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Human Trafficking: A Theoretical Application of Anomie on the Tier Placement System Utilized by the U.S. Department of State’s “Trafficking in Persons” Report

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Utilized by the U.S. Department of State’s “Trafficking in Persons” Report

Jennifer L. Melvin

Grand Valley State University
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By: Jennifer Melvin
August 14, 2006
To my wonderful husband Cory:

Without you, it wouldn’t be possible.
I am very grateful to those people who have made this research and thesis possible and to those who have made my experience in graduate school one that I will always remember.

To my committee, Dr. William Crawley, Dr. Brian Johnson, and Dr. Chris Kierkus – thank you so much for your guidance and support throughout this process.
## Human Trafficking

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Abstract

This study reviews the U.S. Department of State's Trafficking in Persons Report. Specifically, the purpose of the current study is to utilize data, consistent with anomic theory, in order to assess the validity of the tier placement system utilized by the Trafficking in Person's Report. In order to develop a baseline of information, a review of the literature available on human trafficking was conducted. Subsequently, through the employment of various statistical analyses (i.e. ANOVA, logistic regression), an examination of the Trafficking in Person's Report was conducted in order to assess the validity of the tier placement system in accordance with Institutional Anomie Theory. This study provides significant insights into the subject of human trafficking. In addition to adding to the body of knowledge, the current study analyzes current trafficking policies and practices used to identify and evaluate anti-trafficking efforts (i.e. the Trafficking in Persons Report) and may generate insights into future research agendas.
HUMAN TRAFFICKING: A THEORETICAL APPLICATION OF ANOMIE ON THE TIER PLACEMENT SYSTEM UTILIZED BY THE U.S. DEPARTMENT OF STATE'S "TRAFFICKING IN PERSONS" REPORT

By: Jennifer L. Melvin

Chapter 1: Introduction

Introduction to the Study

According to the United Nations (UN), trafficking in persons has been defined as:

The recruitment, transportation, transfer, harboring, or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or a position of vulnerability or the giving or receiving of payments of benefits to achieve the consent of a person having control over another person, for the purpose of exploitation (United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially in Women and Children, 2000, p. 2).

It was estimated that the number of victims trafficked across international borders each year was between 600,000 and 800,000 (U.S. Department of State, 2006). It has also been estimated that between 18,000 and 20,000 victims were trafficked into the United States annually (Bureau of Justice Assistance, 2005). It is also important to note that, although the UN has defined trafficking in persons, this definition has not been universally accepted. Rather, there has been some debate between academics and practitioners in terms of defining the scope and contents of this phenomenon (Laczko, 2005).

Victims have been trafficked for several different purposes including, although not limited to: prostitution, domestic work, criminal activities and agricultural jobs (Bureau of Justice Assistance, 2005). They have been subjected to various forms of abuse and inhumane treatment, such as: sexual (Gallagher, 2004; Hughes, 2000d), physical (Gallagher, 2004; Hughes, 2000d; Gushulak & MacPherson, 2000) and emotional (Gallagher, 2004; Hughes, 2000d;
Gushulak & MacPherson, 2000) abuse; poor working conditions with inadequate food supply and shelter; and a lack of proper health care (Vocks & Nijboer, 2000; Malarek, 2003; Raymond & Hughes, 2001; Richard, 1999) to defend against many of the serious illnesses and injuries sustained during the trafficking journey.

Throughout the last decade, the level of awareness and concern regarding human trafficking has increased globally. As a result, both governments and non-governmental organizations (NGOs) have attempted to institute a combination of proactive and reactive measures against trafficking. The United States has been no different. For example, a model state anti-trafficking statute was created that would specifically include all persons of trafficking and involuntary servitude. It was found that many states already had laws that directly addressed this criminal problem; however, these crimes were codified in disparate parts of the criminal code, making it difficult or unclear for prosecutors to identify behaviors of trafficking and charge as such (U.S. Department of Justice, n.d.).

In 2000, the Victims of Trafficking and Violence Protection Act (VTVPA) was passed unanimously by both houses of Congress (U.S. Department of Justice, n.d.), which represented a culmination of the federal government's efforts to control both global and domestic problems involving violence (U.S. Department of Justice, n.d.). More specifically, the VTVPA (2000) encompassed several legislative reactions to violence against women and children. Its purpose was to "combat trafficking in persons, especially into the sex trade, slavery and involuntary servitude, to reauthorize certain federal programs to prevent violence against women and for other purposes" (Victims of Trafficking and Violence Protection Act, 2000, p.2).

The Trafficking Victims Protection Act 2000 (TVPA) was created as a division of the VTVPA (2000) and established the mandate that required the U.S. Department of State to
“submit a report each year to the U.S. Congress on foreign governments’ efforts to eliminate severe forms of trafficking” (U.S Department of State, 2005, p.5). This report was known as the “Trafficking in Persons” (TIP) Report. Based on the information provided, the U.S. Department of State categorized each trafficking country on a progressive tier scale. “This report has increasingly focused on the efforts of a growing community of nations to share information and to partner in new and important ways to fight human trafficking” (U.S. Department of State, 2005, p.5). In other words, this report represented a collection of shared, anti-trafficking measures that were globally employed.

The first TIP report was published in 2001 and included 82 countries across three progressive tiers. The most recent report was published in 2006 and included 149 countries effectively across four tiers (three tiers and a watch list). As indicated over the last six years, there has not been a significant increase in the number of countries identified within the TIP report, but also an increase in the sensitivity of their classification. This increase was largely due to a stronger response from many governments, more public awareness campaigns alerting victims to protection services and greater transparency in anti-trafficking efforts (U.S. Department of State, 2005).

The U.S. Department of State has been confronted with issues related to reliable and sufficient information [about trafficking in various countries] since the initial TIP report. Some of the problems resulted from: the illegal and underground nature of trafficking; the absence or emergence of government programs; the difficulty in distinguishing between trafficking and smuggling; the fear and silence of trafficking victims who often cross borders illegally or are physically coerced or abused; or the general lack of freedom of information in a country (U.S.
Department of State, 2005). Despite these limitations, the TIP report has added approximately 60 countries to the list since its conception in 2001.

As previously stated, the U.S. Department of State categorized countries based on a system of tiers. The tiers represented a scale of compliance with the TVPA’s minimum standards. In simplest terms, tier one represented “total” compliance, tier two represented partial compliance, tier two watch list included those countries who were complying even less than partially and tier three represented those countries that were totally incompliant. In order to increase compliance of the TVPA’s minimum standards, sanctions would be imposed on those countries placed in tier three. Such sanctions could include suspending or withholding non-humanitarian and non-trade related assistance (U.S. Department of State, 2005). For those countries who did not receive this form of assistance, funding for participation in educational and cultural exchange programs could be withheld (U.S. Department of State, 2005). In addition, such governments would also face “U.S. opposition to assistance…from international financial institutions” (U.S. Department of State, 2005, p.31), such as the International Monetary Fund and multi-lateral development banks (i.e. the WorldBank).

**Statement of the Problem**

While research exists demonstrating and describing issues and potential variables regularly correlated with the significant presence of human trafficking practices (both at the aggregate level of analysis and in case study form), why has such information not been more specifically utilized to inform the tier placement system employed by the U.S. Department of State? Moreover, would the utilization of such theoretically derived data empirically validate or challenge current placement practices? In consideration of these issues, it was the goal of this

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1 See Appendix A for the TVPA’s minimum standards and criteria (section 108).
study to examine the validity of the U.S. Department of State's tier placement system in accordance with theory.

Background of the Problem

The trade of human beings first received attention in relation to women in the late 19th century by modern reformers and feminists (Bruckert & Parent, 2002; Bertone, 2000); however, it was not until the later part of the 20th century that "human trafficking" emerged as an international problem involving men, women and children alike (Bruckert & Parent, 2002). A review of the literature found that trafficking patterns occurred in "waves" (Malarek, 2003). Beginning in the 1970s and continuing throughout the next three decades, major source (or supply) regions have shifted from Southeast Asia, to Africa, then to Latin America and finally to Eastern Europe (Malarek, 2003), where, currently, the most "valuable" women are from (Hughes, 2001).

The current literature also found that there were many agencies and organizations working to end trafficking through the implementation of anti-trafficking legislation and the development of various programs and campaigns. Such programs attempted to assist law enforcement, social service workers and health care professionals in victim identification (United States Department of Health and Human Services, 2005) as well as victim assistance (LaStrada, n.d.; Safe Horizons, 2005).

In addition to providing estimated numbers and purposes of human trafficking, the literature has evidenced several themes relevant to the study of human trafficking. First, defining the problem has led to the creation of multiple definitions and global inconsistencies when researching the phenomenon (Laczko, 2005; U.S Department of State, 2005; LaStrada, n.d.;
Arizona Coalition Against Domestic Violence, 2002; James & Atler, 2003; Andrees & van der Linden, 2005; Agbetse, Aula & Traverso, n.d.; Raymond & Hughes, 2001; Adepoju, 2005; Piper, 2005). Second, numerous recruitment methods for obtaining victims have been identified (Hughes, 2000b; Hughes, 2000c; Hughes & Denisova, 2002; Malarak, 2003; Hughes, 2004b). Third, there have been links between human trafficking and all levels of organized crime, including government corruption (Moran & Toft, 2003; Hughes & Denisova, 2001; Finckenauer & Schrock, 2001; Shelley, 2002, Stoecker, 2000; Richard, 1999; Aronowitz, 2001; Schloenhardt; 1999). Fourth, there have been multiple legislative attempts to combat human trafficking (Protocol to Prevent, Suppress and Punish Trafficking in Persons..., 2000; Jordan, 2002; Raymond, 2002; Potts, 2003). Finally, the literature has held that the existence of mitigating and aggravating factors within a country contribute to the vulnerability of potential victims, thus making them more appealing to the trafficker (Hughes, 2000c; Hughes & Denisova, 2002; James & Atler, 2003; Hughes, 2004b; Hughes, n.d.;).

These factors were divided into two categories: push factors and pull factors. The push factors represented the “supply” side of trafficking that “intensifies the vulnerability of disadvantaged or marginalized social groups to trafficking” (James & Atler, 2003, p.7). Push factors were identified, for example, as the globalization and feminization of poverty (Adepoju, 2005; Bertone, 2000; USAID, 2005; Somerset, 2005; Arizona Coalition Against Domestic Violence, 2002; Hughes, 2001; Stoecker, 2000; Schloenhardt, 1999; Hughes, 2004b; Shelley, 2002); traditional and cultural practices (James & Atler, 2003); lack of education and employment opportunities (Adepoju, 2005; Coonan & Thompson, 2005; USAID, 2005; Hughes 2002; Stoecker, 2000; Hughes, 2004); discrimination based on ethnicity or minority status (Somerset, 2005); conflict, refugees and internal displacement (Adepoju, 2005; USAID, 2005;
Arizona Department of Health Services, 2002); and selective migration policies (James & Atler, 2003).

On the other hand, pull factors were those that represented the “demand” side of trafficking and included: the need for cheap, submissive labor (USAID, 2005); commercialization and the sex industry (USAID, 2005; Arizona Coalition Against Domestic Violence, 2002; Hughes, 2000a; Stoecker, 2000); HIV/AIDS and other communicable diseases (Adepoju, 2005); low-risk, high-profile trade; trade and border controls (Coonan & Thompson, 2005; USAID, 2005; Arizona Coalition Against Domestic Violence, 2002); poor enforcement of international treaties and legal protection for trafficked victims (USAID, 2005); and perceptions of a better life elsewhere with insufficient information about the risks (James & Atler, 2003).

Purpose of the Research

The purpose of this research was to utilize data, which was consistent with anomic theory, in order to assess the validity of the U.S. Department of State’s TIP report. Not only did this study add to the knowledge base on human trafficking, but it also examined the TIP report with respect to issues of validity (i.e. criterion and construct) in accordance with anomic theory.

Theoretical Conceptual Support for the Current Research

Currently, there exists little research that utilizes theoretical conceptualization in the literature on human trafficking (Hughes & Denisova, 2002). Therefore, it was apparent that the next natural step in the research evolution on human trafficking would be to incorporate additional insights of theory to the understanding of human trafficking. For the purposes of this research, insights developed out of Institutional Anomie Theory (IAT) were utilized. IAT held
that “culturally produced pressures to secure monetary rewards, coupled with weak controls from non-economic social institutions, promote high rates of instrumental criminal activity” (Chamlin & Cochran, 1995, p.413). In other words, instead of promoting other social goals, these institutions supported the quest for material success (i.e. the American Dream). IAT was “best suited” for this research for several reasons. First, IAT does not focus on the limitations of the economic structure as the pressure to innovate, rather, it focuses on the “criminogenic influence of social institutions” (Chamlin & Cochran, 1995, p.413) on society. Second, IAT argues that other aspects of society, namely non-economic familial, educational and political institutions, contribute to the explanation of serious crime (Maume & Lee, 2003). Finally, IAT assigns a critical role to the balance among major social institutions and the absence of such balance results in the social change on crime (Kim & Pridemore, 2005; Messner & Rosenfeld, 1997); thus creating an anomic state.

In addition, the current research was grounded in IAT because it demonstrated a smooth transition from past studies. In other words, studies utilizing IAT shared similarities with the current research endeavor. For instance, several studies (Chamlin & Cochran, 1995; Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003; Stucky, 2003; Kim & Pridemore, 2005) have analyzed their phenomenon at the aggregate level of analysis and employed cross-sectional research designs paralleling the current study. In order to effectively and accurately address the research questions proposed herein, insights provided by IAT proved to be the most plausible for this study.

Literature on anomie provided a detailed illustration of the shift between Emile Durkheim’s theory of anomie, Robert Merton’s revisions of anomie and Messner & Rosenfeld’s

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2 The American Dream “refers to a commitment to the goal of material success, to be pursued by everyone in society, under conditions of open, individual competition” (Messner & Rosenfeld, 2001, p.62).
Institutional Anomie Theory. Durkheim’s theory of anomie was based on his proposition that anomie represented a state of “normlessness.” In other words, a society that underwent rapidly-changing social conditions in which “nobody knew the rules” (Pfohl, 1985, p.202) was considered anomic. On the other hand, Merton’s theory of anomie focused on the internalized “strain” caused by society. According to Lanier & Henry (2001), Merton emphasized that anomie began as a feeling of “relative deprivation” (p.239). Essentially, people compared themselves to others who were better off than they were. As a result, they felt underprivileged. This feeling of relative deprivation provoked a mismatch between cultural goals and the institutional (legitimate) means to attaining them. It was this mismatch, Merton believed, that created the strain that produced anomie (Lanier & Henry, 2001).

Another anomic perspective was that of Messner and Rosenfeld (1997). Building upon classical anomie, IAT attributed high levels of crime to interrelated cultural and structural dynamics. The basic premise of anomie, with respect to culture, was that “market mechanisms and arrangements were conducive to anomic pressures” (Messner & Rosenfeld, 1997, p.1396). In other words, markets promoted a materialistic goal-orientation, which impacted social relationships. When a preoccupation with these material outcomes existed, the legitimacy of actions decreased due to the need for efficiency and, as a result, deviant behavior was more likely to occur. Structurally, anomie was likely to exist when “the economy dominated the institutional balance of power” (Messner & Rosenfeld, 1997, p.1396). Simply stated, society’s level and types of crime were tied to how it (the society) was organized (Henry & Lanier, 2006).

Several of the variables that the literature indicated as predictors of trafficking had also been tested in the literature on IAT. For example, Messner and Rosenfeld (1997) developed a socioeconomic index that used measures of life expectancy, gross national product, infant...
mortality rates, percentage of elderly populations, population growth and the percentage of urban
development. This index was later revised into the human development index and included
measures of life expectancy, adult literacy rates, combined primary, secondary and tertiary
education enrollment and gross domestic product (Pratt & Godsey, 2003). Both studies focused
on the aggregate influence of social support and economic institutions on homicide rates. Other
studies that tested IAT employed similar lines of aggregated theoretical understanding.

Assumptions

For the purpose of this study, IAT will be the tool used to examine the validity of the TIP
report’s tier placement system. This study will not evaluate IAT and, therefore, will assume that
the theory provides explanatory value.

Scope and Delimitations

This study will include all the countries listed in the TIP report from 2005. Through the
analysis of tier placement, the number of countries will represent a population of 145 (n=145).
The study will focus on assessing the validity of the TIP report by evaluating anomic variables
(e.g. socioeconomic index, economic inequality, socioeconomic change, social support measures
and other IAT variables) through statistical analysis. Countries not included in the TIP report
will be excluded from this study.

Limitations

Human trafficking is perceived as a transnational phenomenon that is prevalent in every
country across the globe. However, the countries that are documented in the TIP report have to
meet specific criteria to be considered a significant contributor. For some countries, the evidence of trafficking does not indicate a significant number of victims (U.S Department of State, 2001). In other words, some countries are not included in the report due to an insignificant amount of documented victims (i.e. an order of less than 100 victims) (U.S Department of State, 2005). Data may also be absent for specific countries because human trafficking is often under-reported and obscured from official view (U.S. Department of State, 2001). Therefore, perhaps not all appropriate countries throughout the world are present in the TIP report and are therefore not included in the population of this study. Moreover, the data, though recovered from archival data analysis, may not be consistently measured across time. Specifically, one variable may have data available from 2000 to 2004; while another variable may have data available only from 2000 to 2002. Notwithstanding these issues, such limitations are not expected to demonstrate any fatal flaws with respect to the current research endeavor.

Research Design

The data from the TIP report will serve as the population data of this study (countries). This study will use information gathered from the TIP Report and the World Bank to inform relevant IAT variables. Such variables include, but are not limited to: life expectancy at birth; gross domestic product; adult literacy rates; and population growth. The majority of the data collected will represent statistics from 2004. However, in the event that such data is not complete, statistics will be collected from the most recent year and documented as such. The compiled data will allow the researcher to examine the variables across units of analysis (i.e. countries and tiers). Statistical analyses (i.e. ANOVA, multinomial logistic regression) will be conducted to determine whether or not IAT at the aggregate level of analysis (by country)
demonstrates both construct and criterion-related validity for the current tier placement system as utilized by the U.S. Department of State.

Research Questions

Two primary research questions were considered in the current study. First, the research asked whether or not the tier placement system utilized by the U.S. Department of State’s “Trafficking in Persons” Report demonstrated validity in accordance with Anomic Theory. Specifically, the research determined the extent to which the tier placement system demonstrated construct and criterion-related validity through the use of statistical analyses. The second research question asked whether or not the utilization of such findings would confirm or challenge the tier placement practices as currently used by the U.S. Department of State.

Significance of the Study

The findings of this research contribute three primary benefits to the scientific literature. First, this research adds to the current knowledgebase on human trafficking. This is significant because it not only complements the array of studies examining human trafficking, but it also adds an original theoretical perspective that considers human trafficking from an aggregate level of analysis.

Second, the findings from this research will either inform or challenge the U.S. Department of State’s practice of utilizing the current tier system criterion for placement purposes regarding anti-trafficking efforts. Changes in the current tier placement policies would be inevitable regardless if the findings support or challenge the system. In the event that the findings inform the current tier placement practices, it may be suggested that the U.S.
Department of State begin purposefully considering external criterion in addition to the minimum standards. In doing so, the sensitivity and accuracy of the actual placements may be enhanced and a more realistic picture of human trafficking would likely emerge.

On the other hand, if the findings challenge current practices, it may mean that socioeconomic variables are not influential to the tier placement system and that a possibility exists that some other external criteria is more predictive of tier placement, such as political variables. Knowing this, it may be suggested that the U.S. Department of State re-evaluate the tier placement system to identify any underlying influences caused by some external variables. Identification of such influences would be significant for the Trafficking in Persons Report, because it may validate the tier placement system.

Finally, the findings from this research may impact the way human trafficking is measured and viewed. In other words, if anomic variables are found to be predictive of tier placement, anti-trafficking campaigns and programs may emerge that directly affect the variables and work to eliminate its impact on human trafficking. On the other hand, if the anomic variables are found to be inconsequential to tier placement, the issue of socioeconomic conditions influencing human trafficking may need to be re-considered, as the findings would not support a relationship between tier placement and socioeconomic variables.

In summary, the significance of this research is three-fold. First, it contributes the body of knowledge on human trafficking. Second, the findings may influence the U.S. Department of State’s tier placement system policies, whether the findings support or challenge the system. Finally, this research may impact the social responses and reactions to human trafficking. The findings may impact future anti-trafficking campaigns and awareness programs.
Chapter 2: Literature Review

Although the term “human trafficking” was termed in the late 20\textsuperscript{th} century, the concept of trading human beings could be found dating back to the 13\textsuperscript{th} century European slave trades in Africa. Likewise, the issue of slavery has roots dating back to biblical times. This modern-day form of slavery was preceded by centuries of inhumane and barbaric treatments of people and several societal responses aimed at eliminating slavery, including the historical Emancipation Proclamation of 1863.

The modern-day trade in human beings first received attention in the late 19\textsuperscript{th} century in relation to the trade in women (Bruckert & Parent, 2002; Bertone, 2000). This emergence was thought to be associated with the “white slave trade” and the increase in the number of migrant prostitutes in Europe (Doezema, 2000). Around the same time, this concept was introduced into the public’s awareness with references found in literary classics, such as Upton Sinclair’s (1906) “The Jungle.” In his book, Sinclair (1906) described a dialogue between two of his characters, which depicted a scene of this modern day slavery:

...that’s the way they keep the girls – they let them run up debts, so they can’t get away. A young girl comes from abroad, and she doesn’t know a word of English, and she gets into a place like this, and when she wants to go the madame shows her that she is a couple of hundred dollars in debt, and takes all her clothes away and threatens to have her arrested if she doesn’t stay and do as she’s told...often, too, they are girls that didn’t know what they were coming into (p.305).

It was not until the late 20\textsuperscript{th} century that the “white slave trade” was transformed into “trafficking in women” when the focus shifted to third world, non-western women for purposes of sexual exploitation (Bruckert & Parent, 2002). With the \textit{United Nations Convention Against Transnational Organized Crime} in 2000, “human trafficking” became a catch-all for victims of...
all forms including men and children for purposes other than sexual exploitation (i.e. various forms of labor). It was not that the world just started recognizing that people were being abducted and sold into slave-like conditions; rather, the public was becoming more aware of this lucrative global market. Current literature found that trafficking patterns occurred in “waves” (Malarek, 2003). In other words, specific regions of the world, during specific periods in history, were deemed “hot spots” for human trafficking. In the 1970s, Southeast Asia, specifically Thailand and the Philippines, were the dominant suppliers of women for the purposes of prostitution. It was not uncommon for the U.S. military bases in the Philippines to be occupied by Filipina prostitutes. In fact, when U.S. military bases were shut down in the 1990s, it had a direct affect (coupled with the Asian economic crisis) on the high unemployment rates of Filipina women (Hughes, Chon, & Ellerman, n.d.; Bertone, 2000). In the early to mid-1980s, it was Africa, predominantly Ghana and Nigeria; in the late 1980s to early 1990s, it was Latin America, more specifically Colombia, Brazil and the Dominican Republic; and from the mid-1990s to the present, Eastern Europe, mainly Ukraine and Russia, have been the suppliers of victims to suffice the demands of the western world (Malarek, 2003; Hughes & Denisova, 2002; Hughes, 2001). With the breakup of the Soviet Union in 1991, democracy swept over its former republics and Warsaw Pact States (Malarek, 2003). Citizens were free to live in their own nations; free to “speak their own language, practice their own faiths and...govern themselves” (Malarek, 2003, p.1). However, the economies of the new republic collapsed and the social safety net that had provided a minimum standard of living for most of the population was destroyed (Malarek, 2003).

According to the U.S. Department of State’s Trafficking in Person’s (TIP) Report, the estimated number of victims (men, women and children) trafficked across international borders
each year was between 600,000 and 800,000 (U.S Department of State, 2005). It was also estimated that approximately 80 percent of the trafficking victims were women and 50 percent were minors (Bureau of Public Affairs, 2005). Richard (1999) argued that these estimations of trafficking vary from source to source because no U.S. or international agency had compiled accurate statistics. Other estimates have ranged between 700,000 and four million people trafficked globally each year (Richard, 1999; Thompson, 2004; Carpenter, 2003; Joshi, 2002). There have also been estimates of between 15,000 to 18,000 victims trafficked into the United States annually (Hughes, 2001; Thompson, 2004; Bureau of Justice Assistance, 2005). Other studies have estimated that “50,000 women and children are trafficked each year into the United States” (Raymond & Hughes, 2001, p.17). A significant limitation to these estimates is that they have not included the millions of victims around the world trafficked within their own national borders (U.S. Department of State, 2006). Regardless, owing to the “clandestine nature of trafficking and the way in which its victims are hidden and controlled” (Thompson, 2004, p.22), it was impossible to find precise numbers representing the scope and extent of human trafficking.

Victims are trafficked for several different purposes. Most sources reported that the majority of trafficking victims were trafficked for commercial sexual exploitation (U.S. Department of State, 2005; Free the Slaves and Human Rights Center, 2004). Domestic servitude was another reason for trafficking victims. For example, in March of 2006, a Cameroonian couple (residing in the U.S.) was convicted of involuntary servitude and related charges (U.S. Immigration and Customs Enforcement, 2006). The Immigration and Customs Enforcement (ICE) received reports of a young girl possibly being held against her will. An investigation revealed that the girl was brought illegally into the United States and lived in the couple’s home. She was forced, through beatings and threats, to care for the couple’s children and perform
various household chores without pay. The young girl was limited in her interactions with the outside world and was not permitted to go to school (U.S. Immigration and Customs Enforcement, 2006).

Each year, thousands of men, women and children were trafficked and forced to work without pay in deplorable conditions (Free the Slaves & Human Rights Center, 2004). Forced labor, according to the International Labor Organization (ILO), is “all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily” (Free the Slaves & Human Rights Center, 2004, p.1). While this form of trafficking involves forcing victims into sexual services, it also includes agricultural work, criminal activities, restaurant work, hotel housekeeping and landscaping (Bureau of Justice Assistance, 2005).

There are many agencies and organizations working to attempt to control the spread of and end trafficking. In addition to governments passing anti-trafficking legislation, many governmental departments and non-governmental organizations have created programs and campaigns to combat this crime. For example, the United States Department of Health and Human Services developed a campaign entitled “Rescue and Restore Victims of Human Trafficking.” This campaign has created numerous fact sheets and toolkits for different departments within the social service industry. These toolkits include brochures, fact sheets, questionnaires and tips for identifying victims of trafficking for health care providers, social service organizations and law enforcement officers (U.S. Department of Health and Human Services, 2005).

Another organization, designed to promote self-awareness to young women and children who may be at risk, is LaStrada. LaStrada is based out of two separate countries: the Ukraine and
the Czech Republic. LaStrada Ukraine engages in numerous anti-trafficking activities such as:
(a) providing a broad range of assistance for trafficked persons; (b) providing a “hot-line” for
emergency telephone assistance; (c) researching the problem of violence against women; (d)
providing expertise on legislation in an advisory capacity concerning women’s status in Ukraine;
(e) conducting educational programs among youth on the problem of women’s rights, prevention
of trafficking in women and other kinds of violence and exploitation; (f) cooperation with mass
media, distribution of the information about the issues; (g) publishing and distributing materials,
bulletins, leaflets; (h) conducting seminars and conferences; (i) cooperating with governmental
and non-governmental organizations in Ukraine and abroad with the goals of preventing
trafficking in women and providing assistance for trafficked persons; (j) and cooperating with
law enforcement bodies and lawyers in the field of improving Ukrainian legislation concerning
trafficking in human beings; and trafficked persons’ protection (LaStrada, 2005).

Similar promotional and awareness programs were executed from other organizations as
well, including MTV EXIT, End Child Prostitution and Trafficking (ECPACT), Global Alliance
against Traffic in Women, Safe Horizons, and Vital Voices\(^3\). While this list was not exclusive, it
illustrated the increasing involvement of non-governmental organizations for the assistance of
trafficking victims.

In addition to providing prevalence estimates and purposes of human trafficking, the
literature has also shown several themes relevant to studying human trafficking. First, defining
the problem has led to the creation of multiple definitions and global inconsistencies when
researching the phenomenon. Second, numerous recruitment methods for obtaining victims have
been identified (Malarek, 2003; Hughes, 2000b; Hughes, 2000c). Third, there have been links
between human trafficking and all levels of organized crime, including government corruption
\(^3\) For more information regarding these programs, see Appendix B.

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(Moran & Toft, 2003; Hughes & Denisova, 2001; Finckenauer & Schrock, 2004; Shelley, 2002, Stoecker, 2000.; Richard, 1999; Aronowitz, 2001; Schloenhardt; 1999)). Fourth, there have been multiple legislative attempts to combat human trafficking (Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, 2000; Jordan, 2002; Raymond, 2002; Potts, 2003). Finally, the literature has held that the existence of mitigating and aggravating factors within a country contribute to the vulnerability of potential victims; thus, making them more appealing to the trafficker (James & Atler, 2003; Hughes, n.d.; Hughes, 2004b; Hughes & Denisova, 2002; Hughes, 2000b).

Defining the Problem

The framework for officially defining human trafficking has centered on the legislative measures implemented to combat it. Basically, in order for governments to take a stance against human trafficking, they had to understand and define what it is they were fighting against. In 1994, trafficking was viewed as an international migratory movement that exhibited the following conditions: (a) money or payment exchange; (b) a facilitator is involved; (c) an international border is crossed; (d) entry is illegal; and (e) the movement is voluntary (Laczko, 2005). This definition reflects how the “smuggling of human beings” was defined. In 2000, the UN Convention against Transnational Organized Crime convened and developed the “United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially in Women and Children” and adopted a broader definition of trafficking (which included an added element of exploitation). The UN defined trafficking in persons as:

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the recruitment, transportation, transfer, harboring or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation (p.2).

This definition provided a comprehensive description of the three elements involved in the trafficking of humans. First, it described the activities that constitute human trafficking (i.e. recruitment, transportation, harboring and the receipt of persons). The Protocol then identified the means being used (i.e. force, coercion, abduction, fraud, deception, abuse of power or a position of vulnerability) and the purpose, which was exploitation (i.e. prostitution of others, sexual exploitation, forced labor or services, slavery or practices similar to slavery) (Andrees & van der Linden, 2005; Agbetse, n.d.; James & Atler, 2003). It was for these reasons that this definition was used for the current research.

In order to fully understand the complexity of the Protocol's definition, it was necessary to define the individual elements within it. Here, force was defined as "obtaining or maintaining through act or threat the labor, services, or other activities of a person by physical, legal, psychological or mental coercion, or abuse of authority" (Richard, 1999, p.vi). Force also entailed "a person’s reasonable belief that he has no viable alternative but to perform the work, service or activity, whether that is objectively correct or not" (Richard, 1999, p.vi). Coercion, sometimes considered a level of force, was defined as "(a) threats of serious harm to or physical restraint against any person; (b) any scheme, plan or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any

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"Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs" (United Nations Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially in Women and Children, 2000, p.2).
The majority of research available on human trafficking focused on the trafficking of women for purposes of sexual exploitation. Therefore, sex trafficking was categorized by the Trafficking Victims Protection Act (2000) as being a severe form of trafficking in persons and was defined by the TVPA as:

sex trafficking\(^5\) in which a commercial sex act\(^6\) is induced by force, fraud, or coercion, or in which the person induced to perform such an act has not attained 18 years of age; or the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude\(^7\), peonage, debt bondage\(^8\) or slavery (U.S. Department of State, 2005, p.25).

There was existing literature that defined human trafficking and human smuggling interchangeably; however, both concepts were distinctly different. The ICE Office of Investigation acknowledged the distinction between the two and confirmed that, “generally, human smuggling is driven by two different goals: (a) smuggling by friends and relatives who may assist illegal entry for personal reasons, and (b) smuggling for profit conducted by organized crime groups in a deliberate evasion of the immigration laws” (ICE, n.d). However,

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\(^{5}\) “Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act (U.S. Department of State, 2005, p.25).

\(^{6}\) “Commercial sex act” means any sex act on account of which anything of value is given to or received by any person (U.S. Department of State, 2005, p.25).

\(^{7}\) “Involuntary servitude” includes a condition of servitude induced by means of (a) any scheme, plan or pattern intended to cause a person to believe that, if the person did not enter into or continue in such condition, that person or another person would suffer serious harm or physical restraint; or (b) the abuse or threatened abuse of the legal process (U.S. Department of State, 2005, p.25).

\(^{8}\) “Debt bondage” means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined (U.S. Department of State, 2005, p.25).

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 unlike smuggling, trafficking specifically targeted the trafficked person as an object of criminal exploitation; “the purpose from the beginning...is to profit from the exploitation of the victim” (The Human Smuggling and Trafficking Center, 2005, p.2). Table 2.1 demonstrates the general differences between human trafficking and smuggling.

<table>
<thead>
<tr>
<th>TRAFFICKING</th>
<th>SMUGGLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must contain an element of force or coercion (actual, perceived or implied), unless under 18 years of age involved in commercial sex acts.</td>
<td>The person being smuggled is generally cooperating.</td>
</tr>
<tr>
<td>Forced labor and/or exploitation.</td>
<td>There is not actual or implied coercion.</td>
</tr>
<tr>
<td>Persons trafficked are victims.</td>
<td>Persons smuggled are violating the law. They are not victims.</td>
</tr>
<tr>
<td>Enslaved, subjected to limited movement or isolation, or had documents confiscated.</td>
<td>Persons are free to leave, change jobs, etc.</td>
</tr>
<tr>
<td>Need not involve the actual movement of the victim.</td>
<td>Facilitates the illegal entry of person(s) from one country into another.</td>
</tr>
<tr>
<td>No requirement to cross an international border.</td>
<td>Smuggling always crosses an international border.</td>
</tr>
<tr>
<td>Person must be involved in labor/services or commercial sex act, i.e., must be &quot;working.&quot;</td>
<td>Person must only be in country or attempting entry illegally.</td>
</tr>
</tbody>
</table>

Source: Adapted from the Human Smuggling and Trafficking Center, 2005, p.4.

*This table does not provide a precise legal distinction, but merely general fact differences derived from fact scenarios, which in themselves are quite complex.

In reviewing the literature on human trafficking, it was obvious there was a connection between human trafficking and organized crime. In fact, “international organized crime has capitalized on weak economies [and] corruption...to traffic some 700,000 to two million women

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*"Smuggling" is the facilitation, transportation, attempted transportation, or illegal entry of a person(s) across an international border, in violation of one or more countries laws, either clandestinely or through deception, such as the use of fraudulent documents" (The Human Smuggling and Trafficking Center, 2005, p.2).
and children globally each year” (Richard, 1999, p.55). Theoretically speaking, organized crime is generally associated with self-perpetuating, hierarchal criminal organizations, such as the Italian Mafia, and whose primary goal is economic gain through illegitimate means (Richard, 1999). However, the UN Convention against Transnational Organized Crime developed a definition that encompasses a broader spectrum of crime affiliation (Richard, 1999); more specifically, this definition encompasses smaller crime groups, loosely connected criminal networks, or large organized families. According to the following definition, “an organized crime group is a structured group of three or more persons existing for a period of time and having the aim of committing a serious crime in order to, directly or indirectly, obtain a financial or other material benefit” (Richard, 1999, p.vii).

When identifying the connection between human trafficking and organized crime, it is important to identify the key people involved. According to Raymond and Hughes (2001), traffickers/recruiters are criminals who supply the sex industry with women (p.48). Pimps, on the other hand, are those who control the women on a day-to-day basis (Raymond & Hughes, 2001).

In addition to understanding the concept of human trafficking, it is imperative to understand, or at least be aware of other major forms of trafficking: child trafficking and labor trafficking. As far as terminology is concerned, child trafficking assumes the definition of human trafficking as explained in the Protocol, with one added element: “child refers to any person under eighteen years of age” (Agbetse, Aula, & Traverso, n.d., p.12). Most crimes against children, in terms of trafficking, fall under the former description; however, child labor is viewed as its own form of labor trafficking, which includes bonded and forced labor.
Labor trafficking, a modern-day form of slavery is recognized as its own section within the TVPA (2000). According to Rescue and Restore Victims of Trafficking (2004b), "bonded labor, otherwise known as debt bondage, is the most widely used method of enslaving people...Victims become bonded laborers when their labor is demanded as means of repayment for a loan or service...the value of their work is greater than the original sum of money "borrowed"" (p.1). The other form of labor trafficking is forced labor, which is a situation in which victims are forced to work against their own will, under the threat of violence or some other form of punishment, their freedom is restricted and a degree of ownership is exerted (Rescue & Restore Victims of Trafficking, 2004b). This form of trafficking includes domestic servitude, agricultural labor, "sweatshop" factory labor, janitorial, food service and other service industry labor, begging, and indentured servitude.

Different branches of government and organizations define, categorize and handle trafficking cases in different ways. "Distinctions regarding trafficking in women, alien smuggling, and irregular migration are sometimes blurred [due to the] predisposition to jump to the conclusion that most cases involving illegal workers are alien smuggling instead of human trafficking" (Richard, 1999, p.31). However, while there is an overall majority of international acceptance of the Protocol's legal definition of human trafficking, researchers continue to disagree on its meaning and how it should be studied (Laczko, 2005; Adepoju, 2005; Piper, 2005). In fact, many contemporary research articles “discuss the problems involved in defining trafficking and developing an operational definition for the purpose of research and data gathering” (Laczko, 2005, p.11). The benefits of a universal definition in academics will allow for a systematic collection of global data from various countries and allow for official statistics

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10 "Labor trafficking" is the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage or slavery (Rescue & Restore Victims of Trafficking, 2004b).
to be examined. In addition, it will establish the extent to which trafficking is increasing or decreasing within a particular area. Therefore, it is crucial that an agreed upon definition exist among researchers, because without one, the current lack of reliable data on trafficking will continue and research will fail to reveal accurate accounts of trafficking occurrences.

Recruitment Methods

Recruitment was considered a major element in the crime of trafficking. In order to satisfy the demands of the sex industry, women were deceived into committing their lives to an unknown occupation. Some women had a general idea that they were being recruited into the sex industry; however, they were unaware of their future circumstances. There were, on the other hand, women who had no idea they were being deceived. Traffickers were methodological people who took advantage of the vulnerabilities of their potential victims. They often went to extreme measures in order to ensure they obtained a healthy supply of women. A number of recruitment methods described in the human trafficking literature included: false job opportunities as waitresses, models, nannies, dishwashers and maids (Malarek, 2003; Bureau of Justice Assistance, 2005; U.S. Department of State, 2005), false marriage proposals (Hughes, 2004b; Raymond & Hughes, 2001), educational opportunities (U.S. Department of State, 2005) and abduction (Malarek, 2003). The following represented one example:

Karin, a young mother of two, was looking for a job in Sri Lanka when a man befriended her and convinced her that she could land a better job in Singapore as a waitress. He arranged and paid for her travel. A Sri Lankan woman met Karin upon arrival in Singapore, confiscated her passport and took her to a hotel. The woman made it clear that Karin had to submit to prostitution to pay back the money it cost her to be flown into Singapore...three months after her arrival, [she] was arrested by the Singaporean police during a raid on the brothel. She was deported to Sri Lanka (U.S. Department of State, 2005, p.16).
“Everyday, hundreds of women...are lured by job offers” (Malarek, 2003, p. 9).

Newspaper advertisements provided women with seemingly ideal opportunities that led them to believe they would be leaving their poverty stricken lives behind (Malarek, 2003). The advertisements did not even present mandatory qualifications. The following example was found in a Kyiv (the capital of Ukraine) newspaper: “Girls: Must be single and very pretty. Young and tall. We invite you to work as models, secretaries, dancers, choreographers, gymnasts. Housing is supplied. Foreign posts available. Must apply in person” (p.10).

Individual women were not the only targets of traffickers. Sometimes, women were recruited in groups believing that there was safety in numbers. In fact, “one group of women from Ukraine was offered jobs as housekeepers in the Czech Republic. Once they crossed into the Republic, they were sold to a pimp for $500 each and forced into prostitution” (Malarek, 2003, p. 11). Hughes and Denisova (2002) conducted a study of trafficking in women from the Ukraine. They found that 70 percent of the women trafficked (in their study) were trafficked by means of sophisticated deception. They were offered waitressing and dancing positions and “were presented with credible, step-by-step plans that left no feeling of doubt in the victims’ mind” (p. 43).

In the world of sex trafficking, not all women fell victim to false job advertisements. There were various other ways that traffickers met the demands of their buyers. One example involved marriage agencies. “One of the most visible signs of the recruitment of women from countries of the former Soviet Union is the internet sites of ‘marriage agencies’” (Hughes, 2004b, p. 2). A search through marriage agencies on the Internet revealed that pornographic photos of the women were used to entice potential buyers. In fact, internet searches alluded to almost 500 marriage agency sites advertising women from former Soviet countries (Hughes &
Denisova, 2002). "The expansion of the global sex market, especially over the Internet, has intensified the harm to the victims and normalized...victimization and exploitation" (Hughes, 2000b, p.14). The Internet as a communications medium would exist without the sex industry, but the Internet industry would not be growing and expanding at its present rate without it (Hughes, 2000b). Technology had definitely aided by providing the sex industry new means of exploiting and marketing women and children as commodities for male buyers.

In addition to using marriage agencies as a method of recruiting women, there have been cases of U.S. military personnel marrying women and then selling them back in the states. According to Raymond and Hughes (2001), many Asian women were brought to the United States by U.S. servicemen and ended up in the sex industry after the relationship dissolved. This bride trade is extremely popular among populations in regions of high poverty and unemployment (Hughes & Denisova, 2002). Other victims, who were trafficked by a 'boyfriend,' were lured across borders with "the excitement and expectation of 'a night on the town,' only to be forced into waiting vehicles and sold to pimps for a bundle of cash" (Malarek, 2003, p.14).

Traffickers also use current victims to recruit new women -- "the so-called second wave" (Malarek, 2003, p. 13). For many trafficked women, the pimps offer the choice to return home so long as they gather a number of replacements. Often times, it is the only way of escaping the unwanted, unprotected sex with dozens of men each day (Malarek, 2003).

In contrast to international women, U.S. women are trafficked in much more casual settings. As an example, "the Mall of America is described as being one of the largest pimping grounds in the state of Minnesota" (Raymond & Hughes, 2001, p.52), where traffickers recruit young women who "hang out" there. Clubs are another common place for recruitment, for both
those women who congregate there and for those women who are employed there. Pimps will befriend women, introduce either an emotional or chemical dependency and then convince them to earn money for him through prostitution (Raymond & Hughes, 2001). In gentlemen’s clubs, there is pressure on the women who dance to ‘do a little more’ to bring in more money (Raymond & Hughes, 2001, p.53).

Finally, and perhaps one of the most terrifying recruitment tactic, was outright abduction. “In many rural areas, women and girls haven been kidnapped walking home along country roads” (Malarek, 2003, p.14). In some areas, the situations had become so serious, parents refused to send their daughters to school for fear they would never be seen again.

**Abuse and Consequences**

Victims of trafficking were subjected to various forms of abuse and consequences as a result of being trafficked. This included sexual, physical and emotional abuse; poor working conditions and lack of health care; pregnancy and abortion; HIV/AIDS and other sexually transmitted diseases; drug and alcohol abuse; and the inability to reintegrate into society (James & Atler, 2003).

Trafficking victims were exposed to all forms of abuse throughout the entire trafficking experience. For example, there were several accounts of children reporting being slapped, kicked, beaten unconscious, burned with cigarettes and raped for refusing to work (End Child Prostitution, Child Pornography and Trafficking of Children for Sexual Purposes, 2006). As a result of daily violence, many victims were in constant fear and exhibit feelings of “shame, guilt, depression, denial and self-blame” (James & Atler, 2003, p.77). Victims were also subjected to poor working conditions, which consisted of working 20 hours a day with inadequate food
supply and shelter. According to Hughes, Chon & Ellerman (n.d.), "the journal of a 22 year-old Filipina [woman] detailed how she and other trafficking victims were locked in their rooms, had their passports and travel documents confiscated, [were] threatened with violence, prohibited from making phone calls, and were given less than $10 a week for food" (p.8). It was also found that victims of trafficking in South Korea were forced to cohabitate with six or more women per room (Hughes, Chon & Ellerman, n.d.).

Because victims were largely in debt to their pimps or "owners," it became increasingly difficult for victims to afford sufficient health care when needed (James & Atler, 2003). Coinciding with poor health care was the risk of pregnancy and abortion. While most women were offered the daily contraceptive pill, some were not. Those who became pregnant were forced to have an abortion, which was usually self-induced or "performed in appalling conditions either by their employers or by other trafficked women" (James & Atler, 2003, p.78). Those who chose to keep the child often returned home where, many times, their child faced serious social stigma or ostracism (James & Atler, 2003).

Sex trafficking victims were also at high risk of contracting HIV/AIDS and other seriously threatening STDs. The message of practicing safe sex was rarely administered to women. The risk resulted from the resistance or refusal of clientele to wear condoms, in which case the women was forced comply (James & Atler, 2003).

Drug and alcohol abuse were also very common within the population of trafficking victims. Many victims used drugs and alcohol as coping mechanisms, while the pimps used the drugs and alcohol as an additional debt bond for the victims (James & Atler, 2003). Even after victims were released home, they continued to battle with their drug and alcohol dependency, further burdening existing financial hardships. Returning home often traumatized the victim as
well. In addition to coping with the “irreparable harm” of the abuse they had suffered (James & Atler, 2003, p.78), victims were often stigmatized as being sexually and morally depraved by their community. They faced rejection from their family and many found themselves unable to self-support by finding a job. Some returned to prostitution in their own communities to earn some money (James & Atler, 2003).

*Organized Crime Links*

The involvement of organized crime networks was also present in the literature on human trafficking. There was no doubt that a connection existed between human trafficking and organized crime. Many sources confirm this link (Moran & Toft, 2003; Hughes & Denisova, 2001; Finckenauer & Schrock, 2001; Shelley, 2002; Stoecker, n.d.; Richard, 1999; Aronowitz 2001; Schloenhardt, 1999); however, there was a discrepancy about the level of involvement organized crime groups invested in the whole trafficking process – from beginning to end. Trafficking human beings was arranged by both small and large organized crime groups (Shelley, 2002); for example, “Russian organized crime [groups] provide the ‘roof’ or cover for trafficking operations, while lower-level Russian criminals manage recruitment and logistics” (Richard, 1999, p.57).

Involvement of organized crime networks differed between international and domestic locations. Specifically speaking, in the United States, trafficking [in women] was primarily conducted by crime rings and loosely connected networks, while overseas, major crime syndicates were heavily involved (Richard, 1999). According to Shelley (2002), “the international links of the traffickers is a very central element of the equation” (p.214). The ability to threaten the victim or the victim’s family with severe violence to maintain control over the
victim was reinforced by the sheer power of the organized crime groups. These threats against the victim made them "particularly vulnerable" (Shelley, 2002, p.214) and easily controlled throughout the trafficking process. Because organized crime groups have had a long history of criminal involvement, the transition to human trafficking proved to be a smooth one.

Anti-Trafficking Legislation

There have been numerous global efforts made around the world to combat human trafficking, dating back to the early 20th century. In 1910, the Mann Act (18 U.S.C. § 2421 et seq.) was passed in the United States. According to the Act, "knowingly transporting any individual, male or female, in interstate or foreign commerce or in any territory or possession of the United States for the purpose of prostitution or sexual activity" (United States Attorneys, 1997, p.2027) is a criminal offense under federal or state statute or local ordinance. The Act also dedicated section 2423 to the issue of transporting minors under the age of 18 for the purpose of prostitution or sexual activity and provided for "an enhanced penalty" (United States Attorneys, 1997, p.2027) if prosecuted under this section.

The Mann Act was followed by the Universal Declaration of Human Rights adopted by the General Assembly of the United Nations in 1948. The goal for the Declaration was for people use the articles as "common standards of achievement...that every individual and every organ of society...shall strive by teaching and education to promote respect for these rights and freedoms..." (United Nations General Assembly, 1948, p.1-2). While this document encompassed human rights in its entirety, article 4 specifically targeted the issue of slavery and present day human trafficking: "no one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms" (United Nations General Assembly, 1948, p.2).
It was not until 52 years later that the next legislative action against human trafficking emerged: the “Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime.” The purpose of this protocol (located in article 2) was: “(a) to prevent and combat trafficking in persons, paying particular attention to women and children; (b) to protect and assist the victims of such trafficking, with full respect for their human rights; and (c) to promote cooperation among States Parties in order to meet those objectives” (Protocol to Prevent, Suppress and Punish Trafficking in Persons..., 2000). One of the purposes of the Protocol was to protect and assist victims. “Even though the protections provisions are relatively weak, the Protocol does obligate governments to adopt domestic laws and policies to protect the rights of, and provide assistance to, trafficked persons…” (Jordan, 2002, p.6). It recognized that certain forms of protection must remain consistent with international human rights norms (Jordan, 2002).

While the Protocol was under deliberation, the most controversial aspect was [defining] trafficking (Raymond, 2002, p.493). The major debate centered on the conditions under which trafficking took place; the issue questioned whether or not it would be considered trafficking if a victim consented to being transported and then was used as a prostitute (Raymond, 2002). During trial cases, “consent was seen as central to the woman’s credibility” (Raymond, 2002, p.494), so it was up to the officers and courts to determine whether or not she had an expectation of enslavement upon entering the United States. The majority of the countries who debated the issue agreed that it was necessary to utilize a definition that “protected all victims of trafficking.
and that was not limited to force or coercion” (Raymond, 2002, p. 495). Article 3 of the
Protocol states such a definition.

Article 3 documented multiple provisions which were important to the fight against
trafficking. The trafficked persons were no longer viewed as criminals, but rather as victims of a
crime and all victims were protected, not just those who could prove force (Raymond, 2002).
Raymond (2002) summarized that “the key actionable element in the trafficking process is the
exploitation, rather than the movement across a border” (p.495) and consent was irrelevant to
establish that the crime was committed.

While many believed that the Protocol was a beneficial step forward in combating
trafficking, others asserted that it was not enough. According to LeRoy Potts, Jr. (2003),
“...states must now work in a bilateral and multilateral framework to stop criminals involved in
trafficking...states must not only enact anti-trafficking laws but assist their judicial systems in
understanding the trafficking scourge and in vigorously prosecuting and punishing traffickers”
(p.228). The Protocol’s framers believed that state-to-state cooperation was a necessity in the
global fight against trafficking. In order to build on this three-P (protection, punish and
prevention) foundation, the global community must take control over organized crime issues and
eliminate corruption within the system. Policies could be implemented and made into laws;
however, it proper enforcement was required to make them effective.

For the purposes of this Protocol: (a) “Trafficking in persons” shall mean the recruitment, transportation, transfer,
harbor, or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud,
of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or
benefits to achieve the consent of a person having control over another person, for the purpose of exploitation.
Exploitation shall include at a minimum, the exploitation of the prostitution of others or other forms of sexual
exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs; (b)
the consent of a victim of trafficking in persons to the intended exploitation set forth in subparagraph (a) of this
article shall be irrelevant where any of the means set forth in subparagraph (a) have been used; (c) the recruitment,
transportation, transfer, harboring or receipt of a child for the purpose of exploitation shall be considered
“trafficking in persons” even if this does not involve any of the means set forth in subparagraph (a) of this article;
and (d) “child” shall mean any person under 18 years of age (Raymond, 2002, p. 495).
The Victims of Trafficking and Violence Protection Act (VTVPA) 2000 was developed around the same time as the UN’s Protocol. The purpose of the VTVPA was to “combat trafficking in persons, especially into the sex trade, slavery and involuntary servitude [and] to reauthorize certain federal programs to prevent violence against women...” (Victims of Trafficking and Violence Protection Act, 2000). Division A of this Act was the Trafficking Victims Protection Act (TVPA) of 2000. The purposes of this division were to “combat trafficking in persons...to ensure just and effective punishment of traffickers and to protect their victims” (TVPA, 2000). Due to the severity of the issue, the VTVPA was reauthorized in 2003 and in 2005.

Mitigating and Aggravating Contributory Factors

These potentially influential factors were be divided into two categories: push factors and pull factors. The push factors represented the “supply” side of trafficking that “intensifies the vulnerability of disadvantaged or marginalized social groups to trafficking” (James & Atler, 2003, p.7). Push factors were identified, for example, as the globalization and feminization of poverty; traditional and cultural practices; lack of education and employment opportunities; discrimination based on ethnicity or minority status; conflict, refugees and internal displacement; and selective migration policies (James & Atler, 2003).

While the globalization of poverty referred to women’s universal inequality in status, power and access to resources (James & Atler, 2003), the feminization of poverty referred to the fact that “women’s employment opportunities have diminished and globalizing economic forces have increased” (James & Atler, 2003, p.74). Structural Adjustment Programs (SAPs) imposed by international financial institutions have forced states into reducing their spending on social
welfare, education and healthcare. The burden of providing these basic needs fell largely to the household where it has increased the women’s workload but, reduced their ability to handle the burden of extra costs (James & Atler, 2003). Traditions and cultural practices also contributed to the supply side of the human trafficking equation. Despite international efforts to create an adequate international human rights framework, the recognition and protection of women from gender-specific human rights abuses remained poor (James & Atler, 2003). Abuses of rights were often hidden or excused as being fundamental, cultural or religious practices or as somewhat natural (Cook, 1994).

Another push factor was the opportunity of education and unemployment open to females. “As a result of the interplay of poverty and cultural practices, girls are often prevented from enjoying the right to equal education” (James & Atler, 2003, p.74). If there was little money for education, it was more likely to go toward the education of the male child, who was seen as the future primary supporter of the family. In addition to the lack of educational opportunities for women, employment opportunities in traditional fields of work have dramatically decreased (James & Atler, 2003). Women often experienced…discrimination on the basis of their race, ethnicity, religion, language or economic status and their gender, creating a situation of “double or triple marginalization” (Coomaraswamy, 2000 in James & Atler, 2003, p.75).

Internal displacement, migration and selective migration policies have also contributed to the causes of human trafficking. “Internal displacement and migration has increased with the growing prevalence of ‘environmental refugees’ — those who have been forced to flee natural disaster, environmental degradation, deforestation or from the increasing concentration of land in the hands of a few land-holders” (James & Atler, 2003, p.75). Women in such situations were
extremely vulnerable to being trafficked as they were often left homeless, without any financial support or the cultural requisite of protection from older male relatives. In relation to migration policies, women’s abilities to migrate legally were significantly less than their male counterparts (James & Atler, 2003); in fact, many migration policies favored only skilled labor or unskilled males for manual labor.

Contrary to the push factors, pull factors were those that represented the “demand” side of trafficking and included: the need for cheap, submissive labor; commercialization and the sex industry; HIV/AIDS and other communicable diseases; low-risk, high-profile trade; trade and border controls; poor enforcement of international treaties and legal protection for trafficked victims; and perceptions of a better life elsewhere with poor information about the risks (James & Atler, 2003).

Cheap, submissive labor was a common demand throughout the global economy. Women were targeted for trafficking in part due to the perception that they were ‘by nature’ more easily controlled and accepting of low wage and hazardous conditions (UNIFEM, 1999). In fact, “many governments in developing countries view prostitution as a necessary part of promoting tourism as a means to development” (James & Atler, 2003, p.76); thus, making commercialization and the sex industry major factors in demand. In wealthier nations, disposable income means high demands on the sex industry, such as pornography, for leisure and entertainment (James & Atler, 2003). The spread of HIV/AIDS, particularly in the developing world, has also led to an increase in the trafficking of women, as the demand has increased for younger women from rural areas (James & Atler, 2003). Myths, such as ‘sex with a virgin cures AIDS’12, continue to pervade some communities. The trafficking of women was an increasingly lucrative trade that assured

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12 This common myth is “totally untrue” (AVERT, 2006, p.3). The rumor says that having sexual intercourse with a virgin will cure AIDS – the younger the virgin, the more potent the cure. This myth “has resulted in many rapes of young girls and children by HIV+ men, who often infect their victims” (AVERT, 2006, p.3).
high profits with very little risk (UNIFEM, 1999). Trafficking syndicates were frequently linked to other aspects of organized crime, such as narcotics, extortion or loan sharking (James & Atler, 2003).

Trade and border controls were another issue that supported the demand for trafficking victims. The issue of border permeability was seemingly contradictory: increased border permeability due to increased trade and modern transportation have opened routes of human migration, yet many border controls have also tightened as governments of wealthier nations have sought to “stem the flow of migration from poor nations” (James & Atler, 2003, p.77). The reality of this “new freedom” is demonstrated in the following excerpt:

Young people are being trafficked as commodities of cross border, global trade, being stripped of their dignity and freedom. On the surface, the world is becoming freer. Yet, it is painstakingly quite the opposite in this scenario (Hussey, 2002 in James & Atler, 2003, p.77).

While it was commonly thought that traffickers move their victims from poorer countries to richer ones, this was an over simplification. Traffickers considered a range of factors, including the ease of transport, communications, the demand in the sex industry and the degree of law enforcement (James & Atler, 2003). The degree of law enforcement was a key element in the trafficking of human beings. Notwithstanding the numerous international agreements with provisions to human trafficking, few were actually ratified, enforced and legally binding (James & Atler, 2003). This led to the development of weak international, legal instruments and poor coordination of prevention efforts between countries and regions. That said, even if a trafficker was apprehended, “it is often the woman who is prosecuted as an illegal immigrant” (James & Atler, 2003, p.77).
Many women were unaware of what trafficking was and the risks involved in taking the chance of a ‘better life’ elsewhere. Fueled by the “increased presence of marketing and advertising in even the most provincial regions” (James & Atler, 2003, p.77), many women disregarded the risks and felt that they had little choice but to take their chances. It was important to note that it was not merely the existence of these factors that caused human trafficking; rather the exploitation of these factors that made the victims more vulnerable for recruitment. In other words, it was not simply that victims fell to these circumstances; but rather the fact that traffickers played on these circumstances and used them to their benefit – to try and lure victims from their current status in society into the global market of forced labor and prostitution.

Human trafficking occurred because criminals took advantage of poverty, unemployment and the victim’s desire for better opportunities. Economic conditions in source countries were considered push factors, along with women wanting to escape the oppression, burdens and liabilities of family pressure. Another example of a pull factor was the flood of western “glamour” that women envision while escaping their current state of being (Raymond & Hughes, 2001; Hughes, n.d.).

The transnational sex trafficking of women was based on a balance between the supply of victims from sending countries and the demand for victims in receiving countries (Hughes, 2004a). While it was necessary to understand the dynamics of source, transit and destination countries, it was also important to be familiar with the concept of supply and demand and how it affected the success of the sex trade market.

Source (or sending) countries were characterized by poverty, unemployment, war and political and economic instability (Hughes, 2002). An example of a major source country was Russia. The collapse of the Soviet Union in 1991, followed by the creation of a criminalized state
and economy, has resulted in ten years of severe economic decline (Hughes, n.d.). Women tried to participate in the development of a new market economy; however, they were threatened by organized crime groups and never had the chance to establish their own business. This need for employment made it easy to recruit women, for trafficker’s recruited women by acting as employment and travel agencies (Hughes, n.d.). Source countries also required the large-scale collaboration of officials to obtain travel documents and facilitate the exit of women from the country (Hughes, 2004a). Other major current source countries included the Ukraine, Belarus and Latvia. Historically, there were a variety of source countries (depending on the decade), but the origin of women was dictated by the marketing ploys to Western men based on sexual, racial and ethnic stereotypes (Hughes & Denisova, 2002).

The research was limited in information regarding transit countries. Many victims were transported through several transit countries in order to avoid detection, as passing through multiple countries made it more difficult to trace the victims. The primary purpose of a transit country was to aid traffickers in “covering up their trails easily” (Hughes & Denisova, 2002). An example of a transit country is Costa Rica. While the TIP report indicated that Costa Rica was also a source and destination country for all victims (male, female and child), it also served as a transit point for individuals who were trafficked into the United States, Mexico, Canada, Japan and Europe for sexual exploitation (U.S. Department of State, 2005). Another example of a transit country was Macedonia. Many of the women and children who were trafficked through Macedonia were from the former Soviet Union and Eastern and Southeastern Europe.

Destination (or receiving) countries were those regions that imported women to meet the demands of men for prostitution (Hughes, 2000a). Frequently, prostitution was legalized or at least tolerated in these areas. “Often times, the men’s demand for women and girls in prostitution
Human Trafficking 40

exceeds the supply in the local area” (Hughes, 2000a); thus making it necessary to recruit and import foreign women and children. Corruption was an enabler in destination countries. The operation of brothels required the collaboration of officials and police who were willing to ignore or even work with pimps and traffickers (Hughes, 2004a). A few of the major destination countries included Western European countries, the United States and Japan.

Most research, until now, had focused on the supply side of trafficking instead of the demand side, which was interesting because the “trafficking process begins with the demand for women to be used in prostitution…it begins when pimps place orders for women” (Hughes, 2004a, p.1). “There are four components that make-up the demand: (1) the men who buy commercial sex acts; (2) the exploiters who make up the sex industry; (3) the states that are destination countries; and (4) the culture that tolerates or promotes sexual exploitation” (Hughes, 2004a, p.2). The men who purchased sex did not respect women, nor did they want to respect women. They were seeking control and sex in contexts which allowed them to be impolite and cruel, and humiliate, degrade and even hurt the women that was what they desired. The exploiters were the people who made up what was known as the sex industry (Hughes, 2004a). These people made money off of women who were exploited for sex.

The state was also a contributor to the demand for women by tolerating or legalizing prostitution. The more states regulated prostitution and derived tax revenue from it, the more active they became in soliciting victims. According to Hughes (2002), “when prostitution is illegal, but thriving, government officials often look jealously at the money made by criminals and think they are not getting their share” (p.3). Culture was the final element of demand. Its’ roles included how the media, in particular, normalized prostitution by portraying it as glamorous or as a way to earn quick money. Religion attempted to battle the stigma of
prostitution as being glamorous; however, many felt it was a lost cause and that it would be better to just regulate it than punish it.

**Empirical Studies in Human Trafficking**

While the majority of the literature has focused on the specific dynamics of human trafficking (i.e. the actual processes of recruiting and transporting victims), there has been little evidence of researchers taking a theoretical approach to the phenomenon. An exception to this was a study conducted by Hughes and Denisova (2002). According to Hughes and Denisova (2002), “trafficking and prostitution are highly gendered systems that result from structural inequality between women and men on a world scale” (p.21). This represented a feminist perspective. Men held the important decision-making positions in all institutions that organized and controlled society. Through this institutional power, men constructed culture, passed laws and enacted policies that served their interests (Hughes, 2000a), as well as, allotting power to themselves to control both the public and private sphere of women and children. This study represented one example of the limited research utilizing theoretical perspective to advance the understanding of human trafficking.

Similar to the issue of theoretical application, there has been a limited number of empirical studies conducted within the human trafficking literature. One significant problem with conducting empirical research on human trafficking has involved the methodologies employed. According to Tyldum and Brunovskis (2005), there have been “a substantial number of publications [that] set out to describe the various elements associated with human trafficking...; however, the methodologies applied were not always well suited for these purposes and inferences are often made based on very limited data” (p.27). In research conducted by Crawley
and Melvin (2005), this specific issue was addressed. Here, the researchers developed *Standards of Proof* in order to assess the various methodologies employed throughout the human trafficking literature. The standards of proof ranged on a scale from one to seven. Category one represented studies that "featured the most rigorous forms of scientific design (i.e. true-experimental designs)" (p.17), while category seven represented "subject matter from the perspective of the author without the benefit of data available to scientific examination" (p.20). Crawley and Melvin (2005) found that the majority of the studies on human trafficking scored a category six on the standards of proof scale, which represented those studies that were "conducted without the use of data (primary or secondary) and therefore employed no scientific design (Crawley & Melvin, 2005, p.20). Basically, the studies were insightful literature reviews which presented information on topics of "emerging social issues and limited access to relevant information" (Crawley & Melvin, 2005, p.20).

*Trafficking in Persons Report*

The current understanding of human trafficking is still emerging in the criminological literature. One approach to analyzing human trafficking was the tier placement system used in the Trafficking in Persons (TIP) report. The U.S. Department of State had developed a classification system that allowed for the placement of countries (with a significant prevalence of human trafficking) on a progressive tier scale based on the minimum standards requirement of the TVPA (2000).

In 2000, the Victims of Trafficking and Violence Protection Act was created. From that, the TVPA was created and established the mandate that required the U.S. Department of State to "submit a report each year to the U.S. Congress on foreign governments’ efforts to eliminate..."
severe forms of trafficking” (U.S. Department of State, 2005, p.5). Based on the information provided, the U.S. Department of State categorized each country on a tier scale (see table 2.2 for a detailed description of the tier placement system). The first TIP report was published in 2001 and included 82 countries across three tiers. The most recent report was published in 2006 and included 149 countries across three tiers and a watch list. “This report has increasingly focused on the efforts of a growing community of nations to share information and to partner in new and important ways to fight human trafficking” (U.S. Department of State, 2005, p.5). Failure to comply could lead to non-humanitarian, non-trade related assistance from the United States to that country (U.S. Department of State, 2005).

The TIP report intended to “raise global awareness and spur foreign governments to take effective actions to counter all forms of trafficking in persons” (U.S. Department of State, 2005, p.5). In assessing foreign governments’ efforts, the TIP report highlighted the ‘three-P’ approach – prosecution, protection and prevention (U.S. Department of State, 2005). The annual report included countries that had been determined to be countries of origin, transit or destination for a significant number\(^\text{13}\) of victims of severe forms of trafficking. Since trafficking likely extended to every country in the world, the omission of a country from the report indicated a lack of adequate information (U.S. Department of State, 2005).

Also included in the report were country narratives that “describe the scope and nature of the trafficking problem, the reasons for including the country in the report and the governments’ efforts to combat trafficking” (U.S. Department of State, 2005, p.25). In addition to the three elements, the narratives also contained assessments of the government’s compliance with the minimum standards for the elimination of trafficking as laid out in the TVPA (2000) and included suggestions for action to combat trafficking (U.S. Department of State, 2005). The

\(^{13}\) Significant number refers to the order of 100 or more victims (TIP, 2005, p.3).
report focused on specific actions that governments had taken to fight trafficking: highlighting prosecutions, convictions and prison sentences for traffickers, victim protection, and prevention efforts. The report did not give much attention to laws in draft form or laws that had not been enacted. It also did not focus on “other government efforts that contribute indirectly to reducing trafficking, such as education programs, support for economic development or programs aimed at enhancing gender equality, although these are worthwhile endeavors” (U.S. Department of State, 2005, p.26). Each narrative explained the basis for rating a country as Tier 1, Tier 2, Tier 2 Watch List or Tier 3.

The Trafficking Victims Protection Reauthorization Act of 2003 created a “Special Watch List” of countries that should receive special scrutiny. This list was composed of (1) countries listed as Tier 1 in the current report that were listed as Tier 2 in the previous report; (2) countries listed as Tier 2 in the current report and were listed as Tier 3 in the previous report; and (3) countries listed as Tier 2 in the current report, where categories a, b and c of the Tier 2 Watch List apply (see Table 2.2).

The U.S. Department of State prepared this report using information from several sources including: U.S. embassies, meetings with foreign government officials, non-governmental organizations (NGOs) and international organizations, published reports, research trips to every region and the information submitted to the e-mail address, which was established for NGOs and individuals to report information on government progress in addressing trafficking (U.S. Department of State, 2005). Assessing each government’s anti-trafficking efforts involved a two-step process. First, the U.S. Department of State determined whether a country was a country of origin, transit or destination for a significant number of victims of severe forms of trafficking, generally on the order of 100 or more victims (U.S. Department of State, 2005). The second step
was tier placement. This placement was based on the extent of the government’s actions to combat trafficking, as defined by the TVPA’s minimum standards. Governments that did comply with the minimum standards were placed in Tier 1. For other governments, the U.S. Department of State considered whether the governments made significant efforts to be in compliance with the standards. These governments were placed in Tier 2. Those countries whose governments did not fully comply with the minimum standards, and were not making significant efforts to do so, were placed in Tier 3. Finally, the Special Watch List criteria were considered, and if applicable, Tier 2 countries were placed on the Tier 2 Watch List (U.S. Department of State, 2005). Table 2.2 demonstrates the tier placement criteria in detail.

Table 2.2. Tier Placement Criteria

<table>
<thead>
<tr>
<th>TIER PLACEMENT</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Countries whose governments fully comply with the Act’s minimum standards.</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Countries whose governments do not fully comply with the Act’s minimum standards but are making significant efforts to bring themselves into compliance with those standards.</td>
</tr>
<tr>
<td>Tier 2 Special Watch List</td>
<td>Countries whose governments do not fully comply with the Act’s minimum standards but are making significant efforts to bring themselves into compliance with those standards, and: (a) The absolute number of victims of severe forms of trafficking is very significant or is significantly increasing; (b) There is a failure to provide evidence of increasing efforts to combat severe forms of trafficking; (c) The determination that a country is making significant efforts to bring themselves into compliance with minimum standards was based on commitments by the country to take additional future steps over the next year.</td>
</tr>
<tr>
<td>Tier 3</td>
<td>Countries whose governments do not fully comply with the minimum standards and are not making significant efforts to do so.</td>
</tr>
</tbody>
</table>

Source: Adapted from the U.S. Department of State’s “Trafficking in Persons” Report (2005).

See Appendix A.
In order to determine a clear distinction between Tier 2 and 3, the U.S. Department of State considered several factors: the overall extent of human trafficking in the country; the extent of government noncompliance with the minimum standards (particularly the extent to which government officials have participated in, facilitated, condones or are otherwise complicit in trafficking); and what measures are reasonable to bring the government into compliance with the minimum standards in light of the government's resources and capabilities (U.S. Department of State, 2005). Countries listed in Tier 3 were subject to penalties and sanctions, such as the U.S government withholding non-humanitarian, non-trade-related assistance (U.S. Department of State, 2005). “Countries that do not receive such assistance would be subject to the withholding of funding for participation in educations and cultural exchange programs” (U.S Department of State, 2005, p.31). Consistent with the TVPA, such governments could also face U.S. opposition to assistance from international financial institutions such as the International Monetary Fund and multilateral development banks, such as the World Bank (U.S Department of State, 2005). This report was a diplomatic tool for the U.S. government to use as an instrument for continued dialogue and encouragement and as a guide to help focus resources on prosecution, protection and prevention programs and policies (U.S. Department of State, 2005).

Theoretical Perspective

There currently exists little research in the literature that utilizes theoretical conceptualization to extend the understanding of human trafficking (Hughes & Denisova, 2002). With this the case, it was apparent that the next natural step in the research evolution on human trafficking would be to incorporate potential insights of theory to the understanding of human
trafficking. Several theories demonstrated the potential to inform: Routine Activities Theory (Cohen & Felson); Conflict Theory (Marx); Social Disorganization (Park & Burgess; Shaw & McKay); Feminism (Hughes) and Anomie (Durkheim; Merton; Messner & Rosenfeld). For the purposes of this research, insights developed out of anomie theory were used.

IAT was “best suited” for this research for several reasons. First, IAT did not focus on the limitations of the economic structure as the pressure to innovate, rather, it focused on the “criminogenic influence of social institutions” (Chamlin & Cochran, 1995, p.413) on society. Second, IAT argued that other aspects of society, namely non-economic familial, educational and political institutions, contributed to the explanation of serious crime (Maume & Lee, 2003).

Finally, IAT assigned a critical role to the balance among major social institutions and the absence of such balance resulted in the social change on crime (Kim & Pridemore, 2005; Messner & Rosenfeld, 1997); thus creating an anomic state. In addition to the previous reasons, IAT was also chosen for the current research because it demonstrated a smooth transition from past studies. In other words, studies utilizing IAT shared similarities with the current research endeavor. For instance, several studies (Chamlin & Cochran, 1995; Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003; Stucky, 2003; Kim & Pridemore, 2005) analyzed their phenomenon at the aggregate level of analysis and employed a cross-sectional research design. In order to effectively and accurately address the research questions, insights provided by IAT proved to be the most plausible for this particular study.

Past research on anomie provided a detailed illustration of the shift between Emile Durkheim’s theory of anomie, Robert Merton’s revisions of anomie and Messner & Rosenfeld’s institutional anomie. Durkheim’s theory of anomie was based on his proposition that anomie represented a state of deregulation or “normlessness.” In other words, the rules of society had
weakened or broken down; people did not know how to interact with one another and therefore they did not know what to expect from one another (Williams & McShane, 2004; Bohn, Hoover & Donovan, 2004; Siegel, 2004). Durkheim’s premise was that this type of society evolved from one, in which people behaved and worked with the same tendencies and goals in mind (mechanical) into a society consisting of specialized labor and selfish, individualist goals (organic).

On the other hand, Merton’s theory of anomie focused on the internalized “strain” caused by society. According to Pfohl (1985), Merton held that society introduced norms and means, which in turn induced certain aspirations. These aspirations became part of the culture and promoted equal opportunity for all; however, in reality, many minority groups and lower class citizens were disadvantaged and did not have the access to achieve these aspirations. Nevertheless, they were socialized to hold them, thus producing the anomic condition of strain that pressured these groups to do whatever it took to achieve the aspiration, even if it meant using innovative or illegitimate means (p.211). In contrast with Durkheim’s view of anomie, Merton felt the “critical ingredient was the ability of the social system to exercise control in the form of social norms” (Williams & McShane, 2004, p.97), not that changes and deregulation within society created anomie. Merton’s view redefined anomie as a disjunction [or split] between those goals and means as a result of the way society was structured (Williams & McShane, 2004; Bohm, Hoover & Donovan, 2004).

Another anomic perspective was that of Messner and Rosenfeld (1997). Building upon classical anomie, Institutional Anomie Theory (IAT) attributed high levels of crime to interrelated cultural and structural dynamics. The basic premise of anomie, with respect to culture, was that “market mechanisms and arrangements were conducive to anomic pressures”
(Messner & Rosenfeld, 1997, p.1396). In other words, markets promoted a materialistic goal-orientation, which had an impact on social relationships. When a preoccupation with these material outcomes existed, the legitimacy of actions decreased due to the need for efficiency and, as a result, deviant behavior was more likely to occur. Structurally, anomie was likely to exist when “the economy dominated the institutional balance of power” (Messner & Rosenfeld, 1997, p. 1396). Simply stated, society’s level and types of crime were tied to how it (the society) was organized (Henry & Lanier, 2001).

Economic dominance led to high rates of crime in two ways: first, this imbalance provided “fertile soil for the growth of the anomic cultural pressures [or strains] associated with market arrangements” (Messner & Rosenfeld, 1997, p.1396-97); and second, economic dominance weakened the external controls associated with institutional attachments (Messner & Rosenfeld, 1997). In other words, when the economy dominated the institutional balance, it placed a cultural strain on those who could not meet the societal norms in place and it weakened the abilities of non-economic entities by making them unattractive; if it was not materialistically valuable, it was not acceptable. It is important to note, however, that what Messner and Rosenfeld proposed was considered normal. “There was nothing necessarily ‘sick,’ pathological, dysfunctional or disorganized about a society organized to produce high rates of crime” (Henry & Lanier, 2001, p.168). IAT held that a particular level and type of crime exists and is a normal outcome of a specified set of cultural and social arrangements (Henry & Lanier, 2001). IAT had been used in several studies to explain crime rates at the aggregate level (Chamlin & Cochran, 1995; Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003; Stucky, 2003; Kim & Pridemore, 2005).
Many of the factors that the literature had indicated as instigators of trafficking had also been studied in the literature on anomie. In fact, two studies tested, utilizing Messner & Rosenfeld’s Institutional Anomie Theory, what the literature referred to as the “human development index” or the “index of socioeconomic development”, which included such variables as life expectancy at birth, gross domestic product, adult literacy rates, urban population growth, infant mortality rates, elderly population growth and population growth (Pratt & Godsey, 2003; Savolainen, 2000). In the study conducted by Pratt & Godsey (2003), one of the main objectives of the study was to determine if a significant interaction effect existed between social support and economic inequality on homicide rates in a cross-national setting. In doing so, the researchers tested several variables, including the percentage of the nation’s gross domestic product spent on health care, the ratio of the median incomes of the richest to the poorest 20 percent of citizens, the human development index, the nation’s sex ratio and the percentage of population living in urban areas. The findings of the analysis showed that a significant relationship between social support, inequality and homicide existed.

In the study conducted by Savolainen (2000), it was hypothesized that economic inequality was a strong determinant of the national homicide rates in societies characterized by weak institutions of social protection. The findings of this study showed that income inequality had a positive effect on the male homicide rate, while welfare spending (measured as the institutional balance of power – amount of government spending on social security and other welfare programs as a percentage of total public expenditures) had a negative impact. Both studies represented the influences of social institutions on the impact of serious crime.

Since research existed demonstrating issues and potential variables regularly correlated with the significant presence of human trafficking practices (at the aggregate level of analysis),
why had such information not been readily utilized to inform the tier placement system employed by the U.S. Department of State? Moreover, would the utilization of such theoretically derived data empirically validate or challenge current placement practices? In consideration of these issues, it was the goal of this research to examine the validity of the U.S. Department of State's tier placement system in accordance with Institutional Anomie Theory.
Chapter 3: Methodology

Introduction: Institutional Anomie Theory

Steven Messner and Richard Rosenfeld (1994) contributed to the revision of Merton’s anomie theory by “combining broad social-structural processes and examining the shift toward an extreme emphasis on material goals and the impact this has on institutions of social control” (Lanier & Henry, 2001, p.252). In basic terms, Messner and Rosenfeld’s Institutional Anomie Theory (IAT) focused on the “American Dream” and the relationships with U.S. economic institutions, and what it [IAT] emphasized -- “winning (the goals) over the way the game is played (the means)” (Lanier & Henry, 2001, p.252). It was this discrepancy between the goals and the means that caused the anomie balance to become dysfunctional. It was also argued that [the] social institutions (such as schools and family) perpetuated the economic status quo, by failing to stimulate alternative means of self-worth and as a result were unable to tame economic desires.

There have been a few landmark studies that have tested and supported IAT. Chamlin and Cochran (1995) conducted the first direct test (Maume & Lee, 2003, p.1141). According to their hypothesis, “the effect of economic conditions on instrumental crime rates will depend on the vitality of non-economic institutions” (Chamlin & Cochran, 1995, p.415). In other words, by strengthening non-economic institutions (i.e. family, religion and polity), economic conditions were expected to improve; thus, reducing crime. Chamlin and Cochran’s (1995) findings both supported their general hypothesis and the core theoretical insights of Messner and Rosenfeld’s initial stances concerning the interrelationships among social structure, culture and crime (Maume & Lee, 2003; Chamlin & Cochran, 1995). Chamlin & Cochran (1995) concluded by
recommending a continued attempt to “make use of available data” (p.426) and evaluate empirical propositions that reflect the core assumptions of IAT.

In Messner and Rosenfeld’s (1997) study on the effect of national homicide rates of political efforts, it was hypothesized that the levels of homicide will vary inversely with the decommodification of labor. Decommodification referred to “the empowerment of the citizenry against the forces of the market” (Messner & Rosenfeld, 1997, p.1394). In other words, decommodification frees people from the market. Specifically, decommodification was operationalized in terms of the degree to which nations prioritize entitlement (e.g. welfare, social security) expenditures and was framed as a mechanism that buffers the effects of the economy (Maume & Lee, 2003). In IAT terms, decommodification balanced more equitably the economy with non-economic, social institutions (Maume & Lee, 2003). Their findings “lend credibility to the theoretical perspective, informing the analysis and helping to empirically distinguish this perspective from more conventional stratification-based accounts of variation” (Messner & Rosenfeld, 1997, p.1407-1408). In terms of this theory, Maume and Lee (2003) determined that, based on the attention to both economic and political concerns, “[decommodification] was an indicator of the balance between the two institutions” (p.1142), thus providing more empirical support for IAT.

In one other study, Savolainen (2000) hypothesized that economic inequality on the level of lethal violence was strongest in nations where the economy dominated the institutional balance of power. Basically, this meant that welfare expenditures would condition the association between income inequality and homicide rates (Maume & Lee, 2003). The findings supported the fact that the relationship between income inequality and homicide was much stronger when welfare support was low; “because of their generous welfare programs, the
nations that appear to me immune to the detrimental effects of economic inequality have a very small or non-existent underclass population” (Savolainen, 2000, p.1037). In the current study, the size of the population below the normative standard of economic well-being may serve as the critical characteristic in explaining the inequality effect in cross-national criminology (Savolainen, 2000).

These studies all used “indirect” measure of IAT central concepts, all of which partially informed the main propositions of the theory (Pratt & Godsey, 2003). A common thread throughout each of these approaches (though not methodologically identical) involved “estimating main effects and interaction terms between the proxy for the strength of non-economic institutions and some measure of economic deprivation” (Pratt & Godsey, 2003, p.615). To the extent that indicators of social support could be reasonably substituted as indicators of the “strength of non-economic institutions,” social support and IAT may be integrated with regard to their similar stances on the dynamics of social support, inequality and crime (Pratt & Godsey, 2003). The importance of these past research endeavors was that they provide the necessary empirical evidence to support the use of the variables employed in the current study. Therefore, it is the purpose of this research to examine the validity of the U.S. Department of State’s Trafficking in Persons Report in accordance with the central concepts of Institutional Anomie Theory.

Use of Secondary Data

The current study employed the used of secondary data. Archival data analysis was conducted on variables related to IAT collected from secondary data sources. More specifically, the data collected for the current research came from the World Bank’s World Development
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Indicators database. The data was subsequently used in statistical analyses (i.e. ANOVA and Multinomial Logistic Regression) and presented in Chapter Four.

There were several advantages to utilizing secondary data for the current research. First, using data from the World Bank proved to be significantly less expensive and was able to be compiled faster than if primary data collection was used. Using secondary data also added to the strength of this research because the information collected would have not been logistically possible for the researcher to collect.

While there were benefits to secondary data, there were also some disadvantages to using it. One major issue involved validity. "When one researcher collects data for one particular purpose, you have no assurance that those data will be appropriate for your research interests" (Maxfield & Babbie, 2005, p.347). For this particular research, data was collected from the World Bank and compiled into a dataset. While the majority of the variables had a complete set of data for the given year, not every variable did. This was another disadvantage of using secondary data – missing data. Another issue that concerned World Bank data was the fact that individual countries defined and classified variables differently. This led to some incomplete or incompatible data variables. In some cases, in order to complete a variable, methodological choices (i.e. collapsing variables) were made and the most recent information was used.

Statistical Procedures

Analysis of Variance (ANOVA)

In order to determine whether or not the tier placement system utilized by the U.S. Department of State’s Trafficking in Persons Report demonstrated construct validity, analysis of variance (ANOVA) was conducted. ANOVA "determines the extent to which there are
significant differences between the means of three or more samples or groups” (Bachman & Paternoster, 1997, p.385). There are two types of variances associated with ANOVA. The first type of variance reflects the “extent to which the cases within a group are different from the groups mean” (Bachman & Paternoster, 1997, p.387). Basically, this reflects variance within a group. The other type of variance used in ANOVA measures “the extent to which each group mean varies from the other group means and is calculated as the difference between the group means and something called the ‘group mean’” (Bachman & Paternoster, 1997, p.388). In other words, this reflects the variance between the groups. Based on these insights, ANOVA proved to be the most suitable statistical procedure in identifying a significant statistical relationship between IAT variables and tier placement.

**Multinomial Logistic Regression Model**

Multinomial Logistic Regression (MLR) was also employed in the current study. In the case of multiple regressions, the aim is to estimate the effect of several independent variables on a dependent variable (Bachman & Paternoster, 2004). Good regression models consist of explanatory variables that are “most strongly related to the dependent variable and unrelated to one another” (Bachman & Paternoster, 2004, p.510). Regarding current study goals, in order to determine whether or not the tier placement system demonstrated criterion-related validity in accordance with IAT, the most suitable statistical procedure for this research was a multinomial logistic regression model. Unlike ordinary least squares (OLS), the outcome variable for this research was categorical and having a categorical outcome variable in OLS is a violation of its assumptions.
There were several reasons for using this statistical procedure. Logistic regression was extremely flexible and an easily used mathematical function compared to other methods (i.e. Probit). It allowed for both categorical and continuous independent variables (Tabachnick & Fidell, 1989; Morgan & Teachman, 1988) and was also easier to interpret than other models that used dichotomous or polytomous dependent variables (Cox, 1970).

Measures of the Variables
The general hypothesis of this research was that the tier placement system utilized by the U.S. Department of State’s “Trafficking in Persons” Report demonstrated both construct and criterion-related validity in accordance with Institutional Anomie Theory. Table 3.1 demonstrates IAT variables, available through the World Bank and their metric attributes, that potentially influenced a country’s tier placement.
### Table 3.1. Multinomial Logistic Regression Variables and Metrics

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>METRICS</th>
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<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>Tier placement</td>
<td>Ordinal</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Index</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>Ratio</td>
</tr>
<tr>
<td>Gross national income</td>
<td>Ratio</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>Ratio</td>
</tr>
<tr>
<td>Population ages 65 and above</td>
<td>Ratio</td>
</tr>
<tr>
<td>Population growth</td>
<td>Ratio</td>
</tr>
<tr>
<td>Urban population</td>
<td>Ratio</td>
</tr>
<tr>
<td>Economic Inequality</td>
<td></td>
</tr>
<tr>
<td>GINI index score</td>
<td>Ratio</td>
</tr>
<tr>
<td>Economic discrimination</td>
<td>Ratio</td>
</tr>
<tr>
<td>Socioeconomic Change Index</td>
<td></td>
</tr>
<tr>
<td>Population change</td>
<td>Ratio</td>
</tr>
<tr>
<td>Unemployment change</td>
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<tr>
<td>Poverty</td>
<td>Ratio</td>
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<td>Foreign direct investment</td>
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<tr>
<td>Social Support Measures</td>
<td></td>
</tr>
<tr>
<td>Public health care expenditures</td>
<td>Ratio</td>
</tr>
<tr>
<td>Public expenditures per student (primary)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Public expenditures per student (secondary)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Other Potential IAT Variables</td>
<td></td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>Ratio</td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>Ratio</td>
</tr>
<tr>
<td>Literacy rates</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

**Research Statement**

The purpose of this research was to examine the validity\(^{15}\) of the U.S. Department of State's tier placement system in accordance with Institutional Anomie Theory (IAT).

Specifically, this research addressed two main issues. First, it examined the degree to which the U.S. Department of State’s tier placement system demonstrates construct validity\(^{16}\). This meant

\(^{15}\) Validity is defined as “the extent to which any measuring instrument measures what it is intended to measure” (Carmines & Zeller, 1979, p.170).

\(^{16}\) Construct validity refers to “the extent to which the measure being validated is related in theoretically expected ways to other concepts or constructs” (Thornberry & Krohn, 2000, p.51).
that, in order for IAT to validate the tier placement system (based on construct), the data traveled in a theoretically expected direction across the four tiers.

Second, this study assessed the degree to which the tier placement system demonstrated criterion-related validity as tested by IAT. This meant that in order for IAT to validate the tier placement system (based on criterion), two things were found: first, a significant positive relationship existed between the IAT variables and the actual tier placement of the countries, and two, there was a significant presence of IAT variables within the unit of analysis that indicated an anomic state. The assumption in using IAT to test the validity of the tier placement system was that if a country was placed low on the tier placement system, the presence of anomic conditions would be low within that country; if a country was placed on the high end of the placement system, the presence of anomic conditions would be high within that country.

Hypotheses for construct validity

H1: There is a relationship between life expectancy and tier placement.  
Null: There is no relationship between life expectancy and tier placement.

H2: There is a relationship between a country’s gross national income and tier placement.  
Null: There is no relationship between a country’s gross national income and tier placement.

H3: There is a relationship between a country’s infant mortality rate and tier placement.  
Null: There is no relationship between a country’s infant mortality rate and tier placement.

H4: There is a relationship between the population of people ages 65 and above and tier placement.  
Null: There is no relationship between the population of people ages 65 and above and tier placement.

H5: There is a relationship between population growth and tier placement.  
Null: There is no relationship between population growth and tier placement.

17 Criterion-related validity refers to “the relationship between test scores and some known external criterion that adequately indicates the quantity being measured” (Thornberry & Krohn, 2000, p.52).
$H_6$: There is a relationship between urban population and tier placement.
   $\text{Null:}$ There is no relationship between urban population and tier placement.

$H_7$: There is a relationship between the GINI index score and tier placement.
   $\text{Null:}$ There is no relationship between the GINI index score and tier placement.

$H_8$: There is a relationship between economic discrimination and tier placement.
   $\text{Null:}$ There is no relationship between economic discrimination and tier placement.

$H_9$: There is a relationship between population change and tier placement.
   $\text{Null:}$ There is no relationship between population change and tier placement.

$H_{10}$: There is a relationship between unemployment rates and tier placement.
   $\text{Null:}$ There is no relationship between unemployment rates and tier placement.

$H_{11}$: There is a relationship between a country that demonstrates a lower percentage of people living below the national poverty line and tier placement.
   $\text{Null:}$ There is no relationship between a country that demonstrates a lower percentage of people living below the national poverty line and tier placement.

$H_{12}$: There is a relationship between foreign direct investment and tier placement.
   $\text{Null:}$ There is no relationship between foreign direct investment and tier placement.

$H_{13}$: There is a relationship between health care expenditures and tier placement.
   $\text{Null:}$ There is no relationship between health care expenditures and tier placement.

$H_{14}$: There is a relationship between public expenditures per primary-aged students and tier placement.
   $\text{Null:}$ There is no relationship between public expenditures per primary-aged students and tier placement.

$H_{15}$: There is a relationship between public expenditures per secondary-aged students and tier placement.
   $\text{Null:}$ There is no relationship between public expenditures per secondary-aged students and tier placement.

$H_{16}$: There is a relationship between a country’s gross domestic product and tier placement.
   $\text{Null:}$ There is no relationship between the gross domestic product and tier placement.

$H_{17}$: There is a relationship between tuberculosis incidence and tier placement.
   $\text{Null:}$ There is no relationship between tuberculosis incidence and tier placement.

$H_{18}$: There is a relationship between adult literacy rates and tier placement.
   $\text{Null:}$ There is no relationship between adult literacy rates and tier placement.
Hypotheses for criterion-related validity

H1: Partial Model 1 – Socioeconomic Index
Index variables (i.e. life expectancy at birth; gross national income; population ages 65 and above; population growth; and urban population) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. life expectancy at birth; gross national income; population ages 65 and above; population growth; and urban population) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

H2: Partial Model 2 – Economic Inequality and Socioeconomic Change Index
Index variables (i.e. economic discrimination; population change; and foreign direct investment) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. economic discrimination; population change; and foreign direct investment) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

H3: Partial Model 3 – Social Support Measures
Index variables (i.e. health care expenditures; expenditures per student – primary level; and expenditures per student – secondary level) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. health care expenditures; expenditures per student – primary level; and expenditures per student – secondary level) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

H4: Partial Model 4 – Other IAT Variables
Index variables (i.e. gross domestic product; tuberculosis incidence; and adult literacy rates) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. gross domestic product; tuberculosis incidence; and adult literacy rates) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.
Dependent Variable

The dependent variable for this study was the actual tier placement of countries in the TIP report. Tier placement was based on the extent of a government’s actions to combat trafficking. The U.S. Department of State evaluated whether the foreign governments fully complied with the Trafficking Victims Protection Act (TVPA)’s minimum standards for the elimination of trafficking. Based on the evaluation, countries were categorized on a progressive tier scale: Tier 1, Tier 2, Tier 2 Watch List and Tier 3. Governments that did [comply with all standards] were placed in Tier 1. For other governments, the U.S. Department of State considered whether they made significant efforts to bring themselves into compliance – these governments were placed in Tier 2. Those countries whose governments did not fully comply with the minimum standards and were not making significant efforts to do so were placed in Tier 3. Finally, the Special Watch List criteria were considered, and if applicable, Tier 2 countries were placed on the Tier 2 Watch List (U.S. Department of State, 2005). In order to determine a clear distinction between Tier 2 and 3, the U.S. Department of State considered several factors: the overall extent of human trafficking in the country; the extent of government noncompliance with the minimum standards (particularly the extent to which government officials had participated in, facilitated, condoned or were otherwise complicit in trafficking); and what measures were reasonable to bring the government into compliance with the minimum standards in light of the government’s resources and capabilities (U.S. Department of State, 2005).

Independent Variables

In accordance with research on IAT (Chamlin & Cochran, 1995; Messner & Rosenfeld, 1997; Savolainen, 2000; and Pratt & Godsey, 2003), several variables were utilized as proxy
indicators for the current research. While the majority of the indicators were cross-sectionally analyzed, some variables were examined longitudinally. The secondary data used for this study was taken from the World Bank’s *World Development Indicators (2006)*. For the majority of the variables, the data reflected the occurrences of 2004; however, there were some variables that did not have a complete 2004 data set and the researcher, therefore, utilized the most current data available. Table 3.2 demonstrates both descriptive statistics (the mean and standard deviation) and an abbreviated explanation for each variable included in this research.

**Socioeconomic index.**

The socioeconomic index used proxy indicators of IAT to encapsulate “the general economic well-being of national populations and of demographic structure” (Messner & Rosenfeld, 1997, p.1401) and included: life expectancy at birth; gross national income; infant mortality rate; population of ages 65 and above; annual population growth and urban population.

**Life expectancy at birth**

As defined by the World Bank (2005), life expectancy at birth was the “number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life” (p.39). This variable was included in the current research because it represented a gendered inequality in the allocation of resources, such as health care; nutrition; education and political voice (World Bank, 2005). These were important to consider because of the strong association between these particular resources and the “well-being, productivity and economic growth” (World Bank, 2005, p.39) of the country. As stated in hypothesis 1, it was theoretically expected that a relationship existed between life expectancy at birth and tier
placement. Specifically, it was expected that as life expectancy at birth increased, tier placement would improve.

Gross national income

According to the World Bank (2005), gross national income “is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad” (p.25). This variable was included in the current research because the World Bank used GNI as a proxy measure of income, which was one of several basic measures used to determine the size of a country’s economy (World Bank, 2005). These measures also provided a broad indication of actual and potential resources (World Bank, 2005). As stated in hypothesis 2, it was theoretically expected that there was a relationship between gross domestic income and tier placement. Specifically, it was expected that as gross national income increased, tier placement would improve.

Infant mortality rate

The World Bank (2005) defined the infant mortality rate as “the number of infants dying before reaching one year of age, per 1,000 live births in a given year” (p.123). This variable was included in the current research because the mortality rate was considered an important indicator of the health status in a country (World Bank, 2005). Age-specific mortality rates “are generally estimated based on vital registrations or the most recent census or survey available” (World Bank, 2005, p.123). As stated in hypothesis 3, it was theoretically expected that a relationship existed between a country’s infant mortality rate and tier placement. Specifically, it was expected that as infant mortality rates decreased, tier placement would improve.
Population ages 65 and above

As defined by the World Bank (2005), population ages 65 and above (otherwise referred to as population age composition) was “the percentage of the total population that is in specific age groups” (p.51), in this case, ages 65 and above. Similar to the GNI, population age composition was a measure of the size of a country’s economy; therefore, this measure was included in the current research. As stated in hypothesis 4 it was theoretically expected that a relationship existed between a country’s population of people 65 years of age and older and tier placement. Specifically, it was expected that as the population of people ages 65 and above increased, tier placement would improve.

Annual population growth

According to the World Bank (2005), the average annual population growth rate “is the exponential change for the period indicated” (p.51). This variable was included in the current research because it measured the growth rate of the total population and “conceals the fact that different groups may grow at very different rates” (World Bank, 2005, p.51). As stated in hypothesis 5, it was theoretically expected that a relationship between a country’s annual growth rate and tier placement existed. Specifically, it was expected that as the population growth increased, tier placement would worsen.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy at Birth</td>
<td>The number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life</td>
<td>66.75</td>
<td>12.190</td>
</tr>
<tr>
<td>Gross National Income</td>
<td>The sum of value added by all resident producers plus any product taxes</td>
<td>210,587,422,820</td>
<td>579,827,164,718</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>The number of infants dying before reaching one year of age, per 1,000 live births in a given year</td>
<td>40.4546</td>
<td>39.72584</td>
</tr>
<tr>
<td>Population of ages 65 and above</td>
<td>Proportion of population that is aged 65 and above</td>
<td>7.7344</td>
<td>5.24308</td>
</tr>
<tr>
<td>Population Growth</td>
<td>The exponential change in population from the previous year</td>
<td>1.4097</td>
<td>2.33242</td>
</tr>
<tr>
<td>Urban Population</td>
<td>Proportion of the population reported living in areas defined as urban</td>
<td>56.7664</td>
<td>22.54026</td>
</tr>
<tr>
<td>GINI Index</td>
<td>The extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution</td>
<td>39.2193</td>
<td>10.09809</td>
</tr>
<tr>
<td>Economic Discrimination</td>
<td>Ratio of income of the richest 20% of the population to the poorest 20% of the population</td>
<td>9.3060</td>
<td>7.17885</td>
</tr>
<tr>
<td>Population Change</td>
<td>Difference between the population in 2000 and the population in 2004</td>
<td>1.0601</td>
<td>.05469</td>
</tr>
<tr>
<td>Unemployment Change</td>
<td>Difference in the proportion of the active labor force unemployed in 2000 and 2004</td>
<td>1.0875</td>
<td>.33077</td>
</tr>
<tr>
<td>Poverty</td>
<td>Proportion of the population living below the national poverty line</td>
<td>37.1463</td>
<td>14.19899</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>The sum of the absolute values of inflows and outflows of foreign direct investment recorded in the balance of payments financial account</td>
<td>-488,635,904</td>
<td>10,361,834,318</td>
</tr>
<tr>
<td>Health Care Expenditures</td>
<td>The recurrent and capital spending from government budgets, external borrowings and grants and social health insurance funds</td>
<td>6.1715</td>
<td>2.18097</td>
</tr>
<tr>
<td>Public Expenditures per Student (primary)</td>
<td>Current public spending on primary education as a proportion of the GDP</td>
<td>14.8059</td>
<td>6.38166</td>
</tr>
<tr>
<td>Public Expenditures per Student (secondary)</td>
<td>Current public spending on secondary education as a proportion of the GDP</td>
<td>20.5414</td>
<td>11.72940</td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td>The sum of gross value added by all resident producers in the economy plus any product taxes</td>
<td>2.1671E+11</td>
<td>5.8647E+11</td>
</tr>
<tr>
<td>Tuberculosis Incidence</td>
<td>Estimated number of new tuberculosis cases</td>
<td>136.3139</td>
<td>152.57654</td>
</tr>
<tr>
<td>Adult Literacy Rate</td>
<td>Percentage of people ages 15 and older who can, with understanding, both read and write a short, simple statement about their everyday life</td>
<td>78.1508</td>
<td>21.92874</td>
</tr>
</tbody>
</table>
Urban population

As defined by the World Bank (2005), urban population “is the mid-year population of areas defined as urban in each country and reported to the United Nations” (p. 169). Specifically for this research, data on urban population was collected in the form of a percentage of the total population, as calculated by the World Bank. This variable was included in the current research because it helped to illustrate the urbanizing development of countries. As stated in hypothesis 6, it was theoretically expected that a relationship existed between a country’s urban population and tier placement. Specifically, it was expected that as urban population increased, tier placement would improve.

Economic inequality index.

The economic inequality index used proxy indicators of IAT to identify when economic dominance occurred. According to IAT, “the form of institutional structure that is particularly conducive to high levels of crime is one in which the economy dominates the institutional balance of power” (Messner & Rosenfeld, 1997, p. 1396). For this research, the measures of economic inequality included: the GINI index and economic discrimination (measured as the ratio of income share held by the highest 20 percent and the lowest 20 percent).

GINI index

The GINI index measured “the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution” (World Bank, 2005, p. 75). According to this index, a GINI score of zero represented perfect equality while a GINI score of 100 implied perfect inequality (World Bank, 2005). The GINI
index provided a summary measure of the degree of income inequality at both a personal and household level; thus making this variable beneficial to the current research. Due to an incomplete set of 2004 data, the current research utilized the most recent statistics available for this variable. As stated in hypothesis 7, it was theoretically expected that there was a relationship between the GINI index score and tier placement. Specifically, it was expected that as the GINI index increased, tier placement would worsen.

*Economic discrimination*

In previous studies (Messner & Rosenfeld, 1997; Savolainen, 2000) using the economic inequality index as a measure of IAT, economic discrimination was referred to as inequality based on an ascribed group characteristic (race, ethnicity, religion, language, etc). Data for this measure was obtained from the Minorities at Risk data file (Savolainen, 2000). However, Pratt and Godsey (2003) took a different approach. Instead of complementing the GINI index with the Minorities at Risk data, Pratt and Godsey (2003) “improved the reliability (and predictive validity) of this measure [economic inequality]” and used “…the ratio of the median incomes of the richest to the poorest 20% of citizens” (p.622). For similar reasons, income differential-based inequality has been used by others; see, e.g. Blau and Blau, 1982; Braithwaite, 1979. For the purpose of this research and for the reason stated above, economic discrimination was defined and measured as “the share that accrues to subgroups of population indicated by deciles or quintiles” (World Bank, 2005, p.75). In other words, economic discrimination is represented by the ratio of income between the richest 20 percent of citizens and the poorest 20 percent of citizens. Due to an incomplete set of 2004 data, the current research utilized the most recent statistics available for this variable. As stated in hypothesis 8, it was theoretically expected that a
relationship exists between economic discrimination and tier placement. Specifically, it was expected that as economic discrimination increased, tier placement would worsen.

Socioeconomic change index.

The socioeconomic change index used proxy indicators of IAT to “represent multiple dimensions of change (e.g. population, economic and legal)” (Kim & Pridemore, 2005, p.1383). The measures of these different dimensions included: population change, unemployment change, poverty and foreign direct investment. Population change and unemployment change were longitudinally analyzed in order to achieve the desired variable.

Population change

Total population data from the World Bank were mid-year estimates for an economy that “includes all residents regardless of legal status or citizenship – expect for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin” (World Bank, 2005, p.51). In order to identify and demonstrate an emphasized change, population data for 2004 was compared to population data for 2000 and the difference represented the population change data for the current research. As a compliment to the GNI and population age composition, population change was a measure of the size of a country’s economy and was therefore included in this research. As stated in hypothesis 9, it was theoretically expected that there was a relationship between a country’s population change and tier placement. Specifically, it was expected that as the population change increased, tier placement would worsen.
Unemployment change

Unemployment referred to the “share of the labor force without work but available for and seeking employment” (World Bank, 2005, p.63). Similar to population change, in order to calculate the unemployment change, 2004 unemployment data was compared with 2000 unemployment data and the difference represented the change. This measure was included in the current research because of the theoretical connection to IAT; basically, the change in unemployment illustrated the degree of economic instability within individual countries. As stated in hypothesis 10, it was theoretically expected that there was a relationship between a country’s unemployment change and tier placement. Specifically, it was expected that as unemployment change decreased, tier placement would improve.

Poverty

For the purpose of this research, the measure of poverty was the national poverty rate. As defined by the World Bank (2005), the national poverty rate “is the percentage of the population living below the national poverty line. [These] estimates are based on population-weighted subgroup estimates from household surveys” (p.69). Similar to unemployment, poverty was included in this research because it identified the degree to which a country’s economy is unstable. As used in Kim and Pridemore (2005), poverty was positively related to the cross-sectional variation of homicides in Russia. Due to an incomplete set of 2004 data, the current research utilized the most recent statistics available for this variable. As stated in hypothesis 11, it was theoretically expected that a relationship between poverty and tier placement existed. Specifically, it was expected that as poverty increased, tier placement would worsen.
Foreign direct investment

As defined by the World Bank (2005), gross foreign direct investment was “the sum of the absolute values of inflows and outflows of foreign direct investment recorded in the balance of payments financial account. It includes equity capital, reinvestment of earnings, other long-term capital, and short-term capital” (p.325). Specifically for this research, this measure was calculated as a ratio of the gross domestic product in U.S. currency. This variable was included in the current research because it represented the “growing integration of societies and economies” (World Bank, 2005, p.325) around the world. The increase in global economic integration helped to reduce poverty in many countries and was considered a growing importance for trade in the world economy (World Bank, 2005). As stated in hypothesis 12, it was theoretically expected that a relationship between foreign direct investment and tier placement existed. Specifically, it was expected that as foreign direct investment increased, tier placement would improve.

Social support measures.

Social support measures were those IAT indicators that illustrated “the spending priorities of nations generally reflective of the social priorities of their citizens” (Pratt & Godsey, 2003, p.621) and included: health care expenditures and public expenditures per student for both primary and secondary education.

Health care expenditure

As defined by the World Bank (2005), public health expenditure “consists of recurrent and capital spending from government (central and local) budgets, external borrowings and
grants (including donations from international agencies and nongovernmental organizations) and social (or compulsory) health insurance funds” (p.83). Specifically for the current research, this variable was measured as the proportion of the nation’s gross domestic product spent on health care. While the World Bank provided aggregated information regarding public, private and total health care expenditures, the use of public spending, for this research, more closely approximated the concepts of social support (i.e. spending priorities reflective of social priorities). The two other forms of health care spending may have been driven by individual spending (Pratt & Godsey, 2003). As stated in hypothesis 13, it was theoretically expected that a relationship existed between health care expenditure and tier placement. Specifically, it was expected that as public health care expenditures increase, tier placement would improve.

Public expenditure per student (both primary and secondary)

The World Bank (2005) defined public expenditure per student as the “public current spending on education divided by the number of students by level, as a percentage of the GDP per capita” (p.87). These variable were included in the current research because the share of public expenditure devoted to education allowed “an assessment of the priority a government assigns to education relative to other public investments and also reflects a governments commitment to investing in human capital development” (World Bank, 2005, p.87). Due to an incomplete set of 2004 data, the current research utilized the most recent statistics available for these variables. As stated in hypothesis 14 and 15, it was theoretically expected that a relationship between public expenditure per student (at both the primary and secondary level) and tier placement existed. Specifically, it was expected that as public expenditures per student (both primary and secondary) increased, tier placement would improve.
Other IAT Measures.

A few other variables were identified that were not included under the previous indices. While the following three variables were not used in previous research together, they were still potential indicators of IAT. These measures included: gross domestic product (GDP); incidence of tuberculosis; and adult literacy rates.

Gross domestic product

As defined by the World Bank (2005), GDP was “the sum of gross value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output” (p.205). Similar to that of the GNI, GDP was used for the current research because it reflected the size of a country’s economy. The difference, however, was that GDP was not calculated out of income; rather it was calculated based on production. As stated in hypothesis 16, it was theoretically expected that a relationship existed between GDP and tier placement. Specifically, it was expected that as gross domestic product increased, tier placement would improve.

Incidence of Tuberculosis

The World Bank (2005) defined incidence of tuberculosis as “the estimated number of new tuberculosis cases (pulmonary, smear positive, extrapulmonary)” (p.119). The data for this research was based on cases per 100,000 people. According to the World Bank and the World Health Organization (WHO), tuberculosis was one of the main causes of death from a single infectious agent among adults in developing countries (World Bank, 2005). “In high income
countries, tuberculosis has reemerged largely as a result of cases among immigrants" (World Bank, 2005, p.119). This variable was included in the current research because it reflected a country’s health condition and was not disproportionately contained to one region of the world. As stated in hypothesis 17, it was theoretically expected that a relationship existed between the incidence of tuberculosis and tier placement. Specifically, it was expected that as the incidence of tuberculosis increased, tier placement would worsen.

*Adult literacy rate*

As defined by the World Bank (2005), adult literacy rate was “the percentage of people ages 15 and older who can, with understanding, both read and write a short, simple statement about their everyday life” (p.99). This measure was included in the current research because “it indicates how the education systems are working and developing” (World Bank, 2005, p.99) with the needs of individual countries. As stated in hypothesis 18, it was theoretically expected that a relationship existed between adult literacy rates and tier placement. Specifically, it was expected that as adult literacy rates increased, tier placement would improve.
Chapter 4: Findings and Analysis

Introduction

In this chapter, proxy indicators of Institutional Anomie Theory (IAT) were analyzed to assess the validity of the tier placement system utilized by the U.S. Department of State’s “Trafficking in Persons” Report. Questions to be addressed in this research included: (1) did the tier placement system demonstrate construct validity in accordance with IAT (i.e. was there a theoretically expected pattern across the tiers); and (2) did the tier placement system demonstrate criterion-related validity in accordance with IAT (i.e. was there enough difference between the tiers to represent a significant relationship)?

Construct Validity

In order to determine whether or not the measures used in this research demonstrated construct validity, two analyses were performed: a substantive and ANOVA analysis. The substantive analysis allowed the researcher to visually examine the relationship between the variable data and tier placement (i.e. was a relationship visually present between the variable and tier placement?). ANOVA allowed the researcher to statistically determine not only whether there was a significant amount of difference between the tiers but also whether there was a significant amount of difference between the countries within the tiers.

Socioeconomic index

Tables 4.1 through 4.6 demonstrate the results of a substantive and ANOVA analysis of the variables for the socioeconomic index. The following variables were included in the socioeconomic index: life expectancy at birth; gross national income; infant mortality;
population of people ages 65 and above; population growth and urban population. In accordance with these variables, the following hypotheses were tested:

\[ H_1: \] There is a relationship between life expectancy and tier placement.
\[ \text{Null}: \] There is no relationship between life expectancy and tier placement.

Table 4.1. Life Expectancy at Birth

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>77.39</td>
<td>64.71</td>
<td>61.86</td>
<td>69.50</td>
<td>66.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>23</td>
<td>75</td>
<td>26</td>
<td>13</td>
<td>137</td>
<td>9.738</td>
<td>.000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>4.316</td>
<td>12.372</td>
<td>12.601</td>
<td>8.478</td>
<td>12.190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 shows the results of a substantive and ANOVA analysis for life expectancy at birth. Based on the substantive analysis, it appears that there is a relationship between life expectancy at birth and tier placement. Tier 1, tier 2 and tier 2 watch list all travel in the same theoretically expected direction (specifically, life expectancy decreasing as tier placement worsens). However, tier 3 data does not support the theoretically expected relationship. Aside from tier 3, a general relationship does exist.

Meanwhile, the ANOVA analysis, shows that there is a statistically significant relationship between life expectancy at birth and tier placement (p = .000). The results of both substantive and statistical analyses find that a general relationship exists between life expectancy at birth and tier placement; thus, it is appropriate to reject the null hypothesis.

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**H2:** There is a relationship between a country’s gross national income and tier placement.  
**Null:** There is no relationship between a country’s gross national income and tier placement.

Table 4.2. Gross National Income

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>645,025,661,130</td>
<td>115,520,949,567</td>
<td>171,788,844,662</td>
<td>42,102,790,545</td>
<td>210,587,422,820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>23</td>
<td>75</td>
<td>26</td>
<td>11</td>
<td>135</td>
<td>5.910</td>
<td>.001</td>
</tr>
<tr>
<td>Std. D.</td>
<td>778,094,049,705</td>
<td>546,041,025,878</td>
<td>413,759,581,948</td>
<td>41,576,808,011</td>
<td>579,827,164,718</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2 shows the substantive and statistical findings for gross national income. Based on the substantive analysis, it appears that there is a relationship between GNI and tier placement. Tier 1 and 2 travel in the same theoretically expected direction (specifically, GNI decreasing as tier placement worsens). However, tier 2 watch list data does not support the theoretically expected relationship. Notwithstanding the increase in tier 2 watch list, a general relationship does exist.

The ANOVA analysis shows that there is a statistically significant relationship between gross national income and tier placement (p = .001). The results of both substantive and statistical analyses find that a general relationship exists between GNI and tier placement; thus, it is appropriate to reject the null hypothesis.

**H3:** There is a relationship between a country’s infant mortality rate and tier placement.  
**Null:** There is no relationship between a country’s infant mortality rate and tier placement.

Table 4.3. Infant Mortality Rate

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8.6636</td>
<td>45.5544</td>
<td>56.3462</td>
<td>33.5786</td>
<td>40.4546</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>75</td>
<td>26</td>
<td>14</td>
<td>137</td>
<td>7.601</td>
<td>.000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>13.28159</td>
<td>40.16373</td>
<td>44.42120</td>
<td>28.83287</td>
<td>39.72584</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.3 presents the results of a substantive and ANOVA analysis for a country's infant mortality rates. Tier 1 has the lowest infant mortality rates followed by tier 3 countries. This does not support the theoretically expected relationship (i.e. as infant mortality rates decrease, tier placement improves). Aside from tier 3, however, a general relationship does exist, as tier 2 and tier 2 watch list have increased infant mortality rates.

The ANOVA analysis shows that there is a statistically significant relationship between a country's infant mortality rate and tier placement (p = .000). The results of both substantive and statistical analyses find that a relationship exists between infant mortality rates and tier placement; thus, it is appropriate to reject the null hypothesis.

**H₄**: There is a relationship between the population of people ages 65 and above and tier placement.

**Null**: There is no relationship between the population of people ages 65 and above and tier placement.

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>13.9885</td>
<td>6.9753</td>
<td>6.1860</td>
<td>4.4019</td>
<td>7.7344</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>23</td>
<td>75</td>
<td>26</td>
<td>14</td>
<td>138</td>
<td>19.898</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>3.91514</td>
<td>4.80340</td>
<td>4.34616</td>
<td>2.61121</td>
<td>5.24308</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 presents the results of a substantive and ANOVA analysis for the population of ages 65 and above. Based on the substantive analysis, it appears that there is a relationship between population ages 65 and above and tier placement, as all data follows the theoretically expected direction (i.e. decrease in population of people ages 65 and above as tier placement worsens); therefore, this analysis finds that a substantive relationship exists.
Human Trafficking 79

The ANOVA analysis shows that there is a statistically significant relationship between a country's population of people ages 65 and above and tier placement (p = .000). The results of both substantive and statistical analyses find that a relationship exists between the population of people ages 65 and above and tier placement; thus, it is appropriate to reject the null hypothesis.

**Hₐ:** There is a relationship between population growth and tier placement.

**Null:** There is no relationship between population growth and tier placement.

Table 4.5. Population Growth

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.4349</td>
<td>1.3120</td>
<td>2.0782</td>
<td>2.2927</td>
<td>1.4097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>23</td>
<td>75</td>
<td>26</td>
<td>14</td>
<td>138</td>
<td>2.878</td>
<td>.038</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.43087</td>
<td>1.48106</td>
<td>4.23597</td>
<td>1.84485</td>
<td>2.33242</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 presents the results of a substantive and ANOVA analysis for population growth. Based on the substantive analysis, it appears that a relationship exists between population growth and tier placement, as all data follows the theoretically expected direction (i.e. increase in annual population growth as tier placement worsens).

The ANOVA analysis shows that there is a statistically significant relationship between a country’s annual population growth and tier placement (p = .038). The results of both substantive and statistical analyses find that a relationship exists between the population of people ages 65 and above and tier placement; thus, it is appropriate to reject the null hypothesis.
**H₀:** There is a relationship between urban population and tier placement.

**Null:** There is no relationship between urban population and tier placement.

Table 4.6. Urban Population

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>75.6113</td>
<td>51.4670</td>
<td>50.1162</td>
<td>66.9257</td>
<td>56.7664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>23</td>
<td>76</td>
<td>26</td>
<td>14</td>
<td>139</td>
<td>10.144</td>
<td>.000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>18.03308</td>
<td>21.53646</td>
<td>18.01105</td>
<td>23.47652</td>
<td>22.54026</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.6 presents the results of a substantive and ANOVA analysis for urban population.

Based on the substantive analysis, it appears that there is a relationship between urban population and tier placement. Tier 1, tier 2 and tier 2 watch list travel in the same theoretically expected direction (specifically, urban population decreasing as tier placement worsens); however, tier 3 data does not support the theoretically expected relationship. Aside from tier 3, a general relationship does exist.

The ANOVA analysis shows that there is a statistically significant relationship between a country’s urban population and tier placement (p = .000). The results of both substantive and statistical analyses find that a general relationship exists between urban population and tier placement; thus, it is appropriate to reject the null hypothesis.

**Economic inequality.**

Tables 4.7 and 4.8 illustrate the results of a substantive and ANOVA analysis for the economic inequality index. The two variables used for this index were the GINI index score and economic discrimination (measured as the ratio of the richest and poorest 20 percent of a country’s population). In accordance with these variables, the following hypotheses were tested:
**H$_{\gamma}$**: There is a relationship between the GINI index score and tier placement.

**Null**: There is no relationship between the GINI index score and tier placement.

**Table 4.7. GINI index score**

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>32.7411</td>
<td>39.6627</td>
<td>40.0940</td>
<td>50.1638</td>
<td>39.2193</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>47</td>
<td>15</td>
<td>4</td>
<td>78</td>
<td>.017</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>5.88748</td>
<td>9.60710</td>
<td>11.54118</td>
<td>10.90344</td>
<td>10.09809</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 presents the substantive and statistical findings for the GINI index score.

Based on the substantive analysis, it appears that a relationship exists between the GINI index score and tier placement, as all data follows the theoretically expected pattern (i.e. as the GINI index increases, tier placement worsens).

The ANOVA analysis shows that there is a statistically significant relationship between a country’s GINI index score and tier placement ($p = .017$). The results of both substantive and statistical analyses find that a relationship exists between the GINI index scores and tier placement; thus, it is appropriate to reject the null hypothesis.

**H$_{\delta}$**: There is a relationship between economic discrimination and tier placement.

**Null**: There is no relationship between economic discrimination and tier placement.

**Table 4.8. Economic Discrimination**

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>12</td>
<td>47</td>
<td>15</td>
<td>4</td>
<td>78</td>
<td>.001</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.45051</td>
<td>6.32224</td>
<td>6.41508</td>
<td>16.10733</td>
<td>7.17885</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.8 presents the results of a substantive and ANOVA analysis for economic discrimination. Based on the substantive analysis, it appears that a relationship exists between
economic discrimination and tier placement, as all data follows the theoretically expected pattern (i.e. as economic discrimination increases, tier placement worsens).

The ANOVA analysis shows that there is a statistically significant relationship between a country’s urban population and tier placement ($p = .001$). The results of both substantive and statistical analyses find that a relationship exists between economic discrimination and tier placement; thus, it is appropriate to reject the null hypothesis.

Socioeconomic change index.

Tables 4.9 through 4.12 illustrate the results of a substantive and an ANOVA analysis for the socioeconomic change index. The variables included in this index were population change, unemployment change, poverty and foreign direct investment. In accordance with these variables, the following hypotheses were tested:

$H_9$: There is a relationship between population change and tier placement.
$Null$: There is no relationship between population change and tier placement.

Table 4.9. Population Change

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.0535</td>
<td>1.0667</td>
<td>1.0437</td>
<td>1.0658</td>
<td>1.0601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>68</td>
<td>23</td>
<td>14</td>
<td>127</td>
<td>1.183</td>
<td>.319</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.04349</td>
<td>.06015</td>
<td>.04394</td>
<td>.05685</td>
<td>.05469</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.9 presents the substantive and statistical findings for population change. Based on the substantive analysis, it appears that there is a relationship between population change and tier placement. Tier 1 and tier 2 travel in the same theoretically expected direction (specifically, population change increasing as tier placement worsens); however, tier 2 watch list and tier 3 do
not support the theoretically expected relationship. Based on these findings, there is no relationship between population change and tier placement.

The ANOVA analysis shows that there is no statistically significant relationship between population change (2000-2004) within a country and tier placement \((p = .319)\). The results of both the substantive and statistical analyses find that a general relationship does not exist between population change and tier placement; thus, it is appropriate to accept the null and reject the alternative hypothesis.

\[ H_{10}: \text{There is a relationship between unemployment rates and tier placement.} \]
\[ \text{Null: There is no relationship between unemployment rates and tier placement.} \]

Table 4.10. Unemployment Change

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.0948</td>
<td>1.1514</td>
<td>.9967</td>
<td>.7355</td>
<td>1.0875</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>19</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>33</td>
<td>.569</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.33668</td>
<td>.36383</td>
<td>.26270</td>
<td></td>
<td>.33077</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.10 presents the results of a substantive and ANOVA analysis for unemployment change. Based on the substantive analysis, it appears that there is a relationship between unemployment change and tier placement. Tier 1 and tier 2 travel in the same theoretically expected direction (specifically, unemployment change increasing as tier placement worsens); however, tier 2 watch list and tier 3 do not support the theoretically expected relationship. Instead, there is an inverse relationship. Table 4.10 shows that as unemployment change decreases, the country's tier placement increased on the UN scale.

The ANOVA analysis shows that there is no statistically significant relationship between unemployment change (2000-2004) and tier placement \((p = .640)\). The results of both substantive and statistical analyses find that there is a discrepancy in the different analyses – the existing
relationship between the variable and tier placement does not travel in the theoretically expected fashion. Albeit the statistical analysis, a general relationship between unemployment change and tier placement does exist; thus, it is appropriate to reject the null hypothesis.

**H**₁₁: There is a relationship between countries that demonstrate a lower percentage of people living below the national poverty line and tier placement.  
**Null**: There is no relationship between poverty and tier placement.

Table 4.11. Poverty

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>30.8500</td>
<td>37.3647</td>
<td>39.7750</td>
<td>18.7000</td>
<td>37.1463</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>17</td>
<td>8</td>
<td>1</td>
<td>27</td>
<td>.696</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>13.57355</td>
<td>16.29213</td>
<td>14.19899</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.11 presents the substantive and statistical findings for poverty (as measured as the proportion of the population living below the national poverty line). Based on the substantive analysis, it appears that a relationship exists between poverty and tier placement. Tier 1, tier 2 and tier 2 watch list travel in the same theoretically expected direction (specifically, the proportion of the population living below the poverty line increases as tier placement worsens); however, tier 3 data does not support the theoretically expected relationship. Upon further inspection, it appears the relationship may be limited in its accuracy, as tier 1 and 3 have only one observation being analyzed.

The ANOVA analysis shows that there is no statistically significant relationship between poverty and tier placement (p = .564). The results of both substantive and statistical analyses find that a general relationship between poverty and tier placement does not exist; thus, it is appropriate to accept the null and reject the alternative hypothesis.
Human Trafficking 85

**H12:** There is a relationship between foreign direct investment and tier placement.

**Null:** There is no relationship between foreign direct investment and tier placement.

Table 4.12. Foreign Direct Investment

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-6,399,447,123.80</td>
<td>282,718,459.80</td>
<td>4,257,459,705.60</td>
<td>666,157,655.56</td>
<td>488,635,904.00</td>
<td>3.844</td>
</tr>
<tr>
<td>N</td>
<td>21</td>
<td>49</td>
<td>16</td>
<td>9</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Std. D.</td>
<td>15,269,210,538</td>
<td>5,648,543,067.0</td>
<td>13,533,256,224</td>
<td>1,396,413,951.90</td>
<td>10,361,834,318</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.12 presents the results of a substantive and ANOVA analysis for foreign direct investment. Based on the substantive analysis, there appears to be no apparent relationship between the four tiers, theoretically expected or otherwise, demonstrated by this table. Therefore, the researcher finds that no relationship exists between the variable and tier placement.

The ANOVA shows that there is a statistically significant relationship between foreign direct investment and tier placement (p = .012). There is a discrepancy between the two analyses, as one identifies a relationship that the other does not. Tier 1 and 2 contain a larger number of observations than tier 2 watch list and tier 3. Therefore, it appears that the statistics are somewhat skewed. Due to incompatible data, the researcher finds that no relationship exists between foreign direct investment and tier placement; and therefore, it is appropriate to accept the null and reject the alternative hypothesis.

**Social support measures.**

Tables 4.13 through 4.15 demonstrate the results of a substantive and an ANOVA analysis of the variables for social support measures of IAT. The following variables were included in this category: public health expenditures; and public expenditures per student at the
primary and secondary level. In accordance with these variables, the following hypotheses were tested:

\( H_{13} \): There is a relationship between health care expenditures and tier placement.

**Null**: There is no relationship between health care expenditures and tier placement.

**Table 4.13. Health Care Expenditures**

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.9735</td>
<td>3.1067</td>
<td>2.5836</td>
<td>3.1903</td>
<td>3.4757</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>76</td>
<td>26</td>
<td>13</td>
<td>137</td>
<td>20.008</td>
<td>.000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.95242</td>
<td>1.73362</td>
<td>1.13969</td>
<td>1.76366</td>
<td>2.00113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.13 demonstrates the results of a substantive and ANOVA analysis for public health care expenditures. Based on the substantive analysis, it appears that there is a relationship between the variable and tier placement. Tier 1, tier 2 and tier 2 watch list travel in the same theoretically expected direction (specifically, public health care expenditures decreasing as tier placement worsens); however, tier 3 data does not support the theoretically expected relationship. Aside from the tier 3 increase in health care expenditures, this analysis finds that a relationship exists.

The ANOVA analysis shows that there is a statistically significant relationship between public health care expenditures and tier placement (\( p = .000 \)). The results of both substantive and statistical analyses find that a general relationship between public health care expenditures and tier placement exists; thus, it is appropriate to reject the null hypothesis.
**H14:** There is a relationship between public expenditures per primary-aged students and tier placement.

**Null:** There is no relationship between public expenditures per primary-aged students and tier placement.

Table 4.14. Expenditures per student (primary)

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>20</td>
<td>49</td>
<td>20</td>
<td>10</td>
<td>99</td>
<td>5.516</td>
<td>.002</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>3.98159</td>
<td>6.06905</td>
<td>4.25294</td>
<td>10.46749</td>
<td>6.38166</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.14 demonstrates the substantive and statistical findings for expenditures per student of the primary level. Based on the substantive analysis, it appears that there is a relationship between expenditures per student (primary) and tier placement. Tier 1, tier 2 and tier 2 watch list travel in the same theoretically expected direction (specifically, public primary education expenditures decreasing as tier placement worsens); however, tier 3 data does not support the theoretically expected relationship. Aside from the tier 3 increase in primary education expenditures, this analysis finds that a relationship exists.

Meanwhile, the ANOVA analysis shows that there is a statistically significant relationship between public expenditures per student (primary level) and tier placement (p = .002). The results of both substantive and statistical analyses find that a general relationship exists between public expenditures for students of the primary level and tier placement; thus, it is appropriate to reject the null hypothesis.
**H₁₅**: There is a relationship between public expenditures per secondary-aged students and tier placement.

**Null**: There is no relationship between public expenditures per secondary-aged students and tier placement.

Table 4.15. Expenditures per student (secondary)

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>25.2361</td>
<td>19.0046</td>
<td>19.1869</td>
<td>20.9669</td>
<td>20.5414</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>48</td>
<td>18</td>
<td>10</td>
<td>96</td>
<td>1.447</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>7.84310</td>
<td>12.36143</td>
<td>12.36143</td>
<td>11.92989</td>
<td>11.72940</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.15 shows the substantive and statistical findings for expenditures per student of the secondary level. Based on the substantive analysis, it appears that there is a relationship between expenditures per student (secondary) and tier placement. Tier 1 and tier 2 travel in the same theoretically expected direction (specifically, secondary education expenditures decreasing as tier placement worsens); however, tier 2 watch list and tier 3 do not support the theoretically expected relationship. Based on these findings, there is no relationship between expenditures per student (secondary) and tier placement.

The ANOVA analysis shows that there is no statistically significant relationship between public expenditures for secondary education (per student) and tier placement (p = .234). The results of both substantive and statistical analyses find that a general relationship between poverty and tier placement does not exist; thus, it is appropriate to accept the null and reject the alternative hypothesis.
Other IAT measures.

Tables 4.16 through 4.18 illustrate the results of a substantive and ANOVA analysis for other measures of IAT. Variables in this model included: gross domestic product; tuberculosis incidence and adult literacy rates. In accordance with these variables, the following hypotheses were tested:

\[ H_{16} \]: There is a relationship between a country's gross domestic product and tier placement.

\[ \text{Null}: \] There is no relationship between the GDP and tier placement.

Table 4.16. Gross Domestic Product

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.3567E+11</td>
<td>1.3267E+11</td>
<td>1.7284E+11</td>
<td>63,114,903,545</td>
<td>2.1671E+11</td>
<td>.003</td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>76</td>
<td>26</td>
<td>11</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>Std.Dev.</td>
<td>8.0036E+11</td>
<td>5.6037E+11</td>
<td>4.1581E+11</td>
<td>74,927,236,173</td>
<td>5.8647E+11</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.16 demonstrates the results of a substantive and ANOVA analysis for gross domestic product (in U.S. dollars). Based on the substantive analysis, it appears that there is a relationship between GDP and tier placement. Tier 1 and 2 travel in the same theoretically expected direction (specifically, GDP decreasing as tier placement worsens); however, tier 2 watch list data demonstrates an increase in the data, which does not support the theoretically expected relationship. It should also be noted that tier 3 is consistent with the patterns of tier 1 and tier 2, as it contains a lesser amount than the previous three tiers. Notwithstanding the increase in tier 2 watch list, a relationship does exist between GDP and a majority of the tiers; therefore, this analysis finds that a relationship exists.

The ANOVA analysis shows that there is a statistically significant relationship between gross domestic product and tier placement (p = .003). The results of both substantive and
statistical analyses find that a general relationship exists between gross domestic product and tier placement; thus, it is appropriate to reject the null hypothesis.

**H$_{17}$**: There is a relationship between tuberculosis incidence and tier placement.  
**Null**: There is no relationship between tuberculosis incidence and tier placement.

Table 4.17. Tuberculosis Incidence (per 100,000 people)

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>30.1818</td>
<td>154.1711</td>
<td>177.2692</td>
<td>129.6154</td>
<td>136.3139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>22</td>
<td>76</td>
<td>26</td>
<td>13</td>
<td>137</td>
<td>4.920</td>
<td>.003</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>43.70969</td>
<td>148.25081</td>
<td>186.58436</td>
<td>155.71102</td>
<td>152.57654</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.17 presents the results of a substantive and ANOVA analysis for the tuberculosis incidence (per 100,000 people). Based on the substantive analysis, it appears that there is a relationship between tuberculosis incidence and tier placement. Tier 1, tier 2 and tier 2 watch list travel in the same theoretically expected direction (specifically, the incidence of tuberculosis increasing as tier placement worsens); however, tier 3 data does not support the theoretically expected relationship. Aside from the tier 3 increase in tuberculosis incidence, this analysis finds that a relationship exists.

The ANOVA analysis shows that there is a statistically significant relationship between the incidence of tuberculosis and tier placement ($p = .003$). The results of both substantive and statistical analyses find that a general relationship exists between the incidence of tuberculosis and tier placement; thus, it is appropriate to reject the null hypothesis.
**H\textsubscript{18}:** There is a relationship between adult literacy and tier placement.  
**Null:** There is no relationship between adult literacy and tier placement.

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 2 Watch List</th>
<th>Tier 3</th>
<th>Total</th>
<th>F-Test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>74.7400</td>
<td>78.4254</td>
<td>75.3439</td>
<td>82.7069</td>
<td>78.1508</td>
<td>.310</td>
<td>.818</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>55</td>
<td>20</td>
<td>12</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>28.09455</td>
<td>22.10171</td>
<td>25.01664</td>
<td>14.09045</td>
<td>21.92874</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.18 presents the substantive and statistical findings for adult literacy rates (which is measured as the percentage of people ages 15 and above). Based on the substantive analysis, it appears that there is a relationship between the variable and tier placement. Tier 1 and tier 2 travel in the same theoretically expected direction (i.e. the adult literacy rates increase as tier placement worsens); however, tier 2 watch list data demonstrates a decrease in the data and then increases considerably in tier 3, which does not support the theoretically expected relationship. Instead, there is an inverse relationship. Table 4.18 shows that as adult literacy rates increase, the country’s tier placement also increases on the UN scale.

Meanwhile, the ANOVA analysis shows that there is no statistically significant relationship between adult literacy rates and tier placement (p = .818). The results of both substantive and statistical analyses find that there is a discrepancy between the two analyses – the existing relationship between the variable and tier placement does not travel in the theoretically expected fashion, rather, the data demonstrates an inverse relationship between the variables. Contrary to the statistical analysis, a relationship between adult literacy rates and tier placement does exist; thus, it is appropriate to reject the null hypothesis.
Table 4.19 illustrates each of the 18 hypotheses and whether or not they were accepted or rejected for the current research (for a fully detailed hypotheses table, see Appendix C). The findings resulted in 14 hypotheses rejecting the null and thus demonstrating a relationship between the variable and tier placement, while four hypotheses accepted the null and did not demonstrate a relationship between the variables and tier placement.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Accept Null</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁: Life expectancy at birth</td>
<td>No</td>
<td>.000</td>
</tr>
<tr>
<td>H₂: Gross national income</td>
<td>No</td>
<td>.001</td>
</tr>
<tr>
<td>H₃: Infant mortality rates</td>
<td>No</td>
<td>.000</td>
</tr>
<tr>
<td>H₄: Population ages 65 and above</td>
<td>No</td>
<td>.000</td>
</tr>
<tr>
<td>H₅: Population growth</td>
<td>No</td>
<td>.038</td>
</tr>
<tr>
<td>H₆: Urban population</td>
<td>No</td>
<td>.000</td>
</tr>
<tr>
<td>H₇: GINI index score</td>
<td>No</td>
<td>.017</td>
</tr>
<tr>
<td>H₈: Economic discrimination</td>
<td>No</td>
<td>.001</td>
</tr>
<tr>
<td>H₉: Population change</td>
<td>Yes</td>
<td>.319</td>
</tr>
<tr>
<td>H₁₀: Unemployment change**</td>
<td>No</td>
<td>.640</td>
</tr>
<tr>
<td>H₁₁: Poverty</td>
<td>Yes</td>
<td>.564</td>
</tr>
<tr>
<td>H₁₂: Foreign direct investment**</td>
<td>Yes</td>
<td>.012</td>
</tr>
<tr>
<td>H₁₃: Health care expenditures</td>
<td>No</td>
<td>.000</td>
</tr>
<tr>
<td>H₁₄: Expenditures per student (primary)</td>
<td>No</td>
<td>.002</td>
</tr>
<tr>
<td>H₁₅: Expenditures per student (secondary)</td>
<td>Yes</td>
<td>.234</td>
</tr>
<tr>
<td>H₁₆: Gross domestic product</td>
<td>No</td>
<td>.003</td>
</tr>
<tr>
<td>H₁₇: Incidence of tuberculosis</td>
<td>No</td>
<td>.003</td>
</tr>
<tr>
<td>H₁₈: Adult literacy rates**</td>
<td>No</td>
<td>.818</td>
</tr>
</tbody>
</table>

*Note: Acceptance of null is no relationship

**Note: Discrepancy between substantive and statistical analyses
**Criterion-Related Validity**

In order to determine whether or not the tier placement system demonstrated criterion-related validity in accordance with IAT, a few statistical analyses were performed. To eliminate multicollinearity across variables, correlation coefficients were computed and those variables that demonstrated a composite score of .70 or above were removed from the models prior to analysis. Following the test of multicollinearity, power analysis\(^\text{18}\) was conducted to determine if the sample size of each partial model was sufficient enough to attain the desired power for a medium effect size when alpha was set at a .05 significance level. It was initially determined that because a full model proposed for multinomial logistic regression was comprised of 16 variables, it was not possible to guarantee statistically significant findings with the limited number of observations. Instead, partial models were drawn from the indices found in the IAT literature. Furthermore, for this method of analysis, the statistical literature had also suggested that a minimum of five observations (preferably 20) for each variable in the model was sufficient for statistically significant findings (Hair, Anderson, Tatham & Black, 1998). Subsequent to power analysis, four multinomial logistic regression models were computed using the five indices derived from the IAT literature.. The following summaries represent the findings of these analyses.

**Partial model 1**

Variables originally presented for analysis in the first partial model included: life expectancy at birth; gross national income; infant mortality rates; population ages 65 and above; population growth and urban population. Table 4.20 (Appendix E) shows a strong correlation \((R = -.929)\) was found between the variables life expectancy at birth and infant mortality rates. For

\(^{18}\) See Appendix D.
the purposes of this research, the infant mortality rate variable was excluded from further model analysis. Three studies (Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003) had utilized the socioeconomic index variables in their research methodology; however, for reasons undisclosed, Pratt & Godsey (2003) omitted infant mortality rates from the index. Also, it would seem that life expectancy at birth would represent the overall demographic structure more appropriately than infant mortality rates, as these rates may fluctuate under a number of different circumstances. For these reasons, the researcher eliminated infant mortality rates from the first partial model.

Five variables remained following the exclusion of the infant mortality variable and represented 134 observations. Table 4.21 demonstrates the distribution of the observations for the first partial model.

<table>
<thead>
<tr>
<th>Tier Placement for 2005</th>
<th>N</th>
<th>Marginal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>23</td>
<td>17.2%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>74</td>
<td>55.2%</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td>26</td>
<td>19.4%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>11</td>
<td>8.2%</td>
</tr>
<tr>
<td>Valid</td>
<td>134</td>
<td>100.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

According to Cohen (1992), 134 observations far exceeded the necessary requirement for statistical power. In fact, with five variables, it was suggested that there be a minimum of 91 variables for a .05 significance level (Cohen, 1992). Based on the requirements of power
analysis, there appeared to be a reasonable number of cases within each category as well as a sufficient number of observations for the sample size.

**H1: Partial Model 1 – Socioeconomic Index**

Index variables (i.e. life expectancy at birth; gross national income; population ages 65 and above; population growth; and urban population) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

**Null:** Index variables (i.e. life expectancy at birth; gross national income; population ages 65 and above; population growth; and urban population) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Table 4.22. Summary of Logistic Regression Model Coefficients for the Socioeconomic Index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig</th>
<th>R²</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>.102</td>
<td>.107</td>
<td>.911</td>
<td>.340</td>
<td>1.107</td>
<td></td>
</tr>
<tr>
<td>Gross national income</td>
<td>.000</td>
<td>.000</td>
<td>.591</td>
<td>.442</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Population ages 65 and above</td>
<td>.567</td>
<td>.214</td>
<td>7.011</td>
<td>.008</td>
<td>1.764</td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>.050</td>
<td>.322</td>
<td>.025</td>
<td>.876</td>
<td>1.052</td>
<td></td>
</tr>
<tr>
<td>Urban population</td>
<td>-.002</td>
<td>.030</td>
<td>.005</td>
<td>.945</td>
<td>.998</td>
<td></td>
</tr>
<tr>
<td><strong>Tier 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>-.051</td>
<td>.048</td>
<td>1.102</td>
<td>.294</td>
<td>.951</td>
<td></td>
</tr>
<tr>
<td>Gross national income</td>
<td>.000</td>
<td>.000</td>
<td>.526</td>
<td>.469</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Population ages 65 and above</td>
<td>.389</td>
<td>.196</td>
<td>3.927</td>
<td>.048</td>
<td>1.475</td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>-.064</td>
<td>.187</td>
<td>.116</td>
<td>.733</td>
<td>.938</td>
<td></td>
</tr>
<tr>
<td>Urban population</td>
<td>-.030</td>
<td>.022</td>
<td>1.915</td>
<td>.166</td>
<td>.970</td>
<td></td>
</tr>
<tr>
<td><strong>Tier 2 Watch List</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>-.077</td>
<td>.051</td>
<td>2.245</td>
<td>.134</td>
<td>.926</td>
<td></td>
</tr>
<tr>
<td>Gross national income</td>
<td>.000</td>
<td>.000</td>
<td>.685</td>
<td>.408</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Population ages 65 and above</td>
<td>.385</td>
<td>.201</td>
<td>3.659</td>
<td>.056</td>
<td>1.470</td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>.042</td>
<td>.176</td>
<td>.058</td>
<td>.810</td>
<td>1.043</td>
<td></td>
</tr>
<tr>
<td>Urban population</td>
<td>-.023</td>
<td>.024</td>
<td>.895</td>
<td>.344</td>
<td>.978</td>
<td></td>
</tr>
</tbody>
</table>

Note: The reference category is: Tier 3

Table 4.22 demonstrates the significance levels associated with the variables of the first partial model. Based on this analysis, it was determined that four variables were not significant in their contributions (p > .05) and were therefore eliminated: life expectancy at birth; gross

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national income; population growth; and urban population. As these findings resulted in the removal of four variables from further analysis, and because the hypothesis was stated in such a way that all variables must demonstrate influence on the criterion-based validity, the researcher accepted the null and rejected the alternative hypothesis.

**Partial model 2**

The second partial model was derived from two indices: economic inequality and socioeconomic change. The variables included in this model were: GINI index score; economic discrimination; population change from 2000-2004; unemployment change from 2000-2004; poverty; and foreign direct investment.

Table 4.23 (Appendix F) shows that a strong correlation ($R = .890$) was found between the GINI index score and economic discrimination. Pratt and Godsey (2003) utilized the GINI index score and the ratio of the median incomes of the richest to the poorest 20 percent of citizens as variables for the economic inequality index. It was noted that in prior research, the GINI index score was "the most common measure of inequality employed in aggregate studies of crime" (Pratt & Godsey, 2003, p.621); however, the GINI index score tended to be unreliable in the cross-national setting. Pratt and Godsey (2003) chose to utilize the ratio of median incomes of the richest to the poorest 20 percent of citizens as a supplement indicator to improve both the reliability and predictive validity of the measure. Based on this information, the GINI index score was excluded from the current analysis. Five variables remained following the exclusion of the GINI index score. It was noted that due to a lack of observations, the unemployment change variable and the poverty variable was also eliminated. Following this elimination, three variables
remained with a total of 54 observations. Table 4.23 represents the distribution of the 54 observations for the second partial model.

<table>
<thead>
<tr>
<th>Tier Placement for 2005</th>
<th>N</th>
<th>Marginal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>10</td>
<td>18.5%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>33</td>
<td>61.1%</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td>7</td>
<td>13.0%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>4</td>
<td>7.4%</td>
</tr>
<tr>
<td>Valid</td>
<td>54</td>
<td>100.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

According to Cohen (1998), a minimum of 76 observations were required in order to guarantee statistically significant findings; however, based on the recommendations of Hair, Anderson, Tatham & Black (1998), five observations per variable was acceptable.

**H2: Partial Model 2 – Economic Inequality and Socioeconomic Change Index**

Index variables (i.e. economic discrimination; population change; and foreign direct investment) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

**Null:** Index variables (i.e. economic discrimination; population change; and foreign direct investment) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.
Table 4.25. Summary of Logistic Regression Model Coefficients for Economic Inequality and the Socioeconomic Change Index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig</th>
<th>R²</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic discrimination</td>
<td>-.526</td>
<td>.276</td>
<td>3.635</td>
<td>.057</td>
<td>.396</td>
<td>.591</td>
</tr>
<tr>
<td>Population change</td>
<td>-3.875</td>
<td>15.937</td>
<td>.059</td>
<td>.808</td>
<td></td>
<td>.021</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>.000</td>
<td>.000</td>
<td>.405</td>
<td>.525</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Tier 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic discrimination</td>
<td>-.112</td>
<td>.061</td>
<td>3.326</td>
<td>.068</td>
<td>.396</td>
<td>.894</td>
</tr>
<tr>
<td>Population change</td>
<td>-2.815</td>
<td>13.445</td>
<td>.044</td>
<td>.834</td>
<td></td>
<td>.060</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>.000</td>
<td>.000</td>
<td>.002</td>
<td>.966</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic discrimination</td>
<td>-.137</td>
<td>.093</td>
<td>2.179</td>
<td>.140</td>
<td>.396</td>
<td>.872</td>
</tr>
<tr>
<td>Population change</td>
<td>-8.179</td>
<td>.093</td>
<td>2.179</td>
<td>.616</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>.000</td>
<td>.000</td>
<td>.496</td>
<td>.481</td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: The reference category is: Tier 3

Table 4.25 demonstrates the significance levels associated with the variables of the second partial model. Based on this analysis, it was determined that none of the variables were significant in their contributions ($p > .05$) and were therefore eliminated prior to further analysis of the partial model. Because the findings of this analysis determined that all three variables produced insignificant contributions, the researcher accepted the null and rejected the alternative hypothesis.

**Partial model 3**

Variables originally presented for analysis in the third partial model included: health care expenditures; expenditures per student at the primary level and expenditures per student at the secondary level. These variables were present within the index of social support measures.

Based on the test for multicollinearity (table 4.26 – Appendix G), there appeared to be no correlations between the variables within this index and therefore, none of the variables were
eliminated from this model. Three variables remained and represented 94 observations. Table 4.27 represents the distribution of the 94 observations for the third partial model.

Table 4.27. Frequency Distribution of Observations

<table>
<thead>
<tr>
<th>Tier Placement for 2005</th>
<th>N</th>
<th>Marginal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>19</td>
<td>20.2%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>48</td>
<td>51.1%</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td>18</td>
<td>19.1%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>9</td>
<td>9.6%</td>
</tr>
<tr>
<td>Valid</td>
<td>94</td>
<td>100.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

Similar to partial model 2, a minimum of 76 observations were required in order to guarantee statistically significant findings for a .05 significance level (Cohen, 1992). Based on the requirements of power analysis, there appeared to be a reasonable number of cases within each category as well as a sufficient number of observations for the sample size.

H₃: Partial Model 3 – Social Support Measures

Index variables (i.e. health care expenditures; expenditures per student – primary level; and expenditures per student – secondary level) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. health care expenditures; expenditures per student – primary level; and expenditures per student – secondary level) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.
Table 4.28 demonstrates the significance levels associated with the variables of the third partial model. Based on this analysis, it was determined that two variables were not significant in their contributions ($p > .05$) and were therefore eliminated: expenditures per student (primary); and expenditures per student (secondary). As these findings resulted in the removal of two variables from further analysis, and because the hypothesis was stated in such a way that all variables must demonstrate influence on the criterion-based validity, the researcher accepted the null and rejected the alternative hypothesis.

**Partial model 4**

Variables originally presented for analysis in fourth partial model included: gross domestic product; incidence of tuberculosis; and adult literacy rates. These variables represented an index independent of other indices found in the IAT literature. In fact, these variables were
not included in specific indices per se; rather, they were mentioned as indicators in and of themselves.

Table 4.29 (Appendix H) indicates that there were no indicators of multicollinearity between the variables within this index; therefore, none of the variables were eliminated from this model. Three variables remained and represent 89 observations. Table 4.28 represents the distribution of the 94 observations for the fourth partial model.

<table>
<thead>
<tr>
<th>Tier Placement for 2005</th>
<th>N</th>
<th>Marginal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>4</td>
<td>4.5%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>55</td>
<td>61.8%</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td>20</td>
<td>22.5%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>10</td>
<td>11.2%</td>
</tr>
<tr>
<td>Valid</td>
<td>89</td>
<td>100.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

Based on Cohen (1992) and Hair, Anderson, Tatham & Black (1998), 89 observations is an acceptable sample size; however, tier 1 had a severely limited number of observations within its category. Based on this information, the findings would be limited in their predictability and therefore should be considered with caution.
H₄: Partial Model 4 – Other IAT Variables

Index variables (i.e. gross domestic product; tuberculosis incidence; and adult literacy rates) significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Null: Index variables (i.e. gross domestic product; tuberculosis incidence; and adult literacy rates) do not significantly influence the criterion-based validity of the tier placement system utilized by the U.S Department of State in the Trafficking in Persons Report.

Table 4.31. Summary of Logistic Regression Model Coefficients for other IAT Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig</th>
<th>R²</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>.000</td>
<td>.000</td>
<td>1.137</td>
<td>.286</td>
<td>.094</td>
<td>1.000</td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>-.009</td>
<td>.009</td>
<td>1.064</td>
<td>.302</td>
<td></td>
<td>.991</td>
</tr>
<tr>
<td>Adult literacy rates</td>
<td>-.044</td>
<td>.034</td>
<td>1.634</td>
<td>.201</td>
<td></td>
<td>.957</td>
</tr>
<tr>
<td>Tier 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>.000</td>
<td>.000</td>
<td>.184</td>
<td>.668</td>
<td>.094</td>
<td>1.000</td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>.000</td>
<td>.003</td>
<td>.004</td>
<td>.948</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Adult literacy rates</td>
<td>-.005</td>
<td>.019</td>
<td>.072</td>
<td>.789</td>
<td></td>
<td>.995</td>
</tr>
<tr>
<td>Tier 2 Watch List</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>.000</td>
<td>.000</td>
<td>.798</td>
<td>.372</td>
<td>.094</td>
<td>1.000</td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>.000</td>
<td>.003</td>
<td>.028</td>
<td>.866</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Adult literacy rates</td>
<td>-.017</td>
<td>.021</td>
<td>.628</td>
<td>.428</td>
<td></td>
<td>.983</td>
</tr>
</tbody>
</table>

Note: The reference category is: Tier 3

Table 4.31 demonstrates the significance levels associated with the variables of the fourth partial model. Based on this analysis, none of the variables were significant in their contributions ($p > .05$) and were therefore eliminated. Because the findings of this analysis determined that all three variables produced insignificant contributions, the researcher accepted the null and rejected the alternative hypothesis.
Full model

It was apparent that the next logical step in this research would be to compute a full multinomial logistic regression model. However, the findings from the previous analyses demonstrated that it was not a worthwhile endeavor to compute a full model due to some major limitations that had developed.

Initially, a full model containing all 18 variables would have been created and analyzed for tier placement predictability; however, it was found that the number of observations included in the full model would be significantly less than what was acceptable, according to Cohen (1992). Cohen (1992) suggested that for eight variables, at medium effect size, at $\alpha = .05$, there should be a minimum of 107 observations (see Appendix D). As such, for 18 variables, it was inferred that the number of required observations would be significantly higher than that of eight variables. The results of a frequency analysis across all 18 variables, there were only 23 cases (countries) where all variable observations were. This number clearly did not meet the minimum requirement for power analysis and therefore was considered a major limitation of the findings of a full model.

Another major limitation that impacted the full regression model was the issue of multicollinearity. As a result of conducting a correlation coefficient test was computed and six variables were found to be highly correlated with other variables (.7 or higher). By removing these variables from the analysis, the number of valid observations used for the regression analysis decreased to four observations. Due to the severity of these limitations, it was determined inappropriate and unnecessary extend the current research analysis to include a computation of a full model.
Chapter 5: Discussion

Introduction

The purpose of the current research was to examine the validity of the tier placement system utilized by the U.S. Department of State in the “Trafficking in Persons” Report. Questions addressed in this research included: (a) does the tier placement system utilized by the U.S. Department of State’s “Trafficking in Persons” Report demonstrate construct and criterion-related validity in accordance with anomic theory, and (b) does the findings of the research confirm or challenge the tier placement practices as currently employed by the U.S. Department of State?

The current research utilized data drawn from the Trafficking in Persons Report and from the World Bank’s World Development Indicators (2006) to address the research questions. Specifically, information was collected on variables from either 2004 data (which would impact the 2005 tier placement in the Trafficking in Persons Report) or the most recently reported data. Such variables reflected several different categories, including: socioeconomic indicators; economic inequality indicators; socioeconomic change indicators; and social support measures. It was the examination of the relationships between these variables and the tier placements of countries that determined whether or not the tier placement system was valid in accordance with IAT.

A variety of statistical procedures provided insights to issues of construct validity and criterion validity with respect to the tier placement system. Having informed the above questions, this research served to determine the extent to which various socioeconomic conditions impacted how a county was classified on the tier placement scale and whether or not IAT validated this system.
Considering the Validity of the Tier Placement System

Findings from this research have advanced the understanding of the current tier placement system utilized in the Trafficking in Persons Report. To date, the TIP report is the only classification practice employed to identify the scope of human trafficking on an international level. The TIP report indicates that the “focus is on concrete actions governments have taken to fight trafficking, especially prosecutions, convictions and prison sentences for traffickers, victim protections and prevention efforts” (U.S. Department of State, 2006, p.27). The TIP report does not consider conferences, task forces, educational programs or other programs that may contribute indirectly to reducing or eliminating trafficking (U.S. Department of State, 2006). The findings of this research demonstrated whether IAT variables were influential within countries of severe trafficking – as defined by the U.S. Department of State.

IAT variable data from the World Bank’s World Development Indicators (2006) was analyzed to assess the validity of the tier placement system in accordance with anomie. In order to inform the research initiatives, a variety of statistical analyses were conducted and reported in Chapter 4 – Findings. The subsequent section discusses these findings in light of the current research objectives.

Construct Validity

The first research question addressed the issue of validity with respect to the tier placement system. This question was divided into two sections. The first section dealt with construct validity. In order to determine whether the tier placement system demonstrated construct validity, two analyses were performed to examine the nature of the relationship of the
IAT variables across the four tiers. The outcomes of the analyses were examined to understand the levels of support for theoretically expected results.

The variables analyzed for this particular portion of the research included: life expectancy at birth; gross national income; infant mortality rates; population ages 65 and above; population growth; urban population; GINI index score; economic discrimination (which was measures as the ratio between the richest 20% and poorest 20% of the population); population change; unemployment change; poverty (which was measured as the percentage of the population living below the national poverty line); foreign direct investment; public health care expenditures; expenditures per student both at the primary and secondary levels; gross domestic product; incidence of tuberculosis; and adult literacy rates. Data linked to these variables was theoretically assessed (through substantive analysis) and statistically analyzed via analysis of variance (ANOVA) against the different tier levels. The results of these analyses found that 12 of the 18 relationships under review substantively and statistically supported the theoretically anticipated direction. Of the remaining six variables, three were found to have a discrepancy between the two analyses, while four variables did not demonstrate a theoretically supported relationship.

The three variables that demonstrated a discrepancy between the substantive and ANOVA analyses were: unemployment change; foreign direct investment and adult literacy rates. Even though there were discrepancies between the substantive and statistical analyses, there was a relationship present; it just did not travel in the theoretically anticipated direction. For example, unemployment change was theoretically expected to increase as the country’s tier placement increased on the UN’s scale. However, the results of the substantive analysis showed that there was an inverse relationship between the two variables, in that, instead of unemployment change increasing, it actually decreased as the tier placement increased on the
UN scale. This finding is surprising, because, according to human trafficking literature (Hughes, 2002; Hughes, n.d.), high unemployment rates are considered characteristic of countries of origin. In fact, traffickers often exploit this vulnerability and lure victims into their control through promises of false employment opportunities.

The four variables that were found to have no substantively or statistically significant relationship with tier placement were population change, poverty, foreign direct investment and adult literacy rates. The fact that poverty was found to have an insignificant relationship with tier placement is an interesting finding. Again, according to the literature on human trafficking, poor economic conditions fuel the supply of victims into trafficking, for they are intrigued with the opportunities of living a better life elsewhere (Raymond & Hughes, 2001; James & Atler, 2003; Hughes, n.d.).

While there may in fact be no relationship between poverty and a country's tier placement, it would be an oversight on the part of the researcher to ignore the number of observations used in the ANOVA analysis. Upon further inspection, it was found that tier 1 and tier 3 only recorded one observation per tier in this analysis. In addition, the number of observations for the ANOVA only totaled 27. For this variable, there was a limited amount of secondary data available and as a result, the findings from the analysis were severely skewed and should be considered with caution. In lieu of this limitation, it should be noted that these analyses were performed with the use of secondary data and such data is subject to various validity issues as well as issues dealing with missing and incompatible data. Despite the simplicity of the analyses, stronger relationships may be found in the future with more complete data.
Criterion-Based Validity

The next section of the first research question focused on the extent to which the tier placement system demonstrated criterion-related validity. In addition to identifying whether IAT variables were distributed across the four tiers that supported the theoretically anticipated direction, it was the aim of this section to examine the effect of IAT variables as predictors of tier placement. As a result of this research approach, a more precise understanding of how the interactions of IAT variables impacted the validity of the tier placement system was achieved. Specifically, potential influences of IAT variables on the criterion validity of the tier placement system were examined by means of statistical analyses (i.e. correlation coefficients and multinomial logistic regression). Here, four partial models were analyzed to estimate independent variable influences on categorically arranged criterion validity (i.e. the four tier placement levels). In other words, the findings of these analyses demonstrated the model’s ability to determine the statistical significance of the variable’s predictability on the tier placement system.

The variables were grouped into partial models in order to provide the necessary analytical “power” to arrive at statistically significant analyses, and to provide for a more theoretically bounded review of research findings. The variable groupings were previously defined by the IAT literature as being indices of various IAT influences (i.e. socioeconomic index, social support measures, and economic inequality) and the partial models were constructed from these indices. The partial models are as follows: 1) partial model 1 – socioeconomic index; 2) partial model 2 – economic inequality and socioeconomic change index; 3) social support measures; and 4) other IAT variables. The statistical analyses found several independent variables failed to produce any significant influence on the dependent
variable, while only a couple independent variables (e.g. population ages 65 and above and health care expenditures) demonstrated a significant impact.

Partial model 1 – socioeconomic index

The first partial model represented the variables of the socioeconomic index. The purpose of this index was to “encapsulate the general economic well-being of national populations and of demographic structure” (Messner & Rosenfeld, 1997, p.1401). When a correlation coefficient test was computed between these variables, life expectancy at birth and infant mortality rates were found to have a strong correlation with one another. Three studies (Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003) had utilized the socioeconomic index variables in their research methodology; however, for reasons undisclosed, Pratt & Godsey (2003) omitted infant mortality rates from the index. Also, it would seem that life expectancy at birth would represent the overall demographic structure more appropriately than infant mortality rates, as these rates may fluctuate under a number of different circumstances. For these reasons, the researcher eliminated infant mortality rates from the first partial model.

A power analysis was conducted on the observations of the model to determine if there would be enough statistical power to present significant findings. The first partial model yielded 134 variables which, according to Cohen (1998) was sufficient for this research. A multinomial logistic regression was computed with the remaining variables of the model. The only variable demonstrating a significant contribution to tier placement was population ages 65 and above. The rest were found insignificant. The results present an interesting find. The variables included for this model represented the general well-being of the nation and its demographic structure. In conjunction with personal reasons, it was often the condition of the native country that made the
country a target for traffickers. The lifestyles of the victims were dictated by their environmental surroundings, and in many cases, the victims lived under poor conditions; thus making them more vulnerable to accept the false offers of employment and study abroad programs.

*Partial model 2 – economic inequality and socioeconomic change*

The second partial model was comprised of variables from two different indices. These indices were combined because the economic inequality index consisted of only two variables. When a correlation coefficient test was computed, it was found that a strong correlation existed between the GINI index score and economic discrimination, which is measures as the ratio of richest 20 percent and poorest 20 percent of the population. Having only one variable in the model would not provide a large enough sample to satisfy the statistical requirements for significant findings. The decision to eliminate the GINI index score was derived from a study conducted by Pratt and Godsey (2003). In this study, the researchers determined that although the GINI index score was “the most common measure of inequality employed in the aggregate studies of crime” (Pratt & Godsey, 2003, p.621), it tended to be unreliable, particularly in cross-national settings. Therefore, for the purposes of this study, the GINI index score was eliminated from further analysis. Following the elimination of the GINI index score, two more variables were excluded from further analysis: unemployment change and poverty. These two variables did not have enough observational data to accurately represent the variable in the model. Based on the lack of data, they were also excluded from the study.

Three variables and 54 observations were used in the regression analysis. One argument that may arise from this model is the size of observations used. According to Cohen (1998), in order for the findings to be considered significant, there needs to be 74 observations for the three
variables. However, it was noted in Hair, Anderson, Tatham & Black (1998) that there is only a minimum of five observations per variable required to guarantee statistical power. Therefore, under this rule, 54 observations meet the necessary requirements and the findings would not be tainted. Following the regression analysis, it was found that none of the variables had a significant contribution and were therefore excluded from any further analysis.

The purpose of including the variables from the economic inequality index and the socioeconomic change index was two-fold. First, the variables of the economic inequality index represented the occurrence of economic dominance within a country while the socioeconomic change index variables represented multiple levels of change (i.e. population, legal and economic). Economic instability, changes in population and lack of employment opportunities are all factors within source countries that contribute to the vulnerabilities of its citizens. The lack of predictability among these variables presented an interesting finding because it indicated that socioeconomic variables were not influential to the tier placement system. As such, it seems that the U.S. Department of State ignores the human trafficking literature regarding potential instigators of trafficking.

**Partial model 3 – social support measures**

The index represented in partial model 3 was the social support measures. Variables in this model included: health care expenditures; expenditures per student (primary); and expenditures per student (secondary). These variables represented the “spending priorities of nations reflective of the social priorities of its citizens” (Pratt & Godsey, 2003, p.621). None of the variables were found to have a strong correlation with one another and, therefore, were all included in regression analysis. 94 observations were calculated in the regression model. It was
found that only the variable health care expenditures provided a significant contribution to the model. The inclusion of this variable as a potential predictor of tier placement indicated that the TIP report considered, to a degree, the level of commitment societies had to devote their economic resources toward supportive, non-economic institutions.

The insignificance of education expenditures was a surprising find. Source countries tended to be limited in their educational abilities; therefore making study abroad programs more enticing to victims. It would seem that countries with higher educational support would be more inclined to educate the public about various issues, such as trafficking, and thus make greater efforts to eliminate the threat. However, based on this model, this does not seem to be the case.

**Partial model 4 — other IAT variables**

This model represented variables that have been identified in the literature as being indicators of IAT; however, they were not included in any of the previous indices. These variables included: gross domestic product; incidence of tuberculosis; and adult literacy rates. A correlation coefficient test was completed and found that none of the variables were strongly correlated with one another. The findings of the regression analysis demonstrated that none of the variables were significant.

It is surprising that none of the variables in this model were found to be significant. Gross domestic product was a proxy indicator used to determine the size of a country’s economy. According to this finding, the size of a country’s economy had no impact on tier placement. This contradicted the literature on human trafficking that claimed a poor economy was a major contributor to the vulnerability of a country and its citizens.
Similar to the issue of health care, the incidence of tuberculosis was also thought to influence the tier placement system. A country plagued with a tuberculosis epidemic would be an easy place for traffickers to recruit people from. However, the regression analysis determined that tuberculosis as a predictor was not significant enough to impact the tier placement system.

Adult literacy rates represented another aspect of education. In the previous model, it was found that the expenditures per student for both primary and secondary levels were not significant predictors of tier placement. This variable was no different. Based on the fourth partial model, adult literacy rates was not a significant predictor of tier placement and therefore was removed from any further analysis, as were the previous two variables in this model.

**Full model**

Initially, a full model containing all 18 variables was to be created and analyzed for tier placement predictability. However, it was found that the number of observations included in the full model would be significantly less than what was acceptable, according to Cohen (1992). For 18 variables, the number of observations had to be significantly higher than 107 (which was the required number for 8 variables). The results of a frequency analysis found that with the 18 variables, there were only 23 total observations. This number clearly did not meet the minimum requirement for power analysis and therefore was considered a major limitation of the findings of a full model.

The other limitation that threatened the full regression model was the issue of multicollinearity. A correlation coefficient test was computed and six variables were found to be highly correlated with other variables and by removing the highly correlated, the number of valid observations used for the regression analysis decreased to four observations. Based on these
limitations, it was determined to be inappropriate and unnecessary to follow through with the computation of a full model.

Summary

Following a series of statistical analyses, this research informed two primary questions: (a) does the tier placement system utilized by the U.S. Department of State’s “Trafficking in Persons” Report demonstrate validity in accordance with anomic theory; and (b) would the utilization of such findings confirm or challenge the current tier placement practices?

The first of these research questions determined the extent to which the tier placement system demonstrated validity in accordance with IAT. The data suggested that the tier placement system is construct valid evidenced by the relationships with the independent variables. Not every variable was found to have a significant relationship with the tier placement system. For example, the variable population change was found to be both substantively and statistically insignificant. The data for this variable had a mixed relationship as it did not travel in the theoretically anticipated direction originally expected. The findings from these statistical analyses suggested that this methodology not only seemed to result in similar relationships between the variables and tier placement, but that it was also theoretically tied to many of the variables understood to associate with human trafficking (e.g. poverty, unemployment, poor health conditions). In other words, the relationships found through ANOVA had also been implied in the literature on human trafficking.

Following a review of the four partial models, this research provided data to inform the second initiative. This initiative sought to determine whether the tier placement system was criterion valid in accordance with IAT. In contrast to the findings from earlier analyses, a
number of variables did not demonstrate a significant relationship with the dependent variable. In fact, only two variables were found to be of significance – population ages 65 and above and health care expenditures. However, a correlation coefficient test between the two remaining variables found that a strong correlation existed and a full regression model was not computed. While much of the information provided in this study was intended to potentially inform the development of theory in this research subfield, significant support was not realized for the variables explored as part of this research to express statistical relationships between IAT variables and tier placement.

Limitations of the Research

The research has provided some insight into the validity of the tier placement system utilized by the U.S. Department of State in the Trafficking in Persons Report. As with all research, findings should be interpreted with caution. While some of the limitations of the current research have been previously discussed in prior chapters, additional and more specific issue related to the research design and other related topics will be presented in this section.

A limitation central to all findings derived from the current research deals with problems inherent to design. In the current research, it was necessary to assume that the external criterion utilized (Institutional Anomie Theory) was indeed actually correct. This assumption was imperative to this research effort as the most practical and valuable means for establishing the validity of the tier placement system was to explore relationships between the IAT variables and tier placement. The use of IAT in this research was considered acceptable as a sufficient amount of confidence has been established in their accuracy through previous studies utilizing specific
IAT variables (Chamlin & Cochran, 1995; Messner & Rosenfeld, 1997; Savolainen, 2000; Pratt & Godsey, 2003; Stucky, 2003; Kim & Pridemore, 2005).

Another limitation to acknowledge is the issue of generalizability. Beyond this specific population, generalizability should be done with caution. Although the population used for analyses was representative of the population from which it was drawn, it is limited in its ability to fully estimate the relationships between IAT variables and tier placement with countries whose data is absent from the analysis pool. In addition to generalizability, the findings of this research are limited because of the cross-sectional nature of the study and therefore cannot be subscribed to beyond the time period to which the data was collected (specifically the year 2004, unless otherwise indicated). Moreover, this research is limited by its use of secondary data. Specifically, as is the case when pre-existing data is involved, there is an innate inability to select potential research variables beyond those in the case files. A further limitation related to the use of secondary data is the missing or incompatible information for different variables. Various reasons contribute to this limitation and for the current research, these limitations were unavoidable.

**Strengths of the Research**

While there are some limitations and weaknesses in this research, there are also some strengths. The general strengths include: using advanced statistical procedures to examine the tier placement system; the creativity of the research effort; and its contribution to the existing knowledge base of both Institutional Anomie Theory and human trafficking.

This is the first time statistical analyses were used to explore the relationships between IAT variables and tier placement. The use of ANOVA, correlations coefficients tests,
distribution examinations and multinomial logistic regression allowed the researcher to assess the issue of validity between tier placement and an external criterion – the tier placement system. Overall, this methodology provided insight into the value of the tier placement system.

This research also builds upon the limited research that exists regarding human trafficking. The review of literature (Chapter 2) illustrated the need to further incorporate potential insights of theory into the understanding of human trafficking. While a study conducted by Hughes and Denisova (2002) reflected a feminist perspective, there is currently a lack of theoretically-based and empirical research. In addition to providing a theoretical approach to the understanding of human trafficking, the findings of this research are also empirically supported.

The research design employed in the current study is also an important strength of the research. Using secondary data has allowed for a systematic collection and examination of research variables. This design made it possible to obtain a large enough sample size to maintain statistical power in the findings. In addition to the availability, the use of secondary data allowed for analyses to be conducted quickly and inexpensively. It economized time, was unobtrusive and provided data that would not have been logistically possible for the researcher to collect.

Policy Implications

As was discussed early on in their research, the “Trafficking in Persons” Report was the first initiative to evaluate the anti-trafficking efforts of foreign governments at the aggregate level. Since its inception, the report has been able to provide a general understanding of the scope of the international problem as well as identify various efforts made to eliminate human trafficking (U.S. Department of State, 2006).
It had been realized through a review of the literature and as a result of some of the analytical findings (from ANOVA) that there was a relationship between IAT variables and tier placement. However, the tier placement system neglects to include such variables and ignores potential socioeconomic influences of human trafficking on current placement practices.

The findings from the first research question were used to inform the second research question. Based on the analyses, IAT did not validate the tier placement system. In fact, IAT challenged the current tier placement practices. None of the variables were found to be a strong predictor of tier placement, which indicated that socioeconomic conditions were not considered as being influential in promoting human trafficking.

The minimum standards criteria for tier placement had provided a vague set of guidelines for evaluating the extent to which governments are making significant efforts toward eliminating trafficking within their borders. However, the dynamics of human trafficking require that efforts be directed, not only toward the actual commission of human trafficking, but also toward those variables that inhibit this crime. In other words, in order to effectively impact human trafficking, influential variables needed to be identified and policies developed that curb the effects of those variables on human trafficking.

Implications for Future Research

While the findings of this research did not find many of the independent variables influential in the tier placement process, it is clear that research in this particular field is unfinished. Specifically, these findings present three implications for future research. First, continued research utilizing IAT variables can be completed. Utilizing data from more reliable and valid sources with complete information may have an impact on the findings. Second, more
research is needed using a theoretical approach. The use of theory in explaining a crime can provide useful insights into the dynamics of the crime and also ways to prolong or eliminate potential victimology. Finally, the tier placement system can be assessed by exploring the political influences inherent in the “Trafficking” in Persons Report. While the current research found that socioeconomic indicators did not significantly contribute to the tier placement process, one area that was not analyzed was politics. Understanding the political relationships with various countries listed in the “Trafficking in Persons” Report may provide further insight into the tier placement process.

Conclusion

Having informed the research initiatives posed in the beginning of the study, this research has served to improve the understanding and inform policies and practices related to tier placement systems. In addition to gaining a better understanding of the tier placement system, this research builds upon the limited research that exists on human trafficking. The review of the literature revealed that the next step in the research evolution would be to incorporate more theoretical insights to the understanding of human trafficking. In conclusion, the findings from this research may be utilized to inform current policy practices of the “Trafficking in Persons Report” and address other avenues of research in the subfield.
References


Arizona Coalition Against Domestic Violence. (April, 2002). “What Sexual Assault and Domestic Violence Service Providers Need to Know about Sex Trafficking.” Arizona Department of Health Services, pp.4-17.


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Appendix A


(A) Minimum Standards
For the purposes of this chapter, the minimum standards for the elimination of trafficking applicable to the government of a country of origin, transit or destination country for a significant number of victims of severe forms of trafficking are the following:

1. The government of a country should prohibit severe forms of trafficking in persons and punish acts of such trafficking.

2. For the knowing commission of any act of sex trafficking involving force, fraud, coercion, or in which the victim of sex trafficking is a child incapable of giving meaningful consent, or of trafficking which includes rape or kidnapping or which causes a death, the government of the country should prescribe punishment commensurate with that for grave crimes, such as forcible sexual assault.

3. For the knowing commission of any act of a severe form of trafficking in persons, the government of the country should prescribe punishment that is sufficiently stringent to deter and that adequately reflects the heinous nature of the offense.

4. The government of the country should make serious and sustained efforts to eliminate severe forms of trafficking in persons.

(B) Criteria
In determination under subsection (a)(4), the following factors should be considered as indicia of serious and sustained efforts to eliminate severe forms of trafficking in persons:

1. Whether the government of the country vigorously investigates and prosecutes acts of severe forms of trafficking in persons that take place wholly or partly within the territory of the country.

2. Whether the government of the country protects victims of severe forms of trafficking in persons and encourages their assistance in the investigation and prosecution of such trafficking, including provisions for legal alternatives to their removal to countries in which they would face retribution or hardship, and ensures that victims are not inappropriately incarcerated, fined or otherwise penalized solely for unlawful acts as a direct result of being trafficked.

3. Whether the government of the country has adopted measures to prevent severe forms of trafficking in persons, such as measures to inform and educate the public, including potential victims, about the causes and consequences of severe forms of trafficking in persons.
(4) Whether the government of the country cooperates with other governments in the investigation and prosecution of severe forms of trafficking in persons.

(5) Whether the government of the country extradites persons charged with acts of severe forms of trafficking in persons on substantially the same terms and to substantially the same extent as persons charged with other serious crimes (or, to the extent such extradition would be inconsistent with the law of such country or with international agreements to which the country is a party, whether the government is taking all appropriate measures to modify or replace such law and treaties so as to permit such extradition).

(6) Whether the government of the country monitors immigration and emigration patterns for evidence of severe forms of trafficking in persons and whether law enforcement agencies of the country respond to any such evidence in a manner that is consistent with the vigorous investigation and prosecution of acts of such trafficking, as well as with the protection of human rights of victims and the internationally recognized human right to leave any country, including one’s own, and to return to one’s own country.

(7) Whether the government of the country vigorously investigates and prosecutes public officials who participate in or facilitate severe forms of trafficking in persons, and takes all appropriate measures against officials who condone such trafficking.

### Anti-Trafficking Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTV – EXIT</td>
<td>The Free Your Mind mission has three main goals: (1) To raise awareness amongst young people across Europe on critical social issues, chiefly through the production and broadcast of special programming aimed at influencing attitudes, understandings, and behaviors; (2) To inspire young people to get involved and take action to address those and other issues; and (3) To support organizations addressing these issues on the ground across Europe and to launch creative initiatives to promote and effect positive change.</td>
<td><a href="http://www.mtvexit.org">www.mtvexit.org</a></td>
</tr>
<tr>
<td>End Child Prostitution and Trafficking (ECPAT)</td>
<td>ECPAT is a network of organizations and individuals working together to eliminate the commercial sexual exploitation of children. It seeks to encourage the world community to ensure that children everywhere enjoy their fundamental rights free from all forms of commercial sexual exploitation.</td>
<td><a href="http://www.ecpat.net">www.ecpat.net</a></td>
</tr>
<tr>
<td>Global Alliance against Traffic in Women</td>
<td>The Global Alliance Against Traffic in Women (GAATW) is a network of non-governmental organizations from all regions of the world, who share a deep concern for the women, children and men whose human rights have been violated by the criminal practice of trafficking in persons.</td>
<td><a href="http://www.gaatw.org">www.gaatw.org</a></td>
</tr>
<tr>
<td>Safe Horizons</td>
<td>Safe Horizon operates a program to assist victims and survivors of human trafficking. Through funding from the Federal Department of Health and Human Services and the Department of Justice, we provide intensive case management, shelter, legal services, and mental health care to survivors of trafficking.</td>
<td><a href="http://www.safehorizon.org">www.safehorizon.org</a></td>
</tr>
<tr>
<td>Vital Voices</td>
<td>Vital Voices Global Partnership’s Anti-Trafficking and Human Rights Program is dedicated to the worldwide elimination of violence against women. Vital Voices has developed a public awareness campaign to educate the American public about the international trade in human beings and warn potential victims about the dangers of trafficking.</td>
<td><a href="http://www.vitalvoices.org">www.vitalvoices.org</a></td>
</tr>
</tbody>
</table>

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### Construct Validity Hypotheses

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<th>Hypothesis</th>
<th>Status</th>
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<td><strong>H₁:</strong> There is a relationship between life expectancy and tier placement.</td>
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<td><strong>Null:</strong> There is no relationship between life expectancy and tier placement.</td>
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</tr>
<tr>
<td><strong>H₂:</strong> There is a relationship between a country’s gross national income and tier placement.</td>
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<td><strong>Null:</strong> There is no relationship between a country’s gross national income and tier placement.</td>
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<td><strong>H₃:</strong> There is a relationship between a country’s infant mortality rate and tier placement.</td>
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<td><strong>H₄:</strong> There is a relationship between the population of people ages 65 and above and tier placement.</td>
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<td><strong>Null:</strong> There is no relationship between the population of people ages 65 and above and tier placement.</td>
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<td><strong>H₅:</strong> There is a relationship between population growth and tier placement.</td>
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<td><strong>H₁₀:</strong> There is a relationship between unemployment rates and tier placement.</td>
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<td><strong>H₁₁:</strong> There is a relationship between countries that demonstrate a lower percentage of people living below the national poverty line and tier placement.</td>
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Construct Validity Hypotheses (con’t).

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Appendix D

N for Small, Medium, and Large ES at Power = .80 for α = .01, .05, and .10

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<th>Test</th>
<th>α</th>
<th>Sm</th>
<th>Med</th>
<th>Lg</th>
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<th>Med</th>
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<td>28</td>
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8. Mult R

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### Appendix E

#### Table 4.20. Correlation Coefficient

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<th>Life expectancy at birth</th>
<th>Gross national income</th>
<th>Infant mortality rates</th>
<th>Population ages 65 and above</th>
<th>Population growth</th>
<th>Urban population</th>
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<td>Life expectancy at birth</td>
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<td>Gross national income</td>
<td>.304</td>
<td>1.00</td>
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<tr>
<td>Infant mortality rates</td>
<td>-.929</td>
<td>-.265</td>
<td>1.00</td>
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<tr>
<td>Population ages 65 and above</td>
<td>.621</td>
<td>.433</td>
<td>-.632</td>
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<td>-.175</td>
<td>.387</td>
<td>-.498</td>
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<td>Urban population</td>
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<td>.239</td>
<td>-.684</td>
<td>.463</td>
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## Appendix F

Table 4.23. Correlation Coefficient

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<th>Unemployment change</th>
<th>Poverty</th>
<th>Foreign direct investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINI index score</td>
<td>1.00</td>
<td></td>
<td></td>
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<tr>
<td>Economic discrimination</td>
<td>.890</td>
<td>1.00</td>
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<tr>
<td>Population change</td>
<td>.184</td>
<td>.177</td>
<td>1.00</td>
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<tr>
<td>Unemployment change</td>
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<td>.035</td>
<td>.035</td>
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<tr>
<td>Poverty</td>
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<td>.188</td>
<td>.217</td>
<td>-.109</td>
<td>1.00</td>
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</tr>
<tr>
<td>Foreign direct investment</td>
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<td>.140</td>
<td>-.055</td>
<td>-.017</td>
<td>-.436</td>
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</table>
**Appendix G**

Table 4.26. Correlation Coefficient

<table>
<thead>
<tr>
<th></th>
<th>Health care expenditures</th>
<th>Expenditures per student (primary)</th>
<th>Expenditures per student (secondary)</th>
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</thead>
<tbody>
<tr>
<td>Health care expenditures</td>
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<td></td>
</tr>
<tr>
<td>Expenditures per student (primary)</td>
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<td>1.00</td>
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<tr>
<td>Expenditures per student (secondary)</td>
<td>.584</td>
<td>.162</td>
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### Appendix H

Table 4.29. Correlation Coefficient

<table>
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<tr>
<th></th>
<th>Gross domestic product</th>
<th>Tuberculosis incidence</th>
<th>Adult literacy rates</th>
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</thead>
<tbody>
<tr>
<td>Gross domestic product</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>-.220</td>
<td>1.00</td>
<td></td>
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<tr>
<td>Adult literacy rates</td>
<td>.164</td>
<td>-.482</td>
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