn't be possible. What is even more unique than traveling is studying abroad. Studying abroad has become a novel and popular experience for students who are looking to see the world, study far off places, or just party the night away. Yet, studying abroad also involves the bridging of multiple cultures and the merging of peer groups who are at the cusp of adulthood. It involves dealing with all aspects of the modern stress response. Studying abroad forces students to question their own domestic stressors, to be exposed to the notion that their ideas of stress aren't the only forms of stress in the world, and to have their own lifestyle thrown off in a brief, but rapid and conscious moment of incongruity.

Studying abroad represents a perfect example which illustrates cultural stress and how grounded the modern human stress response is in responding to socially and economically created stressors. The experience of going abroad represents a microcosm for this modern "promotion and devotion" stress response and how lifestyle incongruity is the foundation to all of it. This is because, under normal circumstances, it is impossible to forcefully set up and observe groups of humans undergoing massive societal and cultural change to determine how they are responding to stress and what stressors they are

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responding to. While Mcdade was able to observe these changes amongst Siberians in a post-communist Russia, it was only after the event of the collapse of the Soviet Union. Not only is it impossible, but also it would be ethically wrong to force populations to undergo some massive life change. However, studying abroad essentially involves students willingly being exposed to such a life change. Going abroad means that students will be immersed in a foreign world and a foreign culture with social, economic and symbolic ideas that are often at ends with the student's developmental background. Therefore, the act of studying abroad is an experiment. It is an experiment in seeing how humans will respond to being thrust into a new world and the ways in which they must cope as their stress response must adapt to completely new and foreign stressors. My research involved studying just that. By working with the Cal Poly Institution Review Board and the International Exchange Office, I was able to acquire data from 49 students who had studied abroad between 2011 and 2012. Through an open-ended questionnaire and more thorough interviews, I was able to statistically analyze the results to be able to evaluate the stressors and coping involved with this literal life-changing experience (Appendices I & II).

Studying abroad enables students to be free to discover themselves and find their own 'culture' as they leave behind their permanent life to enter a world where long-term consequences, to some degree, are non-existent. Being in an unknown locale for a short period of time is an interesting combination as students tend to strongly try to adhere to a role or some lifestyle that they've always wanted to live in an attempt to fit in to both their new physical world and their social world. This process of acculturation is the source of much of the stress of being abroad. The physical world offers up challenges as students are exposed to landscapes, architecture, norms, ideals, rules and behaviors that they've never seen before. The social world offers challenges as students try to fit in to the peer group they are studying with while simultaneously attempting to connect and bond with locals which combines the stress of adjusting to the new culture (so to fit in with the locals) with the stressful nature of making friends in general. Ultimately the stressors involved with studying abroad are specifically unique to the acculturation process which is really a combination of different aspects of social life that appear foreign because students are immersed in an unfamiliar culture. This epitomizes the cultural stress model at its core. The stressors that students anticipate and experience are strictly social and

sometimes academic but are so tied to ideas of success that they translate to a seemingly life-or-death situation. The stress of studying abroad is a young adult's attempt to acculturate to a foreign social world where the dire need to fit in is complicated by incongruence and language. However, studying abroad presents a means to buffer to the effects of the modern stressors of a globalized world through the necessity for social solidarity and connectedness.

Studying abroad is a perfect example of lifestyle incongruity while at the same time being unique in the sense that most students don't consciously understand how the mismatch of lifestyles effects levels of stress and the acculturation process. And yet, almost everyone who travels and spends any extended time abroad understands that this mismatch is occurring and that it will happen during the experience. This realization of lifestyle incongruence is often labeled culture shock. Culture shock is a commonly experienced by a person when traveling to a foreign environment. This shock is brought about by stressors experienced as a person becomes immersed in a new surrounding and the subsequent attempts to cope with new lifestyles (Zapf 1991). This shock is heavily grounded in socioeconomic status. Often, the most startling aspect of going abroad is witnessing the living conditions of other people's lives. This can cause a massive amount of shock and subsequent stress as the person, most likely coming from a wealthy nation, must cope with the fact that life isn't as comfortable everywhere else in the world. Yet, the most long lasting and truly impactful aspect of studying and traveling abroad is the mismatch between social life and social status. Experiencing a foreign culture abroad means leaving all of one's social life at home and being forced to create a new one from scratch. Especially in studying abroad, a student's social status is going to be most threatened. While this gives freedom to students to be who they want to be, the 'restart' of one's social life means that the football jock, for example, who was well loved and well known in their home university must now cope with proving themselves in the midst of a new, foreign peer group. Data gathered from my surveys showed that 16% of students sampled found it most stressful to attempt to fit in and 20% found it most stressful to make new friends, leading these to be the two highest reported stressors.

This anticipated and realized lifestyle incongruity stress pertaining to studying abroad is felt especially strongly when students abroad experience role shock. Role shock is a response to stressors that occur when an individual's expectation of their societal role and their actual role don't match (Zapf,

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1991). This could be the jock expecting to party and maintain popularity, realizing that there is no party scene and that being a jock won't earn them friends. Or, it could be the exceptional student, hoping to take as much as possible from the program both culturally and academically but finding that the program doesn't facilitate for complete immersion. In both instances, students have an idea of what they want their experience where their perception of their U.S. Identity is translated to their expected 'abroad' identity. When these ideas don't come to fruition, the subsequent stress of the role shock can hinder their experience and prevent them from finding a social sphere that will grant them the acceptance which is the basket that modern society has placed all it's eggs in. The social stress that is the heart of acculturative stress amongst those studying abroad can be examined even further through a discussion of language barriers and social connectedness, and their intense effect on students' experience while studying abroad.

What shows to be the most extreme barrier to students acculturating and coping with the foreign stressors is language. Language presents a conundrum for students studying abroad because it makes all things trivial about modern stress into a bout of actual life or death. This is because, as already mentioned, modern stress is grounded in social and economic institutions and ideas that are shared by the larger society. in order for society to direct it's populace into fitting into the larger culture's ideas of success. Students grew up in and understand the culture, norms and stressors of their own society. By traveling and studying abroad, students immerse themselves in a world where their previous status and ideas no longer necessarily pertain to the normative ideas of success and progress. If a person can't understand what the people are saying, they can't expect to learn the ideas and attitudes of another culture in order to effectively establish themselves as a member of that society. This could transcend into matters of life or death as not understanding the language would inhibit an individual from participating in social and economic aspects of that society. Not being able to participate would mean not finding a suitable role other than 'tourist' which leads to subsequent role shock as students don't study abroad to be a tourist. A lack of economic life would leave a person without resources to literally survive, while a lack in social life would prevent a person from finding adequate buffers against the hardships of the new world.

While the effects of not knowing the language I just mentioned above might seem dire, it does paint a picture of the serious barriers that language incompetency can place on an individual, or student, studying abroad. Data gathered from the 49 student participants of my research showed significant effect on those students who studied abroad, with the language barriers leading to extreme stress. This effect was so great that a t-test analysis showed that those who id'ed having language difficulties spent 30% of their time abroad in stressful acculturation; whereas those who did not id language difficulties spent only 14% ($p < .05$). The fact that language difficulty doubled the time spent acculturating is astonishing. This means that students who have difficulties with the language spent twice the amount of time managing the effects of culture shock and lifestyle incongruity. They had to spend twice the time with bouncing emotions, feeling homesick and lost, and just generally stressed out. What is even more interesting is that of the 49 students I evaluated, over 60% listed the language barrier as one of their top three anticipated stressors when going abroad. While this shows that the majority of students recognize the difficulties of foreign language, the fact that over half of the population identified language as being difficult while abroad students are going abroad ill-equipped. When viewed in the light of the extreme effects of culture shock and lifestyle incongruity, the importance of language training for preparing students for study abroad is apparent. And yet, even without pre-departure language training, students can still buffer against these difficulties by utilizing the best coping strategy against the "promotion and devotion" response.

While the modern stress response still utilizes biological processes when exposed to artificially created stressors mainly grounded in the social and economic spheres, the way in which to cope with these artificial stressors is also grounded in the social sphere. It makes sense that the best way to cope against modern stressors is through one's social life. When the fight-or-flight response was the key to survive in the natural world, one had to have a large amount of physical capital in order to either fight or run. In the modern world, humans are responding to social and economic stressors and, therefore, need to have social support to buffer against the artificial stressors. This social support can even be seen as economic in the form of social capital. These are, "social resources that can be drawn on to support you in times of need" (Wiley & Allen 2009). The times of need being referred to are those artificial life-or-death moments. Social capital can greatly alleviate the stress associated with low

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economic and social status. This isn't because social capital gives one stronger skin, or a more powerful punch. Social capital helps buffer against the stressors of the modern world in that having a lot of social resource is a symbol of exceptional 'place'. Therefore, an individual with a lot of social capital (i.e. close friends, kin, or co-workers nearby) will display to the larger society that the individual is successful and a proper member of society. Also, being 'socially wealthy' means having a large number of people who can physically be there for support during rough times. The ability of social capital to help with the stress of the modern, Western world clearly depicts the place that society stands in currently. The fact that the best defense against stress is how many close acquaintances one has (think of Facebook) shows how the stressors that the larger society has created have no physical bearing on the immediacy of survival. Once again, studying abroad and traveling illuminates how crucial social capital is in the globalized social world that exists today.

A major difficulty that students face when going abroad is their ability to hold on to their sense of social connectedness. Social connectedness is essentially a person's personal recognition of how close their relationship is with the social world (Yeh & Inose, 2003). Thus, an individual with high levels of social connectedness will more easily be able to form relationships with others in that society as they feel closely connected with the larger social world. A student from Latin America or Asia, for example, coming to study in America will have a harder time acculturating as his/her feeling of connectedness to the American social world would be extremely low compared to a socially well-connected local. This is because younger generations in these areas of the world are raised on values of high connectivity and support. On coming to America, these international students will find it difficult to achieve that same level of support as they must interact with the individualistic nature of America (Yeh & Inose, 2003). Thus, students such as these while possibly understanding the English language and American culture will still undergo a high amount of distress as the high levels of support and community connectedness they were raised on would be non-existent.

Yet, when American students are removed from that larger culture of individuality and personal achievements they seek out that same level of social support. My own time spent participating in and observing the study abroad culture illustrated this clearly. As American students converge in a foreign environment, the study abroad circle becomes a world of it's own. When students are faced with a

world where the language, ideals, and rules are so different, they find it easier to stay in-group instead of branching out. Those students, who at home are out for themselves and striving to achieve total, successful independence will strongly seek out a cohort within the study abroad group just like every other student. This is definitely an effect of that desire to have social connectedness, and therefore social capital, in those times when the stressors of both the foreign environment and the experience of traveling gets to be too distressful. However, this is coupled with the expected way to 'fit in' that American students have learned to associate with life or death. American students studying abroad will desperately seek out a social group to be a part of, within their own study abroad group, so that they can display themselves as being socially successful and having that necessary support in times of social and economic need.

Humanity is experiencing a revolution. This revolution doesn't involve a massive governmental overthrow, or a breakthrough in new medical technology. This is a stress revolution. As the 21st century continues forward and the world increasingly becomes more globalized the cultures, ideas, symbols and beliefs of the most dominate cultural body will be further diffused to all corners of the world. This places humanity in danger of creating a single global culture. This emerging singular culture won't be based on the collective ideas of the 7 billion people currently populating the planet, but will be a representation of the ideas held by the strongest and wealthiest nations. Therefore, all things about the modern, Western world could diffuse to all other areas of the globe, including our ideas about stress and associated stressors.

Every human, and every species at that, experiences a stress response. The biological underpinnings of stress are a response to things deemed by the organism to be a threat. In the natural world, animals even humans would perceive a threat as being an immediate attack on their very survival thereby initiating the fight-or-flight response. In the cultural world that humans inhabit, the stress response has become based on the ideas created by the collaboration of people in large societies. Once natural dangers were largely eliminated, humans were left with a biological response in their bodies that hasn't had time to catch up with human cultural evolution. Therefore, the autonomic nervous system is still seeking out perceived threats in the environment to mobilize the body to effectively survive. Yet, those perceived threats are now being created and "advertised" as threatening.

Getting that first kiss, obtaining your driver's license, and not being a "loser" are all examples of these created stressors that are in no way life threatening, but have been made to seem so through the cultural paradigm.

Traveling and studying abroad is critical to the modern world we live in today. It provides us with an experience that would be unthought of 1,000 years ago. It allows people to open their eyes and to understand that their way of living, their *culture*, isn't the only way of living. It allows for people to understand that things they find to be stressful in their home country aren't universally stressful. This is seen everywhere as destinations are advertised as the relaxation hotspot where all worries are thrown by the wayside. Yet, it also allows for the examination of just how social and economic stress almost has to be in this modern world. The fact that those studying abroad will always seek out strong social support is an indicator of how important social ties are to humans. Humans are social creatures, and when placed in a culturally foreign environment will only be able to 'survive' by immediately seeking out and finding an established social group. It also creates artificial barriers that wouldn't be an issue without the ability to travel. Language wouldn't be a problem if humans didn't travel to far-off locales, and yet language is the ultimate problem that people face when traveling and it can provide an extreme hindrance to the ability to be successful and find that necessary human support.

Natural stress largely diminished for humans as modern humanity evolved and established culture as the ultimate adaptation. Once this occurred, and humans had continuously separated themselves from the harsh threats of the natural world, the biological stress response still exists and is still responding. Thus, societies accumulated ideas and formulated rules on how to "survive" in their artificial world. The emphasis placed on success and fitting in led people to equate having a sense of place as being life-or-death. This sense of place is a reflection of the role that society wants it's populace to hold on to. While these rigid definitions of roles have led to a host of other difficulties in acceptance, it also has created a stressful situation in which every individual has to strive to fit in. Since fitting in and acquiring a role is a lifelong task, the stress becomes lifelong. Lifelong stress equals chronic stress which is associated with health effects on the heart, the bloodstream, on eating, and so much more. Thus, the global society faces a trade-off. In order to have a place in the human world, and therefore have the success and social rewards that societies deem so important, people have to sacrifice

their health and must deal with a chronic biological stress response. The ultimate question, then, still remains: if someone wants to make the trade-off in the other direction, can humans still find their 'place' if not in the emerging global society?

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Appendix

HUMAN SUBJECTS PROTOCOL APPROVAL FORM
Cal Poly, San Luis Obispo

All Cal Poly faculty, staff, and student research with human subjects, as well as other research involving human subjects that is conducted at Cal Poly, must be reviewed by the **Cal Poly Human Subjects Committee** for the protection of human subjects, the researchers, and the University. Human subjects research is defined as any systematic investigation of living human subjects that is designed to develop or contribute to generalizable knowledge. While the ethical guidelines for research are applicable to classroom activities, demonstrations, and assignments, the Human Subjects Committee does not review classroom activities unless data will be collected and used in a systematic investigation.

Researchers should complete all items on this approval form and submit *three copies* of it, along with *three copies* of a research protocol (containing the information detailed in Guidelines for Human Subjects Research Protocol), to the Office of Research and Industry Relations (Debbie Hart, Bldg. 38, Room 154). Please feel free to attach an additional page if your responses to any of the items require more space. Your answers to the items on this form, as well as the research protocol, should be typed. The Committee will make every effort to respond to your submission within two to four weeks. Committee approval should be received prior to contacting prospective subjects and collecting data. Please read carefully Cal Poly's Policy for the Use of Human Subjects in Research prior to completing this application.

If you require assistance in completing this form,
contact the Office of Research and Industry Relations at (805) 756-1508.

1. Date: February 12, 2013

2. Title of Research Project:

Ethnography of Acculturative Stress

3. Type of Research:

X	Senior project
	Master's thesis
	Faculty research
	Other:
	please explain

4. Name(s) of Researcher(s)

Principal Investigator:	Jeff Nicklas
Department or other affiliation:	
Phone:	(805) 235-7164 Email: Jwnicklas@gmail.com
Position:	[ ] Faculty [X] Student
	[ ] Other: *please explain*
Additional Researcher:	
Department or other affiliation:	
Phone:	Email:
Position:	[ ] Faculty [ ] Student
	[ ] Other: *please explain*
Additional Researcher:	
Department or other affiliation:	
Phone:	Email:
Position:	[ ] Faculty [ ] Student
	[ ] Other: *please explain*

Any additional researchers involved in the project should be listed with the descriptive information requested above on a separate sheet.

5. Faculty Advisor (if applicable)

Name:	Dr. Dawn Neill	Email:	dbneill@calpoly.edu
Department or other affiliation:	College of Liberal Arts	Phone:	(805) 756-6046

Other thesis committee members if the research is a thesis:

Name:		Email:	
Department or other affiliation:		Phone:	
Name:		Email:	
Department or other affiliation:		Phone:	
Name:		Email:	
Department or other affiliation:		Phone:	

6. Is there an *external* funding source for the project:

[ ] Yes, and the source is:	

| X | No |

7. Is this a modification of a project previously reviewed by Cal Poly's Human Subjects Committee?

| | Yes, and the approximate date of the last review was: | | |
| X | No |

8. Estimated duration of the project:

Starting date: | March 2013 | Completion date: | November 2013 |

9. Describe *any* risks (physical, psychological, social, or economic) that may be involved. *See Specific Ethical Criterion #1 in Policy for the Use of Human Subjects in Research for a description of the types of risks.*

There is no anticipated risk from participation. Participants will only discuss daily routines, basic feelings, and public encounters. Interviews will be coded by first name only and participants will have the option to have even their first name kept confidential.

10. Indicate what measures will be taken to minimize risks. *See Specific Ethical Criterion #1 in Policy for the Use of Human Subjects in Research for a discussion of strategies for minimizing risks.*

Participants will be given the Informed Consent Form and have the choice to request that their identity not be revealed in written findings. All raw data I obtain from these interviews will be kept and viewed only by me as I assess and utilize the information I've received.

11. Explain how subjects' *confidentiality* will be protected. *See Specific Ethical Criterion #5 in Policy for the Use of Human Subjects in Research for a discussion of strategies for minimizing risks.*

Participants will be given the Informed Consent Form and have the choice to request that their identity not be revealed in written findings. All raw data I obtain from these interviews will be kept and viewed only by me as I assess and utilize the information I've received.

12. Describe any *incentives* for participation that will be used. *See Specific Ethical Criterion #2 in Policy for the Use of Human Subjects in Research for a discussion of the use of incentives in research.*

None

13. Will *deception* of subjects be involved in the research procedures?

	Yes*		X	No

If so, explain the deception and how it will be handled. See **Specific Ethical Criterion #3** in _Policy for the Use of Human Subjects in Research_ for a discussion of the use of deception in research:

14. Type of review requested:

	Exempt from further review[*]	X	Expedited review		Full review

See ***Types of Review*** in Policy for the Use of Human Subjects in Research for a discussion of the criteria for exempt, expedited, and full reviews.

*The research protocol submitted for a project presumed to be exempt may be abbreviated but should contain sufficient information to support the conclusion that the project meets the criteria for exemption.

15. Signatures:

Your signature below indicates that the information presented in this application (the approval form and research protocol) is accurate and that you have read, understand, and agree to follow the Policy for the Use of Human Subjects in Research.

Name of Primary Researcher:

Signature:

Cal Poly Faculty Advisor's Signature (Required if this is student research)

I have reviewed this research proposal which has been prepared by my advisee(s) in accordance with the Guidelines for Obtaining Human Subjects Approval.

Name of Faculty Advisor:

Signature

Survey Questionnaire

*To answer these questions please recall your most recent travel to a destination outside of the United States for a period exceeding 3 weeks in duration.

*For all scales, 1 is least stressed while 10 is most or highly stressed.

IV. Where do you currently live?

V. a) Did you study or travel abroad?

b) Where did you go abroad?

VI. How long were you abroad for this particular travel experience?

VII.   What are the top three things or situations that causes you the most stress?

VIII.   On a scale of 1 to 10 what is your general stress level at home?

IX. What stressors did you anticipate upon leaving to go abroad?

X. a) On a scale of 1 to 10, how stressful is the physical act of travel?

b) Which form of travel especially stresses you out and what is one reason/cause for this?

XI. a) On a scale of 1 to 10, how would you rate the level to which you were affected by culture shock?

b) Can you list one particular aspect of the culture that was especially shocking?

XII.   Had you prepared for this shock? If so, how?

XIII.   About how long did it take until you felt acculturated, that is comfortable with the surrounding culture?

XIV.   a) Did you maintain contact with family or friends back home?

        b) Did it add or relieve any stress?

XV.   a) Did you experience homesickness?

        b) Please provide one way in which you alleviated this feeling.

XVI.   What did you find to be most challenging, and thus, most stressful about your host country?

XVII.   a) On a scale of 1 to 10 how was your level of fluency with the host country language?

        b)Was language use particularly stressful?

        c)Can you list one instance when language use was the most stressful?

XVIII. Was it more stressful to shop at a grocery store and then cook at home, or to go out to eat and order off of a menu?

XIX.   On a scale of 1 to 10, how intense were the effects of reverse culture shock upon arriving back in your home country?