

# INTERNATIONAL RESEARCH and REVIEW

**Journal of Phi Beta Delta  
Honor Society for International Scholars**



**VOLUME 11 NUMBER 1 2021**  
ISSN: 2167-8669



# Shepherd University

*A vibrant liberal arts college in an historic American town, close to major cities and airports.*



## Enjoy a variety of activities:

- World Culture Day
- International cook-off
- Language Lunches
- International Student Leadership Team
- Trips to New York City, Washington DC, and beyond

**You are  
welcome here!**

[www.shepherd.edu/international](http://www.shepherd.edu/international)

**Shepherd**  
UNIVERSITY

Located in Shepherdstown, West Virginia

## *In Memoriam*

Dr. Amy (Sheng Chieh) Leh



The Board of Directors, the Chapters, and the Members of Phi Beta Delta express their condolences to the family, colleagues, and friends of Dr. Amy (Sheng Chieh) Leh, executive director of Phi Beta Delta from 2017-2021. Dr. Leh passed away on November 22, 2021.

In her letter to the Phi Beta Delta membership, Dr. Sharon Joy, president of the Society said, “We are all greatly saddened. She has been a wonderful executive director and a positive force in the administration of our society.”

She was an accomplished educator, serving in the California State University, San Bernardino (CSUSB), Department of Educational Leadership and Technology for more than 20 years. She wrote over 30 articles and gave more than 100 national and international presentations. Previous to becoming executive director and CEO of Phi Beta Delta, she served as treasurer and president of Gamma Lambda chapter. She received her Ph.D. in education from Arizona State University.

In addition, Dr. Leh provided guidance, backing, and encouragement to the *International Research and Review*. Her kindness will be missed.



**International Research and Review**  
Journal of Phi Beta Delta, Honor Society for International Scholars  
Volume 11 Number 1 Fall 2021

**Michael B. Smithee, Ed.D.**  
**Editor**

**Table of Contents**

Editor’s Comments ..... 3

Academic Experiences that Impact the Study Abroad Propensity of College Students  
William Pruitt, Ph.D., University of South Carolina ..... 5

An Assessment of the Knowledge, Attitude, and Practice of Phone Use While Driving and Crash  
Outcomes Among Drivers in Oyo State, Nigeria  
Oluwaseun Adeyemi, Ph.D., University of North Carolina at Charlotte ..... 25

Our Collective Failure: Why the International Community Has Not Intervened to Protect China’s  
Uighur Muslims  
Megan Mooney, B.A., Roger Williams University ..... 45



**International Research and Review:  
Journal of Phi Beta Delta  
Honor Society for International Scholars**

**Editor-in-Chief**

Dr. Michael Smithee, Syracuse University

**Editorial Board**

Dr.	Patricia	Burak	paburak@syr.edu	Syracuse University
Dr.	Gary	Cretser	gacretser@csupomona.edu	California State University, Pomona
Dr.	Charles	Gliozzo	gliozzo@msu.edu	Michigan State University
Dr.	Yiurj	Kondratenko	y_kondratenko@rambler.ru	Black Sea State University, Ukraine
Dr.	Carl	Patton	cpatton@gsu.edu	Georgia State University
Dr.	Cristina	Rios	cristina.rios@lamar.edu	Lamar University
Mr.	Skip	Greenblatt	sidney.greenblatt@gmail.com	Syracuse University (retired)
Dr.	Judy	Smrha	jsmrha@bakeru.edu	Baker University
Dr.	Marco	Tavanti	mtavanti@usfca.edu	University of San Francisco
Dr.	Joshua	McKeown	mckeown@oswego.edu	Oswego State University
Dr.	Sharman	Siebenthal-Adams	sharmans@umflint.edu	University of Michigan
Dr.	John	Winslade	jwinslad@csusb.edu	California State University, San Bernardino
Ms.	Tyra	Twomey-Smith	Consulting Editor	SUNY Institute of Technology



### Editor's Comments:

The articles in this issue represent the completion of each of the three stages of university study: bachelor's master's and doctorate. Many candidates for academic degrees do not publish their theses. It is a rigorous process, very different from the thesis writing process, in expression, format, and succinctness. Nearly all submissions for publication of theses must be reduced in size to fit the requirements for publication. While online publication would appear to alleviate the pressure to reduce size, that is not just a carryover from print publication. The requirement for demonstration of knowledge certifying completion of each stage of study is often accompanied by certain redundancies of language and expression of facts in order to convince the reviewing committee one has achieved the requisite level of competence for awarding the degree. For publication, it is different.

For publication, one must present one's argument clearly and concisely for the reader may not to be a professor, but a practitioner in the field. In both cases the knowledge is obtained can provide ideas for further research, or confirm current research; it can provide ideas for application to social, educational, or cultural programs; it can provide arguments for changes in policy, procedure, or laws; and it can provide insights into phenomena occurring around us or in our interaction with other nations, groups, or individuals. For these reasons, the article must be honed to a point where the argument the author posits at the beginning is not lost during the process of reading. Thus, I present these three articles representing the theses of the three levels of academic study.

In the first article, William Pruitt provides a *dissertation for the doctorate* in higher education on the subject of study abroad. It is a rare quantitative study for the field of international education. He explored the relationship between demographic characteristics, college experiences (personal, social, and academic), and study abroad participation among college students. He concluded that such a study provides actionable ideas for faculty and decision makers; that experiences in the classroom can increase the propensity for students to study abroad; and pedagogical practices suggested by the research promote diverse approaches to development of global competency. These conclusions have aided his continued work in the field of international education.

The second article was authored by Oluwaseun Adeyemi. Although having completed his doctorate at the time of this issue of the IRR, *the article that was submitted was his master's thesis*. It was found valuable as a contribution to our knowledge and perspectives on issues of concern to people of other nations. In this case it was found valuable the field of international education; after those in this field strive to understand others. In this case, the focus is on

Nigerian vehicle drivers who use mobile phones while driving, and the resulting events that occur. The call is for more awareness and intervention aimed at improving knowledge, influencing attitude, and changing the practices around mobile phone use among Nigerian drivers. But I daresay that this lesson applies to all of us, no matter the nation.

The third article was authored by Megan Mooney. At this time, she has completed the requirements for her bachelor's degree. But her *article is the result of her bachelor's honor's thesis* at her university. She presents three (theories) reasons for the human rights violations of the Uighurs (WEE-ghurs) by the Chinese government have failed to attract international action to stop these violations. She concludes that the reasons for the collective failure of the international community can be attributed to the ineffectiveness of human rights organizations, China's attempts to control global discourse, and the prioritization of countries' economic interests over the plight of the Uighurs. Her stridency can be felt in her writing. And, while this is an honor's thesis, it is also sufficient for the reader to know that such theses show that while short articles could be published in a magazine, well organized arguments on socio-political issues can and should be published in an academic journal.

In all, these three articles form the examples of work that should be offered to this journal or periodic publication. *The editor welcomes such submissions.* Be alert that in submitting that the author will have his/her article double-blind peer-reviewed, meaning that neither the author nor the reviewer will know the other's name. The author will receive a constructive critique on the submission, and will be mentored through the process of making the submission ready for publication.

Michael Smithee, Ed.D.  
Editor, International Research and Review  
ms@smitheeassociates.com

## **Academic Experiences that Impact the Study Abroad Propensity of College Students**

William Pruitt, Ph.D.  
*University of South Carolina*

### ***Abstract***

Studying abroad is arguably one of higher education's most effective ways of developing students' global competency and preparing them to enter a global workforce. This study explores the relationship between demographic characteristics, college experiences (personal, social, and academic), and study abroad participation among college students. This study first summarizes previous findings on how college students view and make decisions about study abroad opportunities. Next, data from the National Survey of Student Engagement (NSSE) is used to examine how campus engagement impacts a student's propensity to study abroad. Findings reveal that gender, race, major, and SES are important predictors of participation in study abroad. More important, the results of the study also reveal that academic experiences specific to diversity and societal awareness increased propensity to study abroad.

*Keywords:* Study Abroad, Diversity, Collegiate Experiences, Race, Socioeconomic Status, Gender, Academic Major, Pedagogy, Teaching

There have been several noteworthy initiatives to increase study abroad participation among United States college students. Perhaps the most popular initiative, appropriately titled "Generation Study Abroad," was launched by the Institute of International Education (IIE) in 2014. The aim of this program was to double and diversify the body of U.S. students studying abroad by 2020. In response, colleges and universities across the country implemented strategic international programming plans, developed scholarships, expanded study abroad program portfolios, and strengthened marketing efforts, all with the hope of increasing student mobility.

Clearly, interest in studying abroad among incoming college students is high. Half (50%) of college bound students want to study outside the U.S. (College-bound students' interests in study abroad, 2008). However, as of 2019 only 1.8% of U.S. college students participated in study abroad programming (Trends in U.S. Study Abroad, 2019). And while the number of students who study abroad in a given year increased from 154,168 to 289,408 over the 15 years between 2001 and 2015, there are still clear disparities between those who decide to study abroad and those who do not (Institute of International Education, 2001-2015).. This study seeks to narrow the gap between students' pre-college desire to study abroad and their fulfillment of this goal. By investigating the role engagement experiences play in student decision-making, the study will provide an understanding of what may assist in turning a student's desire to study abroad into reality.

## Literature Review

The literature reveals several important factors that contribute to students' participation in study abroad. Studies about study abroad in higher education have focused on the demographic characteristics of students, personal experiences, social experiences, and academic experiences.

### Demographics

A number of researchers have studied the impact that demographics have on study abroad participation among U.S. students (Brown, 2005; Carlson, et al., 1990; Institute of International Education, 2001-2015; Lozano, 2008; Norton, 2008; Schmidt, 2009). There are a number of characteristics that serve as important indicators of students' likelihood to study abroad, including race, gender, academic major, socioeconomic status, and disability.

Not surprisingly, the study abroad student population is generally comprised of white women who come from wealthy families, but it is important to understand, not just describe, the demographics of study abroad participation. Understanding these demographics equips higher education professionals to better advise students from the groups less likely to participate already. In terms of race, students of color have frequently had low study abroad participation numbers. Students of color made up 45.2 percent of the United States undergraduate population in 2016 (Dedman, 2019), but during the 2015-16 academic school year, students of color (Black, Hispanic or Latino, Asian, Native Hawaiian, Multiracial, American Indian or Alaska Native), collectively made up approximately 28 percent of America's study abroad participants (Institute of International Education, 2001-2015).

There is a combination of factors that leads to the racial disparities in study abroad. One factor is students of color generally having the mentality that they need to transition to the job market as quickly as possible (Simon & Ainsworth, 2012). Studying abroad can delay that transition to the workforce. Additional barriers include lack of support from faculty and staff, financial constraints, limited program options, and a lack of familial support (Norton, 2008; Simon & Ainsworth, 2012).

Gender has also been identified as a predictor of study abroad participation. In 2017, the majority of students (57 percent) enrolled in postsecondary education were female (NCES, 2017). In 2015-2016, 66.5% of study abroad participants were women (Institute of International Education, 2017). Women have been shown to be motivated to study abroad by influential authority figures in an educational context (Schmidt, 2009). Women also are expected to perform better in social relationships, which can be enriched through study abroad experiences (Hoffa & Pearson, 1997). Male students, on the other hand, are less likely to study abroad (Brown, 2005; Carlson, et al., 1990; Institute of International Education, 2001-2015; Salisbury et al., 2013). In comparison, males made up 43% percent of the U.S. college population and 33% of the study abroad demographic (NCES, 2017; Institute of International Education, 2017). In 2017, Male students made up one-third of the United States study abroad population (Redden, 2018). The primary factors that contribute to the lack of interest include peer influence and failure to understand how the experience contributes to professional development (Fischer, 2012; Schmidt,

2009). The literature appears to suggest that women seek study abroad as a way to enhance their chances of finding a job post-graduation, while men see limited value.

Socioeconomic status has long played a significant role in study abroad participation for college students (Lozano, 2008). Forty years ago, study abroad was viewed as being a luxurious opportunity for only those students who had parents with resources to support experiences beyond the campus-bound curriculum (Simon & Ainsworth, 2012). However, in the early 1990s, universities' expansion of their offered international education opportunities resulted in an increase in participation among students from middle SES families (Simon & Ainsworth, 2012).

Students from lower SES families, however, remain severely underrepresented in study abroad (Carlson, et al., 1990; Lozano, 2008; Simon & Ainsworth, 2012). Undoubtedly, finances play a huge role in this underrepresentation. Students from mid- or high-SES families have a much higher likelihood of participating in study abroad. The factors that impact study abroad participation as it relates students from high to mid SES include access to financial resources, social capital, social networks that value study abroad, and targeted recruitment efforts by study abroad professionals (Fordham, 2002; Simon & Ainsworth, 2012).

Another factor influencing study abroad participation is academic major. It has been shown that students with undeclared majors, which generally lack academic rigidity and constraints, tend to study abroad at higher rates than their peers in other majors (Twombly, et al., 2012).

Students who have declared a major show no statistical difference between STEM and non-STEM majors when it comes to intent to study abroad (Salisbury, et al., 2009). And while, historically, participation rates have favored humanities majors, in recent years there has been a marked shift in popularity within STEM fields. STEM majors now participate in study abroad programs in higher numbers than students from other majors. During the 2012-13 academic year, STEM majors represented 23% of the United States' study abroad population. Social Science majors represented 22%, business majors represented 20%, humanities majors represented 10%, fine or applied arts majors represented 8%, foreign language majors represented 5%, education majors represented 4%, and undeclared or "other" majors represented 8% of the study abroad population (Institute of International Education, 2001-2015). This shift may be the result of calls within engineering and science disciplines to differently prepare graduates for a globalized workforce and a need to address issues that have global implication (climate change, global pandemics, and human trafficking).

The last demographic studied as a part of this research was disability. Little research has been conducted on students with disability and study abroad participation. However, in recent years there have been increasing study abroad participation rates among students with disabilities (Institute of International Education, 2001-2015). From 2006 to 2015, participation rates among students with disabilities who participate in study abroad have increased from 2.6% to 5.1% (Institute of International Education, 2001-2015). There may be difficulty in attaining complete and accurate data about this category of participation, however, since a student is not obligated to self-disclose whether or not they have a disability, or the nature of the disability (physical or

cognitive). Nonetheless, the increase in participation could be attributed to university administrators and faculty members becoming more knowledgeable about accommodating students with disabilities on study abroad programs.

Though participation rates among students with disabilities are increasing, the numbers are still low. Reasons for low participation could be because of a lack of program options. Previous studies have shown that study abroad administrators interested in increasing participation among students with disabilities must develop promotional materials that display people with disabilities studying abroad, have peer mentors or advisors with disabilities who have participated in study abroad programs, and develop a structured advising process for advisors and disability specialists (Belch, 2000).

While student demographics have provided initial indicators for participation, this study seeks to uncover personal, social, and academic experiences that impact the study abroad propensity of students. One set of studies indicates that certain collegiate experiences lead to an increased likelihood to study abroad (College-Bound Students Interests in Study Abroad, 2008; Goldstein & Kim, 2006; Carlson et al, 1990; Opper et al, 1990; Pearce, 1988; Stroud, 2010). However, other researchers argue that there are very few factors that can be used to predict the individual decisions of students to study abroad (Salisbury et al, 2009).

### **Personal Experiences**

There is no clear definition of what makes up a personal collegiate experience. However, research has identified certain personal influences such as family, friends, and values, which, singularly or collectively, can affect how a student engages in college (Astin, 1993; Gardner & Barefoot, 2010; Pascarella & Terenzini, 2005).

Student employment is another personal experience that appears to negatively impact study abroad propensity (Astin, 1993). Working students have less time to engage in campus activities, and therefore, less time to contribute towards studying abroad. Students with familial responsibilities also were less likely to study abroad. Responsibilities such as taking care of siblings, parents, and housework led to less encouragement and support from family and friends for participation in study abroad programming (Astin, 1993).

Distance traveled to attend college is also a personal experience that effected students' decisions to study abroad. Studies have shown that students who attend college more than 100 miles from their home are more likely to study abroad (Stroud, 2010) compared to students who commute to campus daily (Kuh, Gonyea, & Palmer, 2001).

The most noteworthy predictors of study abroad participation as they relate to personal experiences are openness to diversity, engaging in activities that increase diverse interactions, and co-curricular involvement. Co-curricular is defined as an activity at a school or college pursued in addition to the normal course of study (Twombly, et al., 2012). Other personal experiences linked to study abroad propensity include political interest and community influence (Twombly, et al., 2012). America's foreign policy and the perception of the quality of post-secondary education also effects a student's decision to study abroad. Students with a higher

propensity to study abroad are more critical of America's foreign policy and have a more favorable view of the quality of post-secondary education in Western Europe (Twombly, et al., 2012).

### **Social Experiences**

Collegiate social experiences also impact the study abroad propensity of students. Social integration in college is defined as human interaction, collaboration, and the formation of interpersonal connections between students and other members of the college community including peers, faculty, staff, and administrators (Astin, 1993; Cuseo, 2007; Pascarella & Terenzini, 2005). Social experiences include attending student functions, joining student organizations or government, voting in an election, and having non-classroom interactions with faculty that have an influence on career trajectory (Chamblis & Takacs, 2014; Nora & Wedham, 1991).

Social atmospheres that expose students to international opportunities, develop their social skills in a diverse environment, and strengthen their knowledge of international issues all impact students' decisions to study abroad (McDonough, 1997). Among social activities, the highest predictor of study abroad propensity is interaction with diverse groups. Collegiate students who engage with members of a different cultural or ethnic group and show an understanding of racial differences have a higher likelihood of studying abroad (Twombly, et al., 2012).

There are also social experiences that discourage study abroad propensity among college students. Living off campus reduces the likelihood that students will be exposed to information and recruitment efforts on study abroad (Lee & LaDousa, 2015). Additionally, (Brux & Fry, 2009) explain that being subjected to discrimination on a daily basis makes students of color less likely to participate in study abroad programming (Brux & Fry, 2009).

### **Academic Experiences**

The academic experiences of college students also impact their decision to study abroad. Students who demonstrate a high interest in reading and writing have a higher likelihood of studying abroad (Twombly, et al., 2012). Additionally, frequent interactions with supportive university faculty and staff members increase a student's study abroad propensity (Simon & Ainsworth, 2012). Teaching faculty are the most influential academic element to study abroad participation among students, irrespective of university enrollment size or institutional type (Streitwieser, 2014).

There are also academic experiences that decrease the study abroad propensity of college students. For example, academic rigor and credit transfers can make students less likely to participate in study abroad (Streitwieser, 2014). The more rigorous and rigid a degree program, the less likely faculty members are to approve transfer credit or find substitute courses that can be taken outside of a student's home university (Streitwieser, 2014).

## Methods

The purpose of this study was to determine the relationship between demographics, college experiences (personal, social, and academic), and study abroad participation among college students. The demographic variables used in this study were gender, race, major, SES, and disability. The data was pulled from a sample of 2,000 traditional aged, full-time college seniors who were United States citizens and completed the National Survey on Student Engagement (NSSE) in the spring of 2014 (See Table 1).

**Table 1**

*Demographic Characteristics of the Sample (N = 824)*

	n	%N
Gender		
Males	214	26
Females	610	74
Race		
Majority	722	87
Non Majority	102	12
Major		
STEM	307	37
Non-STEM	517	63
Disability		
Yes	37	4
No	787	96
SES		
Low	199	24
Mid	363	44
High	262	32
Taking All Courses Online		
Yes	5	1
No	819	99
Majors		
One	705	85
More than One	119	14
Began College		
Started Here	707	86
Started Elsewhere	117	14
Attended a Community or Junior College		
Yes	123	15

No	701	85
Member of a Fraternity or Sorority		
Yes	136	17
No	688	83
Student Athlete		
Yes	61	7
No	763	92

### Measurements

The NSSE survey is administered through collaborative efforts between NSSE staff and administrators at over 1,500 colleges and universities in the United States and over 2,000 campuses in Canada. As an ongoing research project conducted by the Indiana University Center for Postsecondary Research, the NSSE is administered to two groups of students: those at the end of their first year of study, and those who are about to receive their baccalaureate degree (NSSE, 2015). There is a question on the NSSE about study abroad propensity, and students' answer to this question was the dependent variable of this study. Item 11 on the NSSE asks "Which of the following have you done or do you plan to do before you graduate from your institution?" Study abroad is listed as a sub-item. Only participants who responded to this sub-item were included in the study.

The NSSE also asks a number of questions on demographics and student engagement, defined as participation in educationally purposeful activities (NSSE, 2015).

For this study, each item on the NSSE was reviewed to determine which could be considered a proxy for demographics or for personal, social, or academic activities. Five NSSE items served as proxies for demographics, five items and 10 sub-items were identified as proxies for personal experiences, six items and 11 sub-items were proxies for social experiences, and 15 items and 55 sub-items were proxies used to identify academic experiences. An example of a demographic proxy would be the item on the NSSE that asked participants "What is your racial or ethnic identification?" The response options were: American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, White, Other, and I prefer not to respond. An example of an item identified as a proxy to represent personal experiences asked, "How much has your experience at this institution contributed to your knowledge skills, and personal development in the following areas?" Developing or clarifying a personal code of values or ethics was listed as a sub-item. The response options were: Very much, Quite a bit, Some, and Very little.

The demographics of race, major, gender, SES, and disability have been determined by prior research to impact a student's decision to study abroad. Therefore, it was important to control for these variables in the statistical analysis. In order to prepare for this analysis, a number of variables had to be recoded. Race was recoded into the binary majority (white) and minority (American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander). Survey participants who did not respond to this

question or selected “other” as an option were not included in the study, since their race was unable to be identified. Major was recoded into STEM and Non-STEM disciplines (NSF-approved STEM fields, 2014). Questions about SES were not asked on the NSSE survey, but an item on the NSSE asked respondents “What is the highest level of education completed by either of your parents (or those who raised you)?” The response to this question was used as a proxy for the socioeconomic status (SES) of each participant. Research indicates that households with higher levels of education are generally of higher SES (NCES, 2015). The response options “Did not finish high school,” “High school diploma or G.E.D.,” and “Attended college but did not complete degree” were recoded to represent Low SES. The response options of “Associate’s degree” and “Bachelor’s degree” were recoded to represent Mid SES. The response options “Master’s degree” and “Doctoral or professional degree” were recoded to represent High SES.

There were personal, social, and academic variables on the NSSE that needed reverse coding as well. This form of coding was necessary to ensure that the preferred direction for negatively worded items would be interpreted in the same way as the preferred direction for positively worded items.

A NSSE item which served as a proxy for personal collegiate experiences asked survey respondents “How would you evaluate your entire educational experience at this institution?” The preferred response was “Excellent.” Therefore, the response options were recoded to reflect the preferred direction. Poor was recoded to reflect the least desirable response (representing the lowest evaluation for the participant’s educational experience), Fair was recoded as 2, Good as 3, and Excellent was recoded as 4 (representing the highest evaluation for the participant’s educational experience). This same form of reverse coding was used for social and academic experiences that required it.

The dependent variable representing study abroad participation also needed recoding. The item on the NSSE asked participants “which of the following have you done or do you plan to do before you graduate? Study abroad was listed as a sub-item. The response options were “Done or in progress,” “Plan to do,” “Do not plan to do,” and “Have not decided.” The responses were recoded to reflect the level of study abroad propensity for respondents. Do not plan to do was recoded as 1 (representing the lowest level of study abroad propensity), have not done was recoded as 2, plan to do was recoded as 3, and done or in progress was recoded as 4 (representing the highest level of study abroad propensity).

### **Data Analysis**

In order to control for the demographic variables that are known to have an impact on study abroad propensity, an independent *t-test* analysis was used to compare race, gender, academic major, and disability. If the results of the *t-test* revealed that there was a statistically significant difference in study abroad propensity ( $p < .05$ ) between the dichotomous variables, then they would be included in multiple linear regression analysis.

Socioeconomic status was handled differently because it was not coded into a dichotomous variable; rather, it was handled as a continuous variable. For this reason, a *one-way*

ANOVA was used to determine if there are any significant differences between high, mid, and low SES as it pertains to study abroad propensity. If the results of the *one-way* ANOVA revealed that there are statistically significant differences in study abroad propensity ( $p < .05$ ) between the continuous variables, then SES would be included in multiple linear regression analysis.

The standard statistical assumptions of normality and homogeneity were evaluated in this research. Normality assumes the scores are normally distributed. Normality was assessed using the Shapiro-Wilks test. If the Shapiro-Wilks test generated a *p value* greater than 0.05, then the data were considered normally distributed. Homogeneity assumes that both groups have equal error variances. This assumption was assessed using the Levene's test for the Equality of Error Variances. If the Levene's generated a *p value* greater than 0.05, the data were assumed to be homogeneous.

Of the demographics studied (gender, race, major, disability, SES), results remained consistent with historical trends, concluding that they all serve as significant predictors of study abroad propensity. However, t-test results of this study divulged that comparisons concerning race and SES have shifted. The results showed that minority students are more likely to study abroad (or at the very least are more strongly considering it) than in previous research. Additionally, results also indicated that students from lower to mid SES have a higher propensity to study abroad in comparison to their counterparts of high SES.

**Table 2**

*Results of t-tests by Demographic Characteristic (N = 824)*

Outcome	Group						95% CI for Mean Difference		Sig Val. .000
	Male			Female			t	df	
	M	SD	n	M	SD	n			
Study Abroad Participation	2.63	.849	214	2.49	.942	610	-.00429, .28236	1.904*	822

*Results of t-tests and Descriptive Statistics for Study Abroad Participation by Race (n = 824)*

Outcome	Group						95% CI for Mean Difference		Sig Val. .000
	Majority			Non Majority			t	df	
	M	SD	n	M	SD	n			
Study Abroad Participation	2.48	.903	722	2.80	.796	102	-.50502, -.12498	-3.254*	822

*Results of t-tests and Descriptive Statistics for Study Abroad Participation by Major (n = 824)*

Outcome	Group	95% CI for Mean	Sig Val.
---------	-------	-----------------	----------

	STEM			Non-STEM			Difference	t	df	.000
	M	SD	n	M	SD	n				
Study Abroad Participation	2.67	.826	307	2.44	.961	517	.10921, .36769	3.622*	822	

*Results of t-tests and Descriptive Statistics for Study Abroad Participation by Disability (n = 824)*

Outcome	Group						95% CI for			Sig Val. .016
	Disability			No Disability			Mean Difference	t	df	
	M	SD	n	M	SD	n				
Study Abroad Participation	2.45	1.10	37	2.53	.912	787	-.37576, .23242	-.463*	822	

p<.05

**Table 3**

*Results for One Way ANOVA on SES and Study Abroad Propensity (N = 824)*

Demographics	Mean Score	Standard Deviation	F Statistic	Sig Value	Tukey's HSD
SES			8.827	.000	
Low	2.66	.825			1, 2 < 3
Mid	2.60	.888			1, 2 < 3
High	2.34	1.00			3 > 2, 1

p<.05

The primary goal of this research was to determine whether or not personal, social and academic collegiate experiences contribute to study abroad propensity among United States' college students. To address this question, an exploratory factor analysis was run using the varimax rotation procedure (George & Mallery, 2003). An acceptable factor for personal, social, and academic experiences was comprised of three or more NSSE survey items that generated a loading score of .60 or higher (George & Mallery, 2003). If factors emerged from the analysis, a Cronbach's alpha was run to ensure the internal consistency of each factor. A Cronbach's alpha score of .70 was used as the baseline to consider a factor reliable (George & Mallery, 2003).

For any factor that emerged, a composite score was created to group the NSSE survey items that represented the collegiate experiences associated with that factor. A composite score representing any factor for the experiences was determined by calculating the sum of participant's responses to the items that comprised the factor. The factor analysis determined two factors that represented personal experiences. I labeled those factors "Openness to Working with

Others,” and “Personal Care.” There were three NSSE items reflecting Openness to Working with Others. The items garnered data about perceived gains in understanding people of different backgrounds, the development of values and ethics, and working effectively with others.

The factor analysis for social experiences yielded one factor consisting of four NSSE items. The items were affiliated with institutional emphasis on attending events concerning important social, financial, and political issues, institutional emphasis on providing social opportunities, and institutional emphasis on attending campus activities and events, and institutional emphasis on encouraging contact among students from different backgrounds. I labeled this factor Social Event Attendance. This factor had an eigenvalue of 2.903, explained 26.39% of the variance, and had a Cronbach Alpha value of .777. This factor was included in the linear regression model.

The factor analysis for academic experiences yielded seven factors. The first factor was comprised of six items that collected data on examining strengths and weaknesses of one’s own views, diverse perspectives in course assignments, trying to understand others’ perspective, connecting learning to societal issues, learning something that changed one’s understanding of an issue, and connecting course ideas to prior experiences. I labeled this factor “Societal Awareness and Diversity.” This factor had an eigenvalue of 12.186, explained 22.92% of the variance, and had a Cronbach Alpha value of .885.

The second academic factor included five items that revolved around the organization of courses by instructors, prompt feedback from instructors, clearly explained course goals, feedback on works in progress, and effective examples used by instructors. This factor was identified as “Faculty Relationships.” Faculty Relationships had an eigenvalue of 3.461, explained 6.53% of the variance, and had a Cronbach Alpha value of .844.

The remaining five factors were labeled “Perceived Academic Improvements,” “Math Skills,” “Communication with Faculty,” “Academic Collaborations with Students,” and “Academic Rigor.” Perceived Academic Improvements was comprised of three items that elicited data on perceived improvements with writing skills, speaking skills, and critical thinking skills. The factor labeled Communication with Faculty was formed by items that collected data pertaining to discussing future career plans, course topics, and academic performance with faculty members.

After determining the significant factors for each experience, a linear regression analysis was then conducted using the enter method to determine whether there was a significant relationship between factors representing personal, social, and academic experiences and study abroad propensity (See Tables 7 – 11). Linear regression was used because the dependent variable (study abroad propensity) was continuous (George & Mallery, 2003). The significant demographics of race, gender, academic major, disability, and SES were the first variables entered into the linear regression model. It was important to compare our data to historical trends of the demographics and study abroad propensity. This allowed us to control for these variables as we continued to build the linear regression model.

Next, the factors representing personal experiences were entered into the regression model to determine if these factors revealed a relationship with study abroad propensity. The same was then done for the factors representing social and academic experiences. Once we determined which demographics and experiences exhibited a significant correlation to study abroad participation, all significant items were entered into the final regression model.

## Results

The results of the four demographic characteristics analyzed via the t-test determined that men ( $M=2.63$ ) reported a significantly higher mean score than women ( $M=2.49$ ) as it pertains to study abroad propensity. In terms of race, non-majority respondents ( $M=2.80$ ) had a significantly higher mean score than the majority population ( $M=2.49$ ). STEM majors ( $M=2.67$ ) also proved to have a higher study abroad propensity than non-STEM majors ( $M=2.44$ ). Lastly, students with disabilities ( $M=2.53$ ) had a higher mean score than students without disabilities ( $M=2.45$ ) (See Table 2).

Socioeconomic status consisted of three groups (high, mid, and low) so an ANOVA was used to analyze this data. There was a significant effect on study abroad propensity by SES at the  $p < .05$  ( $F(2, 821) = 8.827, p = .000$ ). Post hoc comparisons using the Tukey HSD test indicated that the mean score for Low SES ( $M = 2.66, SD = .825$ ) was not significantly different than the mean score for Mid SES ( $M = 2.60, SD = .888$ ). The High SES group ( $M = 2.34, SD = 1$ ) significantly differed from both the Low and Mid SES respondents (See Table 3). Collectively, these results suggest that SES has an impact on a student's decision to study abroad where students from a high SES have a lower study abroad propensity than students from a low or mid-range SES.

Next, the questions pertaining to personal, social, and academic experiences related to study abroad propensity were addressed. A factor analysis was run to determine if items from the NSSE represented personal, social, or academic factors. Of the 10 items believed to be representative of personal experiences, two factors emerged as particularly relevant: I have called these "Openness to working with Others" and "Personal Care." The Openness to Working with Others factor had an eigenvalue of 2.999, explained 27.62% of the variance, and had a Cronbach Alpha value of .769. This factor was included in the linear regression. The Personal Care factor had an eigenvalue of 1.188, explained 10.79% of the variance, and had a Cronbach Alpha value of .547 which was lower than the .7 score needed to demonstrate internal consistency of the grouped items. Therefore, the Personal Care factor was not used in the linear regression analysis.

Next, an exploratory factor analysis was run for 11 items identified as representations of social experiences. One relevant factor emerged which was labeled "Event Attendance." This factor had an eigenvalue of 2.903, explained 29.39% of variance, and had a Cronbach Alpha value of .777. Therefore, it was included in the linear regression analysis.

The final exploratory analysis run on the 55 items reflecting academic experiences produced seven relevant factors. These factors were labeled "Diversity and Societal Awareness,"

“Faculty Relationships,” “Perceived Academic Improvements,” “Math Skills,” “Communication with Faculty,” “Academic Collaborations with Students,” and “Academic Rigor.” All had Cronbach Alpha values exceeding .7, and were included in the linear regression analysis.

The assumptions of multiple regression include linearity (the idea that there is a linear relationship between the independent and dependent variables), homoscedasticity (a condition of the variance around the regression line being the same for all values of the independent variable (George & Mallery, 2003), and the absence of multicollinearity (meaning that the independent variables of the regression model are not more correlated with any other independent variable than they are the dependent variable). A scatter plot was used to assess the assumptions of linearity and homoscedasticity; multicollinearity was tested using Variance Inflation Factors (VIF). VIF values that exceeded 10 suggest multicollinearity (George & Mallery, 2003), so its absence is assumed from lower values.

Interestingly, the results of the linear regression analysis indicated that when it came to collegiate experiences (personal, academic, social) that impacted the study abroad propensity of students, there were no personal or social experiences that had a significant correlation. The only experiences that impacted a collegiate student’s likelihood of studying abroad were academic.

The academic experiences representing Societal and Diversity Awareness and their significant correlation coefficients to study abroad propensity are as follows. Academic experiences that encouraged students to “examine the strengths and weaknesses of their own views on a topic or issue had the highest level of correlation (.783) to study abroad propensity, while academic experiences that “connect ideas from coursework to prior experiences and knowledge had the lowest significant correlations (.678) to study abroad propensity.

#### **Linear Regression Results with correlation coefficients:**

1. Connect learning to societal problems or issues **(.746)**
2. Examine the strengths and weakness of their own views on a topic or issue **(.783)**
3. Learn something that changes the way they understand an issue or concept **(.686)**
4. Try to better understand someone else's views by imagining how an issue looks from his or her perspective **(.763)**
5. Include diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments **(.778)**
6. Connect ideas from your course to their prior experiences and knowledge **(.678)**

#### **Discussion**

Preparing students to enter a global economy is an important educational outcome in American higher education. A number of students enter the college years with aspirations to study abroad. For their part, universities of all types have developed wide-ranging experiences that facilitate global knowledge and awareness. Universities are pressured by student interest, act in response to external stakeholders, and operate in their own self-interest to compete for talented students and faculty. The idea of a “global university” has proliferated chiefly among large

American research universities as they jockey for positions in ranking tables and seek geographic domination across the globe. However, despite every effort to grow study abroad programs, the hoped-for high numbers of students in such programs have yet to materialize. In order to tip the scales, it is important to understand deeper dimensions of the student decision-making process and the precursor experiences of students that influence participation.

Mostly, prior studies in this area have focused on the demographic characteristics of students who choose to study abroad. This is hardly useful beyond confirming common sense or to bolster marketing campaigns. Instead, increasing our understanding of the factors that lead to improving the likelihood of participation is of paramount concern. The main purpose of this study was to understand the measurable common predictors of students' propensity to study abroad.

We find three major takeaways from this study. First, minority students are more likely to have a desire to study abroad than their counterparts. Second, students from a lower SES are more likely to study abroad than their counterparts. Third, engaging academic experiences increase the likelihood that a collegiate student will study abroad. Two of these findings are surprising and point to a dramatic shift in the types of students seeking study abroad experiences.

First, the demographic variables used to predict study abroad propensity divulged some interesting results. This study revealed that minority students are more likely to have a higher interest and desire to participate in study abroad experiences than the majority population. This is surprising because other studies have revealed just the opposite (Institute of International Education, 2001-2015; Norton, 2008). Secondly, it was also surprising that study results indicated students from lower to mid SES were more likely to want to engage in study abroad programming despite perceived financial barriers to access .

Affordability has historically been identified as a barrier to study abroad participation (Simon & Ainsworth, 2012). It would be hard to argue that finances do not play into the decision-making process of students seeking to study abroad. Likely, the efforts of federal and state governments, private lenders, more affordable study abroad initiatives, and provision of financial assistance is helping to shift a broader range of students to view study abroad as more attainable (Myths and Realities of Financing Study Abroad, 2006).

Affordability has always been a roadblock to many opportunities for students of color when it comes to higher education. As this concern pertains to African Americans, 42% have student loans, in comparison to 28% of white students (Quinton, 2015). Hispanic and Latino students and their families also incur student loan debt at higher rates than white families (Douglas-Gabriel, 2015). So, historically, the idea of studying abroad may have been considered financially out of reach for minority students. However, recent trends that enable students to transfer financial aid to international experiences may contribute to the increased likelihood of participating in study abroad programming.

Other considerations could include study abroad professionals recognizing the financial barriers for minority students and structuring programs that offset some of the additional costs of studying abroad. Study abroad administrators can structure programs that help by arranging

group rates for discounted flights, traveling during the non-tourist season, offering shorter programs (winter/spring break), and establishing programs in more affordable locations. Such efforts may place study abroad within reach for more students of color.

Perhaps more importantly, students of color may be seeking experiences to differently prepare for the workforce and differentiate themselves in the marketplace. Recognition of the importance of global competency in today's workforce may be one way to do this. Minority students recognize they will be more competitive on the job market if they have international experiences.

Surprisingly, this study also revealed that students from high SES were *less* likely to study abroad in comparison to their counterparts. This finding is inconsistent with historical trends (Carlson, et al., 1990; Lozano, 2008; Simon & Ainsworth, 2012) so it is quite interesting. It is likely that students from higher SES have had more exposure to international opportunities prior to entering college than students from other backgrounds, and therefore possible that the allure of studying abroad is not as strong. The parents of students from high SES backgrounds may also have networks that allow them to structure international internships and visits on their own rather than relying on a college or university. While this would help students from high SES avoid the added expenses of study abroad programs offered by universities, it is more likely that these families prefer tailored experiences or ones that are perceived as more prestigious.

Arguably the most interesting finding from this study had to do with the types of collegiate experiences that impacted study abroad propensity. It would seem logical that personal and social collegiate experiences would impact a student's decision to study abroad, but this study indicated otherwise. It could be deduced that since the impact of individual's personal experiences cannot be standardized, the decision to study abroad will differ among student populations based on these experiences. The same can be said for social experiences.

### **Academic Experiences that Impact the Study Abroad Propensity of College Students**

As the linear regression analysis developed, collegiate academic experiences, coupled with the key demographic factors measured, demonstrated a significant relationship with study abroad propensity.

These six academic experiences speak to students seeking to increase their cultural awareness, understand the diverse viewpoints of others, consider the pros and cons of their own thought process, and be open to changing their assumptions or world view. The first academic experience is *Connecting learning to societal problems or issues*. A wide array of subject matters ranging from climate change to managing epidemics, economic disparities, and government relations can all assist students in connecting learning to societal problems. Every discipline within the academy has an opportunity to connect student learning to current events and societal problems, thereby increasing its students' study abroad propensity. Such connectivity increases the student's knowledge base of environmental, social, or political issues and how their coursework has the potential to extend beyond the classroom, a development of academic thought will dovetail into other components of the pedagogy.

Using the second academic experience, *examining the strengths and weaknesses of their own views on a topic or issue*, instructors could engage students in simple classroom discussions or question-and-answer segments during a lecture series, or could assign academic work that requires them to delve into why they agree or disagree with a particular issue. By expressing their views and having the opportunity to support or defend their perspectives, students will develop an understanding of not only why they may be so strong in their particular views, but also why others may oppose them. Students will become more deliberate about taking the vantage point of others into consideration when developing their views on an issue. This form of openness builds into the next components.

The third and fourth components work in conjunction with each other. The third component, *learning something that changes the way they (students) understand an issue or concept*, and the fourth component, *trying to better understand someone else's views by imagining how an issue looks from his or her perspective*, both assist in developing the willingness of students to recognize and be more accepting of other individuals and the way they view the world. This fosters the kind of thinking about diversity that is necessary for the fifth component.

The fifth academic experience is *including diverse perspectives in course discussion or assignments*. Domestic and international scholarship alike have documented several different methods of solving very similar problems. By instructors including literature, narratives, and experiences that are diverse in their course discussions or assignments, students are given opportunity broaden their perspective and be exposed to different ways of approaching topics or issues.

The final component, *connecting ideas from coursework to prior experience and knowledge*, may be the most difficult to implement, especially in large classroom settings. This is because it may be hard to gauge a student's prior experiences and knowledge. However, offering assignments that encourage students to draw from their experience and prior knowledge is an effective approach to the sixth component. The ideal approach would be for the instructor to introduce the subject matter, and the student to make the connection through academic activities such as classroom presentations, group assignments, and writing projects.

Taking classes in a foreign country and engaging with students from different backgrounds and nationalities only intensifies this type of academic experience. Study abroad offers students opportunities to interact with diverse populations and learn about societal issues through various outlets. Therefore, it is reasonable to conclude that students who have a desire to communicate and engage with diverse populations would also have an increased interest in studying abroad.

There may be several reasons why personal and social experiences showed no correlation in this study. Unlike personal and social experiences, academic experiences are simpler to standardize. Instructional faculty generally operate in a controlled environment with defined learning outcomes. Also, the academic experiences in higher education are compulsory, and successful completion is mandatory for graduation. This is not the case for personal and social

experiences. Consequently, the frequency with which students engage academically and the requirement to understand course material could explain the relationship between academics and study abroad propensity. Though personal and social experiences showed no relevancy, it is important for researchers to try and gain a better understanding as to why.

Ultimately, this research led to the following key findings: some demographic characteristics can predict propensity to study abroad; personal and social factors are not predictors; and, the academic factor of societal and diversity awareness, when coupled with demographic factors, has a large effect size when predicting the likelihood of study abroad participation. The findings pertaining to the demographic characteristics around race and SES deviate starkly from past research findings. This conclusion calls for additional research with a larger sample size and more precise instrument. Perhaps this is an anomaly produced by the NSSE, or perhaps it is the sign of a new trend. Only further inquiry will tell.

The findings focused on academic factors highlight the importance of including societal and diversity awareness as components of collegiate pedagogy. The opportunity to experience learning from different perspectives (and a globalized curriculum) further heightens a college students' likelihood of participating in study abroad programming.

### **Limitations**

Of course, as with most studies, some methodological issues arose. First was the proxy used to measure SES. The NSSE asked question about the highest level of education attained by the participant's parents. The answer to this question served as a measure of the student's SES. A level of education does not necessarily equate to a particular level of SES. As the findings are a vast deviation from prior research conclusions, additional research with a larger sample size or different instrument may produce different results. Then there was the categorizing of race. In this study, race was separated into two categories, majority and non-majority. The sample size was not large enough to separate out into specific races. Thirdly, a factor analysis was used after assigning personal, social, and academic experiences to their respective categories. Assigning the experiences and analyzing the results of a factor analysis have the potential for personal interpretation. Lastly, the NSSE itself posed concerns. Most items on the NSSE fell under the academic experience category; not as many fell under the personal and social categories.

### **Conclusion**

Increasing study abroad participation rates is a frequent topic in higher education circles. As the workforce is demanding more globally competent students, the academy is being tasked with meeting that demand. As previously mentioned, there have been several administrative strategies implemented with the goal of increasing participation. This research allows teaching faculty a seat at the table to discuss these strategies and options for their implementation by providing actionable teaching methods. This study suggested what demographic characteristics and academic experiences increase the study abroad propensity of college students. The

pedagogical practices by this research can help highlight the importance of diverse academic approaches and promote the development of global competency for tomorrow's workforce.

### References

- Astin, A. W. (1993). *What matters in college?: Four critical years revisited*. Jossey-Bass.
- Brown, P. (2005). Educationally at-risk college students from single parent and two parent households: An analysis of differences employing cooperative institutional research program (CIRP) data.  
[http://digital.library.unt.edu/ark:/67531/metadc4897/m1/1/high\\_res\\_d/dissertation.pdf](http://digital.library.unt.edu/ark:/67531/metadc4897/m1/1/high_res_d/dissertation.pdf)
- Brux, J. M., & Fry, B. (2009). Multicultural students in study abroad: Their interests, their issues, and their constraints. *Journal of Studies in International Education*, 14(5), 508-527.
- Carlson, J. S., Bum, B. B., Useem, J., & Yachimowicz, D. (1990). Study abroad. The experience of American undergraduates in Western Europe and the United States. *Council on International Education Exchange*. (ERIC Document Reproduction Service No. ED340332)
- Chambliss, D. F., & Takacs, C. G. (2013). *How College Works*. Harvard University Press.
- Cuseo, J. (2007). Student success: Definition, outcomes, principles and practices.  
[http://www.indstate.edu/studentsuccess/pdf/Defining Student Success.pdf](http://www.indstate.edu/studentsuccess/pdf/Defining_Student_Success.pdf)
- Dedman, B. (2019, March 07). College students are more diverse than ever. faculty and administrators are not. <https://www.aacu.org/aacu-news/newsletter/2019/march/facts-figures#:~:text=A%20Diversifying%20Student%20Population&text=In%202017%2C%20the%20population%20was,Hawaiian%20or%20other%20Pacific%20Islander.>
- Douglas-Gabriel, D. (2015, May 19). Minorities and poor college students are shouldering the most student debt.  
[https://www.washingtonpost.com/news/wonk/wp/2015/05/19/minorities-and-poor-college-students-are-shouldering-the-most-student-debt/?utm\\_term=.739d98f32d65](https://www.washingtonpost.com/news/wonk/wp/2015/05/19/minorities-and-poor-college-students-are-shouldering-the-most-student-debt/?utm_term=.739d98f32d65)
- Fischer, K. (2012). In Study Abroad, Men Are Hard to Find.  
<http://chronicle.com/article/In-Study-Abroad-Men-Are-Hard/130853/>
- Fordham, T.A. (2002) Cultural Capital and the making of the 'blue blazer kids': an ethnography of a youth exchange program [Ph.D. thesis], Maxwell School of Citizenship and Public Affairs, Syracuse University.
- George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference, 11.0*. Needham Heights, MA: Pearson Higher Education.
- Hoffa, W., & Pearson, J. (1997). *NAFSA's guide to education abroad for advisers and administrators* (2nd ed.). NAFSA, Association of International Educators.
- Institute of International Education. (2017). International Students at All Institutions, 2004/05-2015/16. *Open Doors Report on International Educational Exchange*.  
<http://www.iie.org/opendoors>
- Institute of International Education. (2001-2015). International Students at All Institutions, 2001/02-2014/15. *Open Doors Report on International Educational Exchange*. April 5, 2016 <http://www.iie.org/opendoors>
- Lee, E. M., & LaDousa, C. (2015). *College students' experiences of power and marginality sharing spaces and negotiating differences*. Routledge.
- Litwin, M. S. (1995). *How to measure survey reliability and validity*. Sage.

- Lozano, J. E. (2008). *Exploring students' decisions regarding studying abroad: A study of private university students in south Texas*.
- McDonough, P. M. (1997). *Choosing colleges: How social class and school's structure opportunity*. Albany: State University of New York Press.
- Myths and Realities of Financing Study Abroad. (NAFSA, 2006). August 01, 2017, [http://www.nafsa.org/About\\_Us/About\\_International\\_Education/For\\_Students/Myths\\_and\\_Realities\\_of\\_Financing\\_Study\\_Abroad/](http://www.nafsa.org/About_Us/About_International_Education/For_Students/Myths_and_Realities_of_Financing_Study_Abroad/)
- National Survey of Student Engagement. (NSSE, 2015). [http://nsse.indiana.edu/html/engagement\\_indicators.cfm](http://nsse.indiana.edu/html/engagement_indicators.cfm)
- NCES fast Facts (National Center for EDUCATION STATISTICS). (n.d.). <https://nces.ed.gov/fastfacts/display.asp?id=98>
- NCES. (2015). *Postsecondary Attainment: Differences by Socioeconomic Status*. National Center for Education Statistics. [https://nces.ed.gov/programs/coe/pdf/coe\\_tva.pdf](https://nces.ed.gov/programs/coe/pdf/coe_tva.pdf).
- Nora, A. & Wedham, E. (1991). Off-campus experiences: The pull factors affecting freshman-year attrition on a commuter campus. American Educational Research Association.
- Norton, I. (2008, September 26). Changing the Face of Study Abroad. <http://chronicle.com/article/Changing-the-Face-of-Study/25788>
- NSF Approved STEM fields. (2014, March 7). <https://www.btaa.org/docs/default-source/diversity/nsf-approved-fields-of-study.pdf?sfvrsn=2>
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students. A Third Decade of Research*. Jossey-Bass.
- Quinton, S. (2015, May 05). The Disproportionate Burden of Student-Loan Debt on Minorities. <https://www.theatlantic.com/education/archive/2015/05/the-disproportionate-burden-of-student-loan-debt-on-minorities/392456/>
- Redden, E. (2019, November 18). Study abroad numbers continue to grow, driven by continued growth in short-term programs. <https://www.insidehighered.com/news/2018/11/13/study-abroad-numbers-continue-grow-driven-continued-growth-short-term-programs>.
- Salisbury, M., Paulsen, M. B., & Pascarella, E. T. (2011). Why do all the study abroad students look alike? Using an integrated student choice model to explore differences in the development of white and minority students' intent to study abroad. *Research in Higher Education*, 52 (2), 123-150.
- Salisbury, M. H., Umbach, P. D., Paulsen, M. B., & Pascarella, E. T. (2009). Going global: Understanding the choice process of the intent to study abroad. *Research in Higher Education*, 50(2), 119–143.
- Schmidt, P. (2009, November 06). Men and Women Differ in How They Decide to Study Abroad, Study Finds. <http://chronicle.com/article/MenWomen-Differ-in-How/49085/>
- Simon, J., & Ainsworth, J. W. (2012). Race and Socioeconomic Status Differences in Study Abroad Participation: The Role of Habitus, Social Networks, and Cultural Capital. *ISRN Education*, 2012, 1-21.
- Streitwieser, B. T. (2014). *Internationalisation of higher education and global mobility*. Symposium Books.
- Trends in U.S. Study Abroad*. NAFSA. (2019). <https://www.nafsa.org/policy-and-advocacy/policy-resources/trends-us-study-abroad>.
- Twombly, S., Salisbury, M., Tumanut, S., & Klute, P. (2012). Study abroad in a new global century: renewing the promise, refining the purpose. *ASHE Higher Education Report*,

*Volume 38, Number 4.*

### **About this Research**

This research was conducted in partial fulfillment of a doctoral degree in Higher Education Administration from Virginia Technical University.

### **Acknowledgements**

I would be remiss if I did not extend my deepest gratitude to Dr. Joan Hirt, Dr. Davis Kniola, Dr. Steve Janosik, and Dr. Claire Robbins who served on my dissertation committee. A special thank you to Dr. Michael Smithee for his unwavering support throughout this publication process. And lastly, to Dr. Donaldson Conserve who continually pushed me to get things done with this research, I offer my sincerest appreciation.

### **About the Author**

William Pruitt has worked in study abroad for over fifteen years. He has previously published works on heritage programming, and how America's gun violence impacts international student recruitment. He is a graduate of Winthrop University with a B.A. in Political Science. He also holds an MBA from Winthrop. He earned his Ph.D. in Higher Education Administration from Virginia Tech in 2017. Dr. Pruitt, his wife, and children call Columbia, SC home.

## **An Assessment of the Knowledge, Attitude, and Practice of Phone Use While Driving and Crash Outcomes Among Drivers in Oyo State, Nigeria**

Oluwaseun Adeyemi, Ph.D.  
*University of North Carolina at Charlotte*

### **Abstract**

This study aims to assess the relationship between crash outcomes and the knowledge of mobile phone hazards, attitude towards mobile phone use, and practices of mobile phone use among urban Nigerian drivers.

The study used a quantitative cross-sectional analytical design. A total of 377 completed responses were obtained through a self-administered questionnaire. The outcome measures were self-reported crash involvement, self-reported crash injury, and self-reported mobile phone-related crash involvement. The main predictor variables were the knowledge of mobile phone hazards while driving, attitude towards mobile phone use while driving, and practices of phone use while driving. Age, sex, marital status, level of education, and driving experience were used as potential confounders. Univariate and multivariate logistic regression analyses were used to compute the unadjusted and adjusted odds of each crash outcome.

The results show almost 75% of the study population reported that they had been involved in a crash event and sustained crash injuries in the past. Drivers with poor knowledge of mobile phone hazards while driving had significantly elevated odds of self-reported crash outcomes compared to those with good knowledge of mobile phone hazards while driving. Similarly, poor attitude towards phone use while driving and bad practice of phone use while driving were associated with significantly elevated odds of self-reported crash outcomes.

The conclusion calls for a need for greater awareness and intervention aimed at improving knowledge, influencing attitude, and changing the practices around mobile phone use among Nigerian drivers.

*Keywords:* Distracted Driving; Crash Injury; Mobile phone use while driving; Knowledge, Attitude, and Practice, Nigeria

### **The Burden of Road Crashes**

Road injuries have evolved, not only as a crucial public health issue but also as a global concern. The alarming and increasing incidence of road injuries in developing countries has risen to an epidemic level (Lagarde, 2007; Nantulya & Reich, 2002). The Centre for Disease Control and Prevention (2016) has estimated that all over the world, 1.3 million lives are lost yearly to

road-related injuries, with half of these casualties being pedestrians, motorcyclists, and cyclists. Road crash fatalities are the 7<sup>th</sup> leading cause of death in low-income countries and the 10<sup>th</sup> leading cause of death in middle-income countries (World Health Organization, 2020). Internationally, road crash fatalities are the highest cause of mortality in young people aged between 5–29 years (World Health Organization, 2021).

In Africa, the cases of road crash injuries have been on the rise in the last 25 years, with the pooled injury rates increasing from 40.7 per 100,000 population in 1990 to 92.9 per 100,000 population in 2015 (Adeloye et al., 2016). According to a WHO report on road safety, Africa, in 2016, had the highest rate of fatalities from road traffic injuries globally at 26.6 per 100,000 population (World Health Organization, 2018). Also, more than 85% of all mortalities and 90% of disability-adjusted life years (DALYs) lost from road injuries happened in low- and middle-income countries (GBD 2013 Mortality and Causes of Death Collaborators, 2015).

Road crash fatality rates have been on the rise in Nigeria. Between 2013 and 2016, the WHO estimated that the crash fatality rate in Nigeria increased from 20.5 per 100,000 to 21.6 per 100,000 (World Health Organization, 2015, 2018). Currently, it is estimated that the crash fatality rate in Nigeria is 29.5 per 100,000 population (World Life Expectancy, 2018). About the same period, the proportion of mobile phone users in Nigeria increased from 21% in 2016 to 48% in 2021 (Statistica, 2021).<sup>i</sup> In Nigeria, road crash injury is the commonest reason for emergency room visits, and road crashes are responsible for the majority of emergency room mortalities (Afuwape et al., 2007).

### **Mobile Phone-Related Distracted Driving**

Distracted driving is any activity a driver engages in that takes his/ her eyes and attention from driving (Bergmark et al., 2016). It is a driving behavior that increases the risk of property damage, injury, and death to persons related to the driving event (McDonald & Sommers, 2015; National Highway Traffic Safety Administration, 2017; TeenSafe, 2018). Yearly, over 3,000 fatal crash injuries are related to distracted driving in the U.S. (Centers for Disease Control and Prevention, 2021; National Highway Traffic Safety Administration, 2021). While distracted driving activities range widely, from eating while driving to looking at roadside objects (Klauer et al., 2014), mobile phone use is the most common and most addictive distracted driving activity (O. Adeyemi, 2021; Caird et al., 2014; Gliklich et al., 2016; Lipovac et al., 2017).

Mobile phone-related distracted driving results from the indiscriminate use of mobile phones while driving (National Highway Traffic Safety Administration, 2012). Poor driving performance has been associated with mobile phone use specifically when such devices are used for texting and calling (Benedetto et al., 2012; Ishida & Matsuura, 2001; Yannis et al., 2016). Furthermore, phone texting has been associated with reduced responsiveness, reduced vehicle control, near-collision, unintentional lane deviation, and crash-related injuries and deaths (Caird et al., 2014; Klauer et al., 2014). Additionally, dialing phones and answering calls while driving

is associated with about a four-fold increase in the odds of a crash injury (Fitch et al., 2013; Klauer et al., 2014; Olson et al., 2009; Simmons et al., 2016).

### **Knowledge, Attitude, and Practice of Phone Use While Driving**

The Knowledge, Attitude, and Practice (KAP) model is commonly used to quantify background information about a public health issue, assess areas of potential intervention, and quantify the effectiveness of an intervention (Gumicio et al., 2011). Conceptually, adequate knowledge of the hazards of mobile phone use while driving, and appropriate attitudes towards the non-use of mobile phones while driving should affect the practice of phone use while driving. The practice of non-use of mobile phones while driving will result in an absence of mobile phone-related distracted driving and obviate the attendant consequences of distracted driving behaviors – crash involvement and fatal and non-fatal crash injury. Earlier studies have used the KAP model to evaluate mobile phone distracted driving among U.S. drivers (Nevin et al., 2017), Columbian commercial drivers (Amaya & Pinto, 2016), and Nigerian motorcyclists (Arosanyin et al., 2013).

Within the context of distracted driving, knowledge of the hazards of mobile phone use while driving refers to the understanding, or the awareness of the risks of engaging in mobile phone use while driving (Kaliyaperumal, 2004). Attitude towards mobile phone use while driving refers to the mental disposition towards engagement in phone use during a temporal driving event (Altmann, 2008). The practice of mobile phone use while driving refers to the interaction of a driver and a mobile phone during a temporal driving event. Akande and colleagues (2006) estimated that about 62% of the non-commercial drivers in Ilorin, a city in South-West Nigeria, were aware of the risks associated with mobile phone use while driving. Also, earlier studies have estimated that between 4 to 42% of Nigerian drivers use their phones while driving for primary (e.g. texting, dialing, receiving calls) and secondary (e.g. social media, driving assistance, scrolling) phone tasks (Adeola et al., 2016; Akande & Ajao, 2006; Olumami et al., 2014; Onyemocho et al., 2013).

### **Research Aims and Hypothesis**

This study aims to assess the association between crash outcome measures and knowledge of mobile phone hazards while driving, attitude towards mobile phone use while driving, and practices of mobile phone use while driving. It is hypothesized that poor knowledge of mobile phone hazards, poor attitude towards mobile phone use while driving, and bad practice of mobile phone use while driving will be associated with increased odds of self-reported crash involvement, crash injury, and mobile phone-related crash involvement. Understanding the distribution of quantified measures of knowledge of mobile phone hazards while driving, attitude towards mobile phone use, and practices of mobile phone use while driving among Nigerian drivers may indicate a need for educational intervention aimed at reducing distracted driving

behavior. Additionally, quantifying the relationship between crash outcomes and the knowledge of mobile phone hazards while driving, attitude towards mobile phone use while driving, and practices of mobile phone use while driving may help quantify the risk associated with mobile phone-related distracted driving and may inform policy on safe driving on Nigerian roads. No publicly available study prior to this work has assessed the association between crash outcome measures and the knowledge of mobile phone hazards while driving, attitude towards mobile phone use while driving, and practice of mobile phone use among Nigerian drivers.

## **Methods**

### **Study Population and Design**

This cross-sectional study was conducted in Oyo State, Nigeria in March 2018. Oyo State is one of the most populous states in Nigeria, with over 5.6 million residents (Oyo State Government, 2019). The state has 33 local government areas (Oyo State Government, 2019), and 5 of these local governments were randomly selected for the study. The selected local governments served as clusters, and participants were randomly selected from each cluster. The selection criteria were as follows: the participants must be aged 18 years and older, possess a valid driving license, use a mobile phone, and have driven a four-wheeled vehicle within a month of the interview. Ethical approval was obtained from the Research Ethics Review Committee of the Oyo State Ministry of Health.

A paper-based self-administered questionnaire was administered. The total number of respondents was 406 persons. A total of 29 responses were deemed inconsistent. Cases classified as inconsistent were cases where the respondents consented that they were above 18 years but selected an age range below 18. Also, inconsistent responses occurred where the respondent stated that they never had a crash event but later stated that the crash injury affected one or more parts of their bodies. The final sample size was 377, representing 92.9% of the total responses collected.

### **Crash Outcome Measures**

Three outcome measures were selected for this study. These outcome measures were self-reported crash involvement, self-reported crash injury, and self-reported mobile phone-related crash involvement. A self-reported crash involvement was defined by the question: “have you ever been involved in an accident?” Responses were binary: either yes or no. A self-reported crash injury was defined by the responses to the statements: “My past accidents affected only 1 part of my body” and “My past accidents affected multiple parts of my body.” The responses were binary, either yes or no. Respondents who responded yes to either or both statements were classified as having sustained crash injuries. Self-reported mobile phone-related crash involvement was defined by the question “Were any of the accidents linked to the use of mobile phones?” Responses to this question were binary (yes or no).

## **Knowledge, Attitude, and Practices of Mobile Phone Use While Driving**

The main predictor variables were the knowledge of mobile phone hazards while driving, attitude towards mobile phone use while driving, and practice of phone use while driving. These variables were defined using three survey instruments: knowledge of mobile phone hazards while driving (KMPHD), attitude towards mobile phone use while driving (AMPUD), and practice of mobile phone use while driving (PMPUD) (Adeyemi, O.J., 2021).<sup>ii</sup>

The KMPHD is a seven-item survey instrument that measures the driver's knowledge of distracting phone activities and knowledge about handheld and hands-free phone use while driving. The instrument has good reliability, with a Cronbach alpha value of 0.88. The instrument had been validated among drivers in Nigeria. The item content validity index (ranging from 0 to 1) was 0.91 and the scale validity index (ranging from 0 to 1) was 0.92. The minimum and maximum scores were 7 and 35, respectively. Higher scores suggest higher knowledge of mobile phone hazards while driving. For this study, knowledge of phone use while driving was measured as a binary variable. Scores of 18 and higher were classified as good knowledge while scores of 17 and lower were classified as poor knowledge.

The AMPUD is a five-item survey instrument that measures the attitude towards using mobile phones while driving. The instrument has good reliability, with a Cronbach alpha value of 0.95. The instrument had been validated among drivers in Nigeria. The item content validity index (ranging from 0 to 1) was 0.83 and the scale validity index (ranging from 0 to 1) was 0.83. The minimum and maximum scores were 5 and 25, respectively. Higher scores suggest a more negative attitude towards phone use while driving. For this study, attitude towards mobile phone use while driving was measured as a binary variable. Scores of 13 and higher were classified as good attitude (supporting avoiding phone use while driving) while scores of 12 and lower were classified as poor attitude (less avoidant of phone use while driving).

The PMPUD is a seven-item survey instrument that measures primary and secondary phone activities while driving. The primary phone activities captured in the instrument are initiating and receiving calls and reading texts while driving. The secondary phone activities captured in the instrument included playing music on phones while driving, playing games on phones while driving, browsing the internet while driving, and scrolling the phone while driving. The instrument has good reliability, with a Cronbach alpha value of 0.92. The instrument had been validated among drivers in Nigeria. The item content validity index (ranging from 0 to 1) was 0.99 and the scale validity index (ranging from 0 to 1) was 0.99. The minimum and maximum scores were 7 and 35, respectively. Higher practice scores suggest non-engagement in phone activities while driving. For this study, the practice of mobile phone use while driving was measured as a binary variable. Scores of 18 and higher were classified as good practice while scores of 17 and lower were classified as bad practice.

## Potential Confounding Variables

Potential confounders were selected from related literature (Akande & Ajao, 2006; Donkor et al., 2018; Olumami et al., 2014). These confounders were age, sex, marital status, level of education, and driving experience.

## Statistical Analysis

The frequency distribution of the demographic, driving, and crash characteristics was summarized in Table 1 and Figure 1 below. The association between the self-reported crash outcome measures and the knowledge, attitude, and practices of phone use were assessed using the chi-square. Univariate and multivariate logistic regression was used to compute the unadjusted and adjusted odds of each crash outcome, respectively. Data were analyzed using the Statistical Package for Social Sciences version 26 (IBM Corp., 2018).

## Results

### Sociodemographic and Driving Characteristics

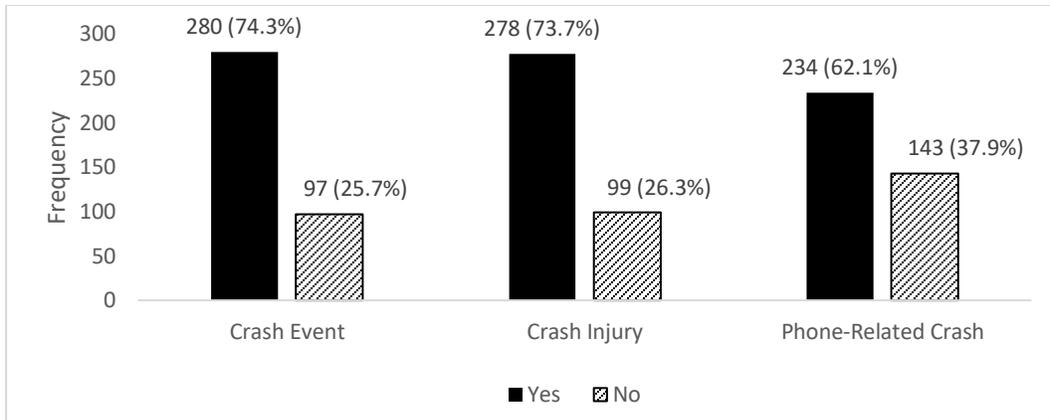
Most of the respondents were aged 18 to 30 years (51.5%), males (72.9%), married (55.4%), had tertiary education (60.2%), and had 5 years or fewer driving experience (52.5%) (Table 1). Age ( $p < 0.001$ ), sex ( $p = 0.029$ ), marital status ( $p < 0.001$ ), educational level ( $p = 0.002$ ), and driving experience ( $p < 0.001$ ) were significantly associated with self-reported crash involvement. Similarly, age ( $p < 0.001$ ), sex ( $p = 0.021$ ), marital status ( $p < 0.001$ ), educational level ( $p = 0.003$ ), and driving experience ( $p < 0.001$ ) were significantly associated with self-reported crash injury. Additionally, age ( $p < 0.001$ ), sex ( $p = 0.021$ ), marital status ( $p < 0.001$ ), educational level ( $p = 0.038$ ), and driving experience ( $p = 0.006$ ) were significantly associated with self-reported mobile phone-related crash involvement.<sup>iii</sup>

### Crash Characteristics

About 74%, representing 280 persons, reported that they had been involved in a crash event in the past (Figure 1). Also, 73.7% of the sample population, representing 278 persons, reported that the crash resulted in injury to at least one part of their body. A total of 234 persons (62.1%) reported that they had been involved in a mobile phone-related crash event.<sup>iv</sup>

### Figure 1

*Distribution of crash outcomes in the study population. Crash outcomes were measured in three categories: involvement in a crash event, sustenance of crash-related injury, involvement in a mobile phone-related crash event*



**Table 1**

*Frequency distribution and association of crash outcomes and the demographic characteristics, driving experience, knowledge of hazards of mobile phone use while driving, attitude towards mobile phone use while driving, and practice of mobile phone use while driving*

Variable	Frequency	Self-Reported Crash Involvement			Self-Reported Crash Injury			Phone-Related Crash Involvement		
	(N=377) (%)	Yes (n=280) (%)	No (n=97) (%)	p-value	Yes (n=278) (%)	No (n=99) (%)	p-value	Yes (n=234) (%)	No (n=143) (%)	p-value
<b>Age categories</b>										
18 – 30 years	194 (51.5)	123 (43.9)	71 (73.2)	<0.001	122 (43.9)	72 (72.7)	<0.001	105 (44.9)	89 (62.2)	0.004
31 – 40 years	105 (27.9)	86 (30.7)	19 (19.6)		86 (30.9)	19 (19.2)		69 (29.5)	36 (25.2)	
41 – 50 years	60 (15.9)	55 (19.6)	5 (5.2)		55 (19.8)	5 (5.1)		46 (19.7)	14 (9.8)	
>50years	18 (4.8)	16 (5.7)	2 (2.1)		15 (5.4)	3 (3.0)		14 (6.0)	4 (2.8)	
<b>Sex</b>										
Male	275 (72.9)	196 (70.0)	79 (81.4)	0.029	194 (69.8)	81 (81.8)	0.021	161 (68.8)	114 (79.7)	0.021
Female	102 (27.1)	84 (30.0)	18 (18.6)		84 (30.2)	18 (18.2)		73 (31.2)	29 (20.3)	
<b>Marital Status</b>										
Married	209 (55.4)	185 (66.1)	24 (24.7)	<0.001	184 (66.2)	25 (25.3)	<0.001	149 (63.7)	60 (42.0)	<0.001
Never Married	168 (44.6)	95 (33.9)	73 (75.3)		94 (33.8)	74 (74.7)		85 (36.3)	83 (58.0)	
<b>Level of Education</b>										
Primary/Secondary School	77 (20.4)	64 (22.9)	13 (13.4)	0.002	64 (23.0)	13 (13.1)	0.003	57 (24.3)	20 (14.0)	0.038
Tertiary Education	227 (60.2)	154 (55.0)	73 (75.3)		153 (55.0)	74 (74.7)		131 (56.0)	96 (67.1)	
Postgraduate	73 (19.4)	62 (22.1)	11 (11.3)		61 (21.9)	12 (12.1)		46 (19.7)	27 (18.9)	
<b>Driving Experience</b>										
5 years or less	198 (52.5)	128 (45.8)	70 (72.2)	<0.001	127 (45.7)	71 (71.7)	<0.001	108 (46.2)	90 (62.9)	0.006
6 – 10 years	95 (25.2)	76 (27.1)	19 (19.6)		76 (27.3)	19 (19.2)		66 (28.2)	29 (20.3)	
More than 10 years	84 (22.3)	76 (27.1)	8 (8.2)		75 (27.0)	9 (9.1)		60 (25.6)	24 (16.8)	
<b>Knowledge*</b>										
Poor Knowledge	99 (26.3)	44 (15.7)	55 (56.7)	<0.001	42 (15.1)	57 (57.6)	<0.001	17 (7.3)	82 (57.3)	0.006
Good Knowledge	278 (73.7)	236 (84.3)	42 (43.3)		236 (84.9)	42 (42.4)		217 (92.7)	61 (42.7)	
<b>Attitude*</b>										
Poor Attitude	135 (35.8)	64 (22.9)	71 (73.2)	<0.001	64 (23.0)	71 (71.7)	<0.001	24 (10.3)	111 (77.6)	0.006
Good Attitude	242 (64.2)	216 (77.1)	26 (26.8)		214 (77.0)	28 (28.3)		210 (89.7)	32 (22.4)	
<b>Practice*</b>										
Bad Practice	35 (9.3)	3 (1.1)	32 (33.0)	<0.001	3 (1.1)	32 (32.3)	<0.001	3 (1.3)	32 (22.4)	0.006
Good Practice	342 (90.7)	277 (98.9)	65 (67.0)		275 (98.9)	67 (67.7)		231 (98.7)	111 (77.6)	

\*Knowledge refers to the knowledge of hazards of mobile phone use while driving; Attitude refers to the attitude towards mobile phone use while driving; Practice refers to the practice of mobile phone use while driving

## Knowledge of Mobile Phone Hazards While Driving

About 26% of the sample population had poor knowledge of mobile phone hazards while driving (Table 1). Knowledge of mobile phone hazards while driving was associated with self-reported crash involvement ( $p < 0.001$ ), self-reported crash injury ( $p < 0.001$ ), and self-reported phone-related crash involvement ( $p < 0.001$ ).

When compared to respondents with good knowledge, respondents with poor knowledge of mobile phone hazards while driving were seven times more likely to report that they were involved in a crash (Odds Ratio (OR): 7.02; 95% CI: 4.20 – 11.75), eight times more likely to sustain a crash-related injury (OR: 7.63; 95% CI: 4.55 – 12.78), and 17 times more likely to report that they were involved in a phone-related crash (OR: 17.16; 95% CI: 9.47 – 31.10) (Table 2). After adjusting for sociodemographic and driving characteristics, respondents with poor knowledge of mobile phone hazards while driving were nine times more likely to report that they were involved in a crash (Adjusted OR (AOR): 8.65; 95% CI: 4.57 – 16.36), ten times more likely to report that they sustained a crash-related injury, (AOR: 9.58; 95% CI: 5.02 – 18.30), and 24 times more likely to report that they were involved in a phone-related crash (AOR: 24.34; 95% CI: 11.90 – 49.78) (Table 3).

**Table 2**

*Univariate logistic regression assessing the relationship between crash outcomes and the demographic characteristics, driving experience, knowledge of hazards of mobile phone use while driving, attitude towards mobile phone use while driving, and practice of mobile phone use while driving*

Variable	Self-Reported Crash Involvement	Self-Reported Crash Injury	Phone-Related Crash Involvement
	Odds Ratio (95% CI)	Odds Ratio (95% CI)	Odds Ratio (95% CI)
<b>Age categories</b>			
31 – 40 years	2.61 (1.47 – 4.65)	2.67 (1.50 – 4.75)	1.63 (0.99 – 2.66)
41 – 50 years	6.35 (2.43 – 16.60)	6.49 (2.48 – 16.97)	2.79 (1.44 – 5.40)
>50years	4.62 (1.03 – 20.67)	2.95 (0.83 – 10.54)	2.97 (0.94 – 9.34)
18 – 30 years	Ref	Ref	Ref
<b>Sex</b>			
Female	1.88 (1.06 – 3.33)	1.95 (1.10 – 3.45)	1.78 (1.09 – 2.92)
Male	Ref	Ref	Ref
<b>Marital Status</b>			
Married	5.92 (3.51 – 10.00)	5.79 (3.46 – 9.72)	2.43 (1.58 – 3.71)
Never Married	Ref	Ref	Ref
<b>Level of Education</b>			
Primary/Secondary School	0.87 (0.36 – 2.10)	0.97 (0.41 – 2.29)	1.67 (0.83 – 3.36)
Tertiary Education	0.37 (0.19 – 0.75)	0.41 (0.21 – 0.80)	0.80 (0.47 – 1.38)
Postgraduate	Ref	Ref	Ref
<b>Driving Experience</b>			
6 – 10 years	2.19 (1.22 – 3.91)	2.24 (1.25 – 4.00)	1.90 (1.13 – 3.19)
More than 10 years	5.20 (2.37 – 11.39)	4.66 (2.20 – 9.86)	2.08 (1.20 – 3.61)

5 years or less	Ref	Ref	Ref
Knowledge*			
Poor Knowledge	7.02 (4.20 – 11.75)	7.63 (4.55 – 12.78)	17.16 (9.47 – 31.10)
Good Knowledge	Ref	Ref	Ref
Attitude*			
Poor Attitude	9.22 (5.43 – 15.64)	8.48 (5.05 – 14.25)	30.35 (17.04 – 54.05)
Good Attitude	Ref	Ref	Ref
Practice*			
Bad Practice	45.46 (13.50 – 153.03)	43.78 (13.01 – 147.29)	22.20 (6.65 – 74.06)
Good Practice	Ref	Ref	Ref

\*Knowledge refers to the knowledge of hazards of mobile phone use while driving; Attitude refers to the attitude towards mobile phone use while driving; Practice refers to the practice of mobile phone use while driving

**Table 3**

*Multivariate logistic regression assessing the relationship between crash outcomes and knowledge of hazards of mobile phone use while driving, attitude towards mobile phone use while driving, and practices of mobile phone use while driving*

Models	Self-Reported Crash Involvement	Self-Reported Crash Injury	Phone-Related Crash Involvement
	Adjusted Odds Ratio (95% CI)	Adjusted Odds Ratio (95% CI)	Adjusted Odds Ratio (95% CI)
Model 1: Knowledge*			
Poor Knowledge	8.65 (4.57-16.36)	9.58 (5.02-18.30)	24.34 (11.90-49.78)
Good Knowledge	Ref	Ref	Ref
Model 2: Attitude*			
Poor Attitude	13.34 (6.89-25.81)	11.41 (5.99-21.72)	67.87 (30.77-149.72)
Good Attitude	Ref	Ref	Ref
Model 3: Practice*			
Bad Practice	33.63 (8.59-131.65)	28.32 (7.59-105.59)	15.73 (4.48-55.28)
Good Practice	Ref	Ref	Ref

Each model adjusted for age, sex, educational attainment, marital status, and driving experience. \*Knowledge refers to the knowledge of hazards of mobile phone use while driving; Attitude refers to the attitude towards mobile phone use while driving; Practice refers to the practice of mobile phone use while driving

### Attitude Towards Mobile Phone Use While Driving

About 36% of the sample population had poor attitudes towards mobile phone use while driving (Table 1). Attitude towards mobile phone use while driving was associated with self-reported crash involvement ( $p < 0.001$ ), self-reported crash injury ( $p < 0.001$ ), and self-reported phone-related crash involvement ( $p < 0.001$ ).

When compared to respondents with good attitude, respondents with poor attitude towards mobile phone use while driving were nine times more likely to report that they were involved in a crash (OR: 9.22; 95% CI: 5.43 – 15.64), eight times more likely to report that they sustained a crash injury (OR: 8.48; 95% CI: 5.05 – 14.25), and 30 times more likely to state that they were involved in a phone-related crash. (OR: 30.35; 95% CI: 17.04 – 54.05) (Table 2). After adjusting for sociodemographic and driving characteristics, respondents with poor attitude

towards mobile phone use while driving were 13 times more likely to report that they were involved in a crash (AOR: 13.34; 95% CI: 6.89 – 25.81), eleven times more likely to report that they sustained a crash injury (AOR: 11.41; 95% CI: 5.99 – 21.72), and 68 times more likely to report that they were involved in a phone-related crash (AOR: 67.87; 95% CI: 30.77 – 149.72) (Table 3).

### **Practice of Mobile Phone Use While Driving**

About 9% of the sample population had bad practices of mobile phone use while driving (Table 1). The practice of mobile phone use while driving was associated with self-reported crash involvement ( $p < 0.001$ ), self-reported crash injury ( $p < 0.001$ ), and self-reported phone-related crash involvement ( $p < 0.001$ ).

When compared to respondents with good phone practice, respondents with bad phone practice were 45 times more likely to state that they were involved in a crash (OR: 45.46; 95% CI: 13.50 – 153.03), 44 times more likely to state that they had sustained a crash injury, (OR: 43.78; 95% CI: 13.01 – 147.29), and 22 times more likely to state they were involved in a phone-related crash (OR: 22.20; 95% CI: 6.65 – 74.06) (Table 2).<sup>y</sup> After adjusting for sociodemographic and driving characteristics, respondents with bad phone practice were 34 times more likely to report that they were involved in a crash (AOR: 33.63; 95% CI: 8.59 – 131.65), 28 times more likely to report that they sustained crash injury (AOR: 28.32; 95% CI: 7.59 – 105.59), and 16 times more likely to report that they were involved in a phone-related crash (AOR: 15.73; 95% CI: 4.48 – 55.28) (Table 3).

### **Discussion**

This study investigated the relationship between crash outcomes and the knowledge of mobile phone hazards while driving, the attitude towards mobile phone use while driving, and the practice of mobile phone use while driving. A substantial proportion of the sampled population had been involved in at least one crash event in the past, had incurred crash-related injuries that affected one or more parts of their body, and had experienced mobile phone-related crash events. Drivers with poor knowledge of mobile phone hazards while driving had significantly elevated odds of self-reported crash outcomes compared to those with good knowledge of mobile phone hazards while driving. Similarly, poor attitudes towards phone use while driving and bad practices of phone use while driving were associated with significantly elevated odds of self-reported crash outcomes.

This study reports that about 74% of the sampled Nigerian drivers had been involved in a crash event in the past. Previous studies have reported high proportions of crash involvement among Nigerian drivers (Onyemaechi & Ofoma, 2016; Onyemocho et al., 2013; Uhegbu & Tight, 2021). A study conducted in Benue State, located in the Southern part of Nigeria, reported that 72.5% of sampled commercial motorists had been involved in a mobile phone-related crash event in the past (Onyemocho et al., 2013). A study conducted in Abuja, the capital of Nigeria,

reported that 30% of the sampled population had been involved in crashes within the last six months of the survey (Uhegbu & Tight, 2021). The Federal Road Safety Corps (FRSC) is the national agency saddled with the task of keeping Nigerian roads safe for all users (Federal Road Safety Corps, 2021). Data collected by the FRSC is hugely under-reported (Onyemaechi & Ofoma, 2016). The lack of a comprehensive national trauma directory makes nationwide estimates of crash injuries a challenge (Onyemaechi & Ofoma, 2016). A study that used the Nigerian's trauma registry with two contributing hospitals reported that 69.2% of the trauma cases were due to motor vehicle crash injuries (Cassidy et al., 2016).

This study reports that 26% of drivers had poor knowledge of mobile phone hazards while driving. As of 2003, Akande et al. (2006) reported that about 9% of non-commercial Nigerian drivers are not aware of mobile phone-related crash hazards. A more recent study in Ghana reported that about 8% of the sampled population lack awareness of the hazards of mobile phone use while driving (Donkor et al., 2018). Poor knowledge is associated with 8-fold increased odds of self-reported crash involvement, 10-fold increased odds of self-reported crash injuries, and 24-fold increased odds of mobile phone-related crash involvement among Nigerian drivers.<sup>vi</sup> With increasing uptakes in technology (Pew Research Center, 2017, 2019) and mobile phone addiction (O. Adeyemi, 2021; Kim et al., 2017), there is a need to increase awareness about the hazards of mobile phone use while driving.

In this study, about 36% of drivers had poor attitudes towards phone use while driving. Also, poor attitude towards phone use while driving was associated with 13-fold increased odds of self-reported crash involvement, 11-fold increased odds of self-reported crash injuries, and 68-fold increased odds of self-reported mobile phone-related crash involvement. The AMPUD scale identifies some characteristics drivers with poor attitudes to mobile phone use may possess (O. J. Adeyemi, 2021). Individuals with poor attitudes towards mobile phone use may believe that their mobile phones do not distract them while driving, may approve of the habit of playing games while driving, and may be inclined to take photographs or make videos while driving. Drivers with poor attitudes towards mobile phone use are unlikely to be inclined to keep their phones away while driving or to park safely before engaging in phone activities. Drivers with poor attitudes towards mobile phone use while driving are more likely to engage in live streaming of events on different social media platforms while driving (Feldman, 2016; Jackson, 2021). Since distracted driving involves visual, manual, and cognitive functions (McGehee, 2014), drivers with poor attitudes toward mobile phone use will, unsurprisingly, have increased odds of crash involvement and crash injuries. The severely elevated odds of self-reported mobile phone-related crash involvement and poor attitude towards mobile phone use may suggest attitude alone is a potential candidate for causation (Rothman & Greenland, 2005).

About 9% of the sampled Nigerian drivers were classified as having bad practices of mobile phone use while driving. This classification suggests that this proportion of drivers are more likely to engage in several of the following activities: text, initiate and receive calls while driving, play music and games while driving, scroll through their mobile phones, and browse the

internet while driving (O. J. Adeyemi, 2021). Olumami et al. (2014) reported that among Nigerian commercial drivers, 10% of them agree that they dial frequently and 11% agree that they receive calls frequently while driving. In similar studies, about 8% and 10% of sampled Greek drivers reported that they very often or always make calls on their handheld and handsfree mobile phones, respectively, while driving (Vardaki & Yannis, 2013).<sup>vii</sup> Also, about 11% of sampled U.S. students reported that they talk to someone on their cell phones while driving, while 20% text or read texts while driving (Bazargan-Hejazi et al., 2017). This study reports that bad practice of mobile phone use while driving was associated with 45-fold increased odds of self-reported crash involvement, 44-fold increased odds of self-reported crash injuries, and 22-fold increased odds of self-reported mobile phone-related crash involvement. Earlier studies have reported similar elevated odds of crash involvement or crash injury from mobile phone use while driving (Hickman & Hanowski, 2012; Klauer et al., 2014; Olson et al., 2009; Simmons et al., 2016). Olson et al. (2009) reported that texting and dialing while driving was associated with 23-fold and 6-fold increased odds of crash involvement, respectively. Hickman and colleagues reported that texting, emailing, and accessing the internet while driving, combined, were associated with 163-fold increased odds of crash involvement (Hickman & Hanowski, 2012).

### **Limitations**

This study has its limitations. As this was a cross-sectional study, causation cannot be established. Also, the outcome measures were self-reported, and the possibility of a response bias may exist. Additionally, respondents might have given socially appropriate responses to what extent they use mobile phones while driving since it is illegal in Nigeria to engage in phone activities while driving (Ogundipe, 2018). Another unrelated limitation is that this study was conducted in a state in the South-Western part of Nigeria, and the results may not be generalizable to rural communities or the other regions in Nigeria. Crashes rarely occur in isolation. There may be other risky driving behaviors (such as driving under the influence of drugs and alcohol, speeding, driving inattention) and road environmental characteristics (such as road type, adverse weather conditions, the time of the day) that contribute to the occurrence of crashes and crash injuries. This study did not control for these characteristics. Despite these limitations, this is one of the few studies to use the knowledge, attitude, and practice model to assess mobile phone distracted driving among Nigerian drivers. Also, this study adds to the crash injury literature by providing estimates of the association of crash outcomes and the knowledge of mobile phone hazards, attitude towards mobile phone use, and the practices of phone use while driving among Nigerian drivers.

### **Conclusion**

A substantial proportion of Nigerian drivers have been involved in motor vehicle crashes and have sustained injuries from such events. During a driving event, the knowledge of mobile phone hazards, attitude towards phone use, and the practices of mobile phone use are significant risk factors for self-reported crash involvement, crash injuries, and mobile phone-related crash

involvement. There is a need for greater awareness and intervention aimed at improving knowledge, influencing attitude, and changing the practices around mobile phone use among Nigerian drivers.

### References

- Adeloye, D., Thompson, J. Y., Akanbi, M. A., Azuh, D., Samuel, V., Omoregbe, N., & Ayo, C. K. (2016). The burden of road traffic crashes, injuries and deaths in Africa: a systematic review and meta-analysis. *Bulletin of World Health Organization*, 94(7), 510-521A. <https://doi.org/https://doi.org/10.2471/BLT.15.163121>
- Adeola, R., Omorogbe, A., & Johnson, A. (2016). Get the Message: A Teen Distracted Driving Program. *Journal of Trauma Nursing*, 23(6), 312-320. <https://doi.org/10.1097/jtn.0000000000000240>
- Adeyemi, O. (2021). The Association of Mobile Phone Addiction Proneness and Self-reported Road Accident in Oyo State, Nigeria. *Journal of Technology in Behavioral Science*. <https://doi.org/10.1007/s41347-021-00193-8>
- Adeyemi, O., & Issel, M. L. (2021). Establishing a Theoretical Association between the Need for Social Connectedness and Distracted Driving. *PsyArXiv*. <https://doi.org/10.31234/osf.io/35wbk>
- Adeyemi, O. J. (2021). Mobile phone use while driving: Development and validation of knowledge, attitude, and practice survey instruments. *Journal of Safety Research*, 77, 30-39. <https://doi.org/10.1016/j.jsr.2021.01.004>
- Afuwape, O. O., Alonge, T. O., & Okoje, V. M. (2007). Pattern of the cases seen in the accident and emergency department in a Nigerian Tertiary Hospital over a period of twelve months. *Nigerian Postgraduate Medical Journal*, 14(4), 302-305. <https://pubmed.ncbi.nlm.nih.gov/18163138/>
- Akande, T., & Ajao, M. (2006). Awareness of hazards and use of GSM mobile phone among non-commercial drivers in Ilorin, Nigeria. *Annals of African medicine*, 5(4), 166-169. <http://www.bioline.org.br/pdf?am06039>
- Altmann, T. K. (2008). Attitude: a concept analysis. *Nursing Forum*, 43(3), 144-150. <https://doi.org/10.1111/j.1744-6198.2008.00106.x>
- Amaya, R. M. R., & Pinto, S. M. B. (2016). Knowledge, attitudes and practices of occupational risks in Colombian taxi drivers. *International Journal of Occupational Safety and Ergonomics*, 22(1), 152-158. <https://doi.org/10.1080/10803548.2015.1111712>
- Arosanyin, G., Olowosulu, A., & Oyeyemi, G. (2013). An examination of some safety issues among commercial motorcyclists in Nigeria: a case study. *International Journal of Injury Control & Safety Promotion*, 20(2), 103-110. <https://doi.org/10.1080/17457300.2012.686040>
- Bazargan-Hejazi, S., Teruya, S., Pan, D., Lin, J., Gordon, D., Krochalk, P. C., & Bazargan, M. (2017). The theory of planned behavior (TPB) and texting while driving behavior in college students. *Traffic Injury Prevention*, 18(1), 56-62. <https://doi.org/10.1080/15389588.2016.1172703>
- Benedetto, A., Calvi, A., & D'Amico, F. (2012). Effects of mobile telephone tasks on driving performance: a driving simulator study. *Advances in Transportation Studies*, 26(26), 29-44. <http://onlinepubs.trb.org/onlinepubs/conferences/2011/RSS/1/Benedetto,A.pdf>

- Bergmark, R. W., Gliklich, E., Guo, R., & Gliklich, R. E. (2016). Texting while driving: the development and validation of the distracted driving survey and risk score among young adults. *Injury Epidemiology*, 3(1), 7. <https://doi.org/10.1186/s40621-016-0073-8>
- Caird, J. K., Johnston, K. A., Willness, C. R., & Asbridge, M. (2014). The use of meta-analysis or research synthesis to combine driving simulation or naturalistic study results on driver distraction. *Journal of Safety Research*, 49, 91-96. <https://doi.org/10.1016/j.jsr.2014.02.013>
- Cassidy, L. D., Olaomi, O., Ertl, A., & Ameh, E. A. (2016). Collaborative Development and Results of a Nigerian Trauma Registry. *Journal of Registry Management*, 43(1), 23-28. <https://europepmc.org/article/med/27195995>
- Centers for Disease Control and Prevention. (2021). *Distracted Driving*. Centers for Disease Control and Prevention. [https://www.cdc.gov/transportationsafety/distracted\\_driving/index.html](https://www.cdc.gov/transportationsafety/distracted_driving/index.html)
- Donkor, I., Gyedu, A., Edusei, A. K., Ebel, B. E., & Donkor, P. (2018). Mobile phone use among commercial drivers in Ghana: An important threat to road safety. *Ghana Medical Journal*, 52(3), 122-126. <https://doi.org/10.4314/gmj.v52i3.3>
- Federal Road Safety Corps. (2021). *About FRSC*. <https://frsc.gov.ng/about-us/>
- Feldman, J. (2016). Social Media Apps are Too Dangerous to Use While Driving – EndDD.org Joins with the Partnership for Distraction-Free Driving to Launch a Petition to Save Lives. *EndDD.org*. <https://www.enddd.org/end-distracted-driving/endddd-in-the-news/social-media-apps-dangerous-use-driving-endddd-org-joins-partnership-distraction-free-driving-launch-petition-save-lives/>
- Fitch, G. M., Soccolich, S. A., Guo, F., McClafferty, J., Fang, Y., Olson, R. L., Perez, M. A., Hanowski, R. J., Hankey, J. M., & Dingus, T. A. (2013). *The impact of hand-held and hands-free cell phone use on driving performance and safety-critical event risk*. <https://www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2013/811757.pdf>
- GBD 2013 Mortality and Causes of Death Collaborators. (2015). Global, regional, and national age–sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 385(9963), 117-171. [https://doi.org/10.1016/S0140-6736\(14\)61682-2](https://doi.org/10.1016/S0140-6736(14)61682-2)
- Gliklich, E., Guo, R., & Bergmark, R. W. (2016). Texting while driving: A study of 1211 U.S. adults with the Distracted Driving Survey. *Preventive Medicine Report*, 4, 486-489. <https://doi.org/10.1016/j.pmedr.2016.09.003>
- Gumicio, S., Merica, M., Luhman, N., Fauvel, G., Zompi, S., & Ronsse, A. (2011). The KAP Survey Model (Knowledge, Attitudes & Practices). *Medicins du Monde*. <https://issuu.com/medecinsdumonde/docs/47-the-kap-survey-model-knowledge-a>
- Hickman, J. S., & Hanowski, R. J. (2012). An Assessment of Commercial Motor Vehicle Driver Distraction Using Naturalistic Driving Data. *Traffic Injury Prevention*, 13(6), 612-619. <https://doi.org/10.1080/15389588.2012.683841>
- IBM Corp. (2018). *IBM SPSS Statistics for Windows*. In (Version 26) IBM Corp.
- Ishida, T., & Matsuura, T. (2001). The Effect Of Cellular Phone Use On Driving Performance. *International Association of Traffic and Safety Sciences Research*, 25(2), 6-14. [https://doi.org/10.1016/S0386-1112\(14\)60065-0](https://doi.org/10.1016/S0386-1112(14)60065-0)

- Jackson, M. (2021). Clubhouse, Distracted Driving and Making Better Decisions. *Marketing and Social Media for Lawyers*. <https://streaming.lawyer/2021/03/21/distracted-driving-on-clubhouse/>
- Kaliyaperumal, K. (2004). Guideline for conducting a knowledge, attitude and practice (KAP) study. *A ECS illumination*, 4(1), 7-9. [http://v2020eresource.org/content/files/guideline\\_kap\\_Jan\\_mar04.pdf](http://v2020eresource.org/content/files/guideline_kap_Jan_mar04.pdf)
- Kim, H.-J., Min, J.-Y., Kim, H.-J., & Min, K.-B. (2017). Accident risk associated with smartphone addiction: A study on university students in Korea. *Journal of Behavioral Addictions*, 6(4), 699-707. <https://doi.org/https://doi.org/10.1556/2006.6.2017.070>
- Klauer, S. G., Guo, F., Simons-Morton, B. G., Ouimet, M. C., Lee, S. E., & Dingus, T. A. (2014). Distracted driving and risk of road crashes among novice and experienced drivers. *The New England Journal of Medicine*, 370(1), 54-59. <https://doi.org/10.1056/NEJMsa1204142>
- Lagarde, E. (2007). Road traffic injury is an escalating burden in Africa and deserves proportionate research efforts. *PLoS Medicine*, 4(6), 170. <https://doi.org/10.1371/journal.pmed.0040170.t001>
- Lipovac, K., Đerić, M., Tešić, M., Andrić, Z., & Marić, B. (2017). Mobile phone use while driving-literary review [Article]. *Transportation Research: Part F*, 47, 132-142. <https://doi.org/10.1016/j.trf.2017.04.015>
- McDonald, C. C., & Sommers, M. S. (2015). Teen Drivers' Perceptions of Inattention and Cell Phone Use While Driving. *Traffic Injury Prevention*, 16 Supplement 2, 52-58. <https://doi.org/10.1080/15389588.2015.1062886>
- McGehee, D. V. (2014). Visual and cognitive distraction metrics in the age of the smart phone: A basic review. *Annals of Advances in Automotive Medicine*, 58, 15-23. <https://www.ncbi.nlm.nih.gov/pubmed/24776223https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4001673/pdf/002.pdf>
- Nantulya, V. M., & Reich, M. R. (2002). The neglected epidemic: road traffic injuries in developing countries. *BMJ (Clinical research ed.)*, 324(7346), 1139-1141. <https://doi.org/10.1136/bmj.324.7346.1139>
- National Highway Traffic Safety Administration. (2012). *Blueprint for ending distracted driving*. [https://www.nhtsa.gov/staticfiles/nti/distracted\\_driving/pdf/811629.pdf](https://www.nhtsa.gov/staticfiles/nti/distracted_driving/pdf/811629.pdf)
- National Highway Traffic Safety Administration. (2017). *Teen distracted driver data*. <https://crashstats.nhtsa.dot.gov/API/Public/ViewPublication/812667>
- National Highway Traffic Safety Administration. (2021). *Distracted Driving*. <https://www.nhtsa.gov/risky-driving/distracted-driving>
- Nevin, P. E., Blunar, L., Kirk, A. P., Freedheim, A., Kaufman, R., Hitchcock, L., Maeser, J. D., & Ebel, B. E. (2017). 'I wasn't texting; I was just reading an email ...': A qualitative study of distracted driving enforcement in Washington State. *Injury Prevention*, 23(3), 6-6. <https://doi.org/10.1136/injuryprev-2016-042021>
- Ogundipe, S. (2018). Driving with hands-free illegal in Nigeria — FRSC. *Premium Times*. <https://www.premiumtimesng.com/news/top-news/302419-driving-with-hands-free-illegal-in-nigeria-frsc.html>
- Olson, R. L., Hanowski, R. J., Hickman, J. S., & Bocanegra, J. (2009). *Driver distraction in commercial vehicle operations*. <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/DriverDistractionStudy.pdf>

- Olumami, H. O., Ojo, T. K., & Mireku, D. O. (2014). Perceiving Risk Of Automobile Drivers On Mobile Phone Usage While Driving In Ibadan Metropolis, Nigeria. *Business Excellence and Management*, 4(3), 24-35. <https://beman.ase.ro/no43/2.pdf>
- Onyemaechi, N., & Ofoma, U. R. (2016). The Public Health Threat of Road Traffic Accidents in Nigeria: A Call to Action. *Annals of Medical and Health Sciences Research*, 6(4), 199-204. <https://doi.org/10.4103/amhsr.amhsr.452.15>
- Onyemocho, A., Johnbull, O. S., Anekoson, J. I., Raphael, A. E., & Shember-Agela, I. (2013). Use of Mobile Phone by Intercity Commercial Motorist in Three Towns in Benue State, Nigeria-A Threat to Road Crash. *International Journal of Sciences: Basic and Applied Research*, 12(1), 198-207. <https://core.ac.uk/download/pdf/249333565.pdf>
- Oyo State Government. (2019). *About Oyo State*. <https://oyostate.gov.ng/about-oyo-state/>
- Pew Research Center. (2017). *Mobile fact sheet*. <https://www.pewinternet.org/fact-sheet/mobile/>
- Pew Research Center. (2019). *Mobile Fact Sheet*. <https://www.pewinternet.org/fact-sheet/mobile/>
- Rothman, K. J., & Greenland, S. (2005). Causation and Causal Inference in Epidemiology. *American Journal of Public Health*, 95(S1), S144-S150. <https://doi.org/10.2105/AJPH.2004.059204>
- Simmons, S. M., Hicks, A., & Caird, J. K. (2016). Safety-critical event risk associated with cell phone tasks as measured in naturalistic driving studies: A systematic review and meta-analysis. *Accident Analysis and Prevention*, 87, 161-169. <https://doi.org/https://doi.org/10.1016/j.aap.2015.11.015>
- Statista. (2021). *Mobile internet user penetration in Nigeria from 2016 to 2026*. <https://www.statista.com/statistics/972900/internet-user-reach-nigeria/>
- TeenSafe. (2018). *100 Distracted Driving Facts & Statistics For 2018*. <https://teensafe.com/100-distracted-driving-facts-statistics-for-2018/>
- Uhegbu, U. N., & Tight, M. R. (2021). Road User Attitudes and Their Reported Behaviours in Abuja, Nigeria. *Sustainability*, 13(8), 4222. <https://www.mdpi.com/2071-1050/13/8/4222>
- Vardaki, S., & Yannis, G. (2013). Investigating the self-reported behavior of drivers and their attitudes to traffic violations. *Journal of Safety Research*, 46, 1-11. <https://doi.org/10.1016/j.jsr.2013.03.001>
- World Health Organization. (2015). Global status report on road safety 2015. [https://www.afro.who.int/sites/default/files/2017-06/9789241565066\\_eng.pdf](https://www.afro.who.int/sites/default/files/2017-06/9789241565066_eng.pdf)
- World Health Organization. (2018). *Global Status Report on Road Safety 2018*. In (pp. 403). [https://www.who.int/violence\\_injury\\_prevention/road\\_safety\\_status/2018/en/](https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/)
- World Health Organization. (2020). *The top 10 causes of death*. <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>
- World Health Organization. (2021). *Road traffic injuries*. <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>
- World Life Expectancy. (2018). *Road Traffic Accidents*. <https://www.worldlifeexpectancy.com/cause-of-death/road-traffic-accidents/by-country/>
- Yannis, G., Laiou, A., Papantoniou, P., & Gkartzonikas, C. (2016). Simulation of texting impact on young drivers' behavior and safety on motorways. *Transportation Research Part F: Traffic Psychology and Behaviour*, 41, 10-18. <https://doi.org/https://doi.org/10.1016/j.trf.2016.06.003>

### **About the Research**

This thesis was submitted in partial fulfillment of the Master's degree in Public Health at the University of Roehampton, United Kingdom.

### **Acknowledgment**

The author thanks his supervisor, Dr. Tolu Osoba, Department of Public Health, University of Roehampton. Her advising and guidance were instrumental in completing this Master's Thesis. The author thanks Prof. Charlie Reeve, Department of Psychological Science, the University of North Carolina at Charlotte, for his training and guidance on instrument design and validation that informed the analysis of this paper. The author thanks the anonymous reviewer. The reviewer's comments have made this paper better.

### **About the Author**

Oluwaseun Adeyemi completed his Ph.D. in Public Health at the University of North Carolina at Charlotte. He obtained an MSc in Trauma and Orthopedics at the University of Edinburgh, MPH in Public Health from the University of Roehampton, London, and a Membership of the West African College of Surgeons in Nigeria. Oluwaseun has authored several articles relating to injury prevention, trauma care, rural health disparities, and COVID-19. He incorporates Spatial Epidemiology in his work to inform policy and practices.

### **Endnotes**

---

<sup>i</sup> Road crashes may be associated with an increase in road networks and road developments. Additionally, road crashes may be associated with increased travel and increased transit time. There is a paucity of data on the trend of road developments and the volume of miles traveled in Nigeria in the last decade. Also, an increase in the number of motor vehicles may have an association with an increase in the rate of crashes. However, in Nigeria, there is no consistent growth in car sales during this period (see <https://www.ceicdata.com/en/indicator/nigeria/motor-vehicles-sales-growth>).

<sup>ii</sup> The KMPHD, AMPUD, and PMPUD survey instruments are validated instruments. Details of the instrument are available at <https://doi.org/10.1016/j.jsr.2021.01.004>. The sample population used to validate the instrument was from the pilot study from the same population of this index study

<sup>iii</sup> In this study, there are three outcome variables -self-reported crash involvement, self-reported crash injury, and self-reported phone-related crash involvement. Conceptually, these variables are correlated. For example, a driver who experienced a crash injury will have experienced a crash and might have experienced a phone-related crash injury. The demographic characteristics of this population should exhibit a similar phone-related crash pattern.

<sup>iv</sup> Knowledge, attitude, and practice were the predictor variables. These variables were separately assessed on three models: Each model has its separate outcomes, which are 1. Self-reported crash

involvement 2. Self-reported crash injury, and 3. Self-reported phone-related crash involvement. The demographic characteristics of the respondents were similar across the domains of crash outcome measures (see Table 1).

<sup>v</sup> One might wonder how 1% of the population engaged in the bad practice of mobile phone use while driving has a 45-fold increased odds of crash injury. The author presents a simplified example of the statistical dynamic that is occurring. Let us imagine that there are 1000 drivers and 10 out of the 1000 (1%) consistently engage in drunk driving. The other 990 never engage in drunk driving. We ask all of them the question, have you ever had a crash and the response is tabulated (please see the table below). 9 out of 10 (90%) of those that take alcohol had a crash. 10 out of the 990 that never took alcohol had a crash. The odds of a crash are calculated as  $a*d/b*c = 882$ . This example shows the principle of calculating the odds of an event. This principle holds for this study. The proportions across the categories are different and the logistic regression model used in the study adjusted for potential confounders.

Variable	Crash	No Crash	Total
Alcohol present	9 (a)	1 (b)	10
No Alcohol	10 (c)	980 (d)	990
No Alcohol	10	980	990

<sup>vi</sup> Knowledge should influence practice. If the knowledge is poor, the practice may be poor and that might increase risk. With regards to this study, it is plausible that knowledge of phone safety (predictor variable) will be associated with phone-related crashes (one of the three outcome variables). The question, therefore, would be why is knowledge of phone safety associated with crash events or crash injuries that may not be directly linked to phone use? First, the three outcome variables in this study are conceptually related (see ii above). From a statistical point of view, the intrinsic correlation may explain the reason why knowledge of phone safety will be significantly associated with crash events or crash injuries. Secondly, crash events are rarely caused by a single factor. A single crash may be caused by the coexistence of weather factors, night driving, phone use, lack of streetlights, speeding, and drunk driving. In such a case, phone use is a factor - among other factors. A survey respondent will select all these factors as factors associated with the crash event in perspective. Supposing there is another crash with all these factors present excluding phone use while driving, the same respondent would state yes, he has had a crash before and his past crashes were associated with phone use (although one of the two crashes was associated with phone use). The survey did not ask for the number of crash events and which factors were specific to each crash. Identifying the number of crashes will not change the knowledge of phone safety, which if it were poor for the first crash, would remain so for the second crash assuming there was no change in knowledge. The conceptual correlation between that self-reported crash involvement, self-reported crash injury and self-reported phone-related crash involvement may be viewed as a nest of events occurring within another event. Another way to conceptualize the three outcome variables is thinking of the self-reported crash involvement as a large bubble "C", and self-reported phone-related crash involvement as a smaller bubble "c1" within the larger bubble "C" and self-reported crash injury as a smaller bubble "c2", separate from the bubble "c1" but within the larger bubble "C".

<sup>vii</sup> From an epidemiological standpoint, the 9% reported in the index study (the proportion of Nigerian drivers with bad practices of phone use while driving), the 10% reported in Olumami's article (the proportion of Nigerian commercial drivers that dial and text while driving), and the 10% reported in the Vardaki and Yaddis article (the proportion of Greek drivers that make calls

---

on hands-free mobile phones while driving) are similar. These values are proportions and not the actual number. The population sizes of the study conducted in Nigeria and Greece are different and the raw counts would not be a proper way to present the data. The author used proportions here to show the pattern of semblance or non-semblance. The intention is not to create any inference

## **Our Collective Failure: Why the International Community Has Not Intervened to Protect China's Uighur Muslims**

Megan Mooney, B.A.  
*Roger Williams University*

### **Abstract**

Today, as many as two million Uighurs (WEE-guhrs)—a predominately Muslim, Turkish ethnic minority group—in China's northwest Xinjiang Uighur Autonomous Region (XUAR) have been arbitrarily detained in highly-secretive, government-run mass detention centers. After years of conducting intensive surveillance—which included the collecting of biometric data and the seizing of passports—the Chinese government began imprisoning hundreds of thousands under the guise of expelling religious extremism. These detention centers have been likened to the concentration camps of Nazi Germany; and satellite imagery, leaked government documents, and testimony from released Uighur detainees have revealed numerous accounts of torture, starvation, brainwashing, organ harvesting, sexual harassment, and even execution occurring inside the camps. However, while the international community has covered the crisis, it has not been covered in sufficient depth to result in any form of large-scale, cohesive international action to protect the Uighurs.

Through an analysis of over 400 news articles obtained from the ProQuest News and Newspapers database, this thesis investigates the potential reasons for why this massive-scale human rights violation has failed to garner substantial international action to put a stop to the Chinese government's systematic repression of the Uighurs. Three theories are presented for this apparent global apathy: (1) Our international human rights organizations are ineffective and lack an enforcement component, (2) China's strict censorship laws, propaganda, and misinformation campaigns have been relatively successful in keeping the issue out of international spotlight, and (3) China is a global economic superpower upon which the rest of the world relies, and we are afraid to question its legitimacy in terms of human rights.

*Keywords:* Uighur, arbitrary detention, ethnic minority, Belt and Road Initiative, human rights

After visiting China while studying abroad in the spring of 2019, I gained insight into one of the world's largest ongoing human rights atrocities, and how contemporary China's totalitarian government, culture of secrecy facilitated by technological excellence, and role as a rising economic world superpower have all allowed this issue to carry on largely unacknowledged—and certainly un-intervened in—by the international community. When I began researching China's Uighur detentions, the issue seemed clear-cut, and I thought I mostly knew what I would find. However, what I ended up uncovering was far more nuanced,

multifaced, and interesting: the overwhelming influence of a multitrillion-dollar Chinese economic initiative, complicit multinational corporations, threats, intimidation, lies, and deceit on behalf of the Chinese government, massive propaganda efforts and coverup schemes, incriminating leaked documents and satellite imagery, and that is just the beginning.

Although China's systematic detentions of the Uighurs seems to have arisen suddenly, these extreme measures on behalf of the Chinese government are essentially the culmination of over 70 years of Uighur repression. The Uighurs once resided in their own autonomous region formerly known as the East Turkistan Republic, but in 1949 this region was invaded and annexed by the Chinese Communist Party (CCP) ("Why is," 2014). Since this ancient Muslim-majority group had virtually nothing in common with the ethnic Han Chinese, the CCP began persecuting and oppressing the Uighurs almost immediately due to their ethnicity, language, religious beliefs, and their presence in the extremely resource-rich Xinjiang region.

In response to decades of harsh treatment by the Chinese government, in the 1990s, the Uighurs began staging protests which prompted China to intensify its crackdown in the region. This crackdown was even further heightened leading up to the 2008 Olympics in Beijing. In 2009, tensions escalated when rioting broke out in Xinjiang's capital, Urumqi, where approximately 200 people were killed, including many Han Chinese ("Why is," 2014). In the years following, Chinese government repression worsened, thus prompting additional violent incidents on behalf of the Uighurs which the Chinese government labeled as Islamic extremist terrorism. Experts estimate that the mass detentions of the Uighurs started in 2014, and began escalating drastically in 2017 (Maizlan, 2019). Since then, the Chinese government has been waging a violent and unjust campaign of internment and ethnic cleansing—what many have even labeled as genocide.

While a large percentage of Chinese citizens remain completely unaware of this issue due to China's stringent internet censorship and persuasive propaganda, the international community has slowly become aware of the magnitude of these human rights violations, especially within the past year. Due to the recent and ongoing nature of this crisis, and the fact that it has been kept highly secretive, there are relatively few academic studies and publications regarding the detention of the Uighur Muslims. Because of this, my research will attempt to fill the gap in literature by examining why this issue has amassed comparatively little attention and has so far prompted a woefully inadequate response.

Upon beginning the initial stages of my research, I quickly noticed that the amount of information on China's detention of the Uighurs seemed to pale in comparison to the amount of information regarding other significant, contemporary human rights violations. To confirm my observations, I examined a similar human rights crisis of about the same scale and time period for comparison: Myanmar's Rohingya genocide. Both China's Uighurs and Myanmar's Rohingya are Muslim groups that are being actively targeted for their religion, and both have faced ongoing state-sponsored persecution within the last couple of years. Tens of thousands of Rohingya have been killed, and over 700,000 have been forced to flee, (Mahtani, 2020), while Uighur detentions are currently numbered at approximately 2 million (Chudnovsky, 2019). I then

compared search results using the ProQuest News and Newspaper database. Entering the key words 'China' and 'Uighur,' and leaving all other search criteria on default, yielded a total of 9,335 results. I then conducted the same search, but this time using the key words 'Myanmar' and 'Rohingya.' This search generated 30,597 results. I initially assumed this lack of results on China's Uighurs reflected the fact that the world knew what was going on but simply did not care. How else could a search for Myanmar's Rohingya have yielded more than three times the number of results as a search for China's Uighurs?

This question became the foundation for my original first theory, which was that powerful Western nations simply do not care about the crisis because China's Uighurs are so different them in terms of national and religious values, government and economic systems, and even geography. I predicted that the then-current U.S. Presidential administration's generation of xenophobic, Islamophobic, and isolationist rhetoric was fostering a widespread indifference to the plight of the Uighurs. I suspected that anti-Muslim sentiment generated after 9/11 and other Islamic extremist attacks on the Western world, in culmination with decades of fierce anti-communist discourse, had been the perfect storm for an apathetic response to the persecution of a group of Muslims from communist China.

As I began delving deeper into my research, however, I came to see that the topic was far more complex than a simple matter of people not caring, and that there are numerous reasons for the lack of a unified international response. But still, the most crucial issue is that we have not intervened to end the crisis.

### **Group Rights are Human Rights**

One of the most considerable points of contention in the international human rights debate is the difference between individual rights and group rights. In his article, Peter Jones neatly sums up this controversy by raising some thought-provoking questions aimed at generating critical examinations of key wording in legislation within the human rights arena:

Can a right borne by a group be a human right? For some analysts, the answer is obviously, "No." They argue that human rights are the rights of human beings and, self-evidently, each human being is an individual being. Groups may have rights of some sort, but whatever those rights might be, they cannot be human rights. Human rights must be rights borne by human individuals (Jones, 1999, p. 80).

One of the problems with the Universal Declaration of Human Rights (UNHDR) is that nearly every article begins with the word "everyone" or "no one," thus making each article aimed directly at individuals instead of at groups of peoples ("Universal Declaration," 1979). While this may seem like a minute difference, the application and enforcement of these human rights laws can vary drastically depending on whether they are applied to individuals or to collective groups.

When examining human rights for groups of peoples, it is important to look at how these rights differ from individual rights, and how the existence of individual rights may even undermine and challenge the legitimacy of group rights. Sanders posits that because society is accustomed to individuals asserting rights, collective and group rights have not received the same amount of acceptance as individual rights. In essence, Sanders argues that few people would attempt to question the validity or necessity of individual rights, even while they are building a case against the recognition of collective rights (Sanders, 1991). While Sanders suggests that group rights are impeded by the prioritization of individual rights, on the contrary, David Phillips argues that group rights are most effectively promoted through the strengthening of individual rights (Phillips, 2005). Using Iraq and its history of ethnoreligious conflict as a case study, Phillips discusses the Iraqi ethnic and sectarian groups that are seeking out unique constitutional provisions which protect them from discrimination and help to preserve their identities. Phillips proposes that the Iraqi constitution must first improve in terms of promoting more liberal individual rights before these minority groups can assert their collective rights (Phillips, 2005).

Richard Thomson adds another layer of complexity to the debate of the coexisting nature of group and individual rights—or lack thereof. In direct contrast to Phillips who believes that individual rights must first be strengthened, Thomson argues that, in certain societies, group rights have the potential to justify culturally-specific practices such as infanticide and female circumcision, which are inherently harmful to individual rights (Thompson, 1997). One area where Thompson and Phillips would likely agree, however, is on the topic of the benefit of decentralization in fostering group rights. When discussing what policies could potentially benefit Iraqi's minority groups, Phillips contends that group rights can be promoted through decentralization:

Consistent with the principle of decentralization, federal Iraqi state, governorate, county, district, and municipal governments should be able to adopt laws conforming to local customs just so long as such laws do not contradict the constitution or laws enacted by the national parliament within the scope of its powers. (Phillips, 2005, p. 26)

In line with Phillips' position on decentralization, Thomson also agrees that delegating power to minority groups is beneficial in helping them to protect themselves against policy and action by dominant groups that could potentially be harmful. (Thompson, 1997). While Phillips and Thomson would concur that decentralization provides regions that are home to minority groups with the opportunity to protect their language and culture, some scholars argue that this same decentralization could intensify political and economic tensions between central and ethnic minority regions. For example, David Lublin conducted a study which analyzed the share of votes won by ethnoregional parties in 71 different democracies throughout the world, and he found that ethnoregional parties do not benefit from the outcomes of decentralization in non-ethnically decentralized countries (Lublin, 2012). In sum, depending on the type of

decentralization and how it is brought about, it has the potential to either deepen the divide between ethnic and majority groups or to unify the two and foster more equity and cohesiveness between group rights and individual rights within a given country. However, as we continue to examine how individual and group rights interrelate, we begin to observe that these tensions over defining and implementing human rights only become more and more complex.

### **Human Rights for Ethnic and Religious Minorities**

Human rights for ethnic and religious minorities may be uniquely distinct from human rights for other groups of people. Article 27 of the International Covenant on Civil and Political Rights reads, "In those states in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language" (Noorani, 1992, p. 1717). The United Nations General Assembly Resolution takes this idea a step further and lays out principles of enforcement: "States shall take measures where required to ensure that persons belonging to minorities may exercise fully and effectively all their human rights and fundamental freedoms without any discrimination and in full equality before the law" (United Nations, 1992). Despite their origin, many human rights laws regarding ethnic and religious minorities make sure to specifically include key verbiage such as 'equity,' 'equality,' and 'discrimination,' and to make it clear that each and every marginalized group deserves the same rights under the law as their majority counterparts. Although most states' constitutions and formal legal documents include similar phrases as included in the aforementioned quotations, it is in the problem of enforcement where most human rights are at risk of being violated.

When it comes to the treatment of ethnic and religious minorities worldwide, we begin to see a phenomenon which somewhat resembles that of the famous 'chicken and the egg' metaphor. Johnathan Fox suggests that "[cross-sectional analyses] tend to attempt to predict or explain the level of protest or rebellion in which ethnic minorities engage at the expense of determining the causes for the behavior of the government of the state in which these minorities live (Fox, 2000, p. 423). Fox's analysis raises the question: do religious and ethnic minorities tend to rebel because the state has not given them the rights and treatment that they deserve, or has this lack of rights granted by the state been in response to the rebellion of certain minority groups?

History has proven that the former is often the case. Religious and ethnic minorities most often rebel against and protest, sometimes violently, their oppression by the state. More often than not, this pushback results in even further oppression and violation of rights which spawns a vicious cycle of rebellion followed by oppression until the minority group has virtually no rights left at all. Fox posits that the political, economic, and cultural discrimination against ethnic minorities results in the group's formation of grievances which then causes them to mobilize and eventually to rebel (Fox, 2000).

Contrary to Fox's assumptions, Michael Clarke rests his argument on the opposing side of this 'chicken and egg' debate. Clarke discusses ethnic minority rights in China, suggesting that "the nature and scale of the challenge posed by any one ethnic minority to the PRC is largely a function of three major factors: the historical relationship between the ethnic group and the Chinese state; the geographic concentration of the ethnic minority; and the degree of acculturation to the dominant Han society" (Clarke, 2013, p. 109). Essentially, Clarke posits that the People's Republic of China's approach to ethnic minority rights—more specifically, which rights and to what degree these rights are to be granted—is contingent upon the extent to which a minority group assimilates to dominant cultural norms. This implies that, in the case of China, rights are not universally applied, but rather are dependent, first and foremost, upon a minority group's ability to homogenize themselves with the ethnic Han Chinese. In the eyes of the Chinese government, failure to assimilate automatically constitutes a form of rebellion, to which the response is to begin revoking rights.

With regard to the protection of human rights, specifically for ethnic and religious minorities, much of the issue lies in the ideologies of universalism versus particularism. Ethical universalism is the belief that all people's interests should be treated with equal and impartial consideration. Ethical particularism, on the other hand, refers to the idea that preferential consideration should be given to the interests of some people over others (Gewirth, 1988). Therein lies the question: ought rights be universally applied, or do certain minority groups warrant specifically tailored rights to place them at the same baseline as majority groups?

Hegel's political philosophy questions the extent to which human rights law should consider nuanced characteristics of the cultural make-up of various groups. However, Hegelian philosophy also holds that although human rights are inherently universalist in nature, they are more than capable of accommodating the particularity of distinct cultural groups. In all, he argues that neither approach is ideal, but rather that a middle ground in between these two philosophies will allow for a set of human rights laws that is universally applicable, but that also considers the needs of cultural groups (Mullender, 2003).

Ultimately, both components of universalism and particularism in human rights law are necessary for a set of laws that is both inclusive and that also accommodates the cultural nuances of ethnic and religious minority groups. However, the complexity of devising and enforcing a cohesive and fair set of rights that also applies to minority groups does not stop here. In the 21<sup>st</sup> century, globalization has added an entirely new level of complexity to this debate.

### **Globalization, Power, and Human Rights**

Since the end of the Cold War, there has been a marked shift in the world's approach to human rights as a result of the new type of globalization that has emerged. Robert McCorquodale and Richard Fairbrother argue that, as a result of this new era of post-Cold War globalization, states are no longer the only actors involved in decision making regarding human rights; now inter-governmental institutions and transnational corporations are also playing an integral role

(McCorquodale & Fairbrother, 1999). These additional actors make human rights policy creation more complex and tumultuous as numerous other interests are at stake.

McCorquodale and Fairbrother go on to assert that globalization has led to the reconceptualizing of state sovereignty, and that in many cases, international human rights law reflects Western, European values instead of universal ones (McCorquodale & Fairbrother, 1999). Adamantia Pollis and Peter Schwab accept McCorquodale and Fairbrother's claim regarding the Westernization of international human rights law, and add that this Westernization has infringed on state sovereignty as a whole (Pollis & Schwab, 1980). McCorquodale and Fairbrother concede that current international human rights law is incapable of dealing with the globalization-induced changes to state sovereignty and that changes must be made to promote a more inclusive system (McCorquodale & Fairbrother, 1999). But, Pollis and Schwab contend that a more radical rethinking of international human rights and an establishment of universals is in order (Pollis & Schwab, 1980).

While there is a general consensus within the scholarly community on the impacts of post-Cold War globalization on state sovereignty, there is greater contention with regard to whether said globalization has helped or hindered the international human rights effort. Micheline Ishay suggests that although globalization has been associated with a growing gap between rich and poor countries, it has also facilitated a communications revolution which has ultimately opened up new spaces for progress in the human rights arena (Ishay, 2008). Dreher, Gassebner, and Siemers would agree with Ishay in the sense that globalization has been beneficial for international human rights, but would likely disagree with her on the economic component. Dreher et al. argue, on the other hand, that economic, political, and social globalization have all led to a broad-spectrum improvement in international human rights. This improvement is due to the globally reformed economic system which has increased the quantity and quality of available goods and services, thus decreasing the scarcity of goods, which in turn decreases the potential for conflict and repression (Dreher et al., 2012). Contrary to this position, Nisar Mohammad bin Ahmad contends that because globalization is mainly driven by corporate elites and transnational companies, it is almost entirely motivated by for-profit interests, often at the expense of human rights (Mohammad bin Ahmad, 2011).

By adding in the dimension of power dynamics, yet another layer of complexity is seen in the issue of globalization's intersection with human rights. When discussing how human rights and power are inextricably linked, Paul Farmer attests that human rights violations are, "symptoms of deeper pathologies of power and are linked intimately to the social conditions that so often determine who will suffer abuse and who will be shielded from harm" (Farmer, 2003, p. 7). One example of these "deeper pathologies of power" that Farmer discusses is the often inherently repressive tendencies of the state. Julius Stone discusses the pervasive nature of the power imbalance between a state and its people, regardless of the type of government in power and true along a spectrum of other factors, stating, "be it communist or capitalist, freedom is a reality only within limits imposed by the state, and these limits cannot go much beyond the broad ideologies of those that govern" (Stone, 1986, p. 1). When placing Stone's argument in the

context of modern globalization, one might infer that this “reality” is not only beholden to the state, but also to the powerful conglomerate of international organizations and multinational corporations that infringe upon the state’s sovereignty. The question could then be raised: has this relatively rapid increase in the number of entities that now impact this reality of freedom aided or impeded it? The general consensus is that it depends. The more actors that are weighing in on topics of human rights, the more international attention it garners, but on the other hand, corporate greed, diplomatic interests, and trade agreements can cause states to turn a blind eye to human rights violations when it serves their interests. An irrefutable example of this failure to intervene at the stake of interest preservation is the international community’s response to China’s arbitrary detention of its Uighur Muslims.

### **Methodology**

This research explores three competing reasons for why China’s arbitrary detention of its Uighur Muslims has failed to garner substantial international intervention. These three theories are: (1) Our international human rights organizations are ineffective and lack an enforcement component, (2) China’s strict censorship laws, propaganda, and misinformation campaigns have been relatively successful in keeping the issue out of international spotlight, and (3) China is a global economic superpower upon which the rest of the world relies, and we are afraid to question its legitimacy in terms of human rights.

A content analysis of newspaper articles was conducted using the ProQuest News and Newspapers database, and the two key words used were ‘China’ and ‘Uighur.’ However, since the term ‘Uighur’ has multiple spellings, the terms ‘Uyghur’ and ‘Weiwu’er’ were also entered to ensure that articles containing any of these three spellings were included in the search. The search included articles published between January of 2017 and April of 2020, and was limited to include the key words only in the document title. These key words were: China and (Uyghur or Uighur or Weiwu’er).

This search yielded a total of 1,225 results. ‘Newspapers’ was then selected in the left-hand column under ‘Source type,’ and this yielded 663 results. After deselecting all of the duplicates, there remained a total of 459 articles. The articles were then sorted through to see if they included information relevant to either of the three theories, regardless of whether the information supported or contradicted these theories. Articles that covered the same concepts were then grouped together in order to see if there was a general consensus amongst the articles covering that particular topic.

Analyzing all of the articles found using these search criteria created objectivity: articles were not selected only because they supported the theories. Examining hundreds of news sources allowed for a relatively untainted examination of the topic which was up-to-date and free from the influence of extensive analyses often seen in academic articles. Utilizing news sources published all around the world provided a diverse and comprehensive perspective from which to analyze each article. This wide array of news sources helped to present the issue from the

perspective of dozens of different countries, thus preventing analysis from an ethnocentric viewpoint.

### **Lack of Enforcement Capabilities or Cowardice? Effectiveness of HROs**

International human rights organizations have done extremely valuable work in spreading awareness of, preventing instances of, and sometimes even ending violations of human rights all across the globe. These organizations, however, often lack a critical component in stopping rights violations: enforcement. Many prominent human rights organizations have successful track records in ending ethnic conflict and human rights infringements on a smaller scale. When it comes to large-scale, state-sponsored violations of rights, however, even organizations as large as the United Nations can appear powerless in intervening. As important as these organizations may be, no entity, no matter how powerful could ever fulfill the role of a global police force; and oftentimes these organizations are forced to accept major losses in the human rights arena at the sake of state sovereignty.

This lack of enforcement capabilities, however, is not the only factor at play when it comes to how international human rights organizations are dealing with China's detention of Uighur Muslims. In fact, the manner in which many of these organizations are responding to China is completely unprecedented. When the issue first started to come to light, many organizations gave appropriate, predictable responses. But as China's detentions continued to increase in scale and severity, other organizations had entirely unexpected responses. Of the total 459 articles analyzed, 108 referenced the attempts on behalf of a human rights organization to either speak or act out against China's Uighur detentions. And 12 of the articles referenced human rights organizations that did the exact opposite: either ignoring or supporting China's actions. Although they represent only a small proportion of the whole, these 12 articles are significant because they specifically reference instances where human rights organizations acted completely contradictorily to their entire purpose for existing.

Many of the predicted responses began surfacing in 2018, still several years after the Chinese government began profiling Uighurs and building its surveillance state in Xinjiang. In May of 2018, the U.S. Commission on International Religious Freedom (USCIRF) publicly denounced China's increasing crackdown on Uighur Muslims ("USCIRF deeply," 2018). In August of that same year, the United Nations anti-discrimination committee cited reliable sources that there were more than one million Uighurs in detention in "counter extremism centers." The Chinese delegation comprised of 50 officials refused to comment. Numerous other organizations also began to speak out, including the Network of Chinese Human Rights Defenders ("UN Panel," 2018). A month later, the United Nations Committee on the Elimination of Racial Discrimination called on China to release all Uighur detainees. The committee's report cited that the Chinese legislation included only vague references to extremism and an unclear

definition of separatism, which the UN cautioned could lead to criminal profiling of ethno-religious minorities (Cumming-Bruce, 2018); ("UN Committee," 2018).

Following behind these organizations, in 2019, the Muslim Association of Britain issued a release imploring the British government to take a hardline stance against China. As justification for the staunch position, the news release specifically read, "Uighur Muslim children as young as 2 years old, are being abducted and subject to brainwashing and organ harvesting by the Chinese Communist Party's social engineering 'strike hard' campaign" ("Muslim Association," 2019). The Executive Director of the International Coalition to End Transplant Abuse in China (ETAC) announced in a joint letter with other human rights organizations that they were calling for a UN Commission of Inquiry into China's forced organ harvesting ("China accused," 2019). Additionally, a human rights organization by the name of Emgage—which mobilizes and encourages American Muslims to speak out on pertinent issues—has called for a boycott of Beijing's 2022 Olympics ("China's inexcusable," 2019).

Other strategies from human rights organizations have included targeting other countries instead of condemning China directly. The director of the international NGO, Society for Threatened Peoples, implored that the EU take punitive actions against China such as imposing travel sanctions and reevaluating its supply chains in Xinjiang ("Uighur Persecution," 2020). Additionally, the USCIRF has heavily criticized Egypt for its deportation of Uighur Muslims to China. The USCIRF has not yet classified Egypt as a Country of Particular Concern (CPC), but implied that Egypt's indifference to the Uighur community could lead to the reevaluation of this classification ("USCIRF condemns," 2017). China, on the other hand, has been classified as a CPC since 1999 ("USCIRF deeply," 2018). Having been already designated as a Country of Particular Concern for nearly two decades by the time that organizations began speaking out, China could reasonably have already been expected by both the USCIRF or the United Nations to act in such ways. The USCIRF is unique in the sense that it has proactively flagged and ranked countries to monitor, whereas many other organizations tend to respond to rights violations only after they have already begun. This track record raises the question: should China have been kept under even closer scrutiny, or would it have been impossible to foresee or prevent these mass-scale arbitrary detentions from occurring? Based on the responses of individual nations and of rights organizations, a more appropriate question may be: did the world see this coming and choose to look the other way?

After China had been under suspicion of detaining Uighur Muslims for three years, in July of 2019, the ambassadors from over thirty Muslim-majority countries signed a letter to the United Nations at Geneva praising China's policies. This letter stated, in part, "We commend China's remarkable achievements in the field of human rights by adhering to the people-centered development philosophy and protecting and promoting human rights through development" ("Arab, Muslim-majority," 2019). The ambassadors who signed this letter represented Russia, Pakistan, Saudi Arabia, Egypt, Cuba, Algeria, United Arab Emirates, Qatar, Nigeria, Angola, Togo, Tajikistan, Philippines, and Belarus among others. What is even more puzzling is that a vast majority of the signatory nations have taken immense pride in safeguarding Islam

throughout their history ("China warns," 2019b). Could China's rapidly growing global influence really be buying the silence of historically devout Muslim countries? And more crucially, the silence of their UN ambassadors?

Also in 2019, the human rights commission of the Organization of Islamic Cooperation—comprised of 57 countries and describing itself as, "the collective voice of the Muslim world"—initially condemned China's treatment of Uighurs. Just a few months later, however, the organization backtracked and issued a report, "commending the efforts of the People's Republic of China in providing care to its Muslim citizens" (Anderlini, 2019).

In all, a majority of the world's human rights organizations fall into three categories: those that are making their best efforts but lack an enforcement component, those that are acting avoidant and failing to deal with China directly, and those that are either failing to condemn China's actions or are overtly supporting them. Those organizations that fall into the latter two categories are likely either afraid of China, incentivized by China, or both. While encouraging other nations to do their part in stopping China's human rights violations is a great step, failing to publicly condemn or directly deal with China starts these organizations down a path of faintheartedness and avoidance that many others may be inclined to follow. On the contrary, while other human rights organizations are taking all the right stances, they simply lack the autonomy to enforce many of their propositions. Whether it be imposing sanctions or boycotting the Olympics, the kinds of large-scale responses that work are often beyond the scope of action of these well-meaning organizations.

### **Censorship, Propaganda, and Misinformation: China's Efforts to Control Global Discourse**

The Chinese government's extensive misinformation campaigns, persuasive propaganda, and stringent censorship have all played a crucial role in stifling the realities of their Uighur detention camps in an attempt to keep the issue out of the international spotlight. China's responses to allegations have ranged from feigned ignorance through outright denial to elaborate cover stories and carefully-constructed facades. In the analysis of articles described above, China's denial and its misleading narratives were most frequently mentioned. China's denial of what is truly going on inside its Xinjiang borders was mentioned in 161 articles, while China's alternative descriptions of its Uighur detentions were mentioned in 254 articles. Many of these articles contained information about both China's denial and its misrepresentation, given that these two have often gone hand-in-hand. However, a vast majority of these articles referenced these two key factors as mere pretextual descriptions of the situation in Xinjiang, rather than China's efforts to control the global discourse being their central story.

Whether intentionally or not, the manner in which the Chinese government has surveilled and suppressed its Uighur Muslim population has also played a role in keeping the surveillance aspect of the issue relatively difficult to expose. China's exceptional innovation in the technology sector has been far from a secret to its global competitors. However, China has been working on far more than smartphones in recent years, with goals that are far more than

economic. A Human Rights Watch report revealed that China is installing QR codes on the homes of Uighur Muslims in order to gain instant access to information on those living inside (Embury-Dennis, 2018). The Chinese government has also imposed a large-scale electronic surveillance system which monitors commonly used mobile apps such as WhatsApp, Viber, and Telegram. The advanced system can even monitor virtual private networks (VPNs) ("Film depicts," 2019). Even tourists in the Xinjiang region are being surveilled in order to curb the risk of information regarding Uighur detention reaching the outside world: "Chinese border police are secretly installing surveillance apps on the phones of visitors and downloading personal information" ("Uighur Muslims'," 2019). To take measures a step further, the Chinese police with the help of startup tech companies have been developing a software that utilizes artificial intelligence to recognize "sensitive groups of people" by using skin color or eye shape in order to profile Uighur Muslims ("China's systematic," 2020);(Mozur, 2019).

Technological means of surveillance are not the only methods used by the Chinese government. It is also reported that between 2016 and 2017, the Chinese government was using "free medical check-ups" as a guise under which to collect DNA from thousands of Uighur Muslims. One Uighur man reported that during one of these alleged check-ups, officials "scanned his face, recorded his voice and took his fingerprints" ("China collected," 2019). To take measures of repression even further, the Chinese government introduced its "Pair Up and Become One" initiative, under which Chinese affiliates were sent to live as "relatives" in Uighur households. The affiliates' job was to report back to the state any behavior they observe that does not align with traditional, secular Chinese values ("China's latest," 2018);(Wong, 2018). These affiliates have been reported as targeting Uighur women whose husbands have been detained, and even forcing the women to share beds with them (Baynes, 2019).

As the issue began gaining traction in the international media, China correspondingly ramped up efforts to control the global discourse surrounding its illegal internment. One of the many tools China uses to propagate its narrative is its state-sponsored newspaper, *Global Times*, which has published numerous articles attempting to counter or deny any information it does not want reaching the public (Grove, 2020);("Uighur Persecution," 2020). During the early months that Uighur detentions began coming under media scrutiny, China outright denied the existence of any sort of detention camps. In November of 2018, a group of Canadian officials organized the signing of a document by 15 Western ambassadors to China requesting entry into Xinjiang in order to assess allegations of human rights abuses. Chinese Foreign Ministry spokeswoman Hua Chunying responded to the request stating, "This is above and beyond the duties of a diplomat and exceeds their mandate under the Vienna Convention on Diplomatic Relations. So we will by no means allow them to do so" ("China will," 2018).

However, after international intelligence agencies gathered evidence from satellite footage and leaked documents, the Chinese government changed their narrative, announcing that the camps were actually "vocational training centers" built to help Uighurs obtain important skills for the workplace and practice their Mandarin Chinese. In attempt to legitimize the camps, China retroactively changed the laws by making amendments to counterterrorism regulations:

The amended counterterrorism regulations, adopted Tuesday in the northwest Xinjiang region where most Uighurs live, say that authorities can use "vocational skills training centers" to "deradicalize" people suspected of extremism. The previous rules made no reference to vocational centers (Dou, 2018).

In an even further effort to control what they were forced to admit, the Chinese government strategically invited international journalists and diplomats to visit "model camps," and led them on highly controlled tours through the facilities (Emont, 2019);(O'Brien, 2019). These state-controlled visits even included detainees demonstrating their happiness by singing and clapping, while undercover Chinese police officers curbed journalists' efforts at independent reporting (Su & Wilkinson, 2019). Apart from these controlled visits, however, China strictly limits entry of foreign journalists in the Xinjiang region.

In 2019, with international tension over Uighur detentions continuing to mount, the Chinese government announced that it had released a majority of those in Xinjiang's camps. Xinjiang governor, Shohrat Zakir, put out a statement that more than 90% of Uighurs had left the camps and gone on to find jobs. However, it was not long before friends and relatives of those detained began to realize that their missing loved ones had not returned. Zakir's statement failed to include any numbers of those interned or released, and when asked by the public for proof of numbers, Beijing responded by saying that the numbers are fluid since people are constantly coming and going from the camps (Chun Han, 2019).

Be it through censorship, propaganda, misinformation, intimidation, or outright denial, China has succeeded in occluding the narrative surrounding its Uighur detentions. The relative lack of available information on the topic as a whole evinces China's ability to at least partially control the information flowing both into and out of its borders. Additionally, the manner in which China has been systematically oppressing the Uighurs (via extreme secrecy, draconian policing, and advanced technology) has also contributed to China's efforts in keeping the issue out of the public eye.

### **Global Fears of Questioning China: Threats, Intimidation, and the Belt and Road Initiative**

All around the world, both Muslim and non-Muslim countries alike have shown reluctance to criticize China's human rights violations in fear of offending Beijing, suffering backlash from the rising power, and straining crucial economic ties. Although Xinjiang has historically been one of China's poorest regions, it is extremely rich in gas and oil, borders eight countries, and comprises a significant part of China's multitrillion-dollar Belt and Road initiative (O'Brien, 2019). This Chinese infrastructure initiative involves investment and development in over 70 countries and international organizations across Asia, Europe, and Africa. The Belt and Road project, "requires a compliant Uighur population, since all these road and energy pathways between coastal China and the Middle East must pass through Xinjiang" (Kaplan, 2018).

According to the articles analyzed above, the international community's economic reasons for not condemning China's actions are threefold. Out of the total of articles, 51

mentioned China's Belt and Road initiative, 23 mentioned the supply chains of major corporations running through Xinjiang, and 80 referenced other potential economic repercussions or the straining of trade ties as a reason for the overall hesitation to act.

Uighur activists are particularly outraged by the lack of criticism and action coming from Muslim nations around the globe. During his visit to China, Mohammad bin Salam—Saudi Arabia's crown prince—stated "China has the right to take antiterrorism and de-extremism measures to safeguard national security." This statement came just after he and Xi Jinping had solidified a 10-billion-dollar deal to refine a petrochemical complex in China (Osborne, 2019). The Philippines also has a sizeable Muslim population, but its President's position is clear: "I cannot fight China. It would be a war which I can never win." This response could also be in part because the Philippines is currently pursuing closer economic ties with China ("Beijing's global," 2019). Even neighboring Kazakhstan, which is heavily dependent on China for trade, has been accused of silencing human rights activists by arresting those who are opposed to China's policies in Xinjiang (Vanderklippe, 2019).

It is not just Muslim nations who have shown reluctance in speaking out against China's human rights violations. Germany is in a particularly interesting position, as it is actively working toward redeeming itself on the global stage after its own egregious human rights violations. Having been such a strong proponent for promoting the "never again" rhetoric generated after the Holocaust, Germany and its response loom large in the public eye. However, China is Germany's largest trading partner, and when asked whether it was right for German companies to continue investing in Xinjiang in light of the Uighur detentions, Chancellor Angela Merkel's spokesman stated, "In a situation where there are no sanctions or other legal regulations which would forbid that, then it's essentially a business decision...I am not here to give advice to German companies" ("Germany under," 2019).

Many of these countries later went on to retract their statements or issue new statements claiming to be either neutral or in support of the Uighurs. Qatar, for example, retracted its support for China's actions, and claimed that it now wishes to maintain a neutral position ("Qatar retracts," 2019). However, these official public statements are often mere surface-level efforts to appear empathetic about human rights atrocities, even while these nations have no intention of acting to put Xinjiang detentions to a halt. In fact, many nations who have publicly denounced China's treatment of Uighurs are continuing business as usual with China in terms of their economic relationships.

Furthermore, China's diplomatic influence, in collaboration with its economic dominance, has been extremely powerful, especially within the pretext of the Belt and Road Initiative. During a trip to China in April, New Zealand's prime minister refused to comment on the ongoing internments in Xinjiang. This visit came just two weeks after New Zealand's horrific mosque shootings in Christchurch, her compassionate response to which earned the Prime Minister praise from the Islamic world. New Zealand has recently developed deep economic ties with China, and the purpose of the Prime Minister's visit was to discuss its possible participation in China's Belt and Road Initiative ("Beijing's global," 2019). Numerous developing regions of

the world, especially many African countries, rely heavily upon the economic prospects that the Belt and Road Initiative promises. It is not surprising then that over 30 African nations all signed a letter to the UN Human Rights Council defending China's program in Xinjiang (Aggrey, 2019). These African nations likely acted not out of fear for Chinese reprisal, but out of collective yearning for China's economic support, which they hope will provide them a gateway into the global market.

Not all nations, however, have been as reluctant to defend the Uighurs openly and actively. Although its response has been far from perfect, the United States has done more than many nations in attempting to condemn China's actions. For example, former U.S. Secretary of State Mike Pompeo publicly implored all nations to resist China's pressure to repatriate ethnic minorities, warning that these individuals will likely face persecution if sent to China (McNamara, 2019). Additionally, the U.S. Department of Commerce officially blacklisted 28 Chinese technology companies, most of which were in the business of creating facial recognition and video surveillance equipment (Withnall, 2019). In an even further effort to protect the Uighurs, the U.S. House of Representatives passed the Uighur Rights Act of 2019 which included the imposition of harsh sanctions on China ("US passes," 2019). However, as soon as the bill passed, the Chinese Foreign Ministry issued a warning: "For all wrong actions and words...the proper price must be paid" ("China warns," 2019a). In a further effort to prevent the U.S. from going through with implementing sanctions, Hua Chunying, the Chinese foreign ministry spokeswoman threatened, "If you undermine China's interests, you will be hit back" (Dou, 2019).

National governments are far from the only entities afraid to question China's legitimacy for fear of economic repercussions. Some multinational corporations are also bordering on complicity. The supply chains of numerous prominent Western corporations run through China's Xinjiang region, including: Adidas, Kraft, Heinz, Coca-Cola, H&M, and Gap ("China's Uighurs," 2020). Residents throughout the region are often forced into "training camps" to prepare them for forced labor in many of Xinjiang's factories. These "training camps" are essentially political indoctrination programs with the goal of forcing the Uighurs into assimilation. The training topics include the importance of national unity and how to avoid the appearance of extremism by not dressing too conservatively or praying too frequently. Those who refuse the training are often detained as suspected extremists, while those who complete the training are often sent into forced labor, many of them working for Huafu Fashion Co. which produces thread that is ultimately used to weave H&M t-shirts ("Top brands," 2020).

In early 2020, the Australian Strategic Policy Institute (ASPI) accused China of forcing over 80,000 Uighurs out of internment camps and into factories that supply major international brands such as Nike, BMW, Volkswagen, and Apple. The ASPI released a statement claiming, "Under conditions that strongly suggest forced labor, Uighurs are working in factories that are in the supply chains of at least 83 well-known global brands in the technology, clothing and automotive sectors." China's Foreign Ministry rejected the report, arguing that it was only trying

“to smear China's anti-terrorism measures in Xinjiang” (Smith, 2020); (“Think-tank report,” 2020).

While many nations have been quick to publicly condemn China's actions, these nations' economic endeavors tell a different story. It is evident in these nations' actions that no matter how grave an offense may be, a vast majority will prioritize their own supply chains, trade ties, and economic prospects over their national or religious values.

### **Conclusion**

Each of the initial three theories is well substantiated by the entire collection of articles analyzed. The articles not only support these theories, but also present numerous additional factors that were not previously theorized. In all, the reasons for the collective failure of the international community can be attributed to the ineffectiveness of human rights organizations, China's attempts to control global discourse, and the prioritization of countries' economic interests over the plight of the Uighurs.

There was more evidence to support the third theory of economic prioritization than there was to support the first two. This theory is the most telling and is substantiated with the greatest number of contributing factors that play into the idea of the prioritization of China trade ties over action on behalf of the Uighurs. First, China views the geopolitical position of the extremely resource-rich Xinjiang region as its gateway to central and south Asia, both of which are instrumental for the Belt and Road Initiative. Additionally, powerful multinational corporations, often with more wealth than many countries, are refusing to relinquish their supply chains that run through Xinjiang. And lastly, due to a vast trade imbalance, most countries rely more heavily on China for trade than China relies on them. This has led countries to avoid condemning China's Uighur rights violations for the sake of preserving day-to-day economic relations with what is, for many countries, their primary trading partner. Ultimately, the research suggests that this third theory contributes the most to the international community's failure to respond.

The Chinese government's misinformation campaigns, propaganda, and censorship controlling the global discourse comprise the theory with the second greatest amount of supporting evidence. When dealing with the public, China's most common approaches are either outright denial or an entirely false narrative surrounding their Uighur detentions. However, whatever strategy it has used, China has been relatively successful in controlling the information flow in and out of its borders. The manner in which China has been systematically oppressing the Uighurs has also contributed to its efforts in keeping the issue out of the public eye. In part by attempting to keep the issue out of the international spotlight, China has so far managed to stave off a cohesive global response or any sort of backlash that might threaten the continuation of its activities in Xinjiang. Even though references to China's denial and attempts to control discourse were mentioned more frequently in the articles than were aspects of the other two theories, a majority of these references were merely descriptions of the ongoing situation, used as a foundation for the rest of the article rather than being the subject of its investigation.

Lastly, the ineffectiveness of human rights organizations is another reason for the world's lack of a unified effort to protect the Uighurs. A majority of the world's human rights organizations are ineffective because they either lack an enforcement component, avoid dealing with China directly, or either fail to condemn or overtly support China's actions. Despite their effectiveness, most of these organizations have at least been helpful in lobbying their governments, calling for boycotts and sanctions, or spreading the word about Uighur detentions. However, when it comes to large-scale, state-sponsored violations of rights, these organizations are often powerless to intervene.

These deplorable human rights violations have not received nearly enough attention or action on behalf of the international community. The implications of ignoring the detention of China's Uighurs in the interest of economics sets a terrible precedent for neglecting future rights violations in China and around the globe. We must act now so that we do not have to look back on the events and recognize them for what they truly were: our collective failure.

### References

- Aggrey, M. (2019, Oct 13). China seeks support from Africa on Uighur policy. *Sunday Nation*.
- Anderlini, A. J. (2019, May 02). China's muscle stifles criticism of its treatment of Uighurs [Usa Region]. *Financial Times*, 9.
- Arab, Muslim-majority countries sign letter supporting China's mistreatment of Uighur's. (2019, Jul 22). *Morocco World News*.
- Baynes, C. (2019, Nov 06). Uighur women 'forced to share beds' with monitors: CHINA. *The Independent*, 23.
- Beijing's global muscle damps criticism of Uighur crackdown: US, Canada and EU attack 're-education' policy while Muslim leaders hesitate to condemn China. (2019, 2019 Dec 19). *Financial Times*, 6.
- China accused of harvesting organs from Uighur, Falun Gong groups. (2019, Sep 26). *IANS English*.
- China collected DNA with help from U.S. experts: Report: Some Uighurs were essentially forced to give up DNA samples, according to The New York Times. (2019, Feb 21). *The Daily Beast*.
- China warns US on Uighur bill. (2019a, Dec 05). *Pakistan Observer*.
- China will 'firmly reject' diplomatic request to visit Uighur camps. (2018, Nov 15). *The Examiner*.
- China's inexcusable internment of Uighur Muslims (Comment). (2019, Dec 15). *IANS English*.
- Chudnovsky, E. (2019, Oct 14). He was a world-famous Uighur academic, but China sentenced him to death anyway. *The Examiner*.
- Chun Han, W. (2019, July 30, 2019). China says majority of Xinjiang detainees released, but activists question claim; Government officials extend their defense of the re-education programs targeting ethnic Uighurs and other Muslims in Xinjiang. *Wall Street Journal (Online)*.
- Clarke, M. (2013). Ethnic Separatism in the People's Republic of China History, Causes and Contemporary Challenges. *European Journal of East Asian Studies*, 12(1), 109-133.
- Cumming-Bruce, N. (2018, Aug 14). China denies reports of Uighur camps: [Foreign Desk]. *New York Times*.

- Dou, E. (2018, Oct 10). China acknowledges re-education centers for Uighurs. *Dow Jones Institutional News*.
- Dou, E. (2019, Dec 04). China threatens retaliation over proposed U.S. sanctions; Furious statements from Beijing follow House passage of a bill condemning detention of Uighur Muslims. *Wall Street Journal (Online)*.
- Dreher, A., Gassebner, M., & Siemers, L.-H. R. (2012). Globalization, Economic Freedom, and Human Rights. *The Journal of Conflict Resolution*, 56(3), 516-546.
- Embury-Dennis, T. (2018, Sep 12). China installing QR codes on Uighur Muslim homes in mass security crackdown. *The Independent (Daily Edition)*, 27.
- Emont, J. (2019, Dec 12). World News: China campaign mutes criticism of Uighur camps --- Effort in Indonesia pays off as Muslim groups accept Beijing's policies in Xinjiang. *Wall Street Journal*.
- Farmer, P. (2003). *Pathologies of Power: Health, Human Rights, and the New War on the Poor* (1 ed.). University of California Press.
- Fox, J. (2000). Religious Causes of Discrimination against Ethno-Religious Minorities. *International Studies Quarterly*, 44(3), 423-450.
- Gewirth, A. (1988). Ethical Universalism and Particularism. *The Journal of Philosophy*, 85(6), 283-302.
- Grove, T. (2020, 2020 Jan 14). Russia Gives China a Leg Up in Foreign Broadcasting; Moscow-run RT backs China on Hong Kong, Uighurs as countries join in information battle against U.S. *Wall Street Journal (Online)*.
- Ishay, M. R. (2008). Globalization and Its Impact on Human Rights. In *The History of Human Rights* (2 ed., pp. 245-314). University of California Press.
- Jones, P. (1999). Human Rights, Group Rights, and Peoples' Rights. *Human Rights Quarterly*, 21(1), 80-107.
- Kaplan, R. D. (2018, Sep 16). Why China is brutally suppressing Muslims; The assault on the Uighurs serves Beijing's imperial ambitions, which require stable land borders. *Wall Street Journal (Online)*.
- Lublin, D. (2012). Dispersing Authority or Deepening Divisions? Decentralization and Ethnoregional Party Success. *The Journal of Politics*, 74(4), 1079-1093.
- Mahtani, S. (2020). International Court of Justice orders Myanmar to prevent genocide against the Rohingya: The ruling at the top United Nations court is the first international reckoning for Myanmar over its alleged atrocities against the Rohingya Muslim minority. *The Washington Post (Online)*.
- Maizlan, L. (2019, Nov. 25). China's repression of Uighurs in Xinjiang *Council on Foreign Relations*
- McCorquodale, R., & Fairbrother, R. (1999). Globalization and Human Rights. *Human Rights Quarterly*, 21(3), 735-766.
- McNamara, A. (2019, Sep 22). Mike Pompeo urges countries to resist China's demands to repatriate Muslim minorities: "It's about China's attempt to erase its own citizens," Pompeo said of the Chinese camps for Muslim Uighurs. *The Daily Beast*.
- Mohammad bin Ahmad, N. (2011). The Economic Globalisation and its Threat to Human Rights. *International Journal of Business and Social Science* 2(19), 8.
- Mozur, P. (2019, Apr 16). China is using AI to profile Uighur Muslims. *The Hindu*.
- Mullender, R. (2003). Hegel, Human Rights, and Particularism. *Journal of Law and Society*, 30(4), 554-574.

- Muslim Association of Britain: China's treatment of Uighur Muslim children a blight on humanity. (2019, Jul 08). *Targeted News Service*.
- Noorani, A. G. (1992). Minority Rights and Human Rights. *Economic and Political Weekly*, 27(33), 1717-1717.
- O'Brien, D. (2019, Nov 25). China must be tackled over treatment of Uighurs: Irish Government cannot abdicate moral duty to speak out against internment of a million Muslims in camps. *Irish Times*, 12.
- Osborne, S. (2019, Feb 24). Saudi Arabia defends China over Uighur detentions. *The Independent (Daily Edition)*, 24.
- Phillips, D. L. (2005). *Individual and Group Rights* (Power-Sharing in Iraq, Issue.
- Pollis, A., & Schwab, P. (1980). Human Rights: A Western Construct with Limited Applicability. 1-18.
- Qatar retracts support for China's detention of Uighur Muslims. (2019, Aug 21). *Telegraph.co.uk*.
- Sanders, D. (1991). Collective Rights. *Human Rights Quarterly*, 13(3), 368-386.
- Smith, N. (2020, Mar 02). Uighur 'forced labour' allegedly making Nike shoes in China factories. *Irish Independent*, 19.
- Stone, J. (1986). World Order: Between State Power and Human Justice With a Postscript on Mutuality of Strategic Defense Initiatives. *Archiv des Völkerrechts*, 24(1), 1-21.
- Think-tank report on Uighur labour in China lists global brands. (2020, Mar 02). *Cyprus Mail*.
- Thompson, R. H. (1997). Ethnic Minorities and the Case for Collective Rights. *American Anthropologist*, 99(4), 786-798.
- United Nations General Assembly Resolution 47/135: Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities. (1992). American Society of International Law
- Universal Declaration of Human Rights. (1979). *Gregorianum*, 60(3), 425-430.
- USCIRF condemns Egypt's deportation of Uighur Muslims to China. (2017, Aug 03). *Targeted News Service*.
- Vanderklippe, N. (2019, Mar 12). Uyghur rights activist released on house arrest: Serikzhan Bilash has been called a hero by Kazakh families for his work revealing China's 're-education' system. *The Globe and Mail*.
- Withnall, A. (2019, Oct 09). US blacklists tech firms over Beijing's Uighur repression: CHINA. 23.
- Wong, E. (2018, Nov 19). Lawmakers push Trump to act against China on Uighur detention. *The New York Times*.

### **Acknowledgements**

I would like to thank Professor Roberts for his tirelessness in guiding me through the thesis process from start to finish, and also for tolerating me as one of your most complicated academic advisees over the last four years. I will truly miss you. Additionally, thank you to my incredible parents for their unconditional support in my two study abroad experiences. Also, a big thank you to my grandparents for their endless love and encouragement.

### **About the Research**

This paper is an honors thesis submitted to the faculty of the Department of Politics and International Relations in partial fulfillment of the requirements for the bachelor's degree in International Relations.

#### **About the Author**

Megan Mooney is a *summa cum laude* graduate from Roger Williams University's class of 2020, with a Bachelor of Arts in International Relations and Public Health and a minor in Spanish. Mooney's extensive international experience, especially her time as a student on Semester at Sea, has instilled in her a passion for human rights and social justice. She is currently pursuing a Fulbright Grant to teach English in Colombia, and hopes to later pursue an LLM in International Humanitarian Law and Human Rights at the Geneva Academy in Switzerland. Contact: [mmooney634@g.rwu.edu](mailto:mmooney634@g.rwu.edu)



## Journal Description

*International Research and Review* is the official journal of the Phi Beta Delta Honor Society for International Scholars. It is a multidisciplinary journal whose primary objectives are to: (1) recognize, disseminate and share the scholarship of our members with the global academic community; (2) provide a forum for the advancement of academic inquiry and dialogue among all members and stakeholders; and (3) cultivate support for international education among campus leadership by working with university administrators to expand the support for international education among campus leaders.

IRR is a peer-reviewed electronic journal providing a forum for scholars and educators to engage in a multi-disciplinary exchange of ideas, to address topics of mutual concern, and to advocate for policies that enhance the international dimension of higher education. Articles should focus on studies and systematic analyses that employ qualitative, quantitative, a mixture of both methods, and theoretical methodologies from an international scope. Both pedagogical and andragogical perspectives in teaching and learning are welcome.

The Journal reaches out to an audience involved in matters touching all areas of international education, including theoretical, empirical, and normative concerns and concepts as well as practices. It includes stakeholders, practitioners, advocates, as well as faculty, independent researchers, staff, and administrators of programs and institutions engaged in the field. The editor welcomes manuscripts that address the following concerns:

*International studies and perspectives*  
*Review of current literature pertaining to international studies*  
*Initiatives and impacts in international education exchange*  
*International program development at American colleges and universities*  
*Internationalizing of curricula: policies, programs, practices, and impacts*  
*International business education*  
*Comparative international education issues*  
*Curriculum development in area studies*  
*Legal issues in the development of international programming*  
*Other related topics*

### **Peer – Review Process**

All manuscripts will be forwarded to the Editor for initial review of its relevance of theme, significance, and over-all quality. Manuscripts which fit the aim and scope of the Journal, and are of sufficient quality, will then be forwarded to two anonymous reviewers. At the end of the review process, authors will be notified of any comments that the reviewers have made. They will also make a recommendation regarding whether to accept, revise and resubmit, or reject the paper.

### **Publication Frequency**

The IRR is intended to be published twice per year, but will be published more often as additional articles are received. The *Proceedings of Phi Beta Delta* will be a separate publication of Phi Beta Delta but published in the same volume as the IRR. It will include conference papers, speeches, commentary, and other information about the society.

### **Open Access Policy**

This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. The journal will be published solely on-line.

### **Copyright Notice**

Authors hold the copyright of articles published in the IRR. Request to reprint IRR articles in other journals will be addressed to the author. Reprints must credit Phi Beta Delta and the IRR as the original publisher and include the URL of the IRR publication. Permission is hereby granted to copy an article, provided IRR is credited and copies are not sold.

### **Indexing**

Articles published in the IRR will be disseminated by the EBSCOHost Databases to libraries, ERIC Clearinghouse, and other of the clients.

## Author Guidelines

*International Research and Review* is the official journal of the Phi Beta Delta Honor Society for International Scholars. It is a multidisciplinary journal that (1) welcomes submission of manuscripts reflecting research representing *all areas of study* that promote the international and global dimensions of institutions programs (including both policy, practice, and debates) and individual experience of engaging in international education; (2) welcomes articles on current issues of the day regarding

international education: the practice, curriculum, institutional issues, faculty and administration management, and cultural aspects and; (3) welcomes book reviews, and reviews or critiques of current literature.

The increasing interest in international opportunities and promotion of scholarship in this shrinking world create new challenges. This purpose of such a publication is to contribute and engage in the conversation related to the broad frames of international education, internationalization, and international scholars. It is hoped that the Phi Beta Delta annual conference and will provide an environment where students, staff, faculty and interested groups can highlight their scholarship in these areas. The conference also serves as a forum for acquiring new ideas, conceptualizations, best practices, as well as discussion on these and other issues of international education.

Research articles may employ qualitative, quantitative, plural (mixed-methods), and theoretical methodologies from an international scope. Both pedagogical and andragogical perspectives on the international experience of teaching, learning, and cross-cultural interchange are welcome. It is recommended that manuscripts be submitted with less than 10,000 words. As of the Fall 2020 issue, submitted articles must use the bibliographic and formatting standards found in the **APA 7th edition (Publication Manual of the American Psychological Association, 7th edition)**.

Authors whose articles are accepted for publication are required to ensure that their data are fully accessible. Authors of quantitative empirical articles must make their data available for replication purposes. A statement of how that is done must appear in the first footnote of the article. Required material would include all data, specialized computer programs, program recodes, and an explanatory file describing what is included and how to reproduce the published results. The IRR is published four times a year on-line by Phi Beta Delta, Honor Society of International Scholars.

**Please send your submissions to the Director of Publications at: [ms@smitheeassociates.com](mailto:ms@smitheeassociates.com)**

#### *Submission Preparation Checklist*

As part of the submission process, authors are required to check off their submission's compliance with all the following items, and submissions may be returned to authors that do not adhere to these requirements.

1. The submission has not been previously published, nor is it before another journal for consideration.
2. The submission file is in Microsoft Word document file format.
3. All URL addresses in the text are activated and ready to click.
4. The text is double-spaced; uses a 12-point font; *employs italics*, rather than underlining (except with URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.
5. The text adheres to the stylistic and bibliographic requirements of the APA, 7th edition. **(Publication Manual of the American Psychological Association, 7th edition)**.

*Your submission should contain the following:*

- **Name, institute affiliation, mailing address, and email address for all authors**
- Paper title
- Abstract
- Keywords
- Introduction
- Body of paper
- Tables, figures, etc. (if applicable)
- Conclusion
- Acknowledgements
- Brief bio of each author (one paragraph, no more than 100 words)
- References

*Nota bene:* Below are some issues authors should attend to:

1. Use quotation " " marks for all direct citations of material from your sources.
2. Citations in text from a book should include the page number as (author, date, p. #).
3. Citations from an on-line source must cite the paragraph: (author, date, para. #).
4. Use *italics* when you want to emphasize concepts or words.
5. Use the *automatic* hyphenation function to keep the character and word spacing at a minimum. In Microsoft Word, users can automatically hyphenate documents by altering the options within the program. The location of the automatic hyphenation option varies depending on the version of Word you are using. In Microsoft Word versions 2007 and 2010, it is found by clicking on Page Layout, Page Setup box, hyphenation. In Microsoft Word 2003, it is located in the "Tools" menu under "Language." Automatic hyphenation is also available in earlier versions of Microsoft Word. Reference the Help menu in the program you're using if you need help with either automatic or manual hyphenation.

Phi (philomatheia) -love of knowledge

Beta (biotremmonia) -valuing of human life

Delta (diapheren) -achieving excellence

