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Undergraduate Students' Perceptions of Their International Teaching Assistants (ITAs) and Perceptions of Themselves in a Course(s) Instructed by an ITA

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Undergraduate Students' Perceptions of Their International Teaching Assistants (ITAs) and
Perceptions of Themselves in a Course(s) Instructed by an ITA

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Education in Teaching English to Speakers of Other Languages

by

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Abstract

The University of Arkansas is a large, diverse public university. International teaching assistants (ITAs) represent 20% of the total graduate teaching assistants at the University of Arkansas. In the Fall semester of 2015, the University of Arkansas ranked 9th among U.S. universities based on the number of ITAs instructing undergraduate classes. Combining quantitative and qualitative data collection and analysis methods, this study investigated domestic undergraduate students' perceptions of their ITAs and of themselves in courses instructed by ITAs. The descriptive quantitative findings showed that the two most significant challenges facing ITAs are American students' perceptions of their pedagogical skills and their intelligibility, in that order. The hypothesis testing from the inferential quantitative analysis resulted in two rejected hypotheses and eight supported hypotheses. The rejected hypotheses showed that students from medium-sized cities have significantly more positive perceptions of ITAs than students from big cities; and female students have significantly more positive perceptions of ITAs than male students. The supported hypothesis indicated that significance differences among students' perceptions of their ITAs are not moderated by the diversity of their neighborhood backgrounds; the diversity of the high schools they attended; the colleges they were enrolled in; year of enrollment; GPA; age; prior cross-cultural experiences; and number of courses with ITAs. The qualitative findings showed that although the student found one of her ITAs unintelligible, she generally favors ITAs over ATAs.

Keywords: English as a Second Language, International teaching assistants, intelligibility, teaching skills.

Table of Contents

Chapter 1	Introduction _____	1
	Background of Study _____	1
	Foreign TA Challenge _____	2
	The University of Arkansas _____	3
	ITAs at the University of Arkansas _____	4
	Purpose of Study _____	6
	Acronyms and Terminologies _____	6
	Significance of Study _____	7
	Research Questions _____	7
	Assumptions of Study _____	9
	Limitations of Study _____	9
	Delimitations of Study _____	9
Chapter 2	Review of Related Literature _____	10
	Brief History of ITAs in the U.S. Higher Education _____	10
	Perceptions of ITAs _____	11
	ITAs and Intelligibility _____	13
	ITAs and Pedagogy _____	14
	Students' Benefits from ITAs _____	17
	The ITA Screening System at the University of Arkansas _____	18
Chapter 3	Research Methodology _____	22
	Quantitative Study _____	22
	Research Instrument _____	22
	Refining the Survey Questions _____	25
	Data Collection _____	25
	Research Questions _____	26
	Setting _____	27
	Participants _____	28
	Implementation _____	29
	Statistical Procedures _____	30
	Qualitative Study _____	34
Chapter 4	Findings _____	36
	Quantitative Analysis _____	36
	Demography of Undergraduate Students _____	36
	Students' Ratings of ITAs _____	46
	Descriptive Statistics from the Five-Point Scale of Preference _____	46
	Research Hypotheses and Inferential Findings _____	49
	Qualitative Analysis _____	54
Chapter 5	Discussion and Conclusion _____	60
	Summary of Research Questions and Methods _____	60
	Summary of Findings and Interpretation of Results _____	61
	Quantitative Analysis _____	61
	Descriptive statistics from the Five-Point Scale of Preference _____	61
	Research Hypotheses and Inferential Findings _____	71
	Qualitative Analysis _____	79

Implications and Suggestions for Further Research _____	81
Implications and Suggestions for Undergraduate Students, ITAs, Supervisory Professors, and the University Administration _____	83
References _____	87
Appendices _____	91
Appendix 1 Research Protocol Approval Letter _____	91
Appendix 2 Research Instrument _____	92
Appendix 3 Email to Students to Request Participation _____	99
Appendix 4 Special Section Interview Guide _____	100

List of Tables

Table 1	38
Table 2	38
Table 3	39
Table 4	40
Table 5	40
Table 6	41
Table 7	42
Table 8	42
Table 9	43
Table 10	44
Table 11	45
Table 12	45
Table 13	46
Table 14	49
Table 15	51

Chapter 1

Introduction

Background of Study

Higher education in the United States is a perfect example of a culturally diverse community. It is also the perfect simulation of a global society in the world today. Hence, higher education is the place where students are expected to learn about and be prepared for the global society they will face in their career in the future. The culturally diverse community in U.S. higher education institutions is a direct feature of U.S.'s excellence in education. Thousands of international students from all over the world have come and pursued their higher education here. Okahana (2017) reported that there were 283,496 international graduate enrollment in Fall 2016; 92,503 of them are first time enrollment (p. 14-15). In 2016-17, the Institute of International Education reported that there are 903,127 enrolled international students in post-secondary level education in the U.S. Still from the same year, 115,841 are undergraduate new international enrollment and 124,888 are graduate new international enrollment (Institute of International Education, 2017).

There are mutual connections that have taken place between the presence of international students in the U.S. and the higher education institutions. For the international students, they get a world-class education and experience living in a global community. For the higher education institution, the presence of the international students has made their campus culturally rich, which will provide abundant opportunities as well for its students to learn and grow.

The focus of this thesis will be on international students at the University of Arkansas pursuing graduate programs, and specifically those who receive graduate teaching assistantships. For the international students, their education and life in the U.S. are supported by a wide variety

of funding, starting from personal funding, general funding resources such as the Fulbright program, and graduate teaching assistantships. These graduate teaching assistants are what have brought another level of richness to U.S. higher education classrooms.

Foreign TA Challenges

The term “Foreign TA Problems” was first introduced by Bailey in 1984. However, the most recent study found in this field, conducted in 2013, shows that Foreign TA problems still exist. From this timeline, we know that the problems have been taking place for more than 30 years already. What are the “problems” actually? Several studies have mentioned that the first and biggest challenge for foreign-born instructors is those that are related to language and linguistics. Liu (2005 in Ates & Eslami, 2012) argued that the biggest challenge is linguistic in nature. Khan’s research findings (2013), which is the most current study the researcher found in this field, also showed that 93.5% of her respondents stated that language inadequacy was the main reason for any communication gap that happened between native speaker undergraduates and their international teaching assistants. These problems will be discussed more comprehensively in the Review of Related Literature chapter under the “Perceptions on ITAs” section.

Because ITAs are imperative in American classrooms, this unintelligibility caused state representative Bette Grande to propose a bill in North Dakota legislature that any undergraduate student had the right to leave a class without any academic and/or financial penalty if their foreign-born instructor did not speak English clearly (Gravois, 2005). Even more, the student could be eligible for a refund if that happened. If more than 10 percent of students in a class with an international teaching assistant complained about the instructor’s language inadequacy, the university was supposed to remove the professor from his/her teaching position.

After 30 years of persistence of these unexpected challenges, the question becomes whether similar problems also happen at other universities and the University of Arkansas in particular. A study that investigates undergraduate students' perceptions of their international teaching assistants needs to be conducted because there has been only one study found so far at the University of Arkansas under the same field of study (Shiga, 2008). The fact that the University of Arkansas is in the top ten—at the 9th rank precisely—of universities across the United States that employ the most number of international teaching assistants as their primary instructors for undergraduate courses in Fall 2015 (Friedman, 2017,) has made it even more imperative that more studies be conducted to complement the previous one and establish a more solid research base in this field.

The University of Arkansas

The University of Arkansas is a land-grant research university founded in 1871 and located in Fayetteville, Arkansas. In Spring 2018, the university's total enrollment was 25,991 with the following distribution: 21,554 undergraduate enrollment, 4,105 graduate enrollment, and 342 Law enrollment. From 21,554 undergraduate enrollment, 20,829 of them are non-foreign students with various ethnicities and 715 of them are foreign (international) students ("Spring 2018 11th Day Enrollment Report," February 26, 2018.)

There are ten colleges and schools at the University of Arkansas. They are: Dale Bumpers College of Agriculture, Food and Life Sciences; Fay Jones School of Architecture and Design; J. William Fulbright College of Arts and Sciences; Sam M. Walton College of Business; College of Education and Health Professions; College of Engineering; Honors College; Global Campus; Graduate School and International Education; and the School of Law. Out of those ten,

undergraduate students from the first six colleges and schools will be the participants of this study. The other four colleges and schools do not meet the conditions to be participants in this study. The Honors College does not have specific majors. This college unites and organizes the university's top undergraduate students and professors from all disciplines through their various programs. The Global Campus provides online classes and distance learning and that means that direct classroom interaction—one element of this study—is not present. The Graduate School and International Education is the home for all graduate and international students, who are automatically exempt from this study (“Colleges and Schools,” n.d.) The School of Law does not employ international teaching assistants, so it is also automatically exempt from this study (B. R. Gallini, personal communication, February 3, 2018).

The Bumpers College of Agricultural Food and Life Sciences had 1,822 undergraduate students; the Fay Jones School of Architecture and Design had 460 undergraduate students; the Fulbright College of Arts and Science had 6,668 undergraduate students; the College of Education and Health Professions had 3,750 undergraduate students; the College of Engineering had 3,098 undergraduate students; the Walton College of Business had 5,681 undergraduate students (“Spring 2018 11th Day Enrollment Report,” February 26, 2018.) The overall number of graduate teaching assistants at the University of Arkansas in the spring semester 2018 was 618 and 124 of them are international students, which represented approximately 20% of the total graduate teaching assistants (P. Lasner, personal communication, March 12, 2018).

ITAs at the University of Arkansas

The University of Arkansas values their teaching assistants as stated in their website:

“Teaching assistants play a critical role in the education of undergraduate students at the University of Arkansas. Undergraduates often get their first exposure to core courses from teaching assistants. As such, many students see teaching assistants as the face of their department and the university. We value our teaching assistants as both instructors and graduate students, and we strive to help them be fully prepared, confident and knowledgeable in their teaching roles.” (“Teaching Assistant Resources,” n.d.)

One of the support systems the University of Arkansas provides for teaching assistants is through the Teaching Assistant Effectiveness Advisory Committee. This committee plans and prepares teaching assistant orientation and teaching assistant workshops as well as writes and maintains a TA handout. This committee’s objective is to assist teaching assistants as stated in the Teaching Assistant Effectiveness Advisory Committee webpage: “The Teaching Assistant Effectiveness Advisory Committee is dedicated to supporting teaching assistants so they are prepared, confident and knowledgeable in the classroom” (“Teaching Assistant Effectiveness Advisory Committee,” n.d.)

Another support system provided by the university for current and future ITAs is several non-degree credit courses: ELAC 2012: English Phonology for Non-Native Speakers, ELAC 5050: International Graduate Teaching Assistant Training, and ELAC 5060: Intensive Training for International Graduate Teaching Assistants. Unlike the TA handout that is provided by the Teaching Assistant Effectiveness Advisory Committee, these courses are provided by the Graduate School and International Education Office (“English Language and Cultural Studies (ELAC)”, n.d.)

Purpose of Study

The purpose of the study is to investigate undergraduate students' perceptions of their International Teaching Assistants and perceptions of their responsibilities in a course(s) instructed by an ITA.

Acronyms and Terminologies*ITA*

The term ITA will be used for the entire study as an abbreviation of International Teaching Assistant. ITA is a non-US citizen who is pursuing a graduate degree at the University of Arkansas and at the same time has the duties of a course instructor. ITAs discussed in this study may come from a country where English is not their primary language or where English is one of their country's official languages but they have an accent. Their study and monthly stipend are supported by the university in the form of a teaching assistantship.

ATA

The term ATA will be used for the entire study as an abbreviation of American Teaching Assistant. ATA is a US citizen who is pursuing a graduate degree at the University of Arkansas and at the same time has the duties of a course instructor. Their study and monthly stipend are supported by the university in the form of a teaching assistantship.

GTA

The term GTA will be used for the entire study as an abbreviation of Graduate Teaching Assistant. GTA refers to both ITA and ATA.

UG

The term UG will be used for the entire study as an abbreviation of Undergraduate Students whose first language is English. These students are US citizens and can be from various ethnicities such as Hispanic or Latino, American Native Indian or Alaskan Native, Asian, African American, Hawaiian or other Pacific Islander, Caucasian, and two or more races.

Significance of Study

1. This study seeks to provide a clearer understanding of undergraduate students' perceptions of their International Teaching Assistants and perceptions of themselves in a course(s) instructed by an ITA at the University of Arkansas.
2. This study seeks to complement an existing previous study of a similar topic. Hence, there will be a continuation of the research at the University of Arkansas.
3. The result of this study also seeks to provide some information about whether the ITA screening method currently implemented at the University of Arkansas provides satisfactory results as evidenced by survey results on undergraduate students' perceptions.

Research Questions

The research questions for this study are divided into two parts:

1. On a scale of 0 to 5, what is the undergraduate students' perceptions of their ITAs, for each individual construct and their perceptions for all six constructs in general?
2. Questions on whether there is a difference in undergraduate students' perceptions of their ITAs moderated by their characteristics.

Sub-Question 1: Is there a difference in undergraduate students' perception of their ITAs based on the size range of their hometown during K-12?

Sub-Question 2: Is there a difference in undergraduate students' perception of their ITAs by their community/neighborhood predominant ethnicity/race during K-12?

Sub-Question 3: Is there a difference in undergraduate students' perception of their ITAs by their high school predominant ethnicity/race?

Sub-Question 4: Is there a difference in undergraduate students' perception of their ITAs between students who have cross-cultural or international experience or not?

Sub-Question 5: Is there a difference in undergraduate students' perception of their ITAs by the number of courses they have taken with an ITA?

Sub-Question 6: Is there a difference in undergraduate students' perception of their ITAs by colleges/schools they are enrolled at?

Sub-Question 7: Is there a difference in undergraduate students' perception of their ITAs by year of enrollment?

Sub-Question 8: Is there a difference in undergraduate students' perception of their ITAs by estimated cumulative GPA?

Sub-Question 9: Is there a difference in undergraduate students' perception of their ITAs by age?

Sub-Question 10: Is there a difference in undergraduate students' perception of their ITAs by their gender?

Assumptions of Study

This study was conducted under several assumptions as follows:

1. The researcher assumed all students enrolled in the Spring, Summer, and Fall 2018 semesters at the University of Arkansas received the email invitation to take the survey.
2. The researcher assumed that students who responded to the survey filled it out honestly.

Limitations of Study

1. Some undergraduate students might be non-native English speakers. However, the survey was intended for undergraduate English native speakers.
2. This study is self-selected participation and that resulted in the distribution of respondents across colleges that did not reflect the distribution of the population at this university.
3. The study is limited to the University of Arkansas.

Delimitations of Study

1. A pilot study to test validity and reliability of the instrument was canceled due to time and resources limitations. Coefficient Alpha tool on IBM SPSS Statistics software was initially going to be used to test the instrument's reliability. Survey/Interview Validation Rubric for Expert Panel (VREP) was initially going to be used to test the instrument's construct, and content validity (Simon and White, 2016). Only face validity was tested.

Chapter 2

Review of Related Literature

This chapter overviews the history of ITAs' immersion into the U.S. education system, issues surrounding ITAs, the results of previous studies on the issues, and the ITAs screening system the University of Arkansas has to test ITAs prospective ITAs.

Brief History of ITAs in the U.S. Higher Education

In his foreword, Jonathan D. Fife states that the first graduate assistantship concept was first introduced when John Hopkins University was founded in 1876 and when the research university system was born. At that era, the graduate assistants' roles were mostly used in helping the main faculties in preparing class materials, grading assignments, and leading small discussion sessions (Smith, R. M., Byrd, P., Nelson, G. L., Barrett, R. P., & Constantinides, J. C., 1992). Lewis (1997) stated that there was hardly any direct contact between these graduate assistants and students. However, their responsibilities in class widened as a direct consequence of the Servicemen's Readjustment Act of 1944, or as it is more commonly known, the GI Bill of Rights (as cited in Khan, 2003).

According to U.S. Department of Veterans Affairs (n.d.) on education and training, after the World War II ended, millions of soldiers came back home and tried to make a living since they no longer had duties outside the country. Before the war, college was one of two prospects that were beyond their financial capacity (the other being homeownership). The passage of the GI Bill granted these veterans the ability to pursue higher education (U.S. Department of Veterans Affairs. Education and Training, n.d.). This rush of post-war warriors was, according to Luo (2000), what called for more instructors in US college classes (as cited in Khan, 2003).

Kaplan (1989) suggested that the inclusion of international graduate assistants came into this setting with the launch of Sputnik, the world's first artificial satellite by the Soviet Union, on January 27, 1957 (as cited in Khan, 2003). This made President Eisenhower sign the National Defense Education Act (NDEA) in the following year that emphasized the need of research and the pursuit of post-secondary education in the U.S. Scholars from all over the world also took advantage of this act (Hunt, n.d.).

Interestingly, Smith et al. (1992) noticed that the trend shows that the number of international students enrolling in scientific and technical fields of study experienced an increase, but the number of domestic students in these areas decreased. Fife concluded in his foreword that the main reason for employing ITAs is the continuing shortage of qualified American graduate students (Smith et al., 1992).

Perceptions of ITAs

International teaching assistants (ITAs) play an important role in higher education institutions in the United States. Kendall & Schussler (2012, in Meyer & Mao, 2014, p. 12) state that universities have relied on these ITAs to teach undergraduate basic courses. On the other hand, ITAs get immeasurable experience by both pursuing their higher education and applying their knowledge through teaching. With this, U.S. undergraduate classrooms have become culturally more plural and much closer in resemblance to the global and pluralistic world. This relationship is in many ways beneficial for each party involved in this relationship. However, studies have reported that there have been complaints from undergraduate students about their ITAs for various reasons.

Earlier research has largely reported that undergraduate students favor ATAs over ITAs (Bresnahan et al., 2002; Rubin, 1992, in Kang, Rubin, & Lindemann, 2015, p. 682). Meyer & Mao (2015, p. 12) compiled research results from Jiang (2014); Smith, Strom, & Muthuswamy (2005); and Trice (2003) in the following statement: “The growing reliance on ITAs has been accompanied by students’ complaints, as American undergraduates have rated ITAs less favorably than ATAs on teaching evaluations at both beginning and end of the semester.” Reasons expressed for this preference have ranged from issues related to linguistic or language competence, teaching skills, to ideas that supposedly do not have any direct relation with an instructor’s teaching performance, such as age, gender, and other homophilic reasons. In addition to that, there has been research that reported that the preference of ATAs over ITAs actually comes more from the students’ stereotyped perception than from any of the reasons mentioned above (Rubin, 2002, in Kang, Rubin, & Lindemann, 2015, p. 682).

Other challenges faced by international teaching faculties are credibility and teaching skills (Bulamur, 2013). Another article mentioned that the challenges are: establishing credibility and authority as their language competency is being questioned; subtle racism; and cultural expectations and values (Ates & Eslami, 2012.) The degree of these challenges might be different across variables such as age level, previous experience with international instructors, and course level. However, and unfortunately, Bulamur (2013) stated in her study that the degree of these challenges is also determined by “how foreign” their instructors are. She was considered “less foreign” than her two other peer instructors who were Indian because she was a white person from Turkey.

ITAs and Intelligibility

There is no universal definition of intelligibility or a widely accepted consensus on an instrument to measure it (Munro & Derwing, 1999 in Isaacs, 2008). Intelligibility is a complex idea, and as such, it has been defined and measured in various methods (Albrechtsen, & Faerch, 1980; Fayer & Krasinski, 1987; Jenkins, 2000, 1982; Munro & Derwing, 1995a, 1999; Nelson, 1983; Smith 1985; Varonis & Gass, 1982 in Hahn, 2004). Abercombie (1949 in Isaacs, 2008) defined intelligibility as ‘a pronunciation which can be understood with little or no conscious effort on the part of the listener’ (p. 120). Kenworthy (1987 in Isaacs, 2008) described ‘comfortably intelligible’ as ‘being understood by a listener at a given time in a given situation’ and equated it with ‘understandability’ (p. 13). Derwing and Munro (1997 in Isaacs, 2008) define intelligibility as how much speech a listener can understand.

In terms of measuring intelligibility, researchers also have different strategies. Gass and Varonis (1984 in Isaacs, 2008) measured comprehensibility (similar to Derwing and Munro’s ‘intelligibility’) by having native speakers transcribe utterances read aloud by non-native speakers. Smith (1992 in Isaacs, 2008) measured intelligibility using fixed cloze tests. Intelligibility scores were calculated by tabulating the number of blanks that the listener was able to fill in. Institutions that employ ITAs use different instruments to measure ITAs’ spoken English. Numerous higher education institutions use the Test of Spoken English (TSE) and its retired version, the SPEAK test (Celce-Murcia, Brinton, & Goodwin, 1996 in Isaacs, 2008). The University of Arkansas uses the Spoken Language Proficiency Test (SLPT) which will be explained in another section of this chapter.

The various spoken English tests play a crucial role in determining whether a graduate student has a sufficient level of English speaking intelligibility to be eligible to teach

undergraduate courses (Gorsuch, 2011; Wallace, 2014; ‘What is’, 2014; in Wallace, 2015). If the graduate student is eventually granted the teaching assistant position, her/his students’ perceptions of his/her English speaking ability (as evidenced by surveys or student complaints) will also determine if the funding will continue (Wallace, 2015). Intelligibility is mentioned as one of major concerns among those who work closely with ITAs (Chiang, 2009; Gorsuch, 2003; Hinofotis, Bailey, & Stern, 1981; Hoekje & Linnell, 1994; Hoekje & Williams, 1992; Smith, Byrd, Nelson, Barrett, & Constantinides, 1992 in Mishima & Cheng, 2017). Studies show that poor pronunciation has been reported to be the most easily recognized struggle ITAs have and this notion comes not only from students and language researchers (Hoekje & Williams, 1992 in Isaacs, 2008) but also from ITAs themselves (Cheng, Myles, & Curtis, 2004 in Isaacs, 2008).

Intelligibility is a complicated construct, and there is no fixed rule about which pronunciation features (such as are stress, rhyme, and/or intonation) are important in assessing intelligibility (Isaacs, 2008). Although necessary, intelligibility should not be the only component to measure whether an ITA is capable or not to instruct an undergraduate classroom (Isaacs, 2008). It is widely accepted in foreign and/or second language learning that intelligibility is a proper learning objective, yet there is no best method to assess and to measure it (Munro & Derwing, 1999 in Isaacs, 2008).

ITAs and Pedagogy

In his foreword, Fife mentioned that many challenges for ITAs are similar to those of their American counterparts. The major differences are that ITAs have an extended list of challenges that involve language and cultural issues (Smith et al., 1992). Some challenges for GTAs in general, both for ITAs and their American counterparts, are as the “first line of defense” for

instruction (Nicklow, Marikunte, & Chevalier, 2007). Moore (1991) mentioned that undergraduate students usually connect to their GTAs more readily than to their regular professors due to similarity in age and social status (as cited in Gardner & Jones, 2011). They play a crucial role in connecting students and their regular professor (Stoecker, Schmidbauer, Mullin, & Young, 1993). However, this crucial role is not usually accompanied by adequate support system training (Alford, 1997 in Nicklow et al., 2007; Stoecker et al., 1993; Luft, Kurdziel, Roehrig, & Turner, 2004).

Since their main duty is to give instruction in a lab or classroom, GTAs are required to acquire skills that every instructor should possess. Shulman (1986) mentioned that there are at least three types of knowledge a GTA should have before teaching a course: knowledge on the subject or discipline, knowledge on the curriculum, and pedagogical content knowledge (as cited in Luft et al., 2004; and Dotger, 2011). Luft et al. (2004) specified the teaching requirements in the fields of science which include: content knowledge, conceptual knowledge, reflective practice, and knowledge of teaching and learning. Herrington and Nakhleh (2003) conducted a survey of 14 GTAs to inquire what knowledge they thought necessary to instruct a chemistry lab. Their responses were knowledge about student learning, knowledge about teaching, knowledge of chemistry content, and knowledge about specific laboratory tasks (as cited in Gardner & Jones, 2011). ITAs will have to add to the list above the knowledge to pass the English screening test administered by their institution.

As has been mentioned above, GTAs' crucial role is not accompanied by adequate support system training. They receive very little or no pedagogical training at all (Alford, 1997 in Nicklow et al., 2007; Stoecker et al., 1993; Luft et al., 2004).). GTAs' training usually consists of a few days to prepare their teaching duties (Nicklow et al., 2007; Gardner & Jones, 2011;

Shannon, Twale, & Moore, 1998). Sometimes they even arrive on campus only a matter of few days before the semester officially starts (Luo, Bellows, & Grady, 2000). With these already short trainings, a lot of them are not field specific (Holten & Nilson, 1990 as cited in Shannon et al., 1998). The training often focuses more on procedural issues such as students' ethics and plagiarism rather than on pedagogical skills (Nicklow et al., 2007; Barrus, Armstrong, Renfrew, & Garrard, 1974 as cited in Luft et al., 2004; Rushin, De Saix, Lumsden, Streubel, Summers, & Berson, 1997 as cited in Luft et al., 2004; Jones, 1993 as cited in Luft et al., 2004; Luft et al., 2004; Buerkel-Rothfuss & Gray, 1991 as cited in Shannon et al., 1998).

GTAs do learn and improve from their on-the-job experience (Nyquist, Abbot, & Wulff, 1989 as cited in Gardner & Jones, 2011). Sometimes GTAs teach each other, so that for the first time GTAs will learn from their more experienced peers. However, if more experienced but still untrained GTAs train their novice peers, the circle of ineffective teaching and learning practices may continue in class (Gardner & Jones, 2011). It is important to acknowledge that GTAs do not become effective in classroom automatically from gaining an advance degree; they still need adequate training (Nicklow et al., 2007) or a close mentorship from experienced faculty members (Bomotti, 1994; Jones, 1993; Moore, 1996; Worthen, 1992 as cited in Shannon et al., 1998).

Another challenge faced by GTAs is that the current educational approach is not what they experienced when they were at school. A lot of GTAs are not familiar with newer education reform (Luft et al., 2004) which calls for active inquiry, problem-solving strategies, and effective learning (Luo et al., 2000), and some institutions do not have a structured transitional period for these GTAs to adapt to their new instructional responsibilities (Luft et al., 2004). Appleby (1990) mentioned that undergraduate students can be quite challenging as well (as cited in Luo et al.,

2000), and this phenomenon is compounded by the increasingly more diverse students (Banks, 1991; Border and Chism, 1992; Solomon, 1991 as cited in Luo et al., 2000).

The list of challenges above goes on for international teaching assistants. ITAs may have very different educational backgrounds and experiences from the students they teach. They are not familiar with interaction patterns between students and teachers in U.S. classrooms (Bauer, 1996; Davis, 1991 as cited in Luo et al., 2000). In addition to that, the new education reform is apparently more challenging for them, because they may have traditional concepts of learning and acquiring knowledge that rely a lot on memorization and structured procedures (Constantinides, 2000 as cited in Gardner & Jones, 2011).

Students' Benefits from ITAs

It is a widely accepted notion that every student will have their own favorite teacher, or prefer a certain teacher over some others because their teaching methods match their learning styles. However, it is somewhat unfortunate that studies have shown that there have been more complaints from undergraduates about ITAs than about ATAs. ITAs provide priceless experience and opportunities a student could not get otherwise. The U.S. is getting more and more diverse. The 2002 United States Census Bureau forecasted that in few years, one third of the U.S. population would consist of minority citizens. By the end of 2020, one-half of its population will be composed of minority citizens, according to the same census. This increase reflects the diversity in the world (in Ameny-Dixon, 2004). A diverse classroom seems to be a good simulation to prepare students for functioning well in the increasingly diverse society in which they will work and live (Clayton-Pederson & Musil, n.d.). If a diverse classroom is a simulation of a real world, this simulation is relatively risk free in the sense that if students get

lost in their ITAs' explanation that results in their not understanding the course materials, there are always chances to seek help. Meanwhile in real life, failing to create an effective communication across cultural differences in a work place could result in losing the job.

Another advantage students will directly get from ITAs is the chance to learn another culture, embrace differences, and celebrate diversity. As Bulamur (2013) mentioned in her study, she perceived her position as an ITA as an opportunity to present a multicultural environment in her classroom where students would learn to see different cultures as different, not right or wrong (p. 173).

Considering the preparations a teaching assistant has to go through before getting the position, it is more than probable that they are capable and credible both in their language proficiency, field of study, and pedagogy skills. The only struggle students may have is their accent—if we want to refer it as a struggle instead of looking at a more positive side as an opportunity to learn and get used to different accents. Accentedness should not be overemphasized since –native or non-native– each English speaker possesses a unique accent (Majanen, 2008, p. 2).

The ITA Screening System at the University of Arkansas

Some requirements for being a teaching assistant at the University of Arkansas vary across departments. However, there are standard requirements which all teaching assistants from any departments have to undergo, as stated in the University of Arkansas Graduate Admission 2017-18 Catalog (“Admission,” n.d.). These requirements apply to every non-native speaker of English, regardless of citizenship, who is seeking a teaching assistantship that requires direct

contact with students in teaching or tutorial roles, in a traditional classroom setting or via distance education. In general, the requirements fall into two categories:

1. Spoken English Language Competency Test

Submitting a test score of the speaking sub-test on one of the following tests at least a:

- 7 on the IELTS
- 26 on the Internet-based TOEFL
- 71 on the PTE-A, or
- “pass” on the Spoken Language Proficiency Test (SLPT).

2. Written English Competency Test

1) submitting a test score of the speaking sub-test on one of the following tests at least a:

- 6.0 on the IELTS
- 26 on the Internet-based TOEFL
- 4.0 on the GRE
- 4.5 on the GMAT
- 71 on the PTE-A, or
- 70 on the English Language Proficiency Test (ELPT) OR

2) by concurrently enrolling in

ELAC 2033 Principles of Research Writing and ELAC 0011 Writing Workshop:

Grammar through Editing, by a request from The Graduate Coordinator or Department Chair/program Director.

There is another test that international students applying for a teaching assistantship must take: Spoken Language Proficiency Test (SLPT). It is a short interactive test between the test taker and examiners measuring their speaking skills. The way this test works is that a topic is

sent to the test taker's email address one day before the scheduled exam. The test taker should then prepare a 10-minute lecture or teaching presentation. On the day of the test, the test taker must simulate the teaching-learning process using the presentation prepared, as well as answer questions about the lesson from examiners. She/he may use a whiteboard or notes but is not allowed to read the lesson. Each SLPT exam is video recorded ("SLPT," n.d.)

The SLPT evaluators will assess the test taker's overall comprehensibility in three key areas: pronunciation, language and delivery. The following explanation is how the scores are described:

1. Pronunciation (35 Points)

- Articulation of Sound: Pronounces sounds clearly enough at the word level that the listener can understand what word is intended.
- Word Stress: Correct word stress (expecTAtion, SIMilar, scenARio); does not add or drop syllables (chang -ed; experim...); occasional incorrect word stress does not impede understanding.
- Intonation: Varied pitch aids in understanding the meaning (a variety of rising, falling and level tones; rising for Y/N questions; falling at end of sentences).
- Prominence: Says important words louder, longer and higher pitched to give emphasis; pauses for emphasis; may use body language to emphasize key words.

2. Language (20 Points)

- Grammar: Presenter uses a wide range of grammatical structures effectively (Errors are minor or infrequent and do not interfere with / distract from learning).
- Vocabulary: Uses a wide vocabulary flexibly to discuss topics at length and make the meaning clear.

3. Delivery (35 Points)

- Fluency: Able to speak coherently at length with a smooth flow of words (neither too fast, nor too slow). No long pauses to search for words. Does not use a lot of repetition or self-correction (related to language).
- Comprehensibility: Presenter enhances his / her communication by using gestures and visual aids (such as pointing to the board). Uses repetition and paraphrasing to help the audience understand. Appropriate volume.
- Audience Awareness: Presenter is aware of listener non-comprehension; uses techniques such as eye-contact, wait time, and comprehension check questions – “Does everyone understand so far?”
- Organization: Material presented in a logical order. Presenter uses transitional phrases effectively to provide cohesion to the content (“First” “Second,” “Okay, let me summarize by...” “For example”).
- Context: Presenter gives clear definitions and examples. Able to adjust these if needed based on audience interaction.
- Aural Comprehension: Presenter demonstrates listening comprehension of English spoken at a natural rate. Negotiates meaning through appropriate questions (“SLPT,” n.d.)

Chapter 3

Research Methodology

This study utilizes both quantitative and qualitative research methodology. The initial design was quantitative only, until a student reached out to the researcher with an interesting case. The researcher decided to interview the student for a deeper understanding on the case and the result of the interview will be discussed qualitatively.

Quantitative Study

Research Instrument

The quantitative section of this study used a survey to collect data. Surveys are an efficient technique to collect data from a broad spectrum of the population and in different educational settings (Check & Schutt, 2011, p. 160). A well-designed survey is versatile, efficient, and generalizable. A survey is versatile because it is able to gather information on almost any educational issues. It is efficient because it is relatively low cost and time efficient. With a large enough number of samples, it is generalizable because it can give precise representation of larger or other similar populations (Check & Schutt, 2011, p. 160). The results of the survey were analyzed quantitatively using ANOVA and Independent T-Test.

The survey consists of four aspects: consent form, demographic information, experience with ITAs, and scale of preference. The first aspect, the consent form, asked the participants' agreement to be part of this study and explained that all the information they provide in the questionnaire would remain anonymous and confidential. The second aspect, the background information, consists of three parts: current information (7 questions), hometown and school background (3 questions), and international or cross-cultural experience at the University of

Arkansas (6 questions). This part is adapted from Fox's study on functions and effects on international teaching assistants at a major research institution (1991). The third aspect, their experience with ITAs, consists of 2 questions, which are adapted from Khan's study on understanding undergraduates' perception on their ITAs (2013). Most of the survey questions are adapted from other studies because it is advisable to use an existing instrument tool that has been validated where possible.

The last aspect, the scale of preference, has 36 Likert-scale statements. Eighteen of them are adapted from Fox's study on functions and effects on ITAs at a major research institution (1991), 10 of them are adapted from Ates' (2008) study on preservice teachers' perceptions of the native and non-native English speaking graduate teaching assistants in ESL methodology courses, and the rest are items developed by the researcher. These 36 statements are developed based on six different constructs and each construct has six statements. Statements in each construct are designed in such a way that they have neutral meaning and are written both in equal numbers of positive and negative sentences.

The idea of developing the scale of preference based on constructs is also inspired from Fox' study (1991). The researcher develops the constructs based on issues and challenges surrounding ITAs and whether undergraduate students understand their responsibilities in a class instructed by an ITA. The constructs are as follows:

Construct 1: ITAs' language and linguistics issue (intelligibility).

Statement examples:

Positive: My ITA(s) has an accent, but I can understand her/his explanations.

Negative: If I got an ITA with a strong foreign accent, I would try to transfer to a different section of the course.

Construct 2: ITAs' pedagogy and teaching skills.

Statement examples:

Positive: My ITA(s) always uses teaching media to help him/her explain the lesson.

Negative: Lecture is the preferred method of instruction my ITA(s) uses in teaching.

Construct 3: ITAs' personal characteristic and communication style.

Statement examples:

Positive: Both the ITA and the student should share the responsibility for classroom communication.

Negative: My ITA(s) is unwilling to meet outside of class hours.

Construct 4: Cultural values students will experience in a course instructed by an ITA.

Statement examples:

Positive: ITAs can give students a taste of another culture, which, in itself, is educationally valuable.

Negative: In the future, I probably won't live or work with people from other countries or cultures.

Construct 5: Students' understanding of course materials and their expected grades.

Statement examples:

Positive: As long as I put in effort (i.e. come to class, pay attention to my ITA(s)' lesson, and do my assignments) I feel I can get a good grade in the course.

Negative: Having an ITA will often cause students to perform lower on exams.

Construct 6: Students' responsibility in class

Statement examples:

Positive: Students' attitudes affect their ability to understand ITAs in class.

Negative: When there are communication problems between students and ITAs, students can do very little to improve the situation.

For the qualitative section, interview was used to collect data. Fifteen questions were asked (see Appendix 4), covering six topics: information about the courses and the ITAs; problems and difficulties in courses instructed by ITAs; the ITAs' communication styles; differences between classes taught by ITAs and ATAs; advantages and disadvantages of having ITAs as instructors; and suggestions for ITAs.

Refining the Survey Questions

As Check and Schutt (2011) argued, "The only good question is a pretested question" (p. 163), the researcher conducted the survey question refinement in two ways. These methods of refining the survey questions are also used to test face validity.

1. Discussing the questionnaire with experts. The questionnaire has been submitted to the research advisor and an educational specialist for preview.
2. Conducting a cognitive interview by asking some individuals similar to the research participants (undergraduate students at the University of Arkansas) to "think aloud" as they answer the questions and provide some feedback for the questions' clarity.

Data Collection

The survey was sent out to undergraduate students online. As the first step, the researcher wrote an email to all deans in all colleges and schools that became participants of this study, asking them to distribute the survey to their US-citizen undergraduate students. The researcher used a private website company called Qualtrics to distribute the survey. This software was chosen

because the University of Arkansas has the license and students can use it for free. Qualtrics provides a tool to calculate sample size with confidence level, population size, and the margin of error as its considerations in determining the number of samples. With 95% confidence level, 5% margin of error, and 20,829 number of domestic undergraduate students at the University of Arkansas, the ideal sample size according to the calculator is 378.

Research Questions

The research questions for this study are divided into two parts:

1. On a scale of 0 to 5, what is the undergraduate students' perceptions of their ITAs, for each individual construct and their perceptions for all six constructs in general?
2. Questions on whether there is a difference in undergraduate students' perceptions of their ITAs among their characteristics.

Sub-Question 1: Is there a difference in undergraduate students' perception of their ITAs based on the size range of their hometown during K-12?

Sub-Question 2: Is there a difference in undergraduate students' perception of their ITAs by their community/neighborhood predominant ethnicity/race during K-12?

Sub-Question 3: Is there a difference in undergraduate students' perception of their ITAs by their high school predominant ethnicity/race?

Sub-Question 4: Is there a difference in undergraduate students' perception of their ITAs between students who have cross-cultural or international experience or not?

Sub-Question 5: Is there a difference in undergraduate students' perception of their ITAs by the number of courses they have taken with an ITA?

Sub-Question 6: Is there a difference in undergraduate students' perception of their ITAs by colleges/schools they are enrolled at?

Sub-Question 7: Is there a difference in undergraduate students' perception of their ITAs by year of enrollment?

Sub-Question 8: Is there a difference in undergraduate students' perception of their ITAs by estimated cumulative GPA?

Sub-Question 9: Is there a difference in undergraduate students' perception of their ITAs by age?

Sub-Question 10: Is there a difference in undergraduate students' perception of their ITAs by their gender?

Setting

This study took place at the University of Arkansas, Fayetteville, Arkansas. The University of Arkansas is a land-grant research university founded in 1871 and located in Fayetteville, Arkansas. There are ten colleges and schools at the University of Arkansas. They are: Dale Bumpers College of Agriculture, Food and Life Sciences; Fay Jones School of Architecture and Design; J. William Fulbright College of Arts and Sciences; Sam M. Walton College of Business; College of Education and Health Professions; College of Engineering; Honors College; Global Campus; Graduate School and International Education; and the School of Law. Out of those ten, undergraduate students from the first six colleges and schools were the participants of this study. The other four colleges and schools did not meet the conditions to be participants in this study. The Honors College does not have specific majors. This college unites and organizes the university's top undergraduate students and professors from all disciplines

through their various programs. The Global Campus provides online classes and distance learning and that means that direct classroom interaction—one element of this study—is not present. The Graduate School and International Education is the home for all graduate and international students, who are automatically exempt from this study (“Colleges and Schools,” n.d.) The School of Law does not employ international teaching assistants, so it is also automatically exempt from this study (B. R. Gallini, personal communication, February 3, 2018).

Participants

The population consisted of 20,829 undergraduate students who are distributed in the following schools: Bumpers College of Agricultural Food and Life Sciences has a total number of 1,822 undergraduate students; Fay Jones School of Architecture and Design has a total number of 460 undergraduate students; Fulbright College of Arts and Science has a total number of 6,668 undergraduate students; College of Education and Health Professions has a total number of 3,750 undergraduate students; College of Engineering has a total number of 3,098 undergraduate students; Walton College of Business has a total number of 5,681 undergraduate students.

A random sampling method was used for this research. Based on the calculation suggested by Qualtrics tool, 378 samples should be enough to represent this study. 380 responses were received from the survey distribution. However, only 283 of the responses were finished, the other 97 were not. From the 283 responses, one of them did not consent and did not wish to participate and thus the student’s response was removed from the data pool. Another student contacted the researcher because she had an interesting case about her ITAs. The researcher

decided to interview the student and moved her response from the data pool to later analyze it qualitatively. This left 281 students in total.

Implementation

The data reporting tool shows that responses were dated from May 4, 2018 to September 19, 2018. The research instrument was initially in a physical paper and pen form and was going to be distributed in two fashions, physical and through emails. However, after considering the limited time and resources, the researcher decided to use email only where it was much more feasible.

Emails were sent to all deans from schools/colleges whose students became the participants of this study on April 25, 2018. Some of the deans responded by referring the researcher to the dean's staff who were responsible for administering their students' data. However, some staff were not able to provide the student information the researcher needed because their work policy did not allow them to do so. At this point, the research was not able to progress.

The researcher contacted an Associate Dean of Graduate School and International Education for assistance in getting students' information for the purpose of the researcher's data collection. After exchanging several emails, the dean was able to help. The researcher also received assistance from a Research Support Analysis from the Office of University Information Technology Service (UITS). The research support analyst helped mainly with the technical issues in operating Qualtrics and distributing the survey. The associate dean with whom the researcher had been in contact granted the analyst access to students' information.

The first batch of emails went out on May 4, 2018. A total of 7,155 students received an invitation to take the survey. A follow-up reminder was scheduled to send out a week after, which was on May 11, 2018. Unfortunately, May 4, 2018 was the Spring 2018 semester dead day where students most possibly were busy studying for their final exams.

The second batch of the survey distribution was conducted during Summer 2018 semester where there were a lot less students taking classes. It was sent out on June 8, 2018 to 3450 students. On June 21, 2018, the survey yielded 93 responses. On June 26, 2018, an email reminder was sent out and it boosted the number of students responding to the survey up to 173. The third distribution was sent out on September 12, 2018 to the same population that had received an email invitation before. This time, since fall semester had started and there were definitely more students attending classes than during summer semesters, the survey distribution yielded much better responses, 207 responses. Therefore, the total responses received were 380.

Statistical Procedures

All the data collected through the survey were processed through IBM SPSS software. There are two parts of the data which will also serve as the points of discussion in the quantitative subsection in Chapter IV.

1. Demography of Undergraduate Students

The research participants' demographic was obtained from descriptive statistics analysis using the SPSS statistics program. The result is presented in the form of frequency tables. Demographic information collected were: school/college where they are enrolled at the University of Arkansas; year they are enrolled in; estimated cumulative Grade Point Average (GPA); age; gender; predominant ethnic/racial background; size of hometown

during K-12; community/neighborhood predominant ethnic/race during K-12; high school predominant ethnic/race; and international or cross-cultural experience.

2. Students' Ratings of ITAs

Descriptive Statistics from the Five-Point Scale of Preference

Students' responses to each individual construct are provided, as is the aggregate of responses across all six constructs.

Research Hypotheses and Inferential Findings

Sub-Question 1: Is there a difference in undergraduate students' perception of their ITAs among the size of their hometown during K-12?

H₀: there is no significant difference in the scale of preference mean among the size of students' hometown during K-12.

H_a: at least one of the means among the size of students' hometown during K-12 is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 2: Is there a difference in undergraduate students' perception of their ITAs among their community/neighborhood predominant ethnicity/race during K-12?

H₀: there is no significant difference in the scale of preference mean among students' community/neighborhood predominant ethnicity/race during K-12.

H_a: at least one of the means among students' community/neighborhood predominant ethnicity/race during K-12 is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 3: Is there a difference in undergraduate students' perception of their ITAs among their high school predominant ethnicity/race?

H_0 : there is no significant difference in the scale of preference mean among students' high school predominant ethnicity/race.

H_a : at least one of the means among students' high school predominant ethnicity/race is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 4: Is there a difference in undergraduate students' perception of their ITAs between students who have cross-cultural or international experience or not?

H_0 : there is no significant difference in the scale of preference mean between students who have cross-cultural or international experience or not.

H_a : there is a significant difference in the scale of preference mean between students who have cross-cultural experience or not.

Statistical procedure: Independent T-Test

Sub-Question 5: Is there a difference in undergraduate students' perception of their ITAs among the number of courses they have taken with an ITA?

H_0 : there is no significant difference in the scale of preference mean between the number of courses students have taken with an ITA.

H_a : at least one of the means among the number of courses students have taken with an ITA is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 6: Is there a difference in undergraduate students' perception of their ITAs among colleges/schools they are enrolled at?

H_0 : there is no significant difference in the scale of preference mean between colleges/schools students are enrolled at.

H_a : at least one of the means among colleges/schools students are enrolled at is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 7: Is there a difference in undergraduate students' perception of their ITAs among their year of enrollment?

H_0 : there is no significant difference in the scale of preference mean among students' year of enrollment.

H_a : at least one of the means among students' year of enrollment is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 8: Is there a difference in undergraduate students' perception of their ITAs among their estimated cumulative GPA?

H_0 : there is no significant difference in the scale of preference mean among students' estimated cumulative GPA.

H_a : at least one of the means among students' estimated cumulative GPA is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 9: Is there a difference in undergraduate students' perception of their ITAs among their age?

H_0 : there is no significant difference in the scale of preference mean among students' age.

H_a : at least one of the means among students' age is statistically different from the others.

Statistical procedure: One-Way ANOVA

Sub-Question 10: Is there a difference in undergraduate students' perception of their ITAs between their gender?

H₀: there is no significant difference in the scale of preference mean between students' gender.

H_a: there is significant difference in the scale of preference mean between students' gender.

Statistical procedure: Independent T-Test

Qualitative Study

On the third survey distribution that was sent out on September 12, 2018, a student reached out to the researcher through email informing that she was having a difficulty answering the survey. She was confused how to fill out the survey because she has had two ITAs and they were completely on the opposite sides of each other, one she did not like and the other she liked. The researcher decided to look more deeply into the case for a better understanding. The researcher asked the student if she would be willing to set up a time to meet where the researcher could interview the student. The student agreed and the meeting happened and lasted for an hour.

Before meeting with the student, the researcher had prepared semi-structural interview questions to help direct the conversation. Since the interview step was not in the research design plan initially and the meeting was going to happen just a few days after exchanging email with the student, the researcher used questions from a similar study conducted at the University of Arkansas a decade ago (Shiga, 2008). The interview questions consisted of 15 items, the first four questions are adapted from Shiga's study (2008).

The interview questions were as follows:

1. What courses have you taken with ITAs?
2. Have you taken a courses taught by international instructors before studying at the U of A?
3. Did you expect to take courses taught by ITAs at the U of A?
4. How did you feel when you found out the course was taught by an ITA?
5. Does it give you a different feeling to know your TA is an American or international?
6. What are the advantages and disadvantages in attending classes taught by ITAs?
7. What problem or difficulties have you encountered in a class taught by an ITA? Please describe in detail and provide an example, if possible.
8. Have you made any effort to overcome the problems or difficulties you encountered in that course, such as talking to the ITA, seeing him/her during office hours, or addressing this issue to your regular professor?
9. Did the ITA make any changes after you expressed the difficulties you had?
10. What was his/her communication style? Was he/she good at responding to emails?
11. Can you tell me more about your other ITA? The one that you liked better?
12. What, if any, are the differences between classes taught by ITAs and by English speaking TAs?
13. If a friend of yours was going to be a TA next semester, what advice would you give her/him?
14. What do you find to be the most important characteristics of a college teacher?
15. Did you know that there is a spoken test here at the UofA for international students who are applying for a teaching assistantship?

Chapter 4

Findings

This chapter presents the findings of quantitative and qualitative data analysis collected from undergraduate students attending the University of Arkansas in the Spring, Summer, and Fall semesters of 2018.

Quantitative Analysis

The quantitative findings are presented in two sections. Section one presents the descriptive statistics which consists of demography of the domestic undergraduate students at the University of Arkansas. Section two presents findings on students' ratings of their ITAs in two sub-sections: (1) descriptive statistics for students' ratings of their ITAs on a five-point scale of preference, and (2) research hypotheses and inferential statistics. Students' ratings of their ITAs on a five-point scale of preference presents responses to each individual construct, as is the aggregate of responses across all six constructs. The research hypotheses presents findings regarding differences in undergraduate students' perceptions of their ITAs as mediated by their demographics.

I. Demography of Undergraduate Students

1. Colleges in which students are enrolled at the University of Arkansas

The biggest student population at the University of Arkansas is in the Fulbright College of Arts and Science. There were 6,668 students attending the Spring 2018 semester. The size of this population is also reflected in the number of subjects participating in this study. A hundred and six students took part in this study, representing 37.7% of the overall respondents. The Fay Jones School of Architecture and Design, on the other

hand, has the smallest number of students with 460 undergraduate students attending during the Spring 2018 semester. Seven students from this college, representing 2.5% of the total subjects, responded to the survey. The Bumpers College of Agricultural Food and Life Sciences had 1,822 undergraduate students, and 48 of them responded to the survey, representing 17.1% of the total subjects. The Sam M. Walton College of Business had 5,681 students, and only 27 of them responded to the survey, representing 9.6% of the total subjects. The College of Education and Health Professions had 3,750 students, and 36 students responded to the survey, representing 12.8% of the total subjects. The College of Engineering had 3,098 students, and 57 of them responded to the survey, representing 20.3% of the total subjects. Interestingly, the Bumpers College had fewer than half as many students as the College of Education and Health Professions, but the survey respondents from Bumpers College outnumbered those from the College of Education and Health Professions. The Walton College of Business had the second largest number of undergraduate students in the Spring 2018 semester, but the number that responded to the survey is the second smallest among all six colleges. Table 1 presents the distribution of students responding to the survey.

Table 1

Colleges in which Students are Enrolled

	Frequency	Percent
Bumpers College	48	17.1
Fay Jones School of Architecture and Design	7	2.5
Fulbright College	106	37.7
Sam M. Walton College of Business	27	9.6
College of Education and Health Professions	36	12.8
College of Engineering	57	20.3
Total	281	100.0

2. Year of Enrollment

The number of students who responded to the survey is in descending order, from senior to freshman. A hundred and one respondents were seniors, making up 35.9% of the total subjects. Eighty-five respondents were juniors, making up 30.2% of the total subjects; 74 respondents were sophomores, making up 26.3% of the total subjects; and 21 respondents were freshmen, making up 7.5% of the total subjects. Table 2 presents the distribution of research participants based on year of enrollment.

Table 2

Year of Enrolment

	Frequency	Percent
Freshman	21	7.5
Sophomore	74	26.3
Junior	85	30.2
Senior	101	35.9
Total	281	100.0

3. Estimated Cumulative GPA

More than half of the respondents—170 students, or 60.5% of the total subjects—have an estimated cumulative GPA of 3.51 – 4.00. GPA brackets are presented in descending order, with 24.6% of the total subjects, or 69 students, having an estimated cumulative GPA of 3.01 – 3.50; 12.5% of the total subjects, or 35 students, having an estimated cumulative GPA of 2.51 – 3.00; and only 2.5% of the total subjects, or seven students, having an estimated cumulative GPA of less than 2.50. Table 3 presents the distribution of the total samples based on estimated cumulative GPA.

Table 3

Estimated cumulative grade point average (GPA)

	Frequency	Percent
3.51 – 4.00	170	60.5
3.01 – 3.50	69	24.6
2.51 – 3.00	35	12.5
less than 2.50	7	2.5
Total	281	100.0

4. Age

More than half of the research participants are in the 18 – 20 year-old range; there are 144 students in this category, representing 51.2% of the total subjects. A hundred and three students are in the 21 – 23 year-old range, representing 36.7% of the total subjects. The smallest group is the 24 – 26 year-old range; there are only nine people in this category, representing 3.2% of the total subjects. Finally, there are 25 students, representing 8.9% of the total subjects, who are 27 years old or older. Table 4 presents the distribution of the total samples based on age.

Table 4

Age

	Frequency	Percent
18-20	144	51.2
21-23	103	36.7
24-26	9	3.2
27 or older	25	8.9
Total	281	100.0

5. Gender

Most of the survey respondents are female students. A hundred and ninety three women filled out the survey, representing 68.7% of the total subjects. Eighty six of the respondents were males, representing 30.6% of the total subjects. Two students, or 0.7% of the total subjects, chose the third option, which is other: they identified themselves as non-binary gender and transgender female. Table 5 presents the distribution of research participants based on gender.

Table 5

Gender

	Frequency	Percent
Male	86	30.6
Female	193	68.7
Other, please specify (optional)	2	.7
Total	281	100.0

6. Predominant Ethnic/Racial Background

As expected, more than three quarters of the research participants are White undergraduate students. The 220 White students make up 78.3% of the total subjects.

The other 21.7% are distributed among seven other ethnic/racial backgrounds. Four students, or 1.4%, are American Native Indian or Alaskan Native; eight students, or 2.8%, are African American; eighteen students, or 6.4%, are Asian; one student, or 0.4% is Native Hawaiian or Other Pacific Islander; fourteen students, or 5%, are Hispanic or Latino; thirteen students, or 4.6%, are of two or more races; and three students or, 1.1%, picked the last option, other, and identify themselves as a North African, an Egyptian, and a Hispanic-White. Table 6 presents the distribution of research participants based on predominant ethnic/racial background.

Table 6

Predominant ethnic/racial background

	Frequency	Percent
American Native Indian or Alaskan Native	4	1.4
African American	8	2.8
White	220	78.3
Asian	18	6.4
Native Hawaiian or Other Pacific Islander	1	.4
Hispanic or Latino	14	5.0
Two or More Races	13	4.6
Other, please specify	3	1.1
Total	281	100.0

7. U.S. Citizenship

As expected, the majority of research participants are U.S. citizens. Two hundreds and sixty six students, or 94.7% of the total subjects, are U.S. citizens, while only fifteen students, or 5.3%, are non U.S. citizens. Table 7 presents the distribution of research participants based on whether they are U.S. citizens or not.

Table 7

U.S. citizen

	Frequency	Percent
Yes	266	94.7
No	15	5.3
Total	281	100.0

8. Size of Hometown during K-12

The research participants are presented in ascending order according to the size of their hometown during K-12. Seventy three students, or 26% of the total subjects, are from rural towns/cities of less than 10,000; 89 students, or 31.7% of the total subjects, are from cities of 10,000 to 50,000; and 119 students, or 42.3% of the total subjects, are from urban areas or cities of more than 50,000. Table 8 presents the distribution of research participants based on the size of hometown during K-12.

Table 8

Size of Hometown during K-12

	Frequency	Percent
Rural Town/City of less than 10,000	73	26.0
City of 10,000 to 50,000	89	31.7
City of more than 50,000	119	42.3
Total	281	100.0

9. Community/Neighborhood Predominant Ethnicity/Race during K-12

Twenty eight students, 10% of the total subjects, lived in a neighborhood or community composed of only one racial/ethnic group. Ten students, or 3.6% of the total subjects, lived in a neighborhood/community composed of four or more ethnic/racial groups with no group in the clear majority. Table 9 presents the distribution of research participants

based on the predominant ethnic/racial composition of their neighborhoods/communities during K-12.

Table 9

Community/Neighborhood Ethnicity/Race during K-12

	Frequency	Percent
Only one racial/ethnic group	28	10.0
Predominantly one racial/ethnic group, with less than 10% of other group(s)	128	45.6
One racial/ethnic group in the majority, with more than 10% of other group(s)	89	31.7
Two or three different ethnic/racial groups, with no group in the clear majority	26	9.3
Four or more ethnic/racial groups, with no group in the clear majority	10	3.6
Total	281	100.0

10. High School Predominant Ethnicity/Race

The percentage of respondents who attended high schools with one predominant ethnicity/race with minorities representing less than 10% is nearly identical to the percentage that attended high schools with one predominant ethnicity/race but with minorities exceeding 10% of the population. A hundred and fourteen students, or 40.6% of the total subjects, attended high schools composed of predominant one ethnic/racial group with less than 10% of other group(s); 113 students, representing 40.2%, attended high schools composed of one ethnic/racial group in the majority with more than 10% of other group(s); 42 students, representing 14.9%, attended high schools composed of two or three different ethnic/racial groups with no group in the clear majority; and 12 students, representing 4.3%, attended high schools composed of four or more

ethnic/racial groups with no group in the clear majority. Table 10 presents the distribution of research participants based on their high school predominant ethnicity/race.

Table 10

High School Predominant Ethnicity/Race

	Frequency	Percent
Predominantly one racial/ethnic group, with less than 10% of other group(s)	114	40.6
One racial/ethnic group in the majority, with more than 10% of other group(s)	113	40.2
Two or three different ethnic/racial groups, with no group in the clear majority	42	14.9
Four or more ethnic/racial groups, with no group in the clear majority	12	4.3
Total	281	100.0

11. International or Cross-Cultural Experience

For this part, six questions assess whether undergraduate students have had an encounter with different culture(s) or people from different culture(s). The researcher recoded the answers to these six questions into a single statistical entry with two variables represented by 0 and 1. 0 means a student answered “No” to all six questions, and 1 means a student answered “Yes” to at least one of the six questions. The statistics showed that most undergraduate students at the University of Arkansas have had international or cross-cultural experiences. Table 11 presents the distribution of students who have had international or cross-cultural experiences.

Table 11

Students' cross-cultural or international experience

	Frequency	Percent
No	27	9.6
Yes	254	90.4
Total	281	100.0

12. Number of Courses/Labs Instructed by an ITA

A hundred and fifteen students, or 40.9% of the total subjects, have had only one course or lab instructed by an ITA. The higher the number of courses/labs with an ITA, the smaller the number of research participants. However, the number of participants increases again slightly for the last category, more than four courses/labs with an ITA.

Table 12 presents the distribution of research participants based on the number of courses/labs that they have taken instructed by an ITA.

Table 12

Number of Courses/Labs Instructed by an ITA Students Have Taken

	Frequency	Percent
1	115	40.9
2	56	19.9
3	42	14.9
4	17	6.0
More than 4	51	18.1
Total	281	100.0

II. Students' Ratings of ITAs

Descriptive Statistics from the Five-Point Scale of Preference

The scale of preference has 36 Likert-scale statements. They are developed based on six different constructs and each construct has six statements. Statements in each construct are designed in such a way that they have neutral meaning and are written both in equal numbers of positively and negatively worded sentences (see Appendix 2). This sub-section presents the findings of the five-point scale of preference. Their responses to each individual construct are provided, as is the aggregate of responses across all six constructs.

For statistical purposes, after the data were collected, the numbered responses to the negatively worded statements were inverted to form a consistent metric that can be compared to the data from the positive statements. After the standardization of the responses, the means of all statements in each constructs were computed to get composite scores, for each individual. Then, the mean, standard deviation, skewness, and kurtosis across individuals were obtained for each construct, shown in Table 13.

Table 13
Descriptive Statistics

	M	SD	<u>Skewness (SE)</u>	<u>Kurtosis (SE)</u>
Language and linguistics	3.78	.94	-.64 (.15)	-.28 (.29)
Pedagogy and teaching skills	3.53	.61	-.50 (.15)	.01 (.29)
Personal communication styles	3.98	.74	-.77 (.15)	.71 (.29)
Cultural benefits	4.30	.74	-1.31 (.15)	1.73 (.29)
Understanding of class materials	4.03	.91	-.82 (.15)	-.22 (.29)
Students' responsibilities	3.97	.86	-.90 (.15)	.49 (.29)
Preference score	3.93	.68	-.91 (.15)	.70 (.29)

Five-Point Scale of Preference

1. Language and Linguistics (Intelligibility)

This construct tries to figure out how undergraduate students perceive their ITAs' intelligibility. The rating is 3.78 (SD = 0.94). Examples of positively and negatively worded statements are:

Positive: My ITA(s) has an accent, but I can understand her/his explanations.

Negative: If I got an ITA with a strong foreign accent, I would try to transfer to a different section of the course.

2. Pedagogy and Teaching Skills

This construct tries to establish an idea how undergraduate students perceive their ITAs' teaching skills. The rating is 3.53 (SD = 0.61). Examples of positively and negatively worded statements are:

Positive: My ITA(s) always uses teaching media to help him/her explain the lesson.

Negative: Lecture is the preferred method of instruction my ITA(s) uses in teaching.

3. Personal Character and Communication Style

This construct tries to figure out how communication between ITAs and students take place in the class from the students' point of view. The rating is 3.98 (SD = 0.74).

Examples of positively and negatively worded statements are:

Positive: Both the ITA and the student should share the responsibility for classroom communication.

Negative: My ITA(s) is unwilling to meet outside of class hours.

4. Cultural Values

This construct tries to figure out whether undergraduate students are aware of cultural benefits they could benefit from a course instructed by an ITA. The rating is 4.30 (SD = 0.74). Examples of positively and negatively worded statements are:

Positive: ITAs can give students a taste of another culture, which, in itself, is educationally valuable.

Negative: In the future, I probably won't live or work with people from other countries or cultures.

5. Understanding of Course Materials and Expected Grades

This construct tries to figure out how undergraduate students understand the materials taught in class and their expected grades. The rating is 4.03 (SD = 0.91). Examples of positively and negatively worded statements are:

Positive: As long as I put in effort (i.e. come to class, pay attention to my ITA(s)' lesson, and do my assignments) I feel I can get a good grade in the course.

Negative: Having an ITA will often cause students to perform lower on exams.

6. Students' Understanding of their Responsibilities in a Class Instructed by an ITA

This construct tries to figure out whether undergraduate students are aware that they have responsibilities to make sure that they understand the lesson. The rating is 3.97 (SD = 0.86). Examples of positively and negatively worded statements are:

Positive: Students' attitudes affect their ability to understand ITAs in class.

Negative: When there are communication problems between students and ITAs, students can do very little to improve the situation.

7. Students' Perceptions of International Teaching Assistants

The rating below is the aggregate of composited recoded responses across all six constructs. The rating is 3.93 (SD = 0.68).

Pearson Product Moment Correlation test was run to check validity among constructs in the scale of preference. Most relationships between constructs have *very* strong positive correlations ($0.6 < |r| < 1.0$) (Cohen, 1988). Only two relationships are merely strong ($0.4 < |r| < 0.6$): the relationship between the variables “Personal Communication Style” and “Language and Linguistics,” and the relationship between the variables “Cultural Benefit” and “Personal Communication Style” (see Table 14).

Table 14

Correlations

	1	2	3	4	5	6
Language and linguistics	-					
Pedagogy and teaching skills	.73**	-				
Personal communication style	.54**	.60**	-			
Cultural benefits	.64**	.62**	.56**	-		
Understanding of class materials	.79**	.72**	.64**	.69**	-	
Students' responsibilities	.67**	.60**	.60**	.68**	.73**	-

** . Correlation is significant at the 0.01 level (2-tailed).

Research Hypotheses and Inferential Findings

A level of significance of 0.05 was chosen for all hypothesis tests in this study. The statistical procedures used to test the hypotheses were ANOVA and Independent T-Test, both of which assume homogeneity of variances. Levene's test was applied during each hypothesis testing to determine the homogeneity of variances. If the Levene's test result was significant, it

indicated that the assumption was violated and equal variance was not assumed in the population. In hypotheses that used ANOVA, if the assumption of homogeneity of variances was violated, a robust test was used to further analyze the data. The types of robust test used in this study are Welch's and Brown-Forsythe; Games-Howell post hoc test was chosen to analyze significant interaction between variables. In the following sections, the null hypothesis is first presented, followed by statistical results and conclusions.

Hypothesis 1: There is no significant difference in students' perceptions of their ITAs depending on the size of their hometown during K-12.

A Levene's test was applied to check the assumption of homogeneity of variance and the result was significant, $(F(2,278) = 6.95, p = .001)$. The result indicates that the data violate this assumption, and the assumption of equal variances does not hold. In consequence, Welch's robust test was conducted to test the hypothesis and was significant, $(F(2,175.5) = 3.59, p < .05)$. To find which group mean(s) of the independent variable differed significantly from the others, Games-Howell post hoc test was conducted. The result shows that students from cities of 10,000 to 50,000 people have significantly different perceptions of their ITAs compared to students from cities of more than 50,000 people (see Table 15).

Decision: reject hypothesis 1. Students from cities of 10,000 to 50,000 people have significantly more positive perceptions of their ITAs compared to students from cities of more than 50,000 people. Their mean difference is 0.24 ($p = 0.03$).

Table 15

Multiple Comparisons

Dependent Variable: Preference Score

Games-Howell

(I) size range of students' hometown during K-12	(J) size range of students' hometown during K-12	Mean Difference (I-J)	SE	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Rural Town/City of less than 10,000	City of 10,000 to 50,000	-.16	.093	.21	-.38	.06
	City of more than 50,000	.08	.1	.72	-.17	.32
City of 10,000 to 50,000	City of more than 50,000	.24*	.09	.03	.02	.45

*. The mean difference is significant at the 0.05 level.

Hypothesis 2: There is no significant difference in students' perceptions of their ITAs depending on their community/neighborhood's predominant ethnicity/race during K-12.

The result of One-Way ANOVA is not significant, ($F(4,276) = .37, p = .83$).

Decision: fail to reject hypothesis 2. There is no difference statistically in students' perceptions of their ITAs regardless of whether they come from a diverse neighborhood background.

Hypothesis 3: There is no significant difference in students' perceptions of their ITAs depending on their high school predominant ethnicity/race.

The result of One-Way ANOVA is not significant ($F(3,277) = .02, p = .99$).

Decision: fail to reject hypothesis 3. There is no difference statistically in students' perceptions of their ITAs regardless of whether they attended diverse high schools.

Hypothesis 4: There is no significant difference in students' perceptions of their ITAs depending on their previous international or cross-cultural experience.

The result of Independent T-Test is not significant ($t(279) = .87, p = .39$).

Decision: fail to reject hypothesis 4. There is no difference statistically in students' perceptions of their ITAs regardless of whether they have previous international or cross-cultural experience.

Hypothesis 5: There is no significant difference in students' perceptions of their ITAs depending on the number of courses instructed by an ITA that students have taken.

A Levene's test is applied to check the assumption of homogeneity of variance and the result is significant, ($F(4,276) = 6.39, p = .00$). The result indicates that the data violates this assumption and the assumption of equal variances does not hold. In consequence, Brown Forsythe robust test is conducted to test the hypothesis and is not significant, ($F(4,166.1) = 2.28, p = .06$).

Decision: fail to reject hypothesis 5. There is no difference statistically in students' perceptions of their ITAs regardless of the number of courses instructed by an ITA that students have taken.

Hypothesis 6: There is no significant difference in students' perceptions of their ITAs depending on colleges/schools students are enrolled at.

The result of One-Way ANOVA is not significant ($F(5,275) = .64, p = .67$).

Decision: fail to reject hypothesis 6. There is no difference statistically in students' perceptions of their ITAs regardless of colleges/schools they are enrolled at the University of Arkansas.

Hypothesis 7: There is no significant difference in students' perceptions of their ITAs depending on their year of enrollment.

The result of One-Way ANOVA is not significant ($F(3,277) = .73, p = .54$).

Decision: fail to reject hypothesis 7. There is no difference statistically in students' perceptions of their ITAs regardless of their year of enrollment.

Hypothesis 8: There is no significant difference in students' perceptions of their ITAs depending on their estimated cumulative GPA.

The result of One-Way ANOVA is not significant ($F(3,277) = .67, p = .57$).

Decision: fail to reject hypothesis 8. There is no difference statistically in students' perceptions of their ITAs regardless of their estimated cumulative GPA.

Hypothesis 9: There is no significant difference in students' perceptions of their ITAs depending on their age.

The result of One-Way ANOVA is not significant ($F(3,277) = .63, p = .25$).

Decision: fail to reject hypothesis 9. There is no difference statistically in students' perceptions of their ITAs regardless of their age.

Hypothesis 10: There is no significant difference in students' perceptions of their ITAs depending on their gender.

Independent T-Test is administered for this hypothesis instead of One-Way ANOVA. The independent variable for this category has three components: male, female, and other. The sample size of “other” is only two, which is considered too small to yield reliable results. Therefore, this component is removed from the independent variable, leaving only two components. Thus, Independent T-Test is applied instead of One-Way ANOVA. The result of the T-Test indicates that means are significantly higher for female students ($M = 4.05$, $SD = .63$) than for male students ($M = 3.69$, $SD = .69$), ($t(277) = 4.21$, $p = .00$).

Decision: reject hypothesis 10. Students’ perceptions of their ITAs is significantly higher among female than male students.

Qualitative Analysis

This qualitative section was not originally part of this study’s design. The researcher decided to include this section after a respondent reached out via email to report that she had experienced difficulty answering the survey. The student mentioned that she was not able to provide accurate responses because she had taken two courses with different ITAs and her perceptions of the two ITAs differed. The student agreed to be interviewed by the researcher. Fifteen interview questions were asked covering the following topics: information about the courses and the ITAs; problems and difficulties in a course instructed by an ITA; the ITAs’ communication style; differences between classes taught by an ITA and ATA; advantages and disadvantages of having an ITA as an instructor; and suggestions for an ITA.

1. About the courses and the ITAs

The student is majoring in Bachelor of Arts in History at the J. William Fulbright College of Arts & Sciences. When the interview took place in the Spring 2018 semester, she was a

sophomore and had two ITAs. The courses that she had with ITAs were Biology Lab, which was mandatory for her degree, and Elementary Japanese. The Japanese class was not mandatory per se, although a foreign language course was mandatory, and students could pick one of several languages offered in the program. Both courses were taken at the same time, during the interviewee's spring semester as a freshman.

2. Problems and difficulties in a course instructed by an ITA

The interviewee had a very negative experience with the first ITA due to his unintelligibility. The second ITA had an accent, but was still quite intelligible. She mentioned that before taking the courses, she had never been taught by a non-native instructor. When she started school at the University of Arkansas, a large diverse public university, she had known that at some point she would have a non-native instructor, although she did not expect it to happen during her first year.

UAconnect did not reveal that a teaching assistant would be instructing either class. This was only clarified on the first day of class. Even during the introduction, she could not understand what the ITA for her Biology Lab was saying. When she attended her Elementary Japanese class a few days later, she got even more nervous, fearing that she would have a hard time understanding the Japanese TA's English too.

In her Biology Lab, her fears did indeed come true. She was not able to understand most of what the ITA said during the semester. "I barely understood what my ITA said in my Biology Lab course. It seems that he did have a good understanding of English, but he had such a thick accent that we barely understood and had to ask him to repeat so many times." She said that she would still give him the benefit of the doubt, believing that she would eventually learn to understand him as expressed through this statement: "After the first

meeting, I still believed that the more I listened to him, the more familiar I would become with his accent. But it never happened either to me or to my classmates. I actually gave him more time before I stopped trying compared to my classmates; I still believed until the third week of class, while most of my classmates stopped trying at the second week.”

She felt a little bit disappointed about how the class turned out because she did not get the grade she was expecting. She said, “I relied on written instruction for assignments. I ended up getting a B for that course, with which I was not quite satisfied. I got an A for the lecture part of the course, which was instructed by our regular professor.”

The researcher asked whether she had ever made an effort to improve the situation before giving up, and she answered “Yes, I emailed him to let him know that I had a hard time understanding his explanation. After that, he started to give more written instruction and explanation, but it did not help much because his handwriting was also not good enough. He would always write in cursive letters, while none of us had experience reading or writing in cursive.” The ITA actually made some changes in his teaching style in response to students’ complaints “... but it was a little too late because it happened after midterm. He started giving us small typed material pieces, which helped us understand the materials greatly.”

The student said she never made use of the ITA’s office hours because she knew it would not solve the problem. When the researcher asked if she or one of her classmates had brought up the issue to their regular professor, she said no because they felt that they did not have any choice: “It was a mandatory course, so you either take it or leave it.” Another reason for not discussing it with their professor was that they did not want to be mean to the ITA since they knew that he was trying hard to help them. She felt that he did care about what he taught and about his students.

3. ITAs' communication style

The ITA this student had difficulties with did not have a poor communication style according to her. "He would always reply to our emails, although he sometimes missed the points we were asking. He was really knowledgeable in his field of study. When we asked one question, he would go the extra mile in explanation. About his communication style in person, I really cannot say anything about that because I never saw him during his office hours."

When asked about the other ITA's communication style, she said she was quite satisfied. "The other ITA had an accent too, but we still could understand what she was saying, and she understood what we were saying. There were times when she did not really understand our questions, and what she would do was writing down those questions and promised to get back with us after she got the answers. She wouldn't pretend to know everything. She told us that she would always consult those questions with her professor before getting back with us."

She also mentioned that she attended the Japanese ITA's office hours, and that the course turned out well for her. "I would always come and see her during her office hours two to three times a week. Sometimes it would be a brief consultation for 2-3 minutes if I had short questions." She was happy when she learned that her final grade was an A.

4. Differences between classes taught by an ITA and ATA

The researcher asked her to compare her experiences with ITAs and ATAs. "I have had two American TAs so far, and I would say that I like my ITAs much better than my ATAs even with the fact that I had a hard time understanding one of my ITAs' English. ITAs care about what they teach and their students. They would try all different teaching styles to make sure

their students understand the materials, such as lecture, Power-point, song, class discussion, games, etc. ATAs do not really care about what they teach and do not really like teaching.

They teach just because they need funding to support their research and to make ends meet.”

5. Advantages and disadvantages of having an ITA as a course instructor

When asked about the advantages and disadvantages of having an ITA, the student mentioned that the advantages definitely far outweigh the disadvantages. The interviewee is majoring in history, and culture is highly relevant to her field of study. Therefore, experiencing a cultural exchange first-hand was highly rewarding. She identified the biggest advantage as exposure to other cultural perspectives.

She also observed that ITAs are more dedicated to their profession and care about their students and what they teach more than ATAs. ITAs are much better teachers, she maintained, when they have to slow down and explain tough material. The interviewee knew that for an ITA to understand a piece of material in English, she/he would need more time to read and reread, and she inferred that as a result, they would gain a better understanding of the material and be able to explain it more thoroughly.

She also noted that ITAs may have gone through a lot before coming to the position they have at the moment, and that might make an ITA expect students to work as hard as they had. For some students, this might be a disadvantage because the ITA will sometimes demand more than their regular American professor does. However, for the interviewee personally, this is an advantage because it encourages her to perform better. On the other hand, she argued, there are not really any disadvantages to having an ITA as long as their English is sufficiently intelligible.

6. Suggestions for an ITA

The researcher asked what advice she would give if one of her international friends were going to become an ITA. She responded that after having an ATA who routinely ended her class early, she had learned to appreciate TAs who devote time and energy to their classes and show their students that they care. She said that she would advise her hypothetical friend accordingly. She also suggested that the ITA should “dumb down” their explanations to more effectively reach their students. She added that regardless of their native language, “A professor should be passionate about their profession; he should like teaching. They also have to care about what they teach and their students; try to find a way to explain materials better. One time I hated a class, but the professor was really great, she was able to present the materials well and show us that there was something good we could take from that course even if we hated it.”

Chapter 5

Discussion and Conclusion

This chapter presents inferences drawn from the research findings and proposes practical applications of the results of this study. This chapter consists of four sections: summary of research questions and methods; summary of findings and interpretation of results; suggestions for further research; and implications and suggestions for undergraduate students, ITAs, supervisory professors, and the university administration.

Summary of Research Questions and Methods

1. Five-point rating scale of responses to each individual construct and the aggregate of responses across all six constructs.
2. Research Questions and hypothesis

Sub-Question 1: Is there a difference in undergraduate students' perception of their ITAs based on the size range of their hometown during K-12?

Statistical procedure: One-Way ANOVA

Sub-Question 2: Is there a difference in undergraduate students' perception of their ITAs by their community/neighborhood predominant ethnicity/race during K-12?

Statistical procedure: One-Way ANOVA

Sub-Question 3: Is there a difference in undergraduate students' perception of their ITAs by their high school predominant ethnicity/race?

Statistical procedure: One-Way ANOVA

Sub-Question 4: Is there a difference in undergraduate students' perception of their ITAs between students who have cross-cultural or international experience or not?

Statistical procedure: Independent T-Test

Sub-Question 5: Is there a difference in undergraduate students' perception of their ITAs by the number of courses they have taken with an ITA?

Statistical procedure: One-Way ANOVA

Sub-Question 6: Is there a difference in undergraduate students' perception of their ITAs by colleges/schools they are enrolled at?

Statistical procedure: One-Way ANOVA

Sub-Question 7: Is there a difference in undergraduate students' perception of their ITAs by year of enrollment?

Statistical procedure: One-Way ANOVA

Sub-Question 8: Is there a difference in undergraduate students' perception of their ITAs by estimated cumulative GPA?

Statistical procedure: One-Way ANOVA

Sub-Question 9: Is there a difference in undergraduate students' perception of their ITAs by age?

Statistical procedure: One-Way ANOVA

Sub-Question 10: Is there a difference in undergraduate students' perception of their ITAs by their gender?

Statistical procedure: Independent T-Test

Summary of Findings and Interpretation of Results

Quantitative Analysis

I. Descriptive Statistics from the Five-Point Scale of Preference

Several previous studies were analyzed in relation to the results of the current study to determine whether there have been changes in students' perceptions of ITAs and the importance that they attribute to various issues. The researchers ranked their themes based on how frequently each one was mentioned by students during interviews. The first theme mentioned was coded as the most prominent issue from the students' perspectives, whereas the current study ranked the themes based on students' responses to the scale of preference. Higher ratings mean the theme received more positive responses from students. It is important to bear in mind that discrepancies between the results of this studies may owe in part to differences in the students bodies at the universities where they were conducted, different social contexts prevalent in the years in which they were conducted, and different methods of data collection.

Various researchers referred to constructs using different terms: issues, emerged theme, key findings. The current study uses the term "construct." For the purpose of readability and uniformity, the term "construct" will be used in reference to all studies.

1. Language and Linguistics (Intelligibility)

From 0 to 5, the average intelligibility score that students gave to their ITAs was 3.78 (SD=0.94). If we break down the scale, a score between 0 and 2.5 indicates a negative perception; while a score between 2.6 and 5 a positive perception. Therefore, 3.78 indicates that students at the University of Arkansas have generally positive perceptions but are not fully satisfied with the ITAs' intelligibility. This score is the second lowest among the six constructs. This finding is congruent with Khan's (2013) qualitative study, Ates' (2008) focus group discussion, Oca's (2013) qualitative study, and Shiga's (2008) interviews, all of which found that intelligibility was one of the major issues in undergraduate students' perceptions of their ITAs.

Khan's (2013) qualitative study found that intelligibility was the first construct that emerged when she was studying undergraduate students' perceptions of ITAs' instruction at Southern Illinois University Carbondale. Respondents made such comments as "it's hard to understand them [ITAs]"; "The ITA spoke too fast for me to understand"; "hard to understand if the accent is very thick, sometimes confusing ...". One student stated that the only advantage of having an ATA instead of ITA would be greater intelligibility. These statements showed that undergraduate students at Southern Illinois University Carbondale circa 2013 believed that intelligibility was a problem among their ITAs, and this also applies to students at the University of Arkansas in 2018.

Ates (2008) conducted a study on domestic preservice teachers' perceptions of their native and nonnative GTAs in ESL methodology courses. Her quantitative data showed that 96% respondents did not have any problem having a nonnative GTA with an accent as long as they could understand the ITA's explanations. However, during her focus group discussion, she found out that intelligibility was a common issue in ESL courses instructed by an ITA. Ates' quantitative results regarding ITAs' intelligibility differed from the current study's rating. However, the results of Ates' focus group discussion indicated that both undergraduate students attending Texas A&M circa 2008 and those attending University of Arkansas in the Spring 2018 semester were not quite satisfied with their ITAs' intelligibility.

Oca (2013) conducted a qualitative study entitled "Expectations, Perspectives and Experiences: Investigations into Teaching and Learning among International Teaching Assistants and Undergraduate Students" at the University of Wisconsin-Madison. The researcher divided their students into three groups based on their responses: six students were receptive, two students had mixed perceptions, and seven students were unreceptive.

Analysis of the interviews with the unreceptive students revealed that language and communication barriers ranked second among five constructs. This is similar to the results of the current study, where students ranked ITAs' intelligibility second to last among the six constructs.

Through interviews with three students, Shiga (2008) found that undergraduate students had both positive and negative experiences with ITAs at the University of Arkansas, but often perceived ITAs' unique accents, speaking speed, and ability to express their thoughts in English as barriers to communication. One student shared a story about a friend who wrote correct information in his paper, but lost points because the ITA failed to interpret the writing accurately. This finding is also consistent with the results of the current study, which indicate that students are not satisfied fully with their ITAs' ability to communicate using English.

2. Pedagogy and Teaching Skills

At 3.53 (SD=0.61), ITAs' pedagogy and teaching skills is ranked the lowest among the six constructs. This implies that among all the measure constructs, pedagogy and teaching skills need the most attention. It is unfortunate that although the main duty of a TA is to teach, their approaches to the profession are receiving the least favor from students. However, it is not surprising because previous studies have also found that students tend to have relatively negative perceptions of their ITAs' teaching styles.

Similarly, the results of Khan's (2013) qualitative study also suggested that students at Southern Illinois University Carbondale found that their ITAs' teaching methods were hard to follow. Khan separated the issue of pedagogy into two constructs: pedagogy in general, and language-pedagogy (2013, p.47). Respondents made comments such as "[ITAs']

teaching style was difficult to follow”; “My Math ITA stood directly in front of the chalkboard as she wrote examples, so we could not see, and I would have benefitted by reading her lips but her back was always to me.”; and “The differences are grading; English speaking TAs tend to grade easier, and instructions are given much better than ITAs.” These comments were classified under the construct of general pedagogy. In relation to the language-pedagogy construct, students expressed their inability to understand ITAs’ instruction, which resulted in the students failing to acquire the course material. Pedagogy and language-pedagogy constructs ranked second and third in order of importance among the seven constructs that emerged during the author’s interviews with students. This is consistent with the results of the current study, in which pedagogy and teaching skills ranked the lowest among the six constructs.

Oca’s interviews with the unreceptive group at the University of Wisconsin-Madison revealed that instructional practices did not match students’ expectation and preferences, but it was the least important construct identified in this study (2013). Oca’s findings regarding ITAs’ pedagogy and teaching skills differ from those of the current study; this key finding received the fewest complaints among undergraduate students at the University of Wisconsin-Madison, but the corresponding construct received the most at the University of Arkansas.

Ates’ findings on pedagogy and teaching skills were quite similar to Oca’s; it was the least prominent of four constructs that emerged during the study’s focus group discussion (2008). Shiga, meanwhile, simply coded students’ responses as positive or negative without further classifying them based on content. When students were asked what negative experiences they had with ITAs, the second and third issues that students raised—grading

problems and ITAs' methods for handling questions about course materials, respectively—were related to teaching skills and pedagogy (2008, p.60-61). In conclusion, the findings of the current study regarding the pedagogy and teaching skills construct are similar to the findings of Khan's (2013) and Shiga's (2008) studies, where these issues are significant according to students. In Oca's (2013) and Ates' (2013) studies, on the other hand, this set of issues did not receive many complaints from students. Additionally, Alford, 1997 in Nicklow et al., 2007; Stoecker et al., 1993; Luft, Kurdziel, Roehrig, & Turner, 2004 noted that although GTAs play important roles in higher education, they often do not receive sufficient support or training from their institutions.

3. Personal Character and Communication Style

The rating for this construct is quite promising, 3.98 in a scale of 0 to 5 (SD=0.74). This score is not perfect, but it implies that in general, undergraduate students think that their ITAs are willing to communicate and available outside of class hours, and that students themselves are aware that effective communication is their responsibility as well as that of the ITAs.

Khan (2013) coded personal character and communication as two different constructs. Whereas the current study combined them under one construct. Nevertheless, both Khan study's (2013) and the current study agreed that personal character and communications styles are not significant issues detracting from ITAs' instruction. In Khan's study (2013), communication is ranked fourth most problematic out of seven constructs; personal character is ranked sixth. In the current study, the corresponding construct is ranked third least problematic. This findings are consistent and indicate that both groups of students have generally positive impressions of their ITAs' characters and communication styles.

Ates (2008) and Oca (2013), on the other hand, found that communication was a prominent issue; it was the second construct that emerged in Ates' focus group discussion (2008, p. 40), and the second construct generated by Oca's unreceptive group (2013, p. 78). The majority of students in Ates' focus group discussion believed that effective communication is the responsibility of the speaker (ITA). Similarly, in Oca's study, communication failure was linked to ITAs' language proficiency, as indicated by this comment: "I definitely think that the language is the most important thing. I need to be able to understand them. And I think that that's just the most important aspect of it, because if you're not able to understand them, and not able to communicate well with them, then that's inhibiting your learning" (2013, p. 78). This indicates that there is not a stable consensus among undergraduate students regarding ITAs' communication styles, and that impressions may vary depending on the university.

4. Cultural Values

Among six constructs, this one received the highest score, 4.30 out of 5 ($SD=0.74$), which implies that students appreciate the exposure to other cultures that ITAs provide. This finding is not surprising because previous studies have shown that students viewed instruction by ITAs as opportunities to engage with other cultures. In this respect, Khan's study is the only outlier; students in this study expressed both positive and negative experiences. More than half (60%) of these students viewed instruction by an ITA as a positive opportunity to engage with another culture. However, many students also expressed that ITAs' approaches to teaching did not align with their own expectations, probably because ITAs attended grade schools—and in most cases, colleges—in completely different education systems (2013, p. 48-49).

Other studies aligned more closely with the finding of the current study. Ates found that a high percentage of students at Texas A&M responded positively to the cultural exposure provided by ITAs. Eighty percent of respondents believed that their ITAs gave them “a taste of another culture,” and 76% believed that having a class with an ITA gave them opportunities to develop their cross-cultural communication skills (2008, p. 43). Oca’s receptive group, which consisted of six students, mentioned that they appreciated having a class with an ITA and being able to “utilize the ITAs as international reference points” (2013, p. 46). Shiga’s interviews revealed that two of three students valued diversity in the classroom and were fascinated to learn about the ITA’s culture (2008, p. 59). These findings are consistent with the current study’s.

5. Understanding of Course Material and Expected Grades

This construct gained second highest out of the six constructs, at 4.03 on the scale of 0 to 5 (SD=0.91). This implies that undergraduate students are quite aware that their understanding of course materials and expected grades depend heavily on their own effort, not solely on the instructor.

Findings from previous studies, however, indicated the opposite. Ates’ quantitative findings revealed that students gave mixed responses to statements like “having a NNES GTA will often cause students to perform lower on exams,” and “If I had to get an ‘A’ in a course, I know my chances would be better if I did not have a NONNATIVE English-speaking TA.” Yet, in the researcher’s focus group discussion, a student said, “I think a lot of students sometimes like to use the non-fluency as a scapegoat and blame it on that’s the reason they didn’t do well in the class when really they probably didn’t do well because they didn’t go or something. I think that’s a lot of what students blame it on...” This comment

seems to be consistent with the findings of the current study, although Ates' qualitative findings were not (2008, p. 45-46).

It is possible that the discrepancies arise from the different contexts in which the data was collected. During the focus group discussion, students may have felt more self-conscious about blaming their ITAs in front of the researcher, and may have shifted responsibility for their failures to themselves to avoid being seen as unwilling to take ownership of their learning. Conversely, while responding privately to surveys, students may have felt more comfortable attributing responsibility to their ITAs. This does not necessarily reveal which response is more accurate, but does indicate that social factors surrounding data collection methods could affect the results. However, the results of the present study and Ates' focus group discussion are more consistent with the widely accepted premise that optimal learning occurs when all parties, not just the instructors, take active roles in the learning process.

Oca's findings, however, were inconsistent with this premise and with the current study. Based on the students' interview responses, Oca divided the research subjects into three groups: receptive, mixed, and unreceptive. In the unreceptive group, fear of getting lower grades in classes instructed by ITAs ranked the highest the key findings. The students expressed their fear even before attending their classes, when they saw that their ITAs had foreign-sounding names. These students seemed to believe that having an ITA instructing their class would inhibit their learning (2013, p. 76-77). This finding differed from the results of the current study, which found that students do not see their success in class as primarily dependent on their instructor, but rather as primarily dependent on their own effort.

6. Students' Understanding of their Responsibilities in a Class Instructed by an ITA

The rating of this construct is 3.97 (SD=0.86); this is still considered a good rating since it is close to 4 in a scale of 0 to 5, but compared to other constructs, it is relatively low. The rating, nevertheless, implies that undergraduate students attending the University of Arkansas during the Spring 2018 semester were generally aware that they share responsibilities with their instructors in order for instruction to succeed. The findings of the current study are slightly more positive than the results of several previous studies. For example, Khan found from her interviews that students at Southern Illinois University Carbondale circa 2013 thought that their culture was the norm and thus believed that the ITAs should conform to American culture (2013, p. 51-52). The majority of students in Ates' focus group discussion, meanwhile, believed that it was the speaker's responsibility—the ITAs—to ensure effective communication. The study's survey indicated that a higher percentage of students—72%—thought that effective classroom communication was both the speakers' and the listeners' responsibility (2008, p. 40-42). This suggests that students attending the University of Arkansas in Spring of 2018 had a better understanding of their classroom responsibilities than previous classes of students at other universities.

In Oca's unreceptive group, understanding of personal responsibility and initiative ranked third among the constructs contributing to students' unsatisfactory perceptions of their ITAs. Students seemed reluctant to ask questions in class. They would give up easily and blame their ITAs for their inability to understand the course material (2013, p. 79-81). Similar attitudes were documented in Shiga's study, wherein students indicated that their ITAs did not understand what American professors would usually do for students in class

(2008, p. 63). The students from these two studies seemed to believe that their learning was primarily the ITAs' responsibility.

7. Students' Perceptions of International Teaching Assistants

The aggregate of all six constructs, which reflects the students' perceptions of their ITAs in general, is 3.93 on the scale of 0 to 5 (SD=0.68). This suggests that students have generally positive perceptions of their ITAs, although there room for improvement.

It is unclear to what extent the location of each study, the year of each study, and the data collection methods used in each study affected the findings, although it is possible that all of these factors contributed to discrepancies between the studies.

II. Research Hypotheses and Inferential Findings

The scale of preference used in this study (see Appendix 2) was adapted from two previous studies on similar topics. Fox conducted a study entitled "Functions and Effects of International Teaching Assistants at a Major Research Institution" in 1991 at Purdue University. This study was then replicated at Iowa State University in 1994 by Barbara Plakans with the title "Undergraduate Experiences with and Attitudes toward International Teaching Assistants," and the findings were compared to those of the previous study.

The current study was not intended to replicate any of the previous studies. The researcher adapted some of the Likert type items developed by Fox, and thus there are similarities between the hypotheses of Fox (1991), Plakans (1994), and the current study. The results of these hypotheses were analyzed in relation to the results of previous studies to determine whether there have been changes in undergraduate students' perceptions. In the current study, a significance level of 95% was chosen for all of the statistical procedures when

testing the following hypotheses. Year, location, and data collection and analysis methods differed from study to study, and all three factors may have contributed to differences among the outcomes.

Eight out of ten hypotheses in this study are not supported, meaning that most variables do not predict differences in undergraduate students' perceptions of their ITAs at the University of Arkansas. Two hypotheses are supported; students' perceptions differ significantly depending on the size range of their hometown during K-12 and on their gender. Fox's findings showed that the researcher's hypothesis with those two variables—the size range of their hometown during K-12 and gender—did not predict any significant difference in students' perceptions (1991). In Plakans' study, all the author's hypotheses were supported; all the variables predicted significant differences in students' perceptions (1994). With fewer hypotheses supported in the current study, it seems that students' perceptions of their ITAs are becoming more homogeneous.

Hypothesis 1

Hypothesis 1 is rejected. Students' perceptions of their ITAs differ significantly based on the size range of their hometown during K-12. It is quite surprising that, at a 95% level of confidence, the results of Games-Howell post hoc test showed that students from cities of 10,000 to 50,000 people have more positive perceptions of their ITAs than students from cities of more than 50,000 people. The mean difference between the two groups is 0.237 ($p = .028$).

Since people in big cities tend to have more exposure to diversity, it seems reasonable to infer that they would be generally more open-minded than people from smaller cities. However, this assumption is not supported by the results of the current study. This may be because even when students come from big cities, they still often live in segregated areas and only interact closely with people from the same linguistic and cultural backgrounds as themselves. Another

reason could be that in big cities, there are often large diaspora populations or cultural groups whose members remain isolated from the rest of the city, and the domestic community rarely has opportunities to interact with them. Medium-sized cities, on the other hand, rarely support such populations, and diverse elements are forced to integrate with the majority. This might explain why the findings of this study indicated that students who come from medium-sized cities tend to have more positive perceptions of their ITAs than students from bigger cities.

Fox's study in 1991 at Purdue University showed a trend proportional to community size; students coming from rural areas had the lowest perceptions of their ITAs, and perceptions grew more positive as hometown size increased. However, the differences among their means did not differ significantly (1991, p. 127). Plakans' study in 1994 at Iowa State University produced similar results, with a trend proportional to community size: students coming from more populous hometowns during K-12 had more positive perceptions. However, the differences among the means were statistically significant (1994, p. 100). The findings of the current study differed from those of both previous studies, with positive perceptions peaking among students from cities of 10,000 to 50,000 people and then dropping off among students from cities of more than 50,000 people. Moreover, the differences between means were statistically significant.

Hypothesis 2

The statistic test fails to reject hypothesis 2. There is no statistically significant difference in students' perceptions of their ITAs depending on the diversity of their neighborhood/community backgrounds. However, this study did not account for differences in socio-economic status among students of their neighborhood/communities. Socio-economic status should be included as an independent variable in future studies of students' perceptions of their ITAs.

Neither Fox nor Plakans discussed differences in students' perceptions of their ITAs based on their community/neighborhood's ethnic/racial composition during K-12. Therefore, there is no data to which the results of the current study can be compared.

Hypothesis 3

The statistic test fails to reject hypothesis 3. There is no statistically significant difference in students' perceptions of their ITAs depending on the diversity of the high schools they attended. Neither Fox nor Plakans discussed students' perceptions of their ITAs based on their high school ethnic/racial composition. Therefore, there is no data to which the results of the current study can be compared.

Hypothesis 4

The statistic test fails to reject hypothesis 4. There is no statistically significant difference in students' perceptions of their ITAs depending on whether they have had previous international or cross-cultural experiences. Plakans' findings showed that undergraduate students attending Iowa State University circa 1994 had significantly different perceptions of their ITAs based on their experiences of traveling or residing abroad. Those who had traveled or lived abroad had significantly more positive perceptions than those who had not (1994, p. 105). Fox's finding showed a similar trend, although she was testing a different type of hypothesis. Plakans was trying to establish regression, whereas Fox's study correlational. Fox's Pearson correlation coefficient showed that there was a significant positive correlation between the amount of ethnic and cultural diversity experience undergraduate students had and their perceptions of their ITAs. The more exposure they had to cultural diversity, the higher their perceptions (1991, p. 134). The results of the current study, on the other hand, do not show any significant differences in

undergraduate students' perceptions of their ITAs based on previous experiences with cultural diversity.

The current study asked several questions about students' previous cross-cultural or international experiences, but did not differentiate types of experiences. For instance, one question asked whether a student had studied a foreign language, which—assuming the instruction took place in the U.S.—would not have given them direct experience with another culture. Meanwhile, another question asked if students had ever had international roommates, and if so, whether conflicts had arisen with them due to cultural differences and whether one or both students had worked to reach an understanding. Yet another question asked whether students had resided outside the U.S. for more than six months, which would most likely entail immersion in the local culture. Future studies could differentiate degrees of cross-cultural or international experience and investigate whether this has any significant effect on students' perceptions of their ITAs.

Hypothesis 5

The statistic test fails to reject hypothesis 5. There is no statistically significant difference in students' perceptions of their ITAs depending on the number of courses instructed by ITAs that they have taken. Fox found that undergraduate students attending Purdue University circa 1991 had significant different perceptions of their ITAs based on the number of courses instructed by ITAs that they had taken in the past. Students who had never had a class with an ITA had the highest mean perceptions among all the groups, and a significant difference existed between students who had never had any classes with ITAs and students who had had three ITAs (1991, p. 123-124). Plakans' study produced very similar results in terms of differences in mean perceptions between students who had never had classes with ITAs and those who had.

Undergraduate students attending Iowa State University circa 1994 who had never had any classes with an ITA had significantly more positive perceptions than those who had. Among students who had taken classes with ITAs, those who had had one ITA had the highest mean. Significant differences existed between three pairs, and in general, students who had taken more classes with ITAs had less positive perceptions (1994, p. 106-107). The findings of the current study, by contrast, do not show any significant difference in undergraduate students' perceptions of their ITAs depending on the number of courses instructed by ITAs.

Hypothesis 6

The statistic test fails to reject hypothesis 6. There is no statistically significant difference in students' perceptions of their ITAs depending on which college/school they are enrolled in at the University of Arkansas. Fox found that undergraduate students attending Purdue University circa 1991 had significantly different perceptions of their ITAs depending on their colleges, with Agriculture students having the lowest mean and Science students having the highest mean (1991, p. 123-125). Plakans' study also showed similar results; undergraduate students attending Iowa State University circa 1994 had significantly different perceptions of their ITAs depending on their colleges, with Agriculture and Business student having the lowest means; and Liberal Arts and Science students having the highest means (1994, p. 97). The findings of the current study, by contrast, do not show any significant difference in undergraduate students' perceptions of their ITAs depending on college/school they are enrolled at.

Hypothesis 7

The statistic test fails to reject hypothesis 7. There is no statistically significant difference in students' perceptions of their ITAs depending on year of enrollment. Fox found that undergraduate students attending Purdue University circa 1991 had significantly different

perceptions of their ITAs based on their years of enrollment, with freshmen having significantly more positive perceptions than sophomores (1991, p. 127). Plakans' study produced similar results; undergraduate students attending Iowa State University circa 1994 had significantly different perceptions of their ITAs depending on their years of enrollment, where significant difference existed between juniors and seniors; seniors had significantly more positive perceptions than juniors (1994, p. 97). The findings of the current study, by contrast, do not show any significant difference in undergraduate students' perceptions of their ITAs depending on year of enrollment.

Hypothesis 8

The statistic test fails to reject hypothesis 8. There is no statistically significant difference in students' perceptions of their ITAs depending on their estimated cumulative GPA. Fox found that undergraduate students attending Purdue University circa 1991 had significantly different perceptions of their ITAs depending on their cumulative GPAs. Students in the GPA range 4.00 – 4.99 had significantly less positive perceptions than students in the GPA range 5.00 – 6.00 (1991, p. 125). Plakans' study produced similar results; undergraduate students attending Iowa State University circa 1994 had significantly different perceptions of their ITAs depending on their cumulative GPAs. Significant differences occurred between students in the GPA range 2.00 – 2.99 and those in the GPA range 3.00 – 3.66 (the latter group had more positive perceptions); and students in the GPA range 2.00 – 2.99 and those in the GPA range 3.67 – 4.00 (again, the latter group had more positive perceptions) (1994, p. 100-101). The findings of the current study, by contrast, do not show any significant difference in undergraduate students' perceptions of their ITAs depending on cumulative GPA.

Hypothesis 9

The statistic test fails to reject hypothesis 9. There is no statistically significant difference in students' perceptions of their ITAs depending on age. Fox found that undergraduate students attending Purdue University circa 1991 had significantly different perceptions of their ITAs depending on their ages. Older students tended to have more positive perceptions of their ITAs than their younger peers. Students aged 25 and older had significantly more positive perceptions than two younger groups: 19 – 20 years old and 21 – 22 years old (1991, p. 127-130). Plakans' study produced similar results; the perceptions of undergraduate students attending Iowa State University circa 1994 were significantly different depending on age. Younger students had less positive perceptions, and their perceptions improved as they got older (1994, p. 100). The findings of the current study, by contrast, do not show any significant difference in undergraduate students' perceptions of their ITAs depending on age.

Hypothesis 10

Hypothesis 10 is rejected. Students' perceptions of their ITAs is significantly more positive among female than male students by 0.353. These results may be related to the common finding that women are generally better language learners than men. This could make it more challenging for men to adjust to new accents than it is for women. Women also tend to be good at reading both verbal and non-verbal language, whereas men more often attend primarily to verbal language. Finally, American women are typically conditioned to be more nurturing than men and thus may be more patient in dealing with communication barriers and other social challenges.

Plakans produced similar finding. Female undergraduate students attending Iowa State University circa 1994 had significantly more positive perceptions of their ITAs than their male

peers (1994, p. 97). However, Fox found that no significant difference between female and male undergraduate students' perceptions of their ITAs at Purdue University circa 1991 (1991, p. 125-127). The results of the current study agree with Plakans' (1994), which found that female undergraduate students had significantly more positive perceptions of their ITAs, whereas Fox's study (1991) showed no significant difference between women and men's perceptions of their ITAs (1991).

Qualitative Analysis

Fifteen interview questions were asked (see Appendix 4), covering six topics: information about the courses and the ITAs; problems and difficulties in courses instructed by ITAs; the ITAs' communication styles; differences between classes taught by ITAs and ATAs; advantages and disadvantages of having ITAs as instructors; and suggestions for ITAs. The student interviewed was enrolled in the Bachelor of Arts in History program at the J. William Fulbright College of Arts and Sciences. When the interview took place in the Spring of 2018, she was a sophomore and had two ITAs, one whom she liked and one whom she did not. The ITA whom she did not like was her Biology Lab instructor. This ITA was not intelligible, and she could not understand the ITA's explanations for most of the semester and ended up receiving a grade she did not expect.

The student had never been taught by an ITA before coming to the University of Arkansas. She was aware that she would probably have an ITA at some point because U of A is a large, diverse public university, although she did not expect it to happen during her first year. She gave the impression that she considered this a common-sense expectation, but that ITAs had not been mentioned during her freshman orientation. Even if it was addressed during orientation,

apparently it did not receive enough emphasis to make an impression. UAConnect did not specify that the instructor for her Biology Lab would be an ITA; she only learned about it on her first day of class. Informing students during freshman orientation that they might be taught by ITAs could potentially help other students form realistic expectation before entering the classroom. It is also important to emphasize that the U of A values diversity and that this makes the campus richer. This could help students appreciate whatever situations they encounter.

The student also mentioned that she actually favored ITAs over ATAs because she thought that ITAs in general cared far more about their students and about what they teach than their American counterparts. This may be because in many cultures, teaching is considered a noble job, and ITAs take on this responsibility proudly. The student even thought that there were no disadvantages to having an ITA instruct their class, except when the ITA was unintelligible.

Unfortunately, the student did find one of her ITAs unintelligible because of his thick accent. When the student emailed the ITA to let him know she was having a hard time understanding, the ITA modified his teaching methods slightly by adding more written explanations. Unfortunately, the written explanation was in illegible cursive and did not help much. When the ITA finally began providing brief typed explanations of the course material, the midterm had already passed, although the student found the typed explanations helpful, it proved to be too little, too late. From this scenario, we can see that it is vital to provide a means for students to assess their ITAs early in the semester. In addition to that, the supervisory professor should also be involved in assessing the ITAs' teaching methods and intelligibility. As for the ITAs, it is important that they enrich themselves with knowledge of teaching methods and suggestions from senior TAs.

The student did not use her ITA's office hours because she thought it would be a waste of time since she would not understand him anyway. This might be partly true, but face-to-face communication would probably have given her a better chance of understanding her ITA because they would have been closer to each other than in the classroom, and because she would have had more opportunities to ask for clarification. Regarding the classroom communication, student mentioned that she had given the ITA the benefit of the doubt, believing that she would eventually learn to understand him. However, she may have avoided her ITA's office hours out of fear that on-on-one communication would have become more awkward than classroom communication had she still failed to understand him. Creating situations for ITAs and students to establish friendly and comfortable interpersonal communication before the first class might encourage students to take more active roles in solving communications issues. ITAs could use this opportunity to talk about their cultures so that their students get to know them better.

Implications and Suggestions for Further Research

If this study is replicated, researchers should consider redesigning the research instrument in the following ways:

1. Stratified random sampling should be selected instead of random sampling in order to more accurately represent the population at the University of Arkansas. The distribution of respondents across colleges in this study did not reflect the distribution of the population at this university. The Sam M. Walton College of Business had twice as many students as the College of Engineering in the Spring 2018 semester. However, in this study, the percentage of respondents from Sam M. Walton College of Business was half of the percentage of respondents from the College of Engineering. Further research is needed here and in other

places to more accurately represent the demographics of the university studied on both qualitative and quantitative dimensions.

2. In the survey, securing students' consent, the first question should ask if the respondent is a domestic or international student. If they are international students, the survey should be automatically closed and the respondent thanked and not permitted to continue taking the survey. This question was not asked in the current study, and thus a small number of international students responded.
3. A question about students' socio-economic status background should be added so the researcher can determine whether students from different socio-economic backgrounds have significantly different perceptions of their ITAs.
4. The current study asked several questions about students' cross-cultural or international experiences, but did not differentiate the types of experiences they had. Future studies should consider differentiating these experiences in order to investigate whether the quality or degree of immersion matter.
5. The survey replicated the one used in two previous studies from 1991 and 1994, including the question about the size range of hometown and its answer options. The classification of what constitutes to a small, medium, and big cities might have changed in 2018. The next study should refer to the U.S. Census Bureau to classify the size range of students' hometown.
6. A similar study should be conducted on undergraduate international students' perceptions of their ITAs. It is interesting to investigate whether undergraduate international students' perceptions of their ITAs differ significantly depending on the root of their first language, continents, group of cultures, etc.

7. The qualitative section of this study should be replicated to gather richer descriptions of what constitutes a good ITA and how to overcome students' negative perceptions of intelligibility. It is important to determine why one student can understand an ITA and another cannot.

Implications and Suggestions for Undergraduate Students, ITAs, Supervisory Professors, and the University Administration

Suggestions for Undergraduate Students

1. One student from the receptive group in Oca's study (2013) suggested that undergraduate students should remain open-minded and take advantage of every opportunity to learn. Having courses with ITAs is one way that students can acquire new knowledge and perspectives beyond the course material in the curriculum.
2. The University of Arkansas is a diverse institution that proudly hosts nearly 1,500 international students from 120 countries ("International Admissions," n.d.). This environment provides many opportunities for students to make friends and mingle with international students. The Office of International Students and Scholars at the University of Arkansas actively works to help domestic students get involved with international students. Exposing oneself to different cultures will not only build communicative competence and facilitate acclimation to different accents; it will also enable students to experience new cultures, see things from different perspectives, and forge friendship with people from all around the world. One way to mingle with international students is by attending international events. There are a handful of culture-based Registered Students Organizations at the University of Arkansas that hold cultural events throughout the semester. Students who are enrolled in classes are eligible to attend as many events as they want free of charge.

3. Studying abroad will further broaden students' perspectives and help them develop more cultural competencies. The university should continue encouraging students to study abroad.

Suggestions for ITAs

1. ITAs should get to know their students better and let their students get to know them as well. They could dedicate time during instruction to talk about their life stories and cultures to their students. This way ITAs and students can connect with each other in a relaxed forum, which could facilitate better classroom communication throughout the semester.
2. ITAs should familiarize themselves with pedagogical practices commonly used in the U.S. This will help them better convey course material to students whose educational experiences have primarily been in the U.S. school system.
3. ITAs should reinforce their teaching with legible written explanations. They need to realize that minor linguistic errors and dialectic differences could potentially change the information they are trying to convey. Thus, it is important to augment their lecture with legible written explanations.
4. ITAs should be open to suggestions from students and let the students know that they take suggestions seriously for the sake of their own and their students' learning.
5. It is important to set a positive and professional tone at the beginning of the semester. ITAs should be detailed and comprehensive in composing the course syllabus, class policy, and grading system, and help remind students of these rules from time to time (Shiga, 2008).

Suggestions for Supervisory Professors

1. It is important for professors to remember that ITAs come all the way from their home countries to the U.S. and may find themselves overwhelmed by many cultural differences. They are also working on their graduate studies in English, which, in most cases, is not their mother tongue. The combination of linguistic and cultural differences is likely to be overwhelming and the adjustment process might take weeks or even months. With this in mind, professors should give their ITAs less challenging assignments while they are adjusting to the new environment. Grading papers or helping senior TAs prepare their classes might be a good place start for incoming ITAs.
2. Professors should provide opportunities for a new ITA to observe an undergraduate class in session in their field of study. They should make sure that their ITAs comprehend how certain policies or campus regulations are interpreted in the classroom (Oca, 2013).
3. Professors should provide opportunities and means for students to assess their ITAs within the first few weeks of the semester. Professors should also visit the class periodically to assess for themselves how intelligible and competent their ITAs are (Fox, 1991).
4. Professors should create a mentorship program where senior GTAs coach new ITAs in their first semester before they assume their teaching roles.

Suggestions for University of Arkansas Administration

1. ITAs screening test should be expanded to include pedagogical knowledge in their field of study.
2. During new student orientation, it is important to make new students aware that there are chances that they will be instructed by nonnative English professors. In addition, it is

important to emphasize that this campus embraces diversity and how to take advantage of the opportunities that this creates. Orientation materials should actively challenge the stereotype that instructors who have foreign accents are going to be poor teachers (Rubin & Smith, 1990).

3. The university should provide an intensive and extensive support system for ITAs. Such a system could be in the form of comprehensive workshops and/or orientations that cover issues related to ITAs' duties such as teaching methodologies; the most popular pedagogical method practiced in the U.S.; academic integrity; campus policies and regulations. The extensive support system could be provided in the form of consultancy opportunities for ITAs throughout the semester (Fox, 1991).

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Appendices

Appendix 1 Research Protocol Approval Letter



To: Nadia Hanayeen
BELL 4188

From: Douglas James Adams, Chair
IRB Committee

Date: 04/11/2018

Action: **Exemption Granted**

Action Date: 04/11/2018

Protocol #: 1802105140

Study Title: Undergraduate Students' perceptions of their International Teaching Assistants and perceptions of themselves in a course(s) instructed by an ITA

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Felicia Lincoln, Investigator

Appendix 2 Research Instrument

RESEARCH INSTRUMENT

Title: Undergraduate Students' Perceptions of their International Teaching Assistants (ITAs) at the University of Arkansas and Perceptions of Themselves in Courses Instructed by ITAs

I. Consent Form

Principal Investigator:

Nadia Hanayeen

M.Ed. TESOL

Peabody Hall 116

nhanayee@uark.edu

Co-Investigator:

Dr. Felicia Lincoln

Associate Professor

Peabody Hall 121

flincoln@uark.edu

Description: This study is aimed at finding out native speaker undergraduate students' perceptions of International Teaching Assistants at the University of Arkansas and perceptions of themselves in courses instructed by ITAs.

Benefits and risks: There are no benefits to participating. There are no anticipated risks to participating in the study since all the recorded data, demographic information, and responses from participants will be destroyed at the completion of the research.

Voluntary Participation: The participation in this research is completely voluntary. There are no rewards in any forms given to students nor college credit for participating

Confidentiality: All information collected for this study will be kept confidential to the extent allowed by law and University policy. All data in any form will be destroyed at the completion of this research.

Right to withdraw: The participants have the right to withdraw at any time during the study. Participants' decision not to participate in this study will bring no negative consequences on the study and the participants.

Informed Consent: I, _____ (please print name), have read information including the description, benefits, risks, participation, confidentiality, and the right to withdraw. I understand that I do not have to join this study if I do not want to. I understand that results of this research will be shared with me. I understand that there are no benefits or risks to participating in this research. My completion of the survey indicates that I agree for my responses to be used in this research.

You may contact the principal investigator through email, nhanayee@uark.edu, and Dr. Felicia Lincoln, my advisor, at flincoln@uark.edu, to ask any other questions.

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

II. Background Information

A. Current Information

1. School in which you are enrolled at the UofA:
 Bumpers College
 Fay Jones School of Architecture and Design
 Fulbright College
 Sam M. Walton College of Business
 College of Education and Health Professions
 College of Engineering
2. Year in School:
 Freshman
 Sophomore
 Junior
 Senior
3. Estimated cumulative grade point average (GPA):
 3.51 – 4.00
 3.01 – 3.50
 2.51 – 3.00
 less than 2.50
4. Age:
 18-20
 21-23
 24-26
 27 or older
5. Gender:
 Female
 Male
 Other, please specify _____ (optional)
6. Predominant ethnic/racial background:
 American Native Indian or Alaskan Native
 African American

- White
- Asian
- Native Hawaiian or Other Pacific Islander
- Hispanic or Latino
- Two or More Races
- Other, please specify _____

7. U.S. citizen:

- Yes
- No

B. Residence and School Background

1. Type of area in which you resided during the majority of your elementary and high school years (please check only one):
 - Rural Town/City of less than 10,000
 - City of 10,000 to 50,000
 - City of more than 50,000
2. Racial/ethnic make-up of the community/neighborhood in which you resided during the majority of your elementary and high school years (please check only one):
 - Only one racial/ethnic group
 - Predominantly one racial/ethnic group, with less than 10% of other group(s)
 - One racial/ethnic group in the majority, with more than 10% of other group(s)
 - Two or three different ethnic/racial groups, with no group in the clear majority
 - Four or more ethnic/racial groups, with no group in the clear majority
3. Racial/ethnic make-up of the high school you attended (please check only one):
 - Only one racial/ethnic group
 - Predominantly one racial/ethnic group, with less than 10% of other group(s)
 - One racial/ethnic group in the majority, with more than 10% of other group(s)
 - Two or three different ethnic/racial groups, with no group in the clear majority
 - Four or more ethnic/racial groups, with no group in the clear majority

C. International or Cross-Cultural Experience at the UofA

1. Have studied a foreign language:
 Yes
 No
2. Have had an international roommate:
 Yes
 No
3. Have hosted international visitor(s):
 Yes
 No
4. Have traveled/vacationed outside the U.S. for less than 6 months:
 Yes
 No
5. Have resided outside the U.S. for 6 months or more:
 Yes
 No

(If no, go on to question #6). If yes:

- a. Number of different stays outside the U.S. (check one):
 One
 Two
 Three
 Four
 Five or more
- b. Length(s) of stay (check all that apply):
 6-11 months
 1 -2 years
 2 years or more
- c. Area(s) of the world where you have resided (check all that apply):
 Canada
 Central or South America
 Asia

- ___ Africa
- ___ Europe
- ___ Australia or Pacific Islands
- ___ Russian Federation

6. Other international experience (please describe):

III. Experience with International Teaching Assistants

1. How many courses/labs instructed by an ITA have you had before?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. More than 4

2. How did you know that she/he was an International Teaching Assistant (as opposed to American Teaching Assistant)?
 - a. By his/her accent
 - b. By his/her appearance
 - c. By his/her clothing style
 - d. By his/her name
 - e. Other (please explain) _____

IV. Scale of Preferences

Please **check the appropriate number** in the column on the right to indicate the extent to which you agree or disagree with each of the following statements. Many of the statements are similar, but please read and respond to each one as accurately as you can. Do not reflect on them. Work quickly and circle your first response.

Use the following scale:

1	2	3	4	5
Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

Students' Perceptions of International Teaching Assistants (ITAs)

Language and Linguistics (Intelligibility)	1	2	3	4	5
1. My ITA(s) has an accent, but I can understand her/his explanations.*					
2. If I got an ITA with a strong foreign accent, I would try to transfer to a different section of the course.					
3. It will not bother me to have an ITA with a slight accent.					
4. It is frustrating to talk with people who have a strong foreign accent.					
5. It doesn't matter to me whether my ITA has an accent or not.					
6. My ITA(s) has difficulty understanding and answering students' questions.					
Pedagogy and Teaching Skills					
1. My ITA(s) always uses teaching media to help him/her explain the lesson.*					
2. Lecture is the preferred method of instruction my ITA(s) uses in teaching.*					
3. My ITA(s) teaches just as effectively as my American TAs.					
4. My ITA(s) is knowledgeable but poor in delivering the lesson.*					
5. American and International TAs can be equal in the subject knowledge.					
6. American TAs are generally more knowledgeable than ITAs.					
Personal Characteristics and Communication Style					
1. My ITA(s) is unwilling to meet outside of class hours.*					
2. Both the ITA and the student should share the responsibility for classroom communication.					
3. My ITA(s) very rarely answers emails from students.*					
4. ITAs usually make a sincere effort to communicate effectively in the classroom.					
5. My ITA(s) seems unaware of communication problems in the class.*					
6. My ITA(s) is always available for consultation during office hours.*					

Students' Perceptions of Themselves in Courses Instructed by ITAs

Cultural Values						
1. ITAs can give students a taste of another culture, which, in itself, is educationally valuable.						
2. In the future, I probably won't live or work with people from other countries or cultures.						
3. Having a class with an ITA is an opportunity for developing cross-cultural communication skills.						
4. Interacting with people of different cultural backgrounds will not be part of my planned career.						
5. Improving communication skills in a class with an ITA is useful preparation for living and working in an increasingly global society.						
6. I have little interest in learning to communicate with people from other countries and cultures.						
Understanding of Teaching Materials and Expected Grades						
1. As long as I put in efforts (i.e. come to class, pay attention to my ITA(s)' lesson, and do my assignments) I feel I can get a good grade in the course.*						
2. Having an ITA will often cause students to perform lower on exams.						
3. I can learn just as well from an ITA as I can from an American TA.						
4. No matter what efforts I have made, I just cannot understand any course(s) instructed by an ITA(s).*						
5. It shouldn't matter whether you have an ITA or an American TA, you can get a good grade either way.						
6. If I had to get an "A" in a course, I know my chances would be better if I did not have an ITA.						
Students' Responsibilities in Class						
1. Students' attitudes affect their ability to understand ITAs in class.						
2. When there are communication problems between students and ITAs, students can do very little to improve the situation.						
3. American students can help ITAs in their adjustment to the U.S. classroom.						
4. Students should not have to take responsibility for improving communication between themselves and ITAs.						
5. As a student, I am willing to adjust to different accents, eye contact patterns, and nonverbal communication styles of ITAs.						
6. It is not reasonable to expect students to make listening and/or speaking adjustments in order to communicate with ITAs.						

(*) survey items developed by the researcher

Appendix 3 Email to Students to Request Participation



Dear student:

My name is Nadia Hanayeen, a master student in TESOL at College of Education and Health Professions at the University of Arkansas. I am currently working on my thesis, and my thesis topic is undergraduate students' perceptions of their international teaching assistants and of themselves in courses instructed by ITAs at the University of Arkansas. In my research, I would like for you to allocate 10 minutes of your time to fill out a survey.

The purpose of this study is to give a clear understanding of undergraduate students' perceptions of their International Teaching Assistants and perceptions of themselves in a course(s) instructed by an ITA at the University of Arkansas. Their perceptions matter because students are important stakeholders of this university. For the campus, this study is expected to give some points of view of whether or not the TA screening method currently implemented has yielded a satisfying outcome.

Participation is fully voluntary. The benefits to you may include improved interactions with International Teaching Assistants in the future and a higher quality of education by ITAs in the future. Throughout the process, your anonymousness will be protected and recorded data will be destroyed at the completion of the study. In this study, your participation is essential.

If you have any questions or concerns about this study, please feel free to contact me at nhanayee@uark.edu and my advisor, Dr. Felicia Lincoln, at flincoln@uark.edu. You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I greatly appreciate your participation.

Sincerely,

Nadia Hanayeen

Appendix 4 Special Section Interview Guide

Interview Questions

1. What courses have you taken with ITAs?
2. Have you taken a courses taught by international instructors before studying at the U of A?
3. Did you expect to take courses taught by ITAs at the U of A?
4. How did you feel when you found out the course was taught by an ITA?
5. Does it give you a different feeling to know your TA is an American or international?
6. What are the advantages and disadvantages in attending classes taught by ITAs?
7. What problem or difficulties have you encountered in a class taught by an ITA? Please describe in detail and provide an example, if possible.
8. Have you made any effort to overcome the problems or difficulties you encountered in that course, such as talking to the ITA, seeing him/her during office hours, or addressing this issue to your regular professor?
9. Did the ITA make any changes after you expressed the difficulties you had?
10. What was his/her communication style? Was he/she good at responding to emails?
11. Can you tell me more about your other ITA? The one that you liked better?
12. What, if any, are the differences between classes taught by ITAs and by English speaking TAs?
13. If a friend of yours was going to be a TA next semester, what advice would you give her/him?
14. What do you find to be the most important characteristics of a college teacher?
15. Did you know that there is a spoken test here at the UofA for international students who are applying for a teaching assistantship?