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### Resettled refugee students' higher education in the United States: The role of parents' highest level of education, family status and language barrier in their academic success

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SHAWNEE STATE UNIVERSITY

Resettled refugee students' higher education in the United States: The role of parents' highest  
level of education, family status and language barrier in their academic success

By

Bashu Pokhrel

Gagan Gautam

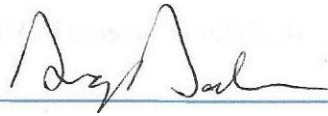
Department of Mathematical Sciences

Submitted in partial fulfillment of the requirements

For the degree of

Master of Science, Mathematics

July 2021



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Accepted by the Graduate Department



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Graduate Director, Date

The thesis entitled '**Resettled Refugee Students' Higher Education in the United States: The Role of Parents' Highest Level of Education, Family Status and Language Barrier in Their Academic Success**' presented by Bashu Pokhrel and Gagan Gautam, candidates for the degree of **Master of Science in Mathematics**, has been approved and is worthy of acceptance.

07/23/2021 \_\_\_\_\_  
Date Graduate Director

07/19/2021 \_\_\_\_\_  
Date Student

07/19/2021 \_\_\_\_\_  
Date Student

## **ABSTRACT**

The research confronts quantitative research outcomes on factors that hindered the academic performance of resettled refugee students in the United States. There are many studies about refugees, but we did not find any research about resettled refugee student's academic performance in the United States. This research will help the audiences, researchers, higher education administrators to know what are the major factors that contribute to the academic performance of the resettled refugee college student in the United States. This research will also be a great reference for researchers who want to research on academic performance and educational background of immigrant students. We used the statistical software package "R" to analyze data. We have used ANOVA, t-test, and Logistic regression to find our results. We found that parents' educational level, language barriers, and family status play a significant role in hindering the academic performance of resettled refugee students in the United States. Despite the traumatic lives, resettled refugee students are doing as better as American college students in their academic performances. The results of this study suggested that there are some factors that are significantly affecting the GPA score of the resettled refugee students in the United States. But there are multiple ways that are to be followed by individual students and their parents to overcome those factors to improve their academic performance.

## **ACKNOWLEDGMENTS**

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#### LIST OF SYMBOLS

$\alpha$  ..... Cronbach 's alpha

$\eta$  ..... eta squared, effect size

$\lambda$  ..... Wilk's lambda

$\chi^2$  ..... Chi-Square

F ..... F statistic for ratio of variances

p ..... p-value, the chance of obtaining the observed result if no real relationship exists

r ..... correlation coefficient, the degree of the relationship between two variables

## **Chapter One Introduction**

Chapter one will provide a brief introduction to the refugee lifestyle, history of resettlement, educational journey, summary of lifestyle of resettled refugees in the United States, and traumatic events and refugee life. This chapter will introduce various definitions of the term. Resettled and American college students at Columbus State Community College and Lackawanna College will be discussed as the population of interest in the study. Chapter one will address the research problem being investigated, the purpose of this study, the research hypothesis, and the importance of the study. Finally, chapter one will be concluded with a brief overview of the organization of the manuscript.

### **Refugee lifestyle and resettlement process**

Some of the people are forced to leave their native land due to political, religious, or cultural conflicts with the ruler of the country. War is also one of the major causes that force some groups of people to leave their native land. Not only do political, religious, cultural conflicts and war force people to leave their native land, but natural disasters also force people to flee from their native country. People leaving the country will do a temporary settlement in a neighboring country as a refugee. Refugee life is a very difficult stage as compared to all the possible social lives in this universe. Most of the refugees are resettled in self-managed camps, collective centers, or transit camps that are in rural locations of the globe. People are deprived of enough food to eat; they lack educational opportunities and health facilities. Transportation facility is beyond their imagination. One of the many struggles a

refugee must face is the fact that they are documental powerless and incompetent to find employment in the host country. The basic needs like food, clothes and shelter are provided to refugees by the United Nations High Commissions for Refugee (UNHCR). The headquarter of UNHCR is in Geneva, Switzerland. The UNHCR is managing refugee camps in countries like Nepal, Tanzania, Kenya, Jordan, South Sudan and many more. Refugees are living in different geographical locations of the globe but the stories of scarcity, fear and insecurity in the refugee camps are similar. Elizabeth Holzer in the article titled “What Happens to Law in a Refugee Camp?” claims that refugee camps leave people in “legal limbo” depriving them of the “right to have rights” despite the presence of international humanitarian actors and the entitlements enshrined in international law. For that reason, refugee camps have become a highly visible symbol of failed human rights campaigns (Holzer, 2013). Indeed, refugee camps lack rights. They are regulated every move they make. Our experience as a Bhutanese refugee spending twenty years in one of the seven refugee camps maintained by UNHCR in Eastern part of Nepal was extremely stressful. The small hut (approximately 18 ft by 10 ft) made up of bamboo and thatch, about five kilograms of rice per person for fourteen days, a small amount of lentil, sugar, salt etc. were our valuable properties. Besides all those obstacles and bitter stories, the education system maintained by Caritas Nepal under the supervision of UNHCR was one of the golden opportunities for the Bhutanese Refugee. It is because of that fundamental education we can go for higher education in different parts of the world. We believe that those who had spent their part of lives in any refugee camps will not disagree with the above facts.

Most of the refugees cannot return to their homeland because of many reasons like continuation of the wars, ongoing religious and political conflicts with the ruler of their

motherland and discrimination among citizens. The countries where they are refuging are also not able to address their needs. If UNHCR realizes the above two conditions, then the process of resettlement will take place. Resettlement is migrating refugees to one of the developed countries of the world where they can reside as a permanent resident. The developed countries that do resettlement are Canada, Australia, England, New Zealand, Netherlands etc. The United States of America is one of the largest countries that do resettlement every year. The United States has a long history of refugee resettlement. "The United States' domestic refugee policy initially, in the years after World War II, focused on the basic questions of whom to admit and in what numbers. Resettlement, the other side of admissions, and the process whereby the refugee accommodates to America, was not considered prior to 1960 "(Zucker, 1983). The United States had widely defined the meaning of freedom and given opportunities to lead happy and prosperous lives to refugees fleeing their native lands.

Resettlement is not an easy process. It is a long process that involves multiple steps that need to be followed by every individual. "The US had resettled more than 250,000 victims from Europe following World War II. The modern refugee resettlement program traces its roots to the 1975 admission of over 100,000 Southeast Asian refugees under an ad hoc resettlement program called the Refugee Task Force. In 1980, Congress formalized the refugee resettlement program in the Refugee Act of 1980, which included the UN criteria for refugee status and set the legal basis for the Refugee Admissions Program. Since 1980, when formal U.S. refugee resettlement began, about 3 million refugees have been invited to live in the United States. About 35-40% of refugees resettled in the U.S. are children" (*Refugee Resettlement: The Who, What, Where, When & Why*). The following figure from the article titled "Refugee

Resettlement: The Who, What, Where, When & Why” explains the resettlement process very well.

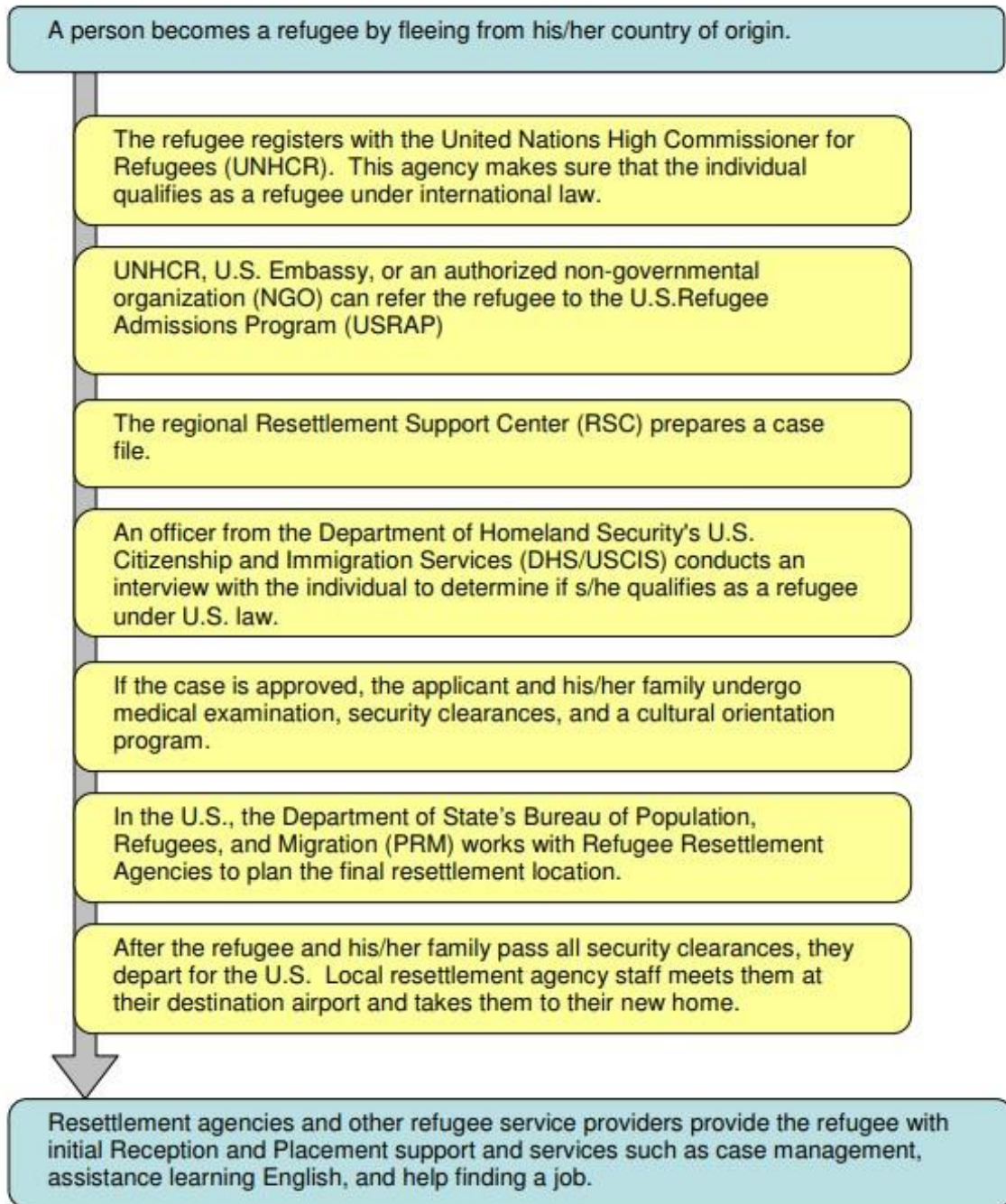


Figure 1: The process followed to resettle refugees in the US

## **Educational Journey and Obstacles**

Educational journey of refugees is like a fiction and extraordinary. They have gone through a very tough path in their educational journey at some point of their refugeeing stages. Some of the refugee children start their primary education in their own native land and will complete high school in the refugee camps after having some gaps in their educational journey while others start their primary education entirely in refugee camps and complete their college degrees in the host country. According to a report titled "Starting Out – Why education for refugees matters" published in 2016 by UNHCR, The UN Refugee Agency estimates that about 91% of the kids around the world are enrolled in primary school but only about 50% of the refugee children go to primary school. The population of refugee children aged to attend primary school in refugee camps is 3.5 million. The reasons for the low enrollment rates are low absorption capacity in local schools, the distance a child must travel to get to the school, and a plethora of social, cultural, and economic factors according to the context (*Starting Out - Why education for refugees matters*). Authors of this study had gone through the obstacles of refugee schools. The classrooms in the refugee camps are very crowded. Some of the schools in refugee camps are operated on a shift basis to minimize the crowd in the perimeter of the school. Most of the parents are not able to manage pencils, notebooks, and other basic school supplies to their kids in refugee camps. More than half of the refugee children do not get an opportunity to go to high school after completing their secondary level of education. Another report titled "Left Behind Refugee Education in Crisis" published by UNHCR in 2017 claims that "As refugee children get older, however, the obstacles only increase: just 23 percent of refugee



adolescents are enrolled in secondary school, compared to 84 percent globally. In low-income countries, which host 28 percent of the world's refugees, the number in secondary education is disturbingly low, at a mere 9 per cent" (*Left Behind - Refugee Education in Crisis* 2017). Indeed, there are many problems behind the scenes that are blocking refugee adolescents from completing their higher education. Most of the refugee adolescents must go to the host country's school which may be too far from their residence. The refugee children are socially, culturally, and economically discriminated against by the host country's classmates resulting in them withdrawing from the school.

Even though the overall aim of providing education to the residents of countries all over the globe is the same, there are some basic differences in the system formulated to provide the education. The United States has its own education system. Most of the underdeveloped countries from where the refugee is resettled in the United States follow three years of bachelor's degree whereas the United States has four years of bachelor's degree. The immigrant students who entered the United States were influenced by British English which is slightly different from the United States. Most of the resettled refugee students in the United States had not gone through the semester basis of study before coming to the United States. They have rather followed the yearly basis of study meaning they have spent one whole year in one class. For instance, Calculus I, II and III are taught in three different semesters in the United States whereas in Nepal we have our own experience that they are combined and taught as a Calculus for the whole one year. The examination system is also different in most of the underdeveloped countries from where refugees are resettled in the United States. The examinations are centralized. Students go to college, read books and lecture notes for the

entire year, and take an examination conducted by the Examination Board at the end of the academic year. The questions are set up from chapter one to the ending chapter of the book. In contrast, examinations in the United States are taken by specific professors in the class at the end of each semester. In most of the underdeveloped countries “guess papers” are very reliable resources to prepare for the board exams. The grading systems in other parts widely vary from the United States. The grades in most of the underdeveloped countries are expressed in a percentage. The percentage above 60 is considered excellent. However, most of the countries are shifting to the 4 years of bachelor’s degree and grading system to alphabetical.

### **Some Factors affecting Students’ Academic Performance**

First, the resettled refugees in the United States have different family status. Some children have lost their parents while they were struggling for their civil, political, economic, and educational rights. Most of the children attending school do not live with both of their biological or adoptive parents. The status of families usually having single or dual parents affect children’s creativity, social and economic living style thereby yielding adverse effects on their academic performances. “The U.S. Census Bureau reports that 1-to 2-year-olds who live with two married parents are read to, on average, 8.5 times per week. The corresponding statistic for their peers living with a single parent is 5.7 times. And it’s likely that dual-parent families in general have many other attributes that affect their children’s educational attainment, mental health, labor market performance, and family formation. More-rigorous quasi-experimental evidence also documents significant negative effects of a father’s absence on children’s educational attainment and social and emotional development, leading to increase in antisocial behavior” (Egalite, By, Egalite, Bio, & Bio, 2020). It is true that a single parent cannot give

sufficient time to their children. They are unable to reside in communities where the school grading is better. Children living without parents must struggle more than children having both parents with them. Children living without parents must manage their personal lives as well as the educational requirements whereas children living with parents can get help managing their daily basic needs at home. Thus, the family status of a child plays a vital role in the academic performance of an individual. “In fact, not only that the school quality may affect students’ academic achievement during compulsory education, but also the ways and abilities of the participation of parents in their children’s compulsory education may directly affect students’ academic achievement” (Li, 2018). Acquiring education is an endless procedure. The primary goal of higher education is to maintain good standing in academic performance. Parents who supervise the high-quality of education for their children will lead to better academic performance. Also, parenting styles and comportment of parents including educational, economic, and social supports for their children could promote children’s learning habits and mark the academic performance.

Secondly, there does not exist a common language that is spoken, readable and understandable by all the people living in different corners of the world. There are thousands of languages used for communication. Most of the underdeveloped countries from where the refugees are resettled in the United States do not design their curriculum in English. Students learn all their courses in their own native languages. Some children are resettled in the United States at a very early age and start their pre-primary school in the United States. Those who have started school before resettling to the United States are facing problems like language barriers and social discrimination in the school. Students who have completed high school in

refugee camps and want to continue their college education in the United States are having a hard time tackling the new system of education. One who had completed college education in refugee camps had to struggle a lot to get a job. Language barrier seems to be a temporary obstacle for most of the refugees. They have overcome this barrier struggling for a long period of time. According to the article titled "Refugees Thrive in America" by Silva Mathema published on November 19, 2018, in Center for American Progress states that "Nearly 44 percent of the refugees reported that they did not speak any English when they first arrived in the United States. However, that changed after they lived in the country for less than 6 ½ years, only about 17 percent of refugees reported not knowing how to speak English at all at the time of the survey. Among refugees who did not speak any English upon arrival, nearly 62 percent reported that there had since been some improvement in their English-language skills. Among refugees who reported that they did not speak English well when they arrived, nearly 68 percent said they spoke English "well" or "very well" at the time of survey" (Mathema, 2018). In fact, learning is a gradual process, and the targeted goal can be achieved in a few years of struggle. English, the international language, is the third eye for us to watch the world clearly.

Not only does family status and the issue of language affect the children's academic performance, but parents' highest level of education also affects students' academic performances. First, a parent's education is supposed to play a vital role in their children's success in the academic field. The world is technologically and socially advancing, adding challenges for the parents to routinely pass the skills to their siblings. Children of educated parents get an opportunity to be involved with their parents who had circulated similar problems and battle phases in their lives. Secondly, highly educated parents pay attention to

the quality of school and teachers employed in the school are more likely than their less educated colleagues to advance children's academic success. "Highly educated parents can also use their social capital to promote their children's development. A cohesive social network of well-educated individuals socializes children to expect that they too will attain high levels of academic success" (Egalite et al., 2020). It is true that educated parents participate in teacher-parents conferences frequently and track their children's academic progress.

## **Traumatic Event**

When the event, or series of events cause a lot of stress, it is called a traumatic event. Traumatic events are marked by a sense of horror, helplessness, serious injury or the threat of serious injury or death. Traumatic events affect survivors, rescue workers, refugees and the friends and relatives of victims who have been involved. They may also have an impact on people who have seen the events either firsthand or on television.

## **Traumatic Events and Refugee Lives**

The life of refugees in refugee camps is miserable. UNHCR (United Nations High Commissioner for Refugees) provides food for refugees every month which is not enough to sustain life. The huts were made of bamboo and plastic. The huts were close enough. So, it is rather hot in summer and better cold in winter. The health facilities were not good. Many people died of starvation, flood, landslide, volcanic eruption, lack of medical facilities, famine etc. The refugees were given three options which are repatriation to their country, local integration and third country resettlement. The repatriation to their country was not allowed by their government. Local integration is not allowed by the government of the country where

they are living as refugees. So, the only option left for them is third country resettlement. Due to all these life-threatening situations refugees are forced to choose this third option because they do not have any other choice. Most of the refugees came to third countries keeping in mind there's children's future (Hollifield, etl, 2005). Due to political and religious oppression, war, migration, and resettlement refugees must experience many stressful events. It is difficult to mention all different types of events that refugees have suffered. Sometimes refugee's trauma starts from the primary war related events that cause them to leave their country. Previously, standard assessment of refugee trauma has been a 17-item section on the Harvard Trauma Questionnaire (HTQ), which assessed whether the event was experienced personally, or whether the refugee witnessed or heard about such trauma. This assessment was very useful for research and the assessment shows that the breadth and depth of trauma for refugees is far more than 17 events. In recent work, sixty-seven Vietnamese and Kurdish refugees endorsed 612 war-related traumatic events in in-depth interviews during development of the Comprehensive Trauma Inventory-104 (CTI-104). The refugees also have suffered from imprisonment, torture, loss of property, rape, physical assault, extreme fear, malnutrition, and loss of livelihood before leaving their motherland. It takes several days or years to reach their unknown destination after leaving their country. During this travel process refugees are separated from their family members, robbed, witness torture or killing and loss of family members and friends. The refugees are also betrayed by their own people, by enemy forces and their political parties. All these unfriendly and unsocial actions of others become a significant factor that controls the lives of refugees and has a vital role for health and their ability to trust interpersonal relationships, which is important to resettlement and healing process.

Torture varies from one refugee group to another ranging from 3% to 63%. Refugees who are tortured face the challenges for physical and emotional healing that must be assessed and treated with care and sympathy. All refugees want repatriation to their country, but they are forced to resettle in a third country, usually that is not of their choice. The refugees must assimilate and adjust to the new place, language, and culture with an uncertain future. Establishing a new home and identity while handling the activities of daily living is a challenge for newly arrived refugees. The study informs us that the post migration stress contributes to the poor mental health of refugees. The post migration stress also affects the emotional health of refugees and sometimes increases the risk greater than the war related trauma. Both pre- and post-migration stress shows types of symptoms in both adults and children. During the time of resettlement, the stress is high because the refugees are reminded of their past traumatic events by the Case Worker or resettlement agencies and health care workers may start to reverse the effect or trauma in their life.

## **Definition of terms**

Authors provide the definitions of following terms to aid the readers. The frequently used word is *academic performance*. It is measured in GPA ranging from 0.0 to 4.0. *The parent's level of education* is measured in three variables-never attended school, had high school or GED, had some college degree. *Family status* is looked at as single-parent or both parents. Students that had taken college courses in countries like Nepal, India or Bhutan are very familiar with the words *Guess Paper*. It is a bundle of questions and answers published by scholars to help students to prepare for the final board exam. The questions published in the guess paper may or may not be seen in the exam, but similar types of questions will be seen in

the test. It is just simple as its name *suggests* – something without certainty. Language barrier is categorized into the following three measures: beginner to pre-intermediate, intermediate and upper intermediate or above. The online survey published in Online English Level test by British Council(<https://learnenglish.britishcouncil.org/online-english-level-test>) is used to categorize the students into three groups.

## **Statement of problem**

Education is a gateway of human civilization, and it plays a vital role to lead a quality life. Refugee students are facing countless hindrances in their education journey and are having low academic performances in comparison to the American college students. The entire resettled family faces many changes while they are adapting and assimilating into American culture and environment. The effect of the new environment and educational system is directly seen in the school and college students. Refugee students witness the challenges faced by their parents to find a reliable job, learn English, understand traffic rules and regulation, and collaborate with the medical, transportation and education system of the United States. Resettled refugee children with a little knowledge of English have an obligation of interpreting for their parents that may cause them to miss their classes and/or they will not get sufficient time to prepare for their exams. Due to all these situations, many refugee/Immigrant college students must drop school to assist their family for daily living and family expenses.

As of today, there is not a lot of research published defining the challenges faced by refugee students in the United States. First, this study pursues to expand the areas that need to be focused by refugee students to improve their academic performances. Secondly, the



students' academic performances will be predicted based on several factors including family status, parents' highest level of education and the language barrier. Finally, some durable solutions will be mentioned to improve those areas.

This study may add one block to build an organized educational journey for refugee students. It is helpful for refugees who are attending college and those who are planning to attend college in future.

## **Purpose of the study**

Refugee students' educational journey is crowded with mental stresses, demographic matters, and social anxieties. Most of the refugee children had not got an opportunity to start school even at their eligible ages. Others had to drop out of school without matriculating. This study is being conducted to help inform most common problems faced by immigrant students in the United States and possible remedies for those issues. The study will be conducted on data taken at Columbus State Community College, Columbus OH and the Lackawanna college, Scranton Pennsylvania. The collected data will be used to compare if the average GPA of refugee students is lower than the American college students. Furthermore, the data will be analyzed with appropriate statistical techniques to help answer the question of whether immigrant students' GPA is related to their family issues, parents' highest level of education, and language barrier.

Most importantly, both primary researchers of this study were former refugees and experienced lots of hindrances in our own educational and non-educational journey of our life. So, we would like to highlight those challenges and obstacles that we had faced to progress in our educational field through our experience and data collection.

## **Significance of the study**

Much research about refugees was published but there are very few studies that primarily focus on academic performance of refugee students in the United States. We will be studying some of the traumatic events and their effects on the academic performances of refugee students. This study will add vital information about the factors affecting the GPA of the immigrant students. The result of the research will be very valuable to immigrant students who are willing to attend higher education in the United States. It will also help the current college students and their parents to track the academic performance of their children in the college level education. Lastly, the factors affecting students' Grade Point Average for the refugee college students can be used to determine how to better support the immigrant students to improve their GPA in college education.

## **Theoretical framework**

The theoretical framework for this research is developed by combining the Diathesis Stress Model and Tinto's Model of Student Retention. The Diathesis Stress Model strives to study pre-existing susceptibilities faced by people and their effects on their everyday lives. On the other hand, Tinto's Model of Student Retention highlights the success rate of students in their academic goals. Since the primary goal of this study is to identify the effects of traumatic events faced by refugee students on their academic performances in their college life. Thus, these two models play a dynamic role to drive our study to a right track.

### **Diathesis Stress Model**

The Diathesis Stress Model (e.g., Monroe and Hadjiyiannakis, 2002) will assist us as the fundamental theoretical framework for our study. People may differ about the point at which they develop a disorder depending on the lifestyle they lead, socio-economic status, the degree to which predispositional risk factors exist and on the degree of experienced stress. Such models assume a dichotomous diathesis, that is, either one has it or one does not have it (Zuckerman, 1999). If the diathesis is absent, there is no effect of stress so that even severe stress will not lead to the development of the disorder. When the diathesis is present, the expression of the disorder will be conditional on the degree of stress: as stress increases so does the risk for the disorder in persons who possess the diathesis (Ingram and Luxton, 2005). The Diathesis Stress Model will promote the researchers of this study to understand if those students, who have experienced an unresponsive traumatic event such as war, exploitations, abuse in any stage of their journey towards the student life will have some adverse effect on their academic professionalism. Thus, relatively minor stressors may lead to a disorder in

persons who are highly vulnerable. The Diathesis Stress Model (Monroe and Hadjiyiannakis) approach accepts additivity, that is, the idea that diathesis and stress add together to produce the disorder in human beings.

### **Tinto's Model of Student Retention**

Tinto proposes that students enter college with pre-existing attributes and experiences, including family background, skills/abilities, and prior schooling, to begin a longitudinal process of interacting with the formal and informal social and academic components of the institution. This process is affected by external forces and because of this interactional process, the student ultimately decides either to stay involved or to leave the educational environment.

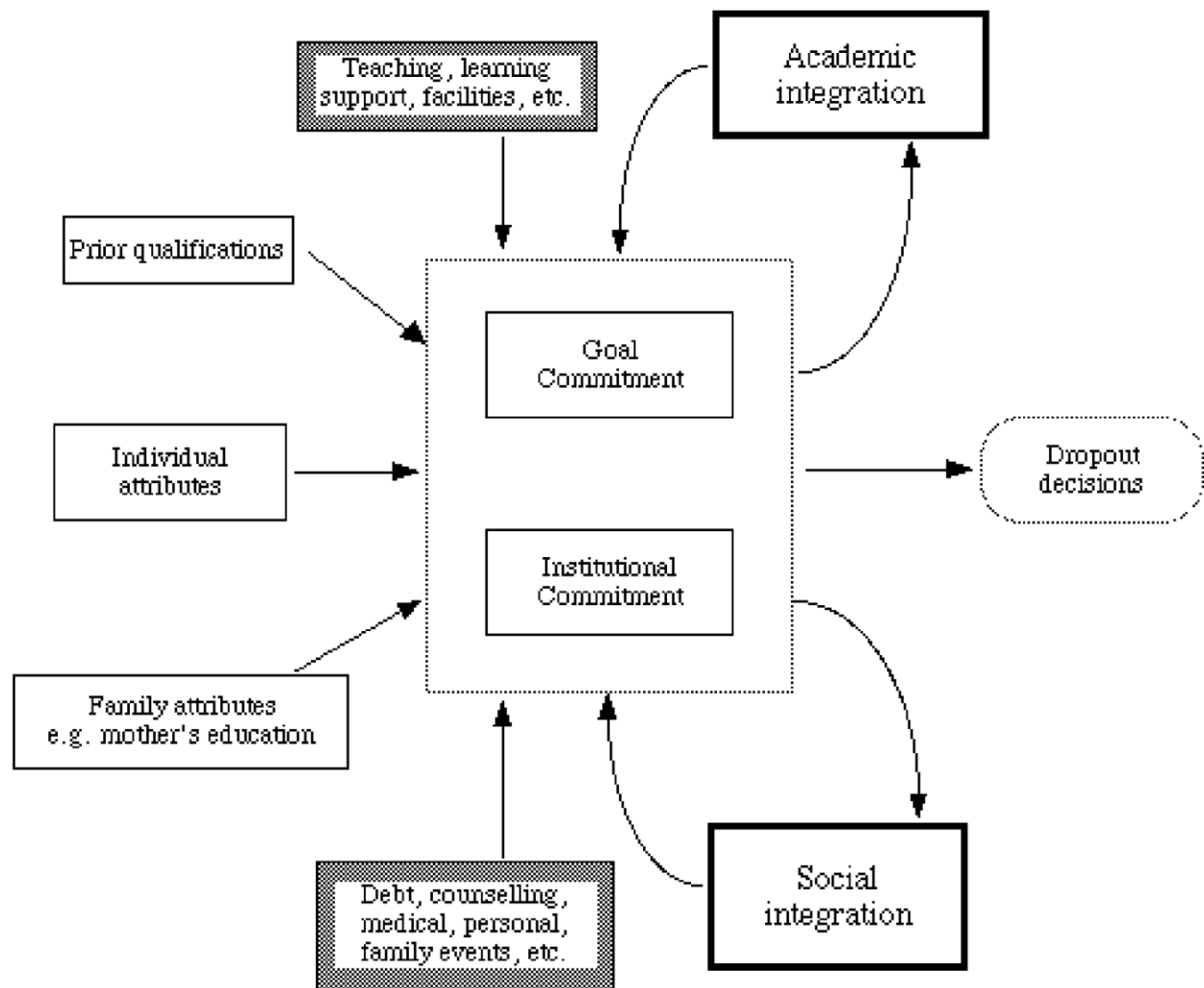


Figure 2: Tinto's model of student retention.

## Research questions

This research is primarily focused on the struggle of refugee students in their educational journey. The following research questions are addressing the aspects of this study.

- 1) Is there a significant difference between the average GPA score of the resettled refugee students and the American college students in the United States?

Hypothesis: There is no significant difference between the average GPA score of resettled refugee students and the American college students in the United States.

2) Are family status, parents' highest level of education and language barrier significant predictors of resettled refugee students' GPA score?

Hypothesis: The family status, parents' highest level of education and language barrier are not the significant predictors of resettled refugee students' GPA score.

## **Summary**

Chapter one presented the problem being addressed and provided an acceptable intention for the current study. Chapter one defines some terms to accelerate the flow of reading for the readers. Chapter two will review the existing research articles related to this study. Literature review will help readers to understand methods and findings of previous scholars. Chapter three will include the methodology of the study. Chapter four will use appropriate statistical techniques to analyze the collected data. Finally, chapter five will accomplish this dissertation and conclude the verdicts of the study.

## **Chapter Two Literature review Introduction**

Chapter two will provide the reader with a background on the causes and lifestyle of refugees in host countries, educational journey and obstacles in refugee camps, the resettlement process, traumatic events and mental health of refugees and the refugee students and their academic performances in the United States. This chapter will review the articles that are already published in the study like our research. Finally, chapter two will be concluded by doing a brief overview of related articles.

## **Refugee lifestyle**

Refugee life is the most underdeveloped form of life on the Earth. The article titled “What Is a Refugee Camp? Explorations of the Limits and Effects of the Camp” by Simmon Turner states that “Camps are preferred means of containing displaced people” (Turner, 2015). In fact, Refugee camps are the territory where people are living a miserable life. People living in camps are forced to leave their nation due to cultural, political, and social discrepancies. “From Syria to Afghanistan, from Colombia to Malta, people who have been forced to leave their homes due to violence, war and natural disasters are contained in Internally displaced persons (IDP) camps, refugee camps, detention centers, transit camps, deportation camps, prisons, and ghettos” (Turner, 2015). The management of refugee camps is usually under the supervision of UNHCR. The refugee camps all over the world are managed by UNHCR. UNHCR usually collaborates with different NGOs and INGOs to manage the refugee camps. “They are put there by states, non-governmental organizations (NGOs) or United Nations (UN) agencies” (Turner, 2015). Like all other refugee camps throughout the world, refugee camps settled in the Eastern part of Nepal survived under UNHCR. “Camps are often located far from cities and other

centers and are clearly demarcated-often fenced-defining a distinction between the inside and outside. Even in cases where camps are unfenced and located in cities, the distinction between inside and the outside persists” (Turner, 2015). Indeed, refugee camps are settled in a rural part of the country. The primary researchers of this study had an experience of walking ten miles to reach the nearest market from the refugee camp where they were settled. Nationality, scarcity, unemployment, and citizenship status are some of the blocks that are added together to make an invisible fence between the refugee camp and an outside community. “In UNHCR camps, the World Food Program (WFP) provides food rations and implementing partners, usually nongovernment organizations (NGOs), implement nutrition and health programs with support from UNHCR and WFP” (Doocy, 2011). Indeed, because of huge crowds, unavailability of organic food and lack of infrastructure, refugee camps are unhygienic and are in danger of spreading infectious diseases like cholera, dysentery, and tuberculosis.

“Being created as a response to a state of emergency, refugee camps are perceived as exceptional and hence temporary measures to be taken before normally being stored once again in the future” (Turner, 2016). In fact, refugee camps do have a dense population. Camps are often established in an area where people are often seen coming in and out for trade and entertainment. “They are often placed in secluded areas and rarely marked on official maps, even though a camp in Northern Kenya for instance may be the biggest concentration of people, trade and exchange in the whole region. Second, they may in legal terms be characterized as exceptional, since usually the refugee camps are governed by other legal instruments than the surrounding areas” (Turner, 2016). “Refugee camps are, by definition,



temporary; they are never meant to remain where they are indeterminably” (Turner, 2016). It is true that refugee camps are not permanent. The primary researchers of this article had spent twenty years in a refugee camp in Eastern part of Nepal but the camp where we spent most of our lives does not exist anymore.

## **Traumatic events and their effects**

Traumatic event appears when an incident or a continuous episode of such incidents causes a stress in one's mind. Traumatic events are caused by community violence, physical abuse, and natural disasters. It is indicated by helplessness, serious injury or even death. Some of the traumatic factors are usually associated with the experience of migration, but the literature indicates that they could occur in pre-migratory stages, during the migratory process, or even in the post-migratory period. A meta-analysis conducted by Bogic et al. found that, regarding war-related factors, a higher number of traumatic experiences was the factor most robustly associated with the presence of mental disorders, including PTSD. In the same line, Nygaard et al. described a 40.9% prevalence of psychotic experiences migrants with refugee status and known PTSD; the most common experiences were auditory hallucinations (66.2%) and persecutory delusions (50%), which were more prevalent in individuals exposed to torture and imprisonment. Different influences, such as childhood abuse and traumatic events, interact in complex ways to determine risk of psychotic disorder. Migration is linked to a more severe psychosis, with a higher risk of “need for care,” and refugees are at higher risk of non-affective psychosis. Some authors state that the actual data suggest that the higher risk of schizophrenia in migrants is found in the least successful and most discriminated groups. This theory also

encompasses that, to a certain degree, it is the reason why childhood trauma is also a risk factor. Other authors argue that, in studies on discrimination, the strongest effect was seen when there was discrimination including physical assault. This supports that exposure to hostility, threat, and violence are a cause of high psychosis risk, because they trigger more paranoia and delusions.

The article titled “Cognitive assessment of refugee children: Effects of trauma and new language acquisition” by a couple of Australian writers claim that about 60,000 children of refugee background are resettled every year by developed nations like US, Canada, Australia, and many European Nations. These children have experienced some kinds of traumatic events before arrival, on the way of arrival or after arrival. The writers claimed that traumatic events like abuse, violence, negligence, and language barriers are some of the factors that have adverse effects on the behavioral, emotional, and cognitive development of children. The longterm effect of these events is seen in the academic performance and other teaching learning processes. (Kaplan et al.). “In general, children and young people of refugee background will have experienced a wide range of traumatic events prior to their arrival in a settlement country. These may have included coming under combat fire and bombing; destruction of home and schools; separation from and disappearance of parents, family members, and friends; witnessing violence and death; prolonged danger; and perilous journeys” (Kaplan et al). It is true that none of the people around the world are willing to leave their native land, but some of the people are forced to do so. If there appears disagreement with the ruler of the country, then a part of the population of the country will start getting tortured and are forced to flee leaving their properties unattended. The primary researchers of

this study had witnessed the tortured given by the ruler to the people forcing them to leave their native land. In the early 1990s, the government of Bhutan had political and cultural conflicts with the onesixth of its population that were residing in the Southern part of the country. The conflicts became so violent that nearly one hundred thousand people left the nation and settled as refugees in a neighboring country, Nepal. “While the majority of the world’s refugees live in countries of first asylum, the focus here is on refugees who have been forcibly displaced from their homes, and who have moved from a country where they sought protection, to be resettled in another country that has agreed to accept them as refugees” (Kaplan et al.).

## **Educational Journey and Their Obstacles**

A review of articles done by J. Lynn McBrien tried to answer the questions about refugee education in the United States. J. Lynn McBrien is an Assistant Professor of Social Foundations at the University of South Florida. Her research is usually done on refugee education, comparative education, cross-cultural studies in motivation, and media education. One of her articles titled “Education Needs and Barriers for Refugee Students in the United States: A Review of the Literature” resembles our study about refugee education and their progress in their academic field. Her work highlighted the causes and definition of refugee, stated the obstacles faced by refugees in educational and non-educational journeys and she had suggested some possible remedies to those hindrances. Purpose of her article was to investigate the needs of refugee students in schools in the United States and possible solutions for those problems. The research was done by creating a matrix of research questions with Portes and

Rumbaut's (200) factors affecting segmented assimilation. Researchers had given a brief explanation of the language barrier for refugee students in the United States. "Most of the literature on language acquisition did not specifically address refugees; instead, most language research applied to all students coming from countries in which the host country's language was not the student's first language" (McBrien, 2005). Although English is an international language, not all people around the world can read, write, and speak English. People around the world have their own native language. In fact, it is hard for everybody to start an entire new language after being used to a different language. The researcher added that "All of the studies indicated that immigrant students with good English language skills were better adjusted to their U.S. school environments" (McBrien, 2005). The researchers summarized the language acquisition part claiming that traumatic events are one of the major factors that affect the language acquisition of both parents and children. "Language is a major barrier to learning until children become competent in speaking, reading and writing English" (McBrien, 2005).

Most of the schools running in the host countries do have well trained teachers to teach in the classroom but teachers working in schools in refugee camps do not get the opportunity to be well-trained teachers. "Quality education is the anchor that will keep children in the classroom, encouraging them to continue to the end of primary school and transition to secondary and beyond. For that reason, education has a prospective effect only if it is of good quality. Knowing that their children are learning is an incentive for parents to send their children to school and make sure they attend regularly. The key to quality lies in sound and inclusive education policies as well as motivated and well-trained teachers. However, teachers are often in short supply where there is an influx of refugees, even in high income countries"

(*Starting Out - Why education for refugees matters*). Authors of the article titled *Starting Out - Why education for refugees matters* explains the condition of the school in refugee camps.

Primary authors of this article had gone through the same situation while attending school in a refugee camp. The primary researchers of this study had not touched the keyboard of the computer until passing high school, never seen acids, bases and salt in science laboratories and never visited the school library. This article also demonstrates the statistics of refugee education in different parts of the world. "Where conflict erupts, the effect on countries with effective and established educational systems can be disastrous. The violence in Syria is a case in point: whereas in 2009, 94 percent of Syrian children attended primary and lower secondary education, by June 2016 only 60 percent of children did so, leaving 2.1 million children and adolescents without access to education. In neighboring countries, more than 4.8 million Syrian refugees are registered with UNHCR, among them approximately 35 percent of school age. In Turkey, only 39 percent of school-age refugee children and adolescents were enrolled in primary and secondary education, 40 per cent in Lebanon, and 70 percent in Jordan. This means that nearly 900,000 Syrian school-age refugee children and adolescents are not in school"

(*Starting Out - Why education for refugees matters*). The picture (a lady teacher is teaching her students) posted in the article titled *Starting Out - Why education for refugees matters* published by UNHCR in 2016 reflects the maximum portion of the reality including the students' uniform, school infrastructure and education system of the refugee camp. The primary researchers had started the school under a tree shed. The school was called a *mobile school*. Mobile School is a type of school where students must change their seats as the movement of the shadow of the tree. The school used to be off on windy and rainy days. After struggling for a

few years under the shadow of a big tree in an open field we were finally transferred into a school building that was made up of bamboo and thatch. The writer concluded this article stating that quality education is the anchor that will keep children in school (*Starting Out - Why education for refugees matters*).

## **Resettlement Process and their Lives in the US**

The article titled “The career adaptive refugee: Exploring the structural and personal barriers to refugee resettlement” briefly highlights the resettlement process, the structural barriers faced by resettled refugee in the United States and the employment discrimination. “The refugee resettlement processes in the E.U. and U.S. are similar. Government agencies and non-profit organizations try to place refugees in cities with available jobs and pre-existing communities of the same ethnicity. Resettlement agencies provide assistance with housing, employment services, host country language courses, and healthcare” (Campion, 2018). The research shows that the resettled refugees have limited exposure to the job search. Secondly, they are scared if their skills match as per the requirement of the job. Some of the people were working as doctors, teachers, lawyers before they became refugees. However, these qualifications may not be valued in the host country. Because of this issue they may face financial stability, depression, and downturn in employment (Campion, 2018).

The article titled “Refugee Resettlement in the United States: Policy and Problems” by Norman Zucker talks about the refugee resettlement history and policies in the United States. This article has given the history of resettlement back to World War II. The author states that “The existing resettlement system with the private nonprofit voluntary agencies, generally referred to as “volags,” as the key actors, evolved after World War II. Before the war, new

entrants – immigrants and refugees alike-were aided by the volags and their local constituents, who relied solely on self-generated resources. A volag-federal relationship began with the Corporate affidavit Program of 1946” (Zucker, 2021). Indeed, The United States has played a vital role in protecting human rights through various means. The United States has given food, shelter, and clothes to those who need it. “By 1978, the refugee situation in Southeast Asia had become increasingly worrisome. In July 1978, President Carter ordered American carriers and ships with U.S. registry to pick up Indochinese boat people and promised them resettlement in the United States” (Zucker, 2021). There are many articles that describe the process, policies, history, and weaknesses of refugee resettlement in the United States. Another article by Jessica Eby etl titled “The Faith Community’s Role in Refugee Resettlement in the United States argues that the United States has become the leading refugee resettlement country in the world particularly because of the long-standing active engagement and support of communities of faith in refugee resettlement and local integration. Today, to gain access to the US Refugee Admissions Program (USRAP), refugees are referred based on need for resettlement as a durable solution as identified by UNHCR, NGOs, or a US Embassy. A Resettlement Support Center (RSC), formerly known as an Overseas Processing Entity (OPE), and before that as a joint Voluntary Agency (JVA), is based in the country or region from which the refugee is being referred, and its staff review and process the case (Eby etl, 2011). The authors claim that the end goal of resettlement as it is approached in the US context is self-sufficiency for refugees. Within the parameters of the cooperative agreement with PRM, voluntary agencies and local affiliates have discretion to develop programs that provide refugees with the most positive resettlement experience possible (Eby etl, 2011).

Home is the first school of every child. Parents' role is a key to show a right track for children in their lives. *Single parenthood and children's educational performance: inequality among families and schools* by Marloes de Lange and Jaap Dronkers is an informative article that clarifies some of the factors affecting children's academic performance. Some of the refugee children are settled in the United States with single biological parents. The authors of this article argue that how single parenthood is related to such outcomes among children is still debated. On the one hand, it is argued that a divorce or separation – as the major cause of single parenthood – has a large emotional impact on both children and their parents and reduces the economic, parental, and social resources within the family. On the other hand, the assumed effect of single parenthood on children's outcomes could in fact be spurious (De Lange, 2018). Regarding the disadvantaged socioeconomic position of single – parent families, it is more likely that single parents must choose schools of lower quality in poorer neighborhoods, which induces a concentration of single – parent families at these schools (De Lange, 2018). The researchers of this article used surveys to collect the data. The researchers concluded that the children at schools with larger shares of children from single-parent families have lower educational performance, and this particularly pertains to children who live with a single parent. Children from single – parent families are doubly disadvantaged (De Lange, 2018).

There is much research done based on refugee lifestyle, conditions of refugees in refugee camps and their educational and non-educational journey. Most of the researchers agree that the refugees had faced many obstacles in their lives. Not only do refugees face hindrances in refugee camps, but also, they must tackle lots of problems after they are



resettled in the developed countries. Some of the problems faced by refugees after resettlement are language barrier, transition into a new education system, family issues, economic and social issues, and job opportunities.

### **Chapter Three Methods Introduction**

Chapter three will provide the brief background of data collection and the process used to analyze the data. This chapter will address the research questions that are investigated in this study. It will also briefly describe the research design. Information on the research sample,

the instruments utilized and the procedures for conducting the study will also be included in chapter three. In addition to the above, chapter three will also state the research hypothesis. This chapter will also review the ethical consideration involved in this study.

## **Research Questions**

1. Is there a significant difference in Mean GPA for resettled refugee students in the United States and American college students?
2. Are family status, parents' highest level of education and language barrier significant predictors of resettled refugee student's GPA score?

Researchers of this study had prepared general questions to administer the data collections.

The instrument used in this study is the survey method. The questions developed by the researchers are: what is your GPA? What is the highest level of your parents' education? Are you residing with a single biological parent or both biological parents? Participants were allowed to skip questions whenever they felt uncomfortable answering our questions. The data used in this study was collected at Columbus State Community College, Columbus OH and Lackawanna College, Scranton PA. Lackawanna College in Scranton Pennsylvania is a private four-year college with an open admissions policy and enroll approximately 1991 students in undergraduate and professional programs. The college offers a variety of traditional academic programs, many of its popular majors are centered on vocations, such as law enforcement, early childhood education, culinary arts, and accounting. Lackawanna has invested in several allied health programs including cardiac sonography, diagnostic medical sonography, vascular technology, physical therapist assistant, occupational therapy assistant and surgical technology. Established in 1894, Lackawanna college ranks number seven in Pennsylvania for best

petroleum programs. The full-time enrollment at Lackawanna College is 1,335 students and the part-time enrollment is 656. This means that 67.1% of students enrolled at Lackawanna College are enrolled full-time. The enrolled student population at Lackawanna College, both undergraduate and professional program, is 60.2% White, 11.8% Black or African American, 11.8% Hispanic or Latino, 2.36% Two or More Races, 1.26% Asian, 0.402% American Indian or Alaska Native, and 0.201% Native Hawaiian or Other Pacific Islanders. Students enrolled at Lackawanna College in full-time Undergraduate programs are most commonly White Female (33.1%), followed by White Male (26.3%) and Black or African American Male (11.8%).

Columbus State Community College is the one of largest community colleges in Ohio. It is located at 550 East Spring Street, Columbus OH. It was established in 1963 and was renamed as Columbus State Community college in 1987. Currently, there are over 45,000 students enrolled as an undergraduate fulltime and part time student in this community college. Columbus State serves students from over one hundred countries. About one-third of the currently enrolled students are immigrants in the Columbus State Community College.

This study will generally help the resettled refugee students who are planning to go back to school. This study will explain the factors affecting the GPA score of students in detail and it will provide some suggestions to overcome those hindrances. It will also provide a brief explanation to the parents of resettled refugee students in the United States to track their children's progress in college level education. Therefore, this study is beneficial to resettled parents as well as students to boost their GPA score in college education.

## **Data Analysis and Variables**

The researchers conducted a power analysis to find the statistical power on the collected data. The *alpha level* was set to 0.05 and the calculated power was 0.95 for 79 sample data.

The outcome variable used in this study is GPA. The GPA ranges from 0.0 to 4.0. The GPA was taken from two different groups of students. The first group of students included is the American college students and the second group is the resettled refugee students going to Lackawanna College and the Columbus State Community College.

The predictor variables used in this study are parents' highest level of education, family status, and language barrier. Parents' highest level of education was measured as having never attended school (N), had high school or GED (H), and some college degree (C). Family status was measured as single biological parent (S) and both biological parents (B). Language barrier was measured as beginner to pre-intermediate (p), intermediate (I), and upper intermediate (U). The online survey published in Online English Level test by British Council (<https://learnenglish.britishcouncil.org/online-english-level-test>) is used to categorize the students into three groups. Upon completion of the survey questions in the above posted link, participants are automatically classified as beginner to pre intermediate, intermediate, and upper intermediate based on their score on their survey.

## **Research Hypotheses**

### *Research Question #1*

Is there a significant difference in mean GPA for resettled refugee students in the United States and American College students?

Ho: There is a significant difference in mean GPA for resettled refugee students in the United States and American College students.

H1: Ho: There is not a significant difference in mean GPA for resettled refugee students in the United States and American College students.

#### *Research Question #2*

Is family status a significant predictor of resettled refugee student's GPA score? Ho:

Family status is a significant predictor of resettled refugee student's GPA score.

H1: Family status is not a significant predictor of resettled refugee student's GPA score.

#### *Research Question #3*

Is parents' highest level of education a significant predictor of resettled refugee student's GPA score?

Ho: Parents' highest level of education is a significant predictor of resettled refugee student's GPA score.

H1: Parents' highest level of education is not a significant predictor of resettled refugee student's GPA score.

#### *Research Question #4*

Is language barrier a significant predictor of resettled refugee student's GPA score?

Ho: Language barrier is a significant predictor of resettled refugee student's GPA score.

H1: Language barrier is not a significant predictor of resettled refugee student's GPA score.

To avoid making a type II error, the researchers had conducted Bonferroni correction techniques. Bonferroni correction technique spreads *a priori* alpha level across the number of hypotheses. The research titled "The Academic Achievement of Adolescents from Immigrant

Families: The Roles of Family Background, Attitudes, and Behavior” conducted by Andrew J. Fuligni had performed Bonferroni correction techniques to explain the relationship between the variables used in his research. This technique controlled the chance of making type II errors throughout the study. The *a priori* alpha level is set at .05 for this study. The researchers are testing four hypotheses and the Bonferroni corrected alpha rate to be tested for each hypothesis is (.05/4).

Inferential and descriptive statistics such as means, standard deviations, and ranges of GPA score for two different groups will be used to describe GPA score of American college students and the resettled refugee students. To answer the research question one, the researchers will use a one-tailed t-test. Research questions 2, 3 and 4 will be answered using the logistic regressions. The effect size is calculated to be 0.58. The researchers assumed that the participants had given a true response based on their knowledge. The collected data is linear, normal and has equal variance. The researchers also assumed that there is no multicollinearity and there are no strong influential outliers. The Tukey Test will be conducted. Specificity and sensitivity will be calculated and explained in detail. ROC (Receiver Operating Characteristic) curve will be plotted, and it will be interpreted.

This study will be approved by the University’s Institutional Review (IRB). Informed consent was obtained from all research subjects before involving the participants in the study. The research will not publish name, gender, country of origin, age, and home address to maintain the privacy of the participants.

The purpose of the study is to find the factors affecting the GPA score of resettled refugee students in the United States. By conducting this study, researchers are hoping to find

the possible factors affecting the GPA score of resettled refugee students in the United States. Chapter four will do the data analysis in depth to answer all the research questions. Both the descriptive and inferential statistics will be used to answer the research questions in the following chapter.

## **Chapter Four Results Introduction**

Chapter four restates the purpose of the study, and this chapter reviews the sample and participants included in this study. It then provides the reader with descriptive statistics such as mean, median, and standard deviation. The authors then answer each of the four research questions using the appropriate statistical techniques. A post-hoc analysis's result will be described to the readers. Chapter four will conclude the summary of the data and findings.

The purpose of this study was to determine if there is a significant difference between the GPA score of the resettled refugee students and the GPA score of the American college students. In addition to the above stated purpose, the primary researchers of this study were also trying to find if family status, parents' highest level of education and language barrier are the significant predictors of the resettled refugee students' GPA score.

## **Participants**

Students taking morning, day and evening classes at Columbus State Community College and Lackawanna College were invited to participate in this study. Few students denied participating in the study. After visiting those two campuses for a few days, the primary researchers of this study were able to collect data that include 75 (50.0%) resettled refugee students and 75 (50.0%) American college students. The data for this study was collected by conducting a survey that included the simple questions formulated by the researchers. The survey was taken at Columbus State Community College and Lackawanna College. Fifty-seven (76.0%) resettled refugee students were from Columbus State Community College and the remaining eighteen (24.0%) were from Lackawanna College. In the case of American college students, 42 out of 75 (56.0%) were from Lackawanna College, Scranton, PA and 33 (44.0%) were from the Columbus State Community College, Columbus, OH. **Data**

## **Cleaning**

The collected data was entered into Microsoft Excel. The data was reviewed for outliers, missing data, and any things like incompleteness of data. The data was then saved as comma separated value(.csv). The comma separated value data was brought into the R (R Core Team,



2019) to do further data analysis.

## **Descriptive Statistics Description of the GPA Score of Resettled Refugee Students and the American College Students.**

The GPA score of resettled refugee students and the GPA score of the American college students were recorded and was analyzed to see if there is a significant difference between their mean GPA scores. There were 75 (50.0%) resettled refugee students and 75 (50.0%) American college students in the data. The following table presents the means, medians, and standard deviations of the GPA score for the resettled refugee and American college students.

Table 1: *Means, medians and standard deviations for the participants' GPA score*

Student's type	Mean	Median	Standard deviation
Resettled refugee students	2.72	2.8	0.75
American college students	2.87	2.9	0.78

## **ANOVA for Mean GPA of Resettled Refugee Students Over Parents' Highest Level of Education and Language Barrier**

Researchers had conducted two ANOVAs: first, for mean GPA of resettled refugee students over parents' highest level of education and second for the mean GPA of resettled refugee students over the language barrier.

The mean and standard deviation for the resettled refugee students as per their parents' highest level of education, language barrier and family status are tabulated below

Table 2: *Means(M) and Standard deviations (SD) of resettled refugee students as per their parents' highest level of education, language barrier and family status.*

Resettled refugee students' GPA score	Parents' highest level of education						Language barrier						Family status			
	Never attended school		High school diploma /GED		Some College degree		I		P		U		Living with both parents		Living with single parents	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
	2.31	0.78	2.63	0.63	3.05	0.73	2.35	0.7	2.56	0.8	2.72	0.59	2.59	0.84	2.49	0.72

## An ANOVA for Mean GPA of Resettled Refugee Students Over Parents' Highest Level of Education

The following bell-shaped histogram shows that the data for the resettled refugee students' GPA score came from the normal distribution.

Figure 3: Histogram of the GPA score for the resettled refugee students only

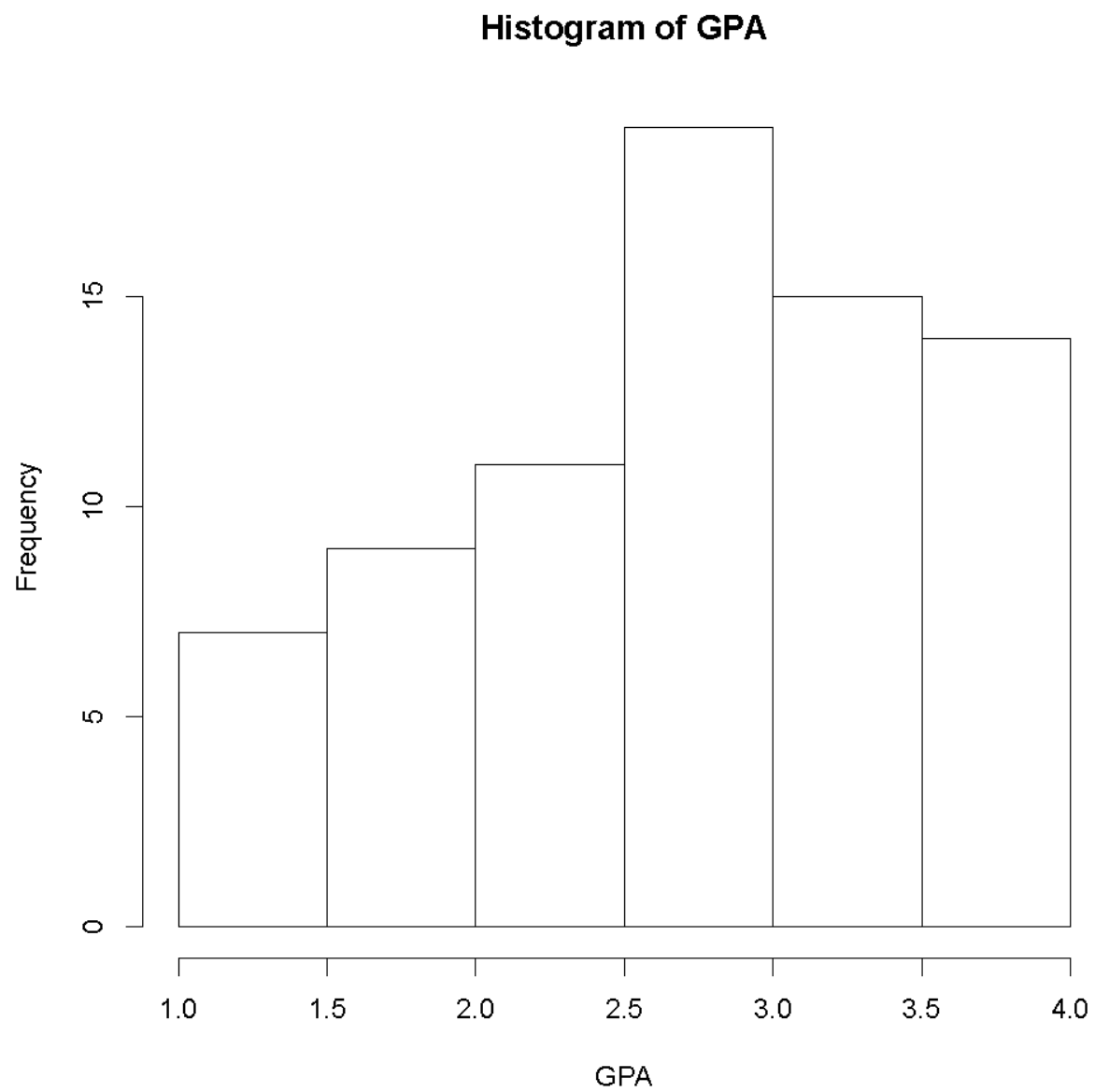
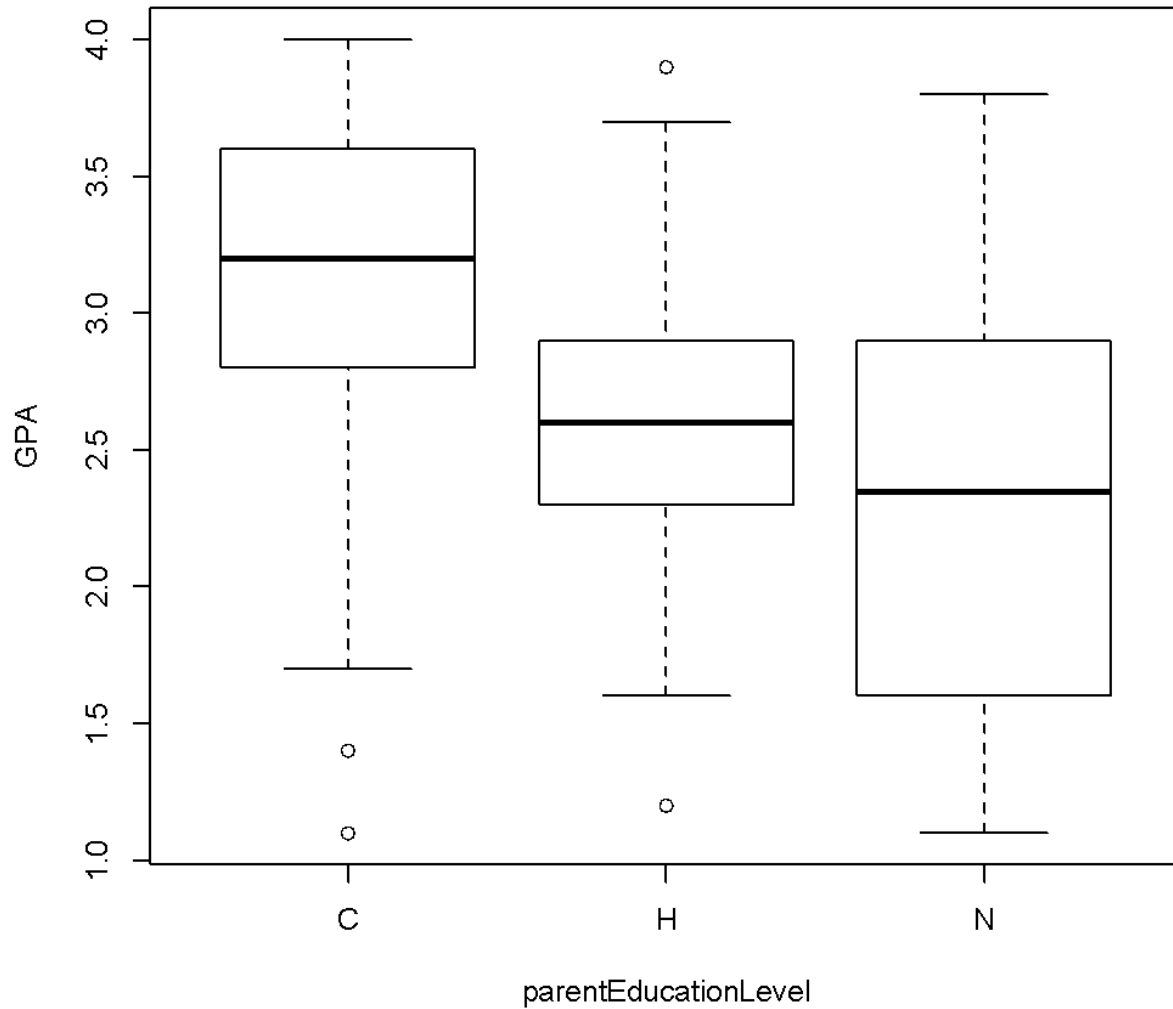


figure 4: The boxplot of the GPA score of resettled refugee students over their parents' highest level of education



The median GPA score of the resettled refugee students whose parents have some college degree (C) is higher than the median GPA of the resettled refugee students whose parents have high diploma/GED (H) and whose parents have never attended the school (N). There are two outliers in the GPA score whose parents have some college degree. Both outliers are below quartile 1. Resettled refugee students whose parents have high school diplomas/GED

also have two outliers: one above the quartile three and one below quartile one. The median GPA of the students whose parents have never attended the school is lowest among the three categories.

### **Levene's Test of Equal Variances**

In Levene's Test, the researchers observed that  $F(0.92, 72)$ ,  $p = 0.40$ . This is not statistically significant, so we failed to reject the null hypothesis for Levene's Test. The variances of the population are equal.

### **Normality Test**

The Shapiro-Wilk normality test was conducted to check if the data was normally distributed across the parents' highest level of education

In the Shapiro-Wil normality test, the researchers observed that  $W = 0.96$ ,  $p = 0.23$ . This is not statistically significant, so we fail to reject the null hypothesis. Thus, the data came from the normal distribution.

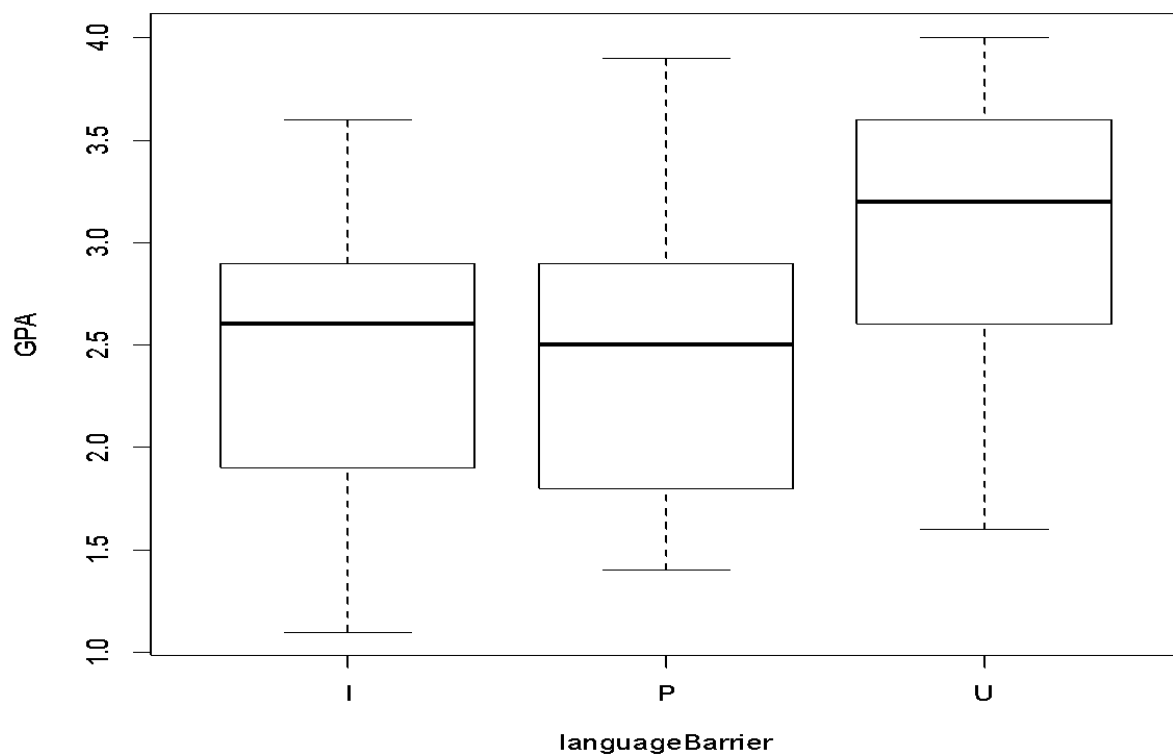
Multivariate normality test was conducted across the parents' highest level of education. None of the categories were statistically significant: parents who had never attended the school ( $W = 0.96$ ,  $p = 0.69$ ), parents who had high school diploma or GED ( $W = 0.98$ ,  $p = 0.74$ ) and parents having some college degree ( $W = 0.88$ ,  $p = 0.12$ )

In the ANOVA test for the mean GPA score of the resettled refugee students across their parents' highest level of education, there was a significant difference in mean GPA score for the resettled refugee across the parents' highest level of education ( $F(2,72) = 6.58$ ),  $p < .01$ ,  $\omega = 0.36$ . Despite a large effect size, Bonferroni post hoc tests revealed non-significant difference between the GPA scores of resettled refugee students for parents with some college degree

and parents with high school diploma/GED ( $p = 0.08$ ) and between parents with high school diploma and parents who had never attended the school ( $p = 0.41$ ); however, a statistically significant difference was revealed between the students whose parents have some college degree and students whose parents have never attended the school ( $p < .01$ ,  $\eta^2 = 0.97$ ).

## **An ANOVA for Mean GPA of Resettled Refugee Students Over Language Barrier**

*figure 5: The boxplot of the GPA score of resettled refugee students over language barrier*



The median GPA score for the resettled refugee students with upper- intermediate level of language barrier is higher than the students with a language barrier of pre-intermediate and

intermediate level of language barriers. Quartile one and quartile three are both higher for the upper-intermediate level of language barrier than other two categories. Outliers were not observed in the graph.

### **Levene's Test of Equal Variances**

In Levene's Test, the researchers observed that  $F(1.20, 72), p = 0.31$ . This is not statistically significant, so we failed to reject the null hypothesis for Levene's Test. The variances of the population are equal.

### **Normality Test**

The Shapiro-Wilk normality test was conducted to check if the data was normally distributed across the language barrier.

In the Shapiro-Wilk normality test, the researchers observed that  $W = 0.96, p = 0.23$ . This is not statistically significant, so we fail to reject the null hypothesis. Thus, the data came from the normal distribution.

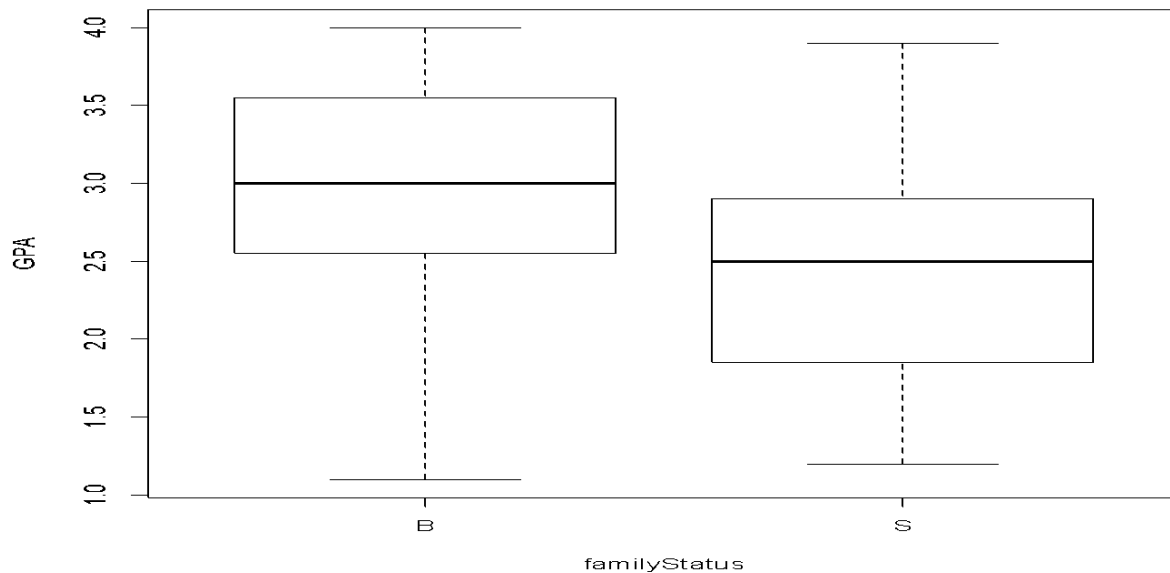
Multivariate normality test was conducted across the language barrier. None of the categories were statistically significant: students with intermediate level of language barrier ( $W = 0.95, p = 0.34$ ), students with pre- intermediate level of language barrier ( $W = 0.96, p = 0.45$ ) and students with upper – intermediate level of language barrier ( $W = 0.95, p = 0.18$ ). In the ANOVA test for the mean GPA score of the resettled refugee students across the language barrier, there was a significant difference in mean GPA score for the resettled refugee across the language barrier ( $F(2,72) = 8.74, p < .001, \omega = 0.41$ ). Despite a large effect size, Bonferroni post hoc tests revealed non- significant difference between the GPA scores of resettled refugee students for pre-intermediate and intermediate level of language barrier ( $p =$

1.00): however, statistically significant difference were revealed between the students whose language barrier was intermediate and Upper-intermediate ( $p < .001$ ,  $g = 1.1$ ) and between pre-intermediate and upper-intermediate level of language barrier ( $p < .01$ ,  $g = 0.88$ ).

### The T- test for the mean GPA over the family status

The following boxplot shows that the median GPA score for the resettled refugee students residing with both biological parents is higher than the GPA score of students residing with single biological parents. Outliers are not seen.

*figure 6: The boxplot of the GPA score of resettled refugee students over their family status*



### Levene Test for Homogeneity of Variances

In Levene's Test, the researchers observed that  $F(1.92, 73)$ ,  $p < .05$ . This is statistically significant, so we are rejecting the null hypothesis for Levene's Test. The variances of the population are not equal. Since the population variances are not equal, the researchers



conducted the unpooled t-test.

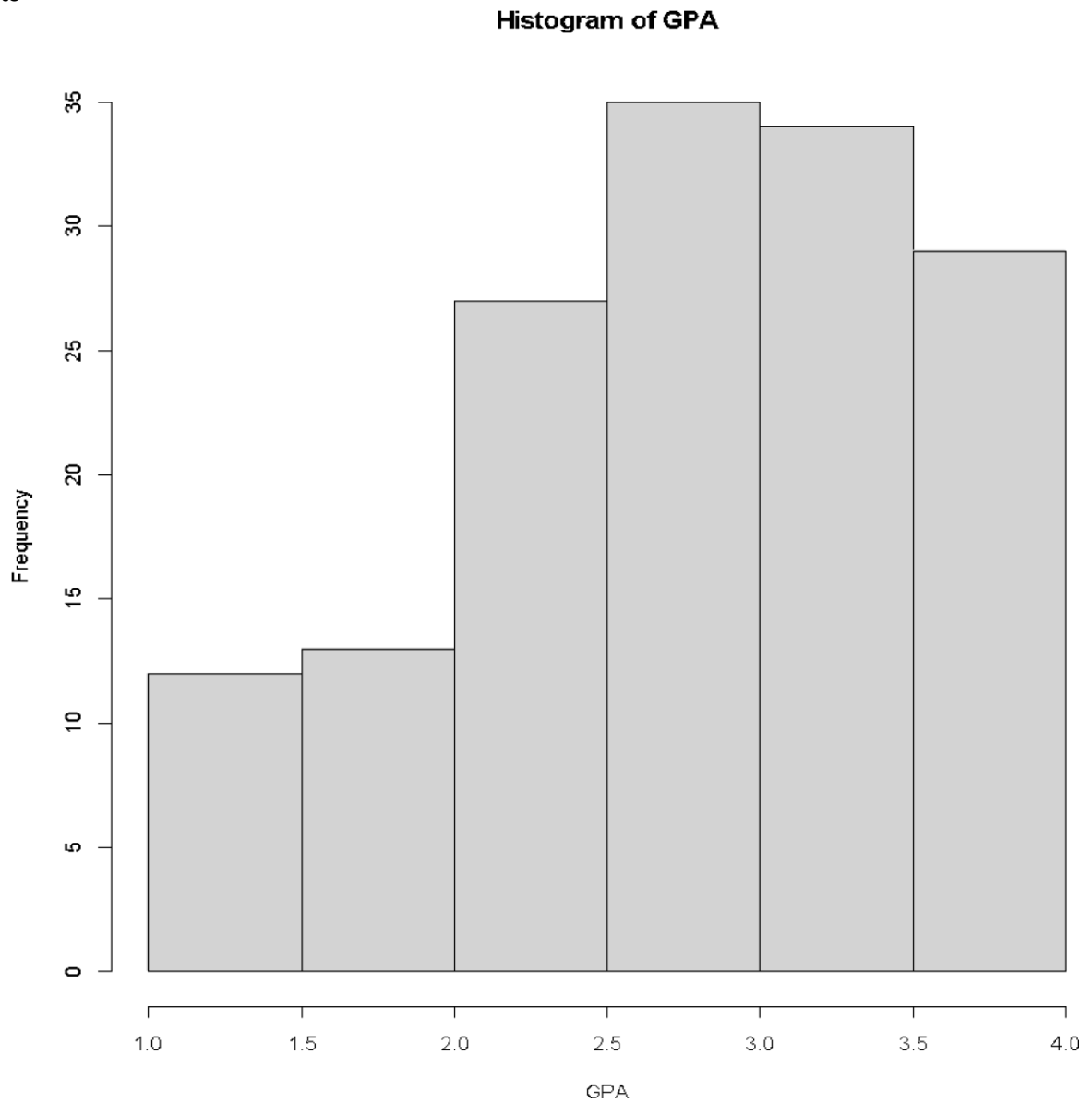
On average, the resettled refugee students' GPA residing with both biological parents (Mean = 2.90, SD = 0.84, n= 44) are greater than resettled refugee students residing with single biological parents (Mean = 2.46, SD= 0.72, n= 31). The t-test reveals that this is true. The twosample t-test  $t(64) = 2.57$ ,  $p < .05$  with a 95 % confidence interval (0.09, 0.78). The effect size is 0.31 with a low power of 36.9%.

## Research Questions

**Research question 1:** Is there a significant difference in mean GPA for resettled refugee students in the United States and American college students? The researchers chose to use ttests to address this question. The t-test is a statistical test that is used to compare the means of two independent groups. The independent variable in this test is of two levels (resettled refugee students and American college students) and the dependent variable is the GPA score for those students. The test statistic that the t-test uses is the t-value. The t-value measures how apart the two means are.

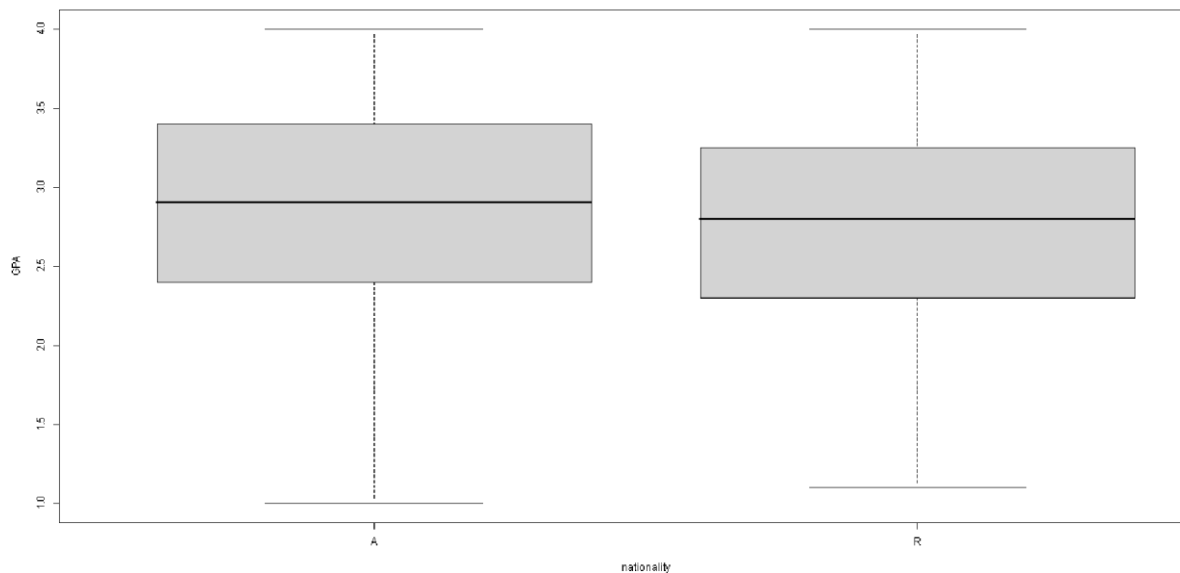
The collected data has categorical independent variables, and the dependent variable is continuous and is quantitative. The collected data was tested for normality. The following bellshaped histogram shows that the data came from the normal distribution.

Figure 7: Histogram of GPA score for both resettled refugee students and American college students



The box plot was drawn to check any outliers. The following boxplot shows that the median GPA score for the resettled refugee students is slightly lower than the median GPA score for the American college students. Q3 and Q1 look lower for the resettled refugee students than the American college students. There are no outliers for any groups

Figure 8: box plot for American college students and resettled refugee students.



### Levene Test for Homogeneity of Variances

Ho: The variances of the GPA scores for refugee and American college students are equal.

Ha: The variances of the GPA scores for refugee and American college students are not equal.

In Levene's Test, the researchers observed that  $F(6.19, 148), p < 0.05$ . This is statistically significant, so we are rejecting our null hypothesis for the Levene's Test. The researchers concluded that the variances are not equal for the GPA scores for the American college and resettled refugee students. Since variances are not equal, the researchers conducted the unpooled t-test.

On average, American college students' GPA scores (Mean = 2.87, Standard Deviation = 0.78,  $n = 75$ ) are greater than the resettled refugee students GPA score (Mean = 2.72, Standard deviation = 0.74,  $n = 75$ ). The t-test reveals that this is not true. The two-sample t-test  $t(148) = 2.17, p = 0.08$  with a 95% confidence interval (-0.09, 0.39) is not statistically significant. This concludes that the true difference in means is equal to 0. The effect size is 0.18 with a very low

power of 19.5%.

**Research Question 2:** Are parents' highest level of education, language barrier and family status significant predictors of GPA for the resettled refugee students? Researchers chose to use logistic regression to address this question. A logistic regression conducted by Sule et al had coded grades D-F as 0 and A-C as 1. The dependent variable, GPA, is considered as success in academic performance and not success. The GPA below 2 (C) is coded as 0 and 2 and above is coded as 1.

A direct logistic regression analysis was performed on the academic success of resettled refugee students as an outcome and three predictors: parents' highest level of education, language barrier and family status. There was no missing data. The total data was 75. 59(78.7%) out of 75 resettled refugee students succeeded and 16 (21.3%) were not successful in their academic performance. Analysis was performed using R (R Core Team, 2019).

A test of the full model with all six predictors against a constant-only model was not statistically significant,  $\chi^2 (6, N = 75) = 20.7, p = 0.08$ , indicating that the set of predictors did not reliably distinguish between academic success and those who are not succeeded in academic performance. The variance in success status accounted for is small with McFadden's rho = 0.017, df = 6. Prediction success (using 0.5 as the threshold) was unimpressive with 59 of 75 cases (78.7%) accurately classified or predicted correctly with sensitivity and specificity values of 0.95 and 0.13, respectively.

Table 3 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the eight predictors. According to the Wald criterion, none

of the predictors reliably predicted the academic success of the resettled refugee students' success.

*Table 3. Logistic regression analysis of academic success for the resettled refugee students.*

Variables	B	Wald	Odds	p-value	95% CI	95% CI (z-ratio)	Ratio	Lower	Upper
Parents' EducationLevelH		0.573	0.725	1.773	0.469	0.557	9.068		
Parents' EducationLevelN		-0.504	-0.628	0.604	0.530	0.381	2.956		
Language BarrierP		0.608	0.835	1.837	0.430	0.452	8.230		
Language BarrierU		2.019	2.234	7.533	0.071	1.453	58.479		
Family StatusS		-0.381	-0.225	-0.541	0.588	0.289	2.632		
(Constant)		0.727	1.221	2.069	0.222	0.166	8.091		

The standard logistic regression analysis was followed up with a backward elimination logistic regression analysis. Beginning with the full set of predictor variables, after 4 Fisher Scoring iterations a statistically reliable reduced model emerged,  $\chi^2 (3, N = 75) = 20.2, p < .001$  with two predictors: upper-intermediate language barrier(U) and pre-intermediate language barrier (P). The variance accounted for success is very low with McFadden's rho = 0.012, df = 3. Prediction success decreased from 78.7% to 70.7%. The following table shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for the remaining two predictors.

*Table 4. Logistic regression analysis of academic success for the resettled refugee students, Reduced Model.*

Variables	B	Wald	Odds	p-value	95% CI	95% CI (z-ratio)	Ratio	Lower	Upper
Language BarrierP		0.288	0.432	1.333	0.666	0.359	5.069		
Language BarrierU		2.015	2.330	7.50	0.019	1.577	54.901		
(Constant)		0.693	1.497	2.00	0.134	0.832	5.277		

Since the two-predictor model was statistically reliable whereas the five-predictor model was not, and the percentage of accurately classified cases decreased moderately, the later model was used to determine cut off points to create adequate sensitivity and specificity. A receiver operating characteristics graph (ROC), which has been shown to be a reliable technique for visualizing, organizing, and selecting classifications based on performance, is presented in Graph 1. For the set of predictors, the area under the curve was found to be 0.698. Graph 2 shows a plot of model sensitivity and specificity for various cutoffs. Using R and the minimized difference threshold (MDT) was found that 0.727 is the value that minimizes the absolute difference between sensitivity and specificity. The values of the sensitivity and specificity at 0.727 were 0.467 and 0.767, respectively.

Figure 9: ROC Curve, Academic success

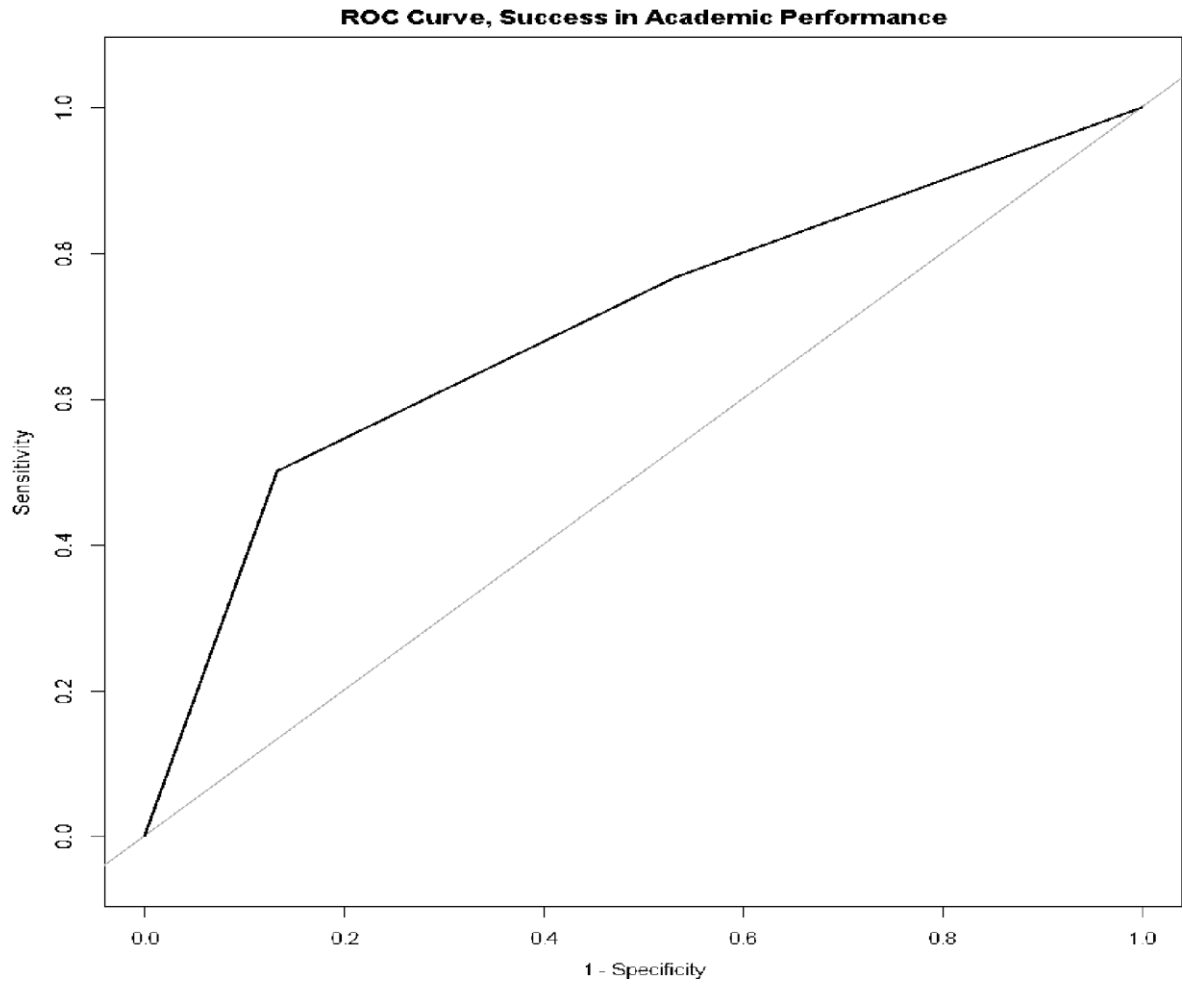
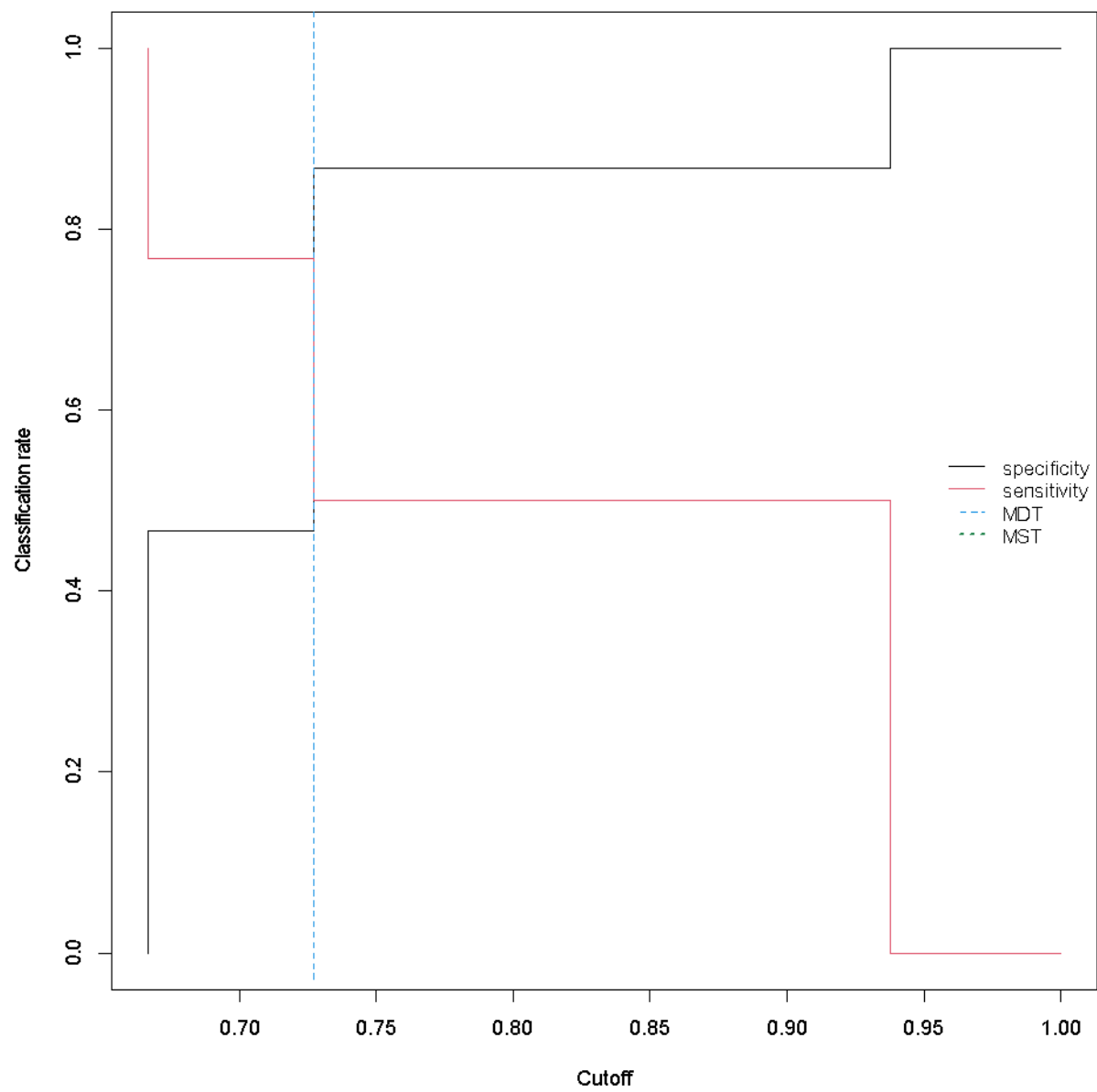


Figure 10: Plot of model sensitivity and specificity for various cutoffs





## Conclusion Based on Hypotheses

The conclusion of the overall hypothesis based on the collected data of resettled refugee students and the American college students were varied. The researchers conducted two ANOVAs: first was run for the mean GPA of the resettled refugee students across their parents' highest level of education and the other one was for the mean GPA across the language barrier. The former ANOVA was statistically significant indicating that the parents' highest level of education is the significant predictor of the GPA score for the resettled refugee students. The post-hoc analysis conducted on the ANOVA model showed that the parents who had some college degree and those who had never attended the school were statistically significant. The later ANOVA was also statistically significant indicating that language barrier is also a significant predictor of the GPA score for the resettled refugee students in the US. The post-hoc analysis conducted on the second ANOVA model showed that the GPA score between the students having the language barrier of intermediate and upper-intermediate, and preintermediate and upper- intermediate were statistically significant. From the unpooled t-test conducted for the mean GPA score of the resettled refugee students across the family status, it was observed that the average GPA score of the resettled refugee students residing with both biological parents is higher than the average GPA score of the students residing with a single biological parent.

The unpooled t-test conducted to compare the mean GPA of American college students and the resettled refugee students was not statistically significant indicating that there is not a significant difference in their mean GPA score. The logistic regression was run to check if

parents' highest level of education, language barrier and family status are the significant predictors of the GPA score for the resettled refugee students. The full model with all six variables was not statistically significant indicating that the set of predictors did not reliably distinguish between academic success and those who did not succeed in academic performance. The full model was followed by a backward elimination and the reduced model was obtained containing only two predictors: upper-intermediate language barrier(U) and preintermediate language barrier (P). The upper intermediate language barrier was statistically significant which indicates that the language barrier is the significant predictor of the academic success for the resettled refugee students. The reduced model indicates that the students having very low difficulties in language have the possibility of getting higher GPA in college level education.

The information presented in this chapter included the method used to collect data, descriptive statistics, statistical techniques to analyze the data and the results. Data were collected using a survey that included demographic and a quantitative question that were set up by the primary researchers of this study. A total of two hypotheses were tested. Unpooled ttest and logistic regression were run the two different statistical techniques were used to analyze the data in a statistical software package – R (R Core Team, 2019).

In Chapter 5, researchers will discuss these findings. The discussion in chapter 5 will include assimilating the findings into the current literature, displaying the consequences of these findings, recognizing the shortcomings of this study, and providing the reader with proposals for future study.

## **Chapter Five Discussion**

### **Introduction**

Chapter 5 begins with a summary of the existing literature which explains the research presented and then conducted in this study. The researchers then condense the purpose of this analysis, the techniques used, and the conclusions of this study. These findings are then integrated into the current literature. The suggestions of this study will be detailed to the targeted readers of this study: resettled refugee students in the United States, parents, and the school administration. The chapter completes with recommendations for the future research developing from this study and a typical summary of the study conducted.

The study was conducted on data collected at the Columbus State Community College, Columbus, OH and Lackawanna College, Scranton, PA. The data was collected via a survey that contained the demographic questions formulated by the primary researchers of this study. The participants were the resettled refugee students and the American college students taking classes at those two colleges. The statistical tools used were mean, median, standard deviation, unpooled t-test, ANOVA, and logistic regression.

### **Background and Study Findings**

Thousands of people around the world are forced to leave their native country every year. Few of them return to their homeland after it becomes safe to settle down whereas the rest of them are relocated to the developed nation following a protocol of the resettlement guidelines. Refugees spend a stressful life in the camps. The stress set in the mind affects their

future academic and job careers.

To understand how stress and anxiety are affecting refugee life and their long-term effect on academic success, the primary researchers studied The Diathesis Stress Model (e.g., Monroe and Hadjiyiannakis, 2002) and Tinto's Model of Student Retention. As per The Diathesis Stress Model, the primary researchers of this study believe that stressors that include traumatic life events, negative family life, civil war, economically and socially poor are some of the major factors of causing vulnerabilities. It is because of the vulnerabilities that were developed in any stage of life, some of the students are unable to perform well in their academic career. In Tinto's Model of Student Retention, researchers of this study found that family background, prior school's teaching environment, extra-curricular activities performed in the school are the key factors for students to be successful in their academic performances. Thus, these models suggest that the stress-free living environment and advanced academic environment are the backbones to success in higher education.

There are many factors including war, natural calamities, political and religious conflicts, and social exploitations that are forcing people to spend a refugee life. Refugee children and adolescents are lacking education, transportation facilities and other basic needs of day to day lives. Refugee lives are full of traumatic events. They have witnessed several series of events such as starvation, flood, and untimely demise of their relatives due to lack of medical facilities. As stated in The Diathesis Stress Model, those traumatic events faced by refugees at some point of their lives can harm their future college careers. Some of the factors that affect students' GPA in college are the level of income, family status, parents' highest level of education, country of origin, language barrier and student's ability to manage the time for their study. The

Tinto's Model of Student Retention had clearly explained that students who are having stressful lives or those who had spent a stressful life at some points are unable to achieve a goal in their academic performances.

The purpose of this study was to verify if there is a significant difference between the American college students' GPA and the GPA of the resettled refugee students. In addition to this the researchers were willing to answer if parents' highest level of education, language barrier and family status are the significant predictors of the GPA for the resettled refugee students in the United States. Researchers had formulated a general survey questions to collect the data for the study. The data was collected from Columbus State Community College, Columbus, OH and Lackawanna College, Scranton, PA. The collected data was analyzed using the appropriate statistical techniques. Volunteer participants were selected from the above two colleges. The data consisted of 75 (50.0%) of resettled refugee students and 75 (50.0%) of American college students. The descriptive statistics included in this study were mean, median, and standard deviation. Histogram and boxplot were observed to visualize the data before applying any statistical techniques.

The first research question of this study was to see whether there is a significant difference in the GPA score between the resettled refugee students and the GPA score of the American college students. The authors chose to use an unpooled t-test to answer the first research question. In descriptive statistics, it was observed that the mean GPA for the American college students (Mean = 2.87) was greater than the mean GPA for the resettled refugee students (Mean = 2.72), but the t-test reveals that this is false. The two-sample t-test was not statistically significant so we failed to reject the null hypothesis for the research question one.

From this observation, we can say that there is no significant difference between the mean GPA score of the American college students and the mean GPA of the resettled refugee students in the United States. We are 95% confident that the interval (-0.09, 0.39) contains the difference between the mean GPA score for the resettled refugee students and the mean GPA score American college students. The effect size (Cohen's  $d$ ) was observed to be 0.18. This indicates that the mean GPA score for the resettled refugee students and the mean GPA score for the American college students differ by 0.18<sup>th</sup> a standard deviation.

The second research question was to verify if parents' highest level of education, language barrier and family status are the significant predictors of the GPA score for the resettled refugee students in the United States. Authors decided to run two ANOVAs: first, an ANOVA for mean GPA score of resettled refugee students over their parents' highest level of education and second ANOVA was for the mean GPA score of resettled refugee students over language barrier. To verify the relationship between family status and the mean GPA score, researchers chose to use an unpooled t-test. The second research question was further analyzed by running a full model logistic regression that was followed by a backward elimination model.

The ANOVA test for the mean GPA score of the resettled refugee students across their parents' highest level of education was statistically significant. Since the model was statistically significant, we fail to reject the null hypothesis. From this observation we can conclude that the parents' highest level of education is a significant predictor of the GPA score of the resettled refugee in the United States. The Bonferroni post hoc tests conducted by the researchers showed that the difference between the GPA score of the resettled refugee students whose

parents have some college degree and whose parents have high school diploma/GED and the GPA score of the resettled refugee students whose parents have high school diploma/GED and whose parents had never attended the school were not statistically significant. But the difference in the GPA scores of the resettled refugee students whose parents have some college degree and whose parents have never attended the school was statistically significant. From the post hoc analysis conducted for this ANOVA, we can say that parents' level of education can affect their children's college GPA. On average, the resettled refugee students whose parents have some college degrees are seen to have higher GPA than the students whose parents have never attended the college. The article by Cheng etl. States that "Family support can be assumed to be an especially important family predictor of academic achievement. College students need family support because coping with academic demands is stressful enough that family support is often welcome and helpful and facilitates the student's coping and positive adjustment. Family support is defined as a student's perception of how much his or her family cares about, values, and encourages his or her efforts to succeed in college". (Cheng, etl). It is true that students going to college without the background support from the family are unable to make good progress in their academic career. If students get financial and educational support from their family, then they are more likely to achieve their goal in their lives. To support their children educationally, first parents must be educated. Thus, the analysis of our study showed that students whose parents are having some college degrees are most likely to get higher GPA scores.

Secondly, the ANOVA test for the mean GPA score of the resettled refugee students across their language barrier was also statistically significant. Since the model was statistically

significant, we fail to reject the null hypothesis. From this observation we can conclude that the language barrier is a significant predictor of the GPA score of the resettled refugee in the United States. From the Bonferroni post hoc analysis, it was observed that the difference in the GPA scores between the pre-intermediate and intermediate level of language barriers was not statistically significant. However, the difference between the GPA scores of the resettled refugee students with intermediate and upper-intermediate levels of language barrier and between pre-intermediate and upper-intermediate levels of language barrier was statistically significant. This observation concludes that students with an upper-intermediate level of language barrier are most likely to have higher GPA than the students with intermediate and pre-intermediate levels of language barrier. On average, the GPA scores of the resettled refugee students with pre-intermediate and intermediate levels of language barrier remain the same. The article titled *The Language Barrier, and Its Effect on Learning* says that “Educators, thus far, have failed to realize that learning standard formal English entails similar instructional approaches to those involved when learning a new language; and in so doing they overlook the importance related to the process of acquiring functional usage in formal standard English. Consequently, teaching the disadvantaged reading, using formal English without first teaching him its usage, we nourish the existent language barrier to the degree that it blocks progress first in the language arts and soon in all areas of learning” (Sepulveda, 1973).

Not only did the authors conducted the ANOVA for the mean GPA score of the resettled refugee students over the parents’ highest level of education and the ANOVA for the mean GPA score over their language barrier, but also the researchers conducted the unpooled t-test for the mean GPA score of the resettled refugee students over the family status. On average, the



resettled refugee students' GPA score residing with both biological parents (Mean = 2.90) is observed to be greater than resettled refugee students residing with single biological parents (Mean = 2.46). The t-test reveals that this is true. The two-sample t-test model was statistically significant. Since the model was statistically significant, we fail to reject the null hypothesis. Thus, we can conclude that family status is a significant predictor of the GPA score of the resettled refugee students in the United States. We are 95% confident that the difference of the mean GPA score of the students residing with both biological parents and the students residing with single biological parents lies in an interval of (0.09,0.78). The descriptive statistics and the t-test indicate that the students residing with both biological parents have the possibility of getting a higher GPA score in the college level education. Indeed, students living with both biological parents have comparatively less responsibilities at home than the students living with single biological parents. Mostly, students living with single biological parents must do part time work to fulfill their daily basic needs and are unable to give as much time as the students living with both biological parents. Thus, on average students living with single biological parents are having lower GPA scores than the students living with both biological parents.

A direct logistic regression analysis was performed on the academic success of resettled refugee students as an outcome and three predictors: parents' highest level of education, language barrier and family status. GPA below 2 was considered unsuccessful and the GPA score of 2 and above is considered as successful in academic performances. The test of the full model was not statistically significant indicating that all the above stated factors are not accurately predicting the GPA score of the resettled refugee students in the United States. The

logistic regression was followed up with a backward elimination logistic regression. The reduced model emerged with two predictors: upper-intermediate language barrier(U) and preintermediate language barrier (P) was statistically significant indicating that the language barrier is the most significant predictor of GPA score of the resettled refugee in the United States. From the ANOVA test for the mean GPA score of the resettled refugee students over language barrier, we observed that the students with the upper intermediate level of language barrier are scoring higher GPA than students with pre-intermediate and intermediate levels of language barrier. In the reduced logistic regression, the upper intermediate level of language barrier was statistically significant. Thus, from those two analyses, we can conclude that more fluent in reading, writing, and speaking English the resettled refugee students are getting higher GPA in college education.

There is much research conducted to analyze the factors affecting college GPA. The study conducted by Betts etl found that personal background, including sex, ethnicity, and family income is significantly linked to University GPA. Authors also found that the socioeconomic environment of the school matters (Betts, 1999). They claim that foreign students obtain slightly lower GPAs than do citizens, but as will be shown this effect is no longer significant at 5 percent once we estimate more complex models. Parent's income is a highly significant predictor of GPA: students whose parents' income was in the range of \$50,000 to 199,999 tended to have higher Grade Point Average than did students from less affluent backgrounds (Betts, 1999).

### **Possible Solutions to advance academic achievement for resettled refugee students in the United States**

In this study, the researchers observed that language barrier is the most significant predictor of the GPA score of the resettled refugee students in the United States. We suggest students having difficulties in reading, writing, or speaking English should visit the public library to find some additional resources to improve their language skills. Taking ESL (English as a Second Language) classes, reading newspapers, listening to radios are also some of the methods to improve our language skills. Hesitation pushes people backward, so students are encouraged to participate in co-curricular activities competitively.

Educated parents can visit the school administration to check their children's academic progress frequently. We had observed from our analysis that parents' highest level of education is also a significant predictor of the GPA score of the resettled refugee students. There are several ways for uneducated parents to verify their children's academic progress: they can use interpretation services available in the market or they can ask one of their knowledgeable relatives to help them to interpret for them to understand the result of the academic progress of their children in school or college.

Most of the colleges in the United States provide scholarships to help them pay for college that are specifically designed for refugee and immigrant students. Students should do research on those types of scholarships or reach out to the financial department of the college so that their financial burden will be decreased. Colleges should develop some bridge courses to make an easy transition from their country's education system into the new and most developed education system in the United States. In addition, colleges can provide more financial aid to help and encourage resettled refugee students to continue their further education.

## **Limitations of the Study**

This research has several weaknesses that should be concentrated in future study. The first limitation is that the data was collected only from two colleges: one from Ohio and another from Pennsylvania so the result of this study may not be generalized covering all the states in the United States. The students taking only the online classes were not involved in this study. If the survey was done to the students taking only the only classes, then the result might be observed differently than what we have presented. The authors believe that the participants were honest in giving their answers but, they may have given answers other than the reality. Most importantly, the data was collected from two colleges so there may be a collinearity in the collected data. Thus, this study cannot be generalized broadly among resettled refugee students and their parents.

## **Recommendations for Future Study**

This study had included three factors: parents' highest level of education, language barrier and family status that are affecting the resettled refugee students' GPA score in the United States. The future researchers can include some more reliable factors including income level, country of origin and age group. The authors of this study observed that the average GPA score of the students whose parents are having some college degree is higher than the average GPA score of the students whose parents are having high school diploma/GED or those who had never attended the school. To justify more clearly if parents' highest level of education is affecting the GPA score of their children, the future researchers can subdivide the factor of some college degree into associate degree, bachelor's degree, master's degree, and PhD. If we

see the result as higher the degree the more is the average GPA score for their children, then we can more confidently conclude that parents' highest level of education is the significant predictor of the GPA score for the resettled refugee students. The data for this study was taken only in two colleges so future researchers can collect the data from more colleges covering a diverse region to generalize the result more effectively.

## **Conclusion**

This research had highlighted the struggle faced by the refugees in their respective refugee camps. In addition to the obstacles and stressful living, this research has presented the resettlement process of the refugees in the United States from different parts of the world. After analyzing the collected data, we observed that despite the traumatic lives resettled refugee students are doing as better as American college students in their academic performances. The results of this study suggested that there are some factors that are significantly affecting the GPA score of the resettled refugee students in the United States. But there are multiple ways that are to be followed by individual students and their parents to overcome those factors to improve the GPA score. This research is believed to be very helpful for the audiences, researchers, higher education administrations to recognize the factors affecting the academic performances of the resettled refugee students in the United States. This research will greatly widen the knowledge of refugee life and the ways to deal with them to advance their success in academic careers.

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## BIBLIOGRAPHY

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Candidates for the Degree of

Master of Science Mathematics

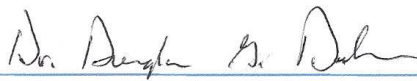
Thesis: RESETTLED REFUGEE STUDENTS' HIGHER EDUCATION IN THE UNITED STATES:  
THE ROLE OF PARENTS' HIGHEST LEVEL OF EDUCATION, FAMILY STATUS AND  
LANGUAGE BARRIER IN THEIR ACADEMIC SUCCESS

Major Field: Mathematics

Biographical: Both the primary researchers of this study were born in Bhutan, spent 20 years in  
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