ADAPTING TO HIGHER EDUCATION IN A NEW CULTURE: INTERNATIONAL STUDENTS’ PERSPECTIVES ON RESEARCH, WRITING, AND ACADEMIC INTEGRITY

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ABSTRACT

Amanda Bennett Click: Adapting to Higher Education in a New Culture: International Students’ Perspectives on Research, Writing, and Academic Integrity
(Under the direction of Sandra Hughes-Hassell)

This qualitative study explores the cultural adaptation of international graduate students studying in the United States at three universities in North Carolina, focusing on how they conduct their academic research and writing, and how they perceive and negotiate issues of academic integrity. Critical incident technique and semi-structured interviews were used to collect and analyze data. Participants were asked to describe a specific critical incident, in this case the process of completing a major assignment that required research and writing. Findings were interpreted using Kim’s cross-cultural adaptation theory.

When asked about the best aspects of living and studying in the United States, participants named the people (particularly their professors and classmates), opportunity to learn and grow, and educational environment. They identified language, cultural, and academic issues as the most challenging aspects. Many described similar research processes and difficulties. They struggled with issues like coming up with a research topic, and specific skills like finding and assessing resources. Academic writing proved to be challenging due to the lack of experience, familiarity with the American scholarly style, and English-language vocabulary.

Participants were familiar with American academic integrity standards and expectations, and viewed paraphrasing and proper citation as the most important tools in avoiding plagiarism. Half of them learned about the concept of academic integrity upon arriving in the United States, and half learned about it in high school or undergraduate programs in their home
countries. The majority acknowledged that they thought about these issues differently after spending one or two years in graduate school in the United States.

The findings of this study have implications for faculty and staff on American college and university campuses, particularly academic librarians, professors, and writing center staff. It was clear that participants were eager to adapt and to learn new skills that would help them to succeed in their graduate programs. Librarians, teaching faculty and writing center staff can and should provide research, writing, and academic integrity support and training for international students. Recommendations include incorporating cultural perspectives into instruction, providing opportunities for international and domestic students to collaborate, and promoting on- and off-campus tools and resources.
For my husband, Josiah, and our growing family.
ACKNOWLEDGEMENTS

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I want also to express the deepest gratitude to my family – especially my husband, Josiah. You were patient when I needed patience and pushed me when I needed pushing. Thank you for your love, support and generosity. Thank you also to my parents, Richard and Heather Click, who taught me perseverance, accountability, and confidence.

To those that participated in this study – thank you for sharing your experiences. Your stories and perspectives were often remarkable and always interesting. You are an impressive group of students, and I know you will find success.
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CHAPTER 1: STUDY OVERVIEW

1.1 Statement of Problem

International students studying in the United States higher education system come from a variety of cultural and educational backgrounds. They may be accustomed to diverse styles of teaching and learning, as well as different perspectives on academic integrity. The literature on this topic tends to take a “deficiency view” of international students regarding academic work and issues of academic integrity, and focuses on helping international students understand and function within the American higher education system. The primary goal of this study is to explore how these students approach their graduate-level academic work, how they learned about academic integrity in their own academic cultures, how they perceive and negotiate this concept in an American context, and how these perceptions affect the process of completing scholarly work.

1.2 Study Significance

According to the Institute of International Education’s Open Doors Report on International Education Exchange (2015a), the number of international students studying in the United States during the 2014-2015 academic year increased by 10%, up to 974,926 students. These students, almost half of whom come from China or India, contribute a great deal to the American economy and system of higher education. The presence of international students in the American classroom supports a global perspective and diverse learning environment (Trice, 2003), and helps prepare students – both domestic and international – to work in an intercultural environment (Pandit, 2013). During this time of austerity, international
students also provide a much-needed source of revenue for universities (Altbach, 2004). Their financial impact is not limited to campuses, however. NAFSA, the Association of International Educators (2014), reported that international students and their families contributed almost 27 billion dollars to the U.S. economy in 2013-2014.

International students face some unique challenges in U.S. higher education. Personally, these students may struggle with issues such as homesickness and loneliness (Rajapaska & Dundes, 2002; Robertson, Line, Jones, & Thomas, 2000), discrimination (Lee & Rice, 2007), and general acculturative stress (Johnson & Sandhu, 2007). Academically, international students may have difficulties related to English-language proficiency (Senyshyn, Warford, & Zhan, 2000; Yeh & Inose, 2003), different pedagogical styles (Andrade, 2006a; Eland & Thomas, 2013), and unfamiliar academic integrity standards (Hayes & Introna, 2005). It is clear that they may benefit from specialized support from a variety of university offices and organizations – from the student health center to the library – so that they can take full advantage of the U.S. higher education system and American students and faculty can benefit from their presence.

This study focuses specifically on international graduate students’ research and writing processes, and perceptions of and engagement with issues of academic integrity as they complete their major assignments. Librarians are natural and involved proponents of academic integrity on university and college campuses, teaching students to find, evaluate, and use information in an ethical manner. The results of this study may be used to inform practice in librarianship related to both services for international students and advocacy for academic integrity. In addition, insight into how these students complete and perceive their scholarly work may help university staff, such as those in international student offices and writing centers, to provide improved support, and help faculty to understand better how to teach and advise international students. Improved and specialized support for this student population from
librarians, faculty and staff would likely result in better learning outcomes and student satisfaction.

1.3 Definitions

The Institute of International Education (n. d.) defines an international student as “anyone studying at an institution of higher education in the United States on a temporary visa that allows for academic coursework” (Open Doors FAQ). This definition is obviously meant for an American setting, which is appropriate for this study which takes places in the U.S. state of North Carolina. Identifying a succinct and useful definition for academic integrity proved to be a challenge. For example, *The Greenwood Dictionary of Education* (2011) gives the following definition:

> Academic integrity is academic honesty integrated into all aspects of academic life, including crediting sources used in all forms of publications, research, experiments, assignments, and papers. Academic integrity also encompasses students refraining from cheating on examinations and in all of their classroom assignments. Academic integrity is the standard by which individuals are expected to create their own work and not reproduce or copy the work or ideas of others without giving proper credit (Werre, p. 4).

I considered this to be too lengthy and detailed for the purposes of this study, and thus the following simpler definition, adapted from Wikipedia (2015), was used:

> Academic integrity is the moral code of academia. Under this code, scholars must avoid cheating and plagiarism, adhere to academic standards, and be honest in their research and writing.

Many scholars interested in international students and non-native speakers of English have written about how plagiarism should be defined and handled (Abasi & Graves, 2008; Deckert, 1993; Pecorari, 2003; Pennycook, 1996). Again, I prefer a broader definition:
Plagiarism is a “term used to describe a practice that involves knowingly taking and using another person’s work and claiming it, directly or indirectly, as your own” (Neville, 2010, p. 30).

1.4 Research Questions

This study seeks to address the following research question and sub-questions:

RQ1: How do international graduate students studying in the United States conduct their academic research and writing?

- What steps do they take in the process of completing an academic assignment?
- How do they conduct research and use the library and other resources in this process?
- How do they integrate these sources during the writing stage of an academic assignment?

RQ2: How do international graduate students studying in the United States perceive, engage with, and negotiate issues of academic integrity?

- What and how did they learn about academic integrity prior to entering graduate school in the United States?
- How do they think about academic integrity during the research and writing process?

1.5 Theoretical Framework

I take a qualitative, constructivist approach in this study. The research design is influenced by Crotty’s (1998) assumptions related to constructivism:

1. Human beings construct meaning as they engage with the world they are interpreting.
2. Humans engage with their world and make sense of it based on their historical and social perspectives – we are all born into a world of meaning bestowed upon us by our culture.
3. The basic generation of meaning is always social, arising in and out of interaction with a human community (Creswell, 2014, p. 9).

The second assumption is particularly relevant in this study, as it will involve exploring concepts (scholarly research, academic integrity) from a variety of cultural perspectives, but making meaning as a result of engaging with the world and social interactions are pertinent as well.

In addition, Kim’s cross-cultural adaptation theory guided the design of this study. This theory contends that “although unique in individual circumstances, all strangers in an unfamiliar environment embark on the common project of establishing and maintaining, over time, a relatively stable and reciprocal relationship with the host environment” (Kim, 2009, p. 244). This research uses Kim’s theory to explore how international students adapt to the higher education environment in the U.S., specifically related to the ways that they approach their academic work and perceive issues of academic integrity. Three boundary conditions frame cross-cultural adaptation theory:

(1) The strangers have had a primary socialization in one cultural or subculture and have moved into a different and unfamiliar culture (or subculture), (2) they are at least minimally dependent on the host environment for meeting their personal and social needs, and (3) they are regularly engaged in firsthand communication experiences with that environment” (Kim, 2009, p. 244).

Each of these conditions clearly applies to the experiences of students studying outside of their home countries. More detail about cross-cultural adaptation theory is provided in Chapter Four.
CHAPTER 2: INTERNATIONAL STUDENTS IN HIGHER EDUCATION

This chapter synthesizes the literature on international students. It begins with current statistics related to international students studying in the United States, and continues with a discussion of the major issues that these students face. The next section focuses specifically on the LIS literature, which covers international student use of library spaces and resources, as well as library instruction and reference services. The chapter closes with a section about institutional support for international students. Some details regarding terminology should be acknowledged: Until the mid-1980s, the phrase “foreign student” was used more commonly, but now “international student” is preferred. Most of the literature reviewed here focuses on international students studying in the United States, United Kingdom, or Australia. Students from these countries are considered “home” or “domestic” students.

2.1 International Student Statistics

In the 2014-2015 academic year, 974,926 international students were enrolled in U.S. higher education, a record high (Institute of International Education [IIE], 2015a).\(^1\) Demographic information about international students studying in the U. S. during 2014-2015, including place of origin and field of study, can be found in Tables 1 and 2. There were 687,379 students from the top ten countries of origin, which was approximately 70% of the total number

\(^1\) It is worth noting that there has been a “record high” number of international students every year since 2007-2008. Numbers dipped in the post-9/11 years, starting with the 2002-2003 academic year (IIE, 2008).
of international students enrolled in the United States. The top two countries of origin were China and India, accounting for 45% of the international students studying in the U.S. during the 2014-2015 academic year. The most popular fields of study were business and management, engineering, and math and computer science. More than half of the international students in the U.S. were studying one of these three fields. Ninety percent were studying one of the thirteen listed disciplines, leaving just 10% categorized as “Other” or “Undeclared.”

*Table 1.* Top 10 countries of origin for international students in the U.S., 2014-2015 (IIE, 2015a)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country of Origin</th>
<th>Number of Students</th>
<th>% of Total International Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>304,040</td>
<td>31.2%</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>132,888</td>
<td>13.6%</td>
</tr>
<tr>
<td>3</td>
<td>South Korea</td>
<td>63,710</td>
<td>6.5%</td>
</tr>
<tr>
<td>4</td>
<td>Saudi Arabia</td>
<td>59,945</td>
<td>6.1%</td>
</tr>
<tr>
<td>5</td>
<td>Canada</td>
<td>27,240</td>
<td>2.8%</td>
</tr>
<tr>
<td>6</td>
<td>Brazil</td>
<td>23,675</td>
<td>2.4%</td>
</tr>
<tr>
<td>7</td>
<td>Taiwan</td>
<td>20,993</td>
<td>2.2%</td>
</tr>
<tr>
<td>8</td>
<td>Japan</td>
<td>19,064</td>
<td>2.0%</td>
</tr>
<tr>
<td>9</td>
<td>Vietnam</td>
<td>18,772</td>
<td>1.9%</td>
</tr>
<tr>
<td>10</td>
<td>Mexico</td>
<td>17,052</td>
<td>1.7%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>687,379</strong></td>
<td><strong>70.40%</strong></td>
</tr>
</tbody>
</table>
Table 2. Fields of study for international students in the U.S., 2014-2015 (IIE, 2015a)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Field of Study</th>
<th>Number of Students</th>
<th>% of Total International Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business and Management</td>
<td>197,258</td>
<td>20.2%</td>
</tr>
<tr>
<td>2</td>
<td>Engineering</td>
<td>196,750</td>
<td>20.2%</td>
</tr>
<tr>
<td>3</td>
<td>Math and Computer Science</td>
<td>112,950</td>
<td>11.6%</td>
</tr>
<tr>
<td>4</td>
<td>Social Sciences</td>
<td>75,951</td>
<td>7.8%</td>
</tr>
<tr>
<td>5</td>
<td>Physical and Life Sciences</td>
<td>73,838</td>
<td>7.6%</td>
</tr>
<tr>
<td>6</td>
<td>Fine and Applied Arts</td>
<td>56,758</td>
<td>5.8%</td>
</tr>
<tr>
<td>7</td>
<td>Intensive English</td>
<td>49,233</td>
<td>5.0%</td>
</tr>
<tr>
<td>8</td>
<td>Health Professions</td>
<td>33,399</td>
<td>3.4%</td>
</tr>
<tr>
<td>9</td>
<td>Communications and Journalism</td>
<td>20,161</td>
<td>2.1%</td>
</tr>
<tr>
<td>10</td>
<td>Education</td>
<td>17,675</td>
<td>1.8%</td>
</tr>
<tr>
<td>11</td>
<td>Humanities</td>
<td>17,504</td>
<td>1.8%</td>
</tr>
<tr>
<td>12</td>
<td>Legal Studies and Law Enforcement</td>
<td>13,778</td>
<td>1.4%</td>
</tr>
<tr>
<td>13</td>
<td>Agriculture</td>
<td>12,278</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>73,176</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>Undeclared</td>
<td>24,217</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>974,926</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

2.2 Issues for International Students

The majority of the research included in this section explores the problems and coping difficulties of international students, which seem to have changed little in the last fifty years. In a two-part study conducted in the late 1970s, Hull (1978) collected data from participants at three universities, via questionnaire and interviews with foreign students (the term used at the
time). The top reported difficulties with coping were financial problems and depression. Decades later, international students still cite their finances as a major stressor (Robertson, Line, Jones, & Thomas, 2000), and identify a need for more work opportunities and scholarships (Sherry, Thomas, & Chui, 2010). In fact, the 2015 *Open Doors Report* indicated that 64% of international students are self- or family-funded (IIE, 2015a). According to Johnson and Sandhu (2007), international students may experience acculturative stress due to homesickness, loneliness, social isolation, identity and values confusion, uncertainty and anxiety, and depression. Other issues for these students may include discrimination (Gonzalez, 2004; Lee & Rice, 2007), English-language proficiency (Heikinheimo & Shute, 1986; Yeh & Inose, 2003) and academic difficulties (Gonzalez, 2004; Ladd & Ruby, 1999).

### 2.2.1 Homesickness and isolation.
Homesickness and loneliness are universal problems for international students (Robertson et al., 2000; Rajapaska & Dundes, 2002), because they generally do not have as much social support as domestic students usually do, as a result of the distance between them and friends and families in their home countries (Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002). Pedersen (1991) points out that “a person’s self-esteem and self-image are validated by significant others, who provide emotional and social support in culturally patterned ways” (p. 12), and that these support systems become far less accessible when a student moves to a new country and attempts to settle in an unfamiliar culture. Heikinheimo and Shute (1986) theorized that international students tend to immerse themselves in academic work in order to keep themselves occupied and combat loneliness (p. 402).

### 2.2.2 Mental health and counseling.
Despite struggling with depression and feelings of isolation, mental health services are underused by international students (Abe, Talbot, & Geelhoed, 1998; Bradley, Parr, Lan, Bingi, & Gould, 1995; Mori, 2000), often because these students tend to prefer informal networks for collecting information and solving problems
instead of relying on university services (Heikinheimo & Shute, 1986). Even when international students utilize these services, they are more likely than American students to end treatment prematurely (Pedersen, 1991). Mori (2000) provides a summary of the reasons why these students are hesitant to avail themselves of mental health services, including the belief that psychological issues are beyond their control and thus cannot be addressed by counseling, the idea that disclosing personal problems to a counselor is shameful, and an inability to distinguish emotional distress from physical illness. The literature recommends cultural competency training for counselors and mental health professionals, so that they are able to meet the needs of international students through specialized counseling (Heikinheimo & Shute, 1986; Zimmerman, 1995). For example, focusing on Asian students studying in the United States, Lin and Yi (1997) emphasize the importance of helping “international students with bi-cultural conflicts to achieve a balance between participating in the new culture and maintaining their own cultural identities” (p. 477). Singaravelu and Pope’s (2007) guide for counseling international students includes regionally specific chapters such as “Counseling African International Students” and “Counseling International Students from the Former USSR.”

2.2.3 Discrimination. International students struggle with “feelings of being discriminated against [which] produce in some students insecurity and a sensation of being unwelcome” (Heikinheimo & Shute 1986, p. 403). Lee and Rice (2007) found that a range of problems faced by international students, including job opportunities, funding, housing, and difficulties with social interactions with students, faculty, and administrators could be attributed to discrimination. A Canadian study found that domestic students sometimes view non-native speakers of English – recent immigrants or international students – as less competent, and are less than welcoming in the classroom (Parks & Raymond, 2004). Even when students do not experience direct prejudice or discrimination, they sense apathy from the host culture: “Some students felt that Americans, outside the university system, were not interested or did not care about foreigners” (Gonzalez, 2004, p. 132). In some cases, international students demonstrate
prejudice and preconceptions about domestic students, particularly as related to their attitudes towards learning. In Montgomery’s (2010) study of international students in the U.K., she found that they perceived domestic students as lacking motivation and focusing on socializing instead of learning (p. 115).

European students in the U.S. face fewer problems with discrimination (Gonzalez, 2004; Lee & Rice, 2007). As a result, they are “significantly less likely to experience acculturative stress than...students from the geographic regions of Asia, Africa, and Latin/Central America” (Yeh & Inose, 2003, p. 23). In addition, being European is negatively correlated with feelings of alienation (Schram & Lauver, 1988).

2.2.4 English language proficiency. A high percentage of the literature included in this review addresses the issue of English language proficiency – usually the issue of lack of proficiency. Although all non-native speakers struggle with learning and socializing in English, Heikinheimo and Shute (1986) found that Asian students in particular struggled with “understanding lectures, taking notes, answering questions, and writing essays” (p. 401). A lack of English language skills has a detrimental effect on the experiences of international students, both in- and outside of the classroom. As language skills improve, the “social and academic adjustment becomes less of a problem” (Heikinheimo & Shute, 1986, p. 405) and levels of acculturative stress decrease (Yeh & Inose, 2003, p. 23). One study showed that students with higher TOEFL scores had an easier time adjusting culturally and were more satisfied with their experience studying in the United States than students with lower scores (Senyshyn, Warford, & Zhan, 2000).

2.2.5 Learning styles and education systems. Throughout this section, “Western” will be used to indicate North American, European, and Australian – for lack of a better term. The literature is full of assumptions about the ways that international students learn, and the educational systems in which they are educated. It is assumed that international students are
accustomed only to rote memorization (Ladd & Ruby, 1999; Lipson, 2008) and unquestioning passive learning (Robertson et al., 2000). In his book of advice for international students in the U.S. and Canada, Lipson (2008) cautions that “U.S. and Canadian universities prize originality and creativity, not conformity and rote repetition” (p. 23). The following is a typical quote from the literature:

   Many foreign students, students from the Middle East for example, will initially have difficulties studying in our system. They often have not been trained to do independent library research or to write imaginative or even logical essays. Generally, they have only experienced the lecture method of teaching and have been required to memorize facts in preparation for exams once or twice a year (Bultheis, 1986, p. 25).

   While these assertions may often be true, the negative tone regarding other (supposedly inferior) styles of education may have a deleterious effect on perceptions of international students and their relationships with domestic students, faculty, and staff. It is essential that educators do not think of these styles of education as inferior or backwards, but simply as alternative and different. In these systems, fact is vital and analysis is secondary, if considered to be of relevance at all. The Western concept of research may be unfamiliar, and Badke (2002) notes that these students may adhere to the “philosophy that research is essentially the reproduction of the work of others” (p. 63).

   Certain aspects of Western-style higher education may be more difficult than others for students who have spent most of their lives learning in a different environment. For example, Chinese students may have difficulty writing an essay in which they must defend a position, because they may be accustomed to an education system that “does not typically require students to take a stance, but rather to find a way to harmonize the various alternatives” (Currie, 1998, p. 6). Conducting and writing a literature review can also be a daunting task, because it is “heavily reliant on the students’ ability to be critical both of the quality and integrity of both
research and author(s)” (Duff, Harris, & Rogers, 2006, p. 687). Students who have spent most of their educational career considering textbooks (and their professors) to be the ultimate authority may falter when asked to critique the ideas of an expert. In a case study at the University of Alberta, librarians found that international students placed the highest value on information given to them by professors and other figures of authority. They used these materials to identify the most important authors, and then searched for other papers by those authors (Morrissey & Given, 2006, p. 233).

Ladd and Ruby’s (1999) study about learning styles of international students did indicate that “the lecture was the primary means of delivery outside the United States,” however, the participants’ preference was actually learning through direct experience (p. 364). Eland and Thomas (2013) address the challenge of transitioning from a teacher-centered to a student-centered learning environment, in which students are expected to express their own ideas. Andrade (2006b) found that students from Asia and Polynesia were unsettled by class participation expectations in the American system, because they were used to a less interactive style of learning. The Asian students in particular found that “adjusting from a competitive educational system to a cooperative one was a challenge” (p. 71).

It is clear that the faculty perceptions of international students reflected in the literature are not usually positive. In a study conducted at an Australian university, surveyed staff were concerned that “many international students are reluctant to give a personal opinion or to involve themselves in tutorial/class discussions” (Robertson et al., 2000, p. 97). Students view their professors and instructors as authority figures, and are hesitant to alter words that come from the established expert (Ladd & Ruby, 1999). This belief about the ownership of information may lead to misunderstandings and accidental plagiarism, a topic covered further in Chapter Three: Academic Integrity. International students tend to expect a great deal of guidance from their professors and advisers, which may explain why Australian faculty were concerned that
“international students do not take sufficient responsibility for their own learning” (Robertson et al., 2000, p. 100).

Drawing attention to the call for the internationalization of American LIS education and a “two-way” learning process, Mehra and Bishop (2007) conducted a series of interviews with 21 international students enrolled in a LIS doctoral program. The authors argue that these students “have access to specific cross-cultural knowledge, international experiences, global social networks, and cultural-specific skills that have often been ignored or underutilized in the past” (p. 54), and that two-way learning in which American and international students share their diverse experiences and perspectives with each other is beneficial for everyone. The participants emphasize the importance of global collaboration, hiring international LIS faculty, and promoting models of teaching that support cultural inclusiveness. They also describe their efforts at sharing their own perspectives in the classroom, and their frustration with the U.S.-centric focus of faculty and other students. As a result of her research on international students in Australia, Hughes (2005) similarly recommends “the interaction of international students with local students in authentic learning situations, thus enabling all students to benefit from experiencing a range of teaching styles and learning behaviours” (p. 175).

2.2.6 Academic pressures. International students generally place a high priority on academic achievement, and often feel intense pressure to succeed (Heikinheimo & Shute, 1986). Lipson (2008) collected feedback from international students, and the faculty members, administrators, and advisers who work with them, and found that “international students face three big issues in their academic work: mastering English, expressing their own viewpoints in papers, class discussions, and research, and learning the rules of academic honesty, as they are understood in the United States and Canada” (p. 21). The latter is particularly important, as international students may not understand the rules of academic integrity, or understand exactly how to cite sources and avoid plagiarism (Eland & Thomas, 2013; Lipson, 2008). Ladd
and Ruby (1999) point out that “in some cultures, knowledge is in the public domain; other cultures believe it is disrespectful to alter an authority’s original words” (p. 366).

Gonzalez (2004) found that the international students she interviewed attributed academic difficulties to external factors, “such as the need to receive more support from the school system (i.e., need for advisors and mentors who can explicitly explain and guide them through the university bureaucracy and administration and the American school culture...),” and academic successes to “internal factors (i.e., their prior content knowledge, hard work, discipline, organization...)” (p. 111). Relationships with faculty can be challenging for international students. In a study of Chinese women living and studying in the United States, Qin (2009) found that participants wished that faculty and administrators would be more open to a different culture, listen more patiently, and provide more direction for study. In addition, students may perceive professors as “dominant or superior figures, whose impatience with less than fluent English speakers or foreign accents undermine these students’ confidence” (Lee & Rice, 2007, p. 398).

2.2.7 Returning home. International students may struggle with issues related to returning home at the end of the academic sojourn. Simply making the decision whether to return to one’s home country or seek employment in the host country can be difficult. Hazen and Alberts (2013) observe that “professional factors typically form the strongest arguments to stay in the United States, while cultural factors often speak strongly in favor of returning to the home country” (p. 83). In addition, readjusting to life in the home country may be challenging. In her ethnography of international students, Brown (2009) discovered that unlearning norms, values, and behaviors adopted in the host country can be a “painful and conflicting” process (p. 516), but also that total “attitudinal change was irrevocable” (p. 509).

In a book published in 1983, Dunnett offers continuing education advice for the “returned professional,” including joining American professional organizations and building a strong
reference library before departing the U.S., and organizing local conferences and seminars after returning home (pp. 128-129). Mori (2000) suggests that counselors should be prepared to assist students with this reentry transition, helping them to “brainstorm ways of coping with such potential problems as inability to work in their chosen specialties, the unavailability of U.S. scientific equipment, the difference between American scientific terminology and the terminology in their native language, and the possible disorientation caused by returning to a lifestyle that differs significantly from a American lifestyle” (p. 142-143).

2.3 Adjusting to a New Culture

There is a great deal of literature covering the adjustment of international students to a new culture and system of higher education. In 2006, Andrade published “International Students in English-speaking Universities: Adjustment Factors,” a thorough review of the literature that provides a useful summary of the research up to that point. Some studies examine the coping behavior of international students, which is defined as “the behavior utilized by the individual to establish emotional security within a culture distinct from his or her own” (Hull, 1978, p. 14). Du Bois (1956) identified five phases of adjustment and readjustment experienced by international students:

- The Spectator Phase, in which the student is not yet personally involved in the new culture and simply observes.
- The Adaptive Phase, in which the student begins to participate in the new culture and “becomes emotionally engaged in the network of values, customs and habits prevalent in [the] country” (p. 68).
- The “Coming to Terms” Phase, in which the student works through the adaptive issues that arose in the previous phase, bringing them into equilibrium. In this phase, the overall perception of the host culture – be it positive or negative – is solidified.
- The Predeparture Phase, in which the student prepares to return to the home culture.
• Readjustment Phases, in which the student readjusts to life in the home country, including changes in interpersonal relationships, cultural shifts, and professional opportunities.

In his book on counseling international students, Barry (2004) lists the following as common transitional issues: academic goals as a central concern, communication problems, building social support, costs of living, discrimination and racism, gender role expectations, and family matters. Du Bois (1956) also identifies the following as crucial factors in sojourn adjustment, and some of which have been addressed in this chapter:

• Language Facility
• Age and Academic Status
• Duration of Sojourn
• Alienation
• Freedom of Choice
• Interpersonal Relations
• Reference Groups
• Status and Self Esteem (p. 78)

Lysgaard (1955) developed the U-curve hypothesis to model the adjustment process, stating that it “follows a U-shaped curve: adjustment is felt to be easy and successful to begin with; then follows a ‘crisis’ in which one feels less well adjusted, somewhat lonely and unhappy; finally one begins to feel better adjusted again, becoming more integrated in the foreign community” (p. 51). Klineberg and Hull (1979) did not find data in support of this hypothesis in their study that included international students studying all over the world, including Brazil, Canada, France, Hong Kong, India, Iran, Japan, Kenya, U.K., U.S., and West Germany. Gullahorn and Gullahorn (1966) changed this model to a W-curve, to take into account both the transition to the host culture, and the transition back to the home culture.
2.3.1 **Easing the transition.** Studies show that some factors in the international student’s experience ease the transition, including frequent contact and relationships with domestic students. Some research finds that more interaction with American students, or host-country students, led to better cultural adjustment and a better academic and social experience for international students (Hechanova-Alampay et al., 2002; Hendrickson, Rosen, & Aune, 2011; Hull, 1978; Klineberg & Hull, 1979; Selltiz, Christ, Havel, & Cook, 1963; Zimmerman, 1995). Shram and Lauver (1988) found that contact with host nationals was negatively correlated with feelings of alienation, and Hull (1978) discovered that “contact with Americans seems to be a factor that relates to the wide area of satisfaction with, and positive expressions toward, the sojourn as a whole” (p. 187). While friendships with domestic students are helpful, they tend to be uncommon (Rajapaska & Dundes, 2002) and difficult to form (Parks & Raymond, 2004; Sherry et al., 2010) because international students “see personal relationships in the United States as shallow,” and describe “friendships in this country as quickly formed and short-lived” (Selltiz et al., 1963, p. 263). International students perceive Americans as friendly, but find it difficult to make the transition from polite conversation and brief interactions to meaningful social relationships (Pritchard & Skinner, 2002). Participants in Qin’s (2009) study of female Chinese students studying in the U.S. expressed a wish for more contact with the host culture. International students interviewed in a study thirty years earlier were also disappointed by the lack of contact with the domestic students (Klineberg & Hull, 1979).

However, some studies showed that international students have a preference for friendships with co-nationals (Hechanova-Alampay et al., 2002). These close friendships with other international students allow them to “form a definite view of their futures as being international and global in nature,” and prepares them to “live and work in a community that has a global perspective” (Montgomery, 2010, p. 112). Montgomery and McDowell (2008) argue that the literature overemphasizes the necessity of domestic friendships. They studied the social networks of a group of international students in the United Kingdom, and found that these
students “formed a strong social group whose purpose was to replace the social capital they had lost in their transition to a new culture” (p. 458). While they acknowledge that there may be a “missed opportunity to develop an international perspective” when international and domestic students fail to interact, Montgomery and McDowell believe that it is the domestic students who are really missing out on a potentially valuable part of their education (p. 465).

Hull (1978) found that “prior international experience of the foreign students will greatly influence the sojourn as regards coping and adaptation, interactions with Americans, and general feelings of satisfaction” (p. 186), and Klineberg and Hull (1979) came to the same conclusion in the second part of this study. However, length of time spent in the U.S. is not correlated with perceptions of adjustment (Zimmerman, 1995) or feelings of alienation (Schram & Lauver, 1988). It is important to understand that international students are not so different from domestic students in many ways. Survey data collected by Klomegah (2006) showed that “the feeling of alienation or social estrangement is not peculiar to foreign students, but occurs in similar proportions in both foreign and American students” (p. 314). In an ethnographic study of the international student experience at a university in the U.K., Brown (2009) found that students see the transition as a positive growth experience:

Early feelings of disorientation were replaced by newfound strength; fear of being alone contrasted a new capacity to withstand stress. Self-efficacy was therefore the product of the confrontation with hardship: this was the necessary precursor of a universal growth in self-belief (p. 510).

Few studies focus on the retention of international students, but Andrade (2006b) interviewed students about the behavior changes necessary to persist in their studies. She found that “encouraging teachers, increased English proficiency, and familiarity with American culture helped students gain confidence and make the behavioral and cultural changes necessary to successfully fulfil course requirements” (p. 68). Students made conscious decisions to improve
time management, classroom participation, and English language proficiency. Gonzalez (2004) found that international students experienced some changes in values, but identified these changes as “behavioral and attitudinal” only and not affecting their “most internal selves” (p. 127).

2.4 LIS Research on International Students

The recent LIS literature on international students tends to be anecdotal and descriptive in nature, as opposed to research-based (Click, Wiley, & Houlihan, 2016). This section focuses on original research, and much of it demonstrates that language, cultural differences, and lack of awareness about library services can all be barriers for international students using an academic library (Baron & Strout-Dapaz, 2001; Curry & Copeman, 2005; Liu, 1993). In a survey of international students on one American campus, Jackson (2005) collected data about demographics, computer and library experiences in students’ home countries, and perceptions of library services in the United States. She found that the students had more experience with computer and library use than older literature would indicate, although library services such as interlibrary loan, reference consultations, and online reference services were often unfamiliar to students prior to arriving in the United States. However, the results of a survey of international graduate students at Virginia Tech showed that these students used the library “more actively and often” than domestic students (Liao, Finn, & Yu, 2007, p. 23).

In an article about cross-cultural communication and the implications for library services, Wang and Frank (2002) observe that:

Academic libraries are organizations that exist within the context of specific cultures that are shaped and, to a degree, governed by various underlying assumptions. Libraries and librarians develop and implement services that are influenced by specific assumptions that are culturally and intellectually based (p. 209).
Although the authors’ findings and recommendations are no longer ground-breaking, this point is well-taken. Wang and Frank (2002) report that a focus group conducted with international students revealed that the Chinese students were confused by the “Check Out Books” sign, because they associated this phrase with either “examining or searching” or “paying for books” (p. 211). The librarians were forced to reconsider their assumptions about language, and changed the sign to “Borrow Books.” The literature reviewed in this section covers the LIS literature related to international students and library spaces, information literacy instruction, reference services and information seeking.

2.4.1  Use of library spaces and resources. International students seem to value the library as a physical space. A study that surveyed both domestic and international business students found that domestic students use the library primarily for access to research resources, while international students use the library primarily as a space in which to study individually or in groups (Song, 2004). Librarians who surveyed international students at three universities in California found that these students regularly use the library for study spaces, course materials, and computers, but do not usually interact with the librarians or make use of other library services (Knight, Hight, & Polfer, 2010). In a case study of ethnic minority students at San Jose State University, researchers found that 62% of the Asian respondents indicated that using the library was easy and felt that they were successful in finding the information they needed (Liu & Redfern, 1997). However, among those that were not confident in their abilities to use the library, Liu and Redfern found that “Asian students are hindered by a fear of asking stupid questions, a belief that their English is not good enough, and inability to understand answers well, and a lack of familiarity with the library reference desk” (p. 348).

Research indicates that international and domestic students demonstrate similar information seeking abilities, although international students demonstrate a preference for “informal” information sources and struggle with language issues. An exploratory study
compared international and domestic students’ abilities to answer questions using online library resources, including the catalog and Academic Search Premier database (Martin, Maxey-Harris, Graybill, & Rodacker-Borgens, 2009). The authors expected to find that international students lagged in information seeking ability, but this was not the case. International and domestic students demonstrated similar information seeking behaviors, although international students were more likely to use resources other than the designated database. A study at Virginia Tech drew similar conclusions about information seeking ability, but depended on students to self-report behaviors as opposed to tracked information retrieval (Liao, Finn, & Yu, 2007). International students at three universities in California reported preferences for friends, teachers, and Wikipedia as information sources (Knight, Hight, & Polfer, 2010). Hughes (2005) used semi-structured interviews and Critical incident technique to study international students’ use of online resources, and found that “linguistic factors tended to have more impact on the participants’ actual use of online resources, while cultural factors had greater influence on their wider educational experience” (p. 175). These linguistic factors included issues such as limited vocabulary and spelling mistakes. She noted that these students possessed strong IT skills but limited information literacy skills.

Mehra and Bilal (2007) interviewed Asian students at the University of Tennessee in order to explore their information seeking strategies using information and communication technologies (ICT), both on the internet (e.g., search engines) and in the library (e.g., online databases). Participants reported that challenges in using library ICTs included limited search skills, poor search functionality, unfriendly interface design, and irrelevant search results (p. 8). The researchers also asked students to discuss experiences with libraries and research processes. Participants reported that the library was not so integral in supporting research in their home countries, and that the research process generally focused on class notes and textbooks as opposed to journal articles (pp. 8-9).
2.4.2 Library instruction. International students tend to respond positively to library instruction. Research shows that it reduces anxiety and increases motivation to use library resources for this population. In his dissertation work, Battle (2004) studied the effects of information literacy instruction on international students’ library anxiety. Two groups of students enrolled in an English for Speakers of Other Languages (ESOL) course were asked to use library resources to complete a research assignment. One group attended several library instruction sessions, and the other group did not. Participant anxiety levels were measured using the State-Trait Anxiety Inventory and the Library Anxiety Scale, and Battle determined that receiving information literacy instruction reduced both general and library anxiety for these international students. In a comparative study, Song (2004) found that international students were more likely than domestic students to find library instruction workshops helpful, and to feel motivated to use library services after attending these workshops. However, Song also discovered that 94% of the international business student respondents began their academic research on either Google or Yahoo instead of the library website (p. 31), so the true meaning of these findings is unclear. In a study of students in Canadian business schools, 52 students were interviewed about information literacy instruction (ILI) and learning outcomes (Detlor, Julien, Willson, Serenko, & Lavallee, 2011). The authors found that international students “seemed more responsive to ILI and more likely to exhibit positive student learning outcomes from instruction” (p. 581) than domestic students.

Morrissey and Given’s (2006) research, in which the authors conducted in-depth interviews with nine Chinese graduate students at a Canadian university, focused on information literacy skills. The authors found that the library orientation sessions provided to new students at the beginning of each semester were not very useful for these students because of their lack of English proficiency. They argue that “targeted, hands-on library training” is the best way to reach these students and introduce them to library resources and the role of the
librarian, and note that “plagiarism, copyright, and appropriate citation strategies” are areas of particular importance for international students (p. 236).

2.4.3 Reference services. Language issues, such as the use of library jargon, and unfamiliarity with U.S.-style library services and resources can create a barrier between international students and reference services. Curry and Copeman (2005) conducted a field stimulation study, “a form of structured observation recommended for data gathering in situations where other techniques such as questionnaires or interviews will likely yield biased results” (p. 412), in which an international student who spoke heavily-accented English approached eleven reference desks in academic libraries in need of research assistance. This student recorded the details of the interaction, including a behavior checklist for the reference librarian, step-by-step narrative, and satisfaction and willingness to return rating. Results of this study showed that the reference librarians were generally approachable, careful listeners. However, the use of library jargon and expectation that the student would interrupt with additional information during the reference interview could both be problematic in providing research support for international students. Liu (1993) interviewed 54 international students at the University of California, Berkeley, and discovered that these students were perplexed by open stacks, the classification system, and reference materials. The author recommends that libraries offer glossaries of library terminology in both English and other languages, bi-lingual library tours, and special workshops to teach international students about library concepts that may be unfamiliar, like the Library of Congress classification system. As a result of survey data collected from international students at two universities in the Midwest, Zhuo, Emanuel and Jiao (2007) recommend activating database language interfaces so that students can search in their native languages. However, when undergraduate and undergraduate international students at the University of Colorado Denver were surveyed, 83% of them indicated that they preferred to use English at the reference desk (Ferrer-Vinent, 2010). The majority of
respondents (55%) said that they would prefer additional assistance in their primary language, if they considered the initial reference desk interaction to be inadequate (p. 194).

2.5 Institutional Support for International Students

While most of the literature focuses on the need for international students to adjust to the host culture as quickly and smoothly as possible, a few authors address the need for institutional adaptation as well. Citing some of the literature included in this review (e.g., Hechanova-Alampay et al., 2002; Klineberg & Hull, 1979; Pritchard & Skinner, 2002) Lee and Rice (2007) express concern that “most of the literature concerning international student experiences describe their difficulties as issues of adapting and coping, which embodies the assumption that international students bear the responsibility to persist, overcome their discomfort, and integrate into the host society” (p. 388). The following is a clear example of this type of assumption:

The imperative for the foreign student, accordingly, is three fold: first, to seek continuously to improve English-language proficiency if needed; second, to avoid patterns of association that might isolate the person from his or her American counterparts; and, third, to make a good-faith effort to better understand and adjust to the local culture (Bevis & Lucas, 2007, p. 243).

In Zimmerman’s (1995) study that “examined perceptions of intercultural communication competence and adaptation in international students” (p. 321) at a mid-sized university in the Midwest, American students were trained to conduct interviews with foreign student participants. The domestic students became more interested in international issues (e.g., one decided to study in the home country of the student he interviewed) and acted as advocates for international students on campus. Zimmerman concluded that “adaptation to an American campus involves adaptation both on the parts of international students and other campus members” (p. 330).
In *Teaching International Students*, Carroll and Ryan (2004) argue against the “deficit view” of international students, which sees them as “lacking in independent, critical thinking skills; as plagiarisers or rote learners, speaking broken English and having awkward ways of participating in class” (p. 6). They call for improved training of instructors and better understanding of students from different cultures, in order to improve learning for all students. Andrade (2006a) also expresses concern about this deficit view and its impact on interactions between international students and professors, but her perspective is not common in the literature.

The literature offers many suggestions for improving the international student experience, and it is important that institutions make a particular effort to support this student population. Zhao, Kuh, and Carini (2005) found that as the number of international students increased, students perceived decreased university support for this group. They note that “a campus cannot simply recruit a critical mass of international students; it must also intentionally arrange its resources so that international and American students benefit in desired ways from one another’s presence” (p. 225).

Robertson et al. (2000) provide recommendations for faculty ranging from mixing local and international students during group work to clearly explaining why plagiarism is unacceptable (p. 98). Host family and peer support programs are highly recommended, and one study showed that a peer support program had significant impact of international students’ social adjustment (Abe et al., 1998). Jacob and Greggo (2001) describe a successful program that paired counseling graduate students with international students to help with the transition. Hayes and Lin (1994) point out that while these programs can “help international students open the door to America,” it is important that the host volunteers take part in a cultural orientation prior to working with international student populations (p. 13).
Specialized orientations are also valuable for international students. Meloni (1984) recommends pre-departure programs covering topics such as “American culture, the American system of higher education, living and education expenses in the United States, and immigration regulations” (p. 44), so that students are able to begin the transition before leaving their home countries. Arizona State University offers an intensive English as a second language program called the American English and Culture Program, which helps international students improve language capability and learn about American culture at the same time (Chang, 2011). Reiff and Kidd (1986) conclude that orientations for international students should:

(1) welcome new student and provide an opportunity for them to meet college or university staff and faulty, as well as community volunteers; (2) provide specific information to facilitate their adjustment to the campus; (3) increase their knowledge and understanding of the American system of higher education; (4) increase their understanding of American culture, values, and customs; (5) impart some awareness of the impending cross-cultural adjustment process (p. 40-41).

It is important to remember, however, that international students need and deserve university support throughout their time studying outside of their home countries, beyond the initial “settling in” phase. Academic support is of particular importance, including help with conducting research, using library resources, and understanding issues of academic integrity. The following chapter discusses the literature related to academic integrity.
CHAPTER 3: ACADEMIC INTEGRITY

This chapter begins with a more thorough explanation of academic integrity, and then discusses the literature on why students, international students in particular, engage in academic dishonesty. The next section explores plagiarism, including why the concept can be considered to be problematic. The chapter closes with a review of the literature on international perspectives on academic integrity, including a variety of countries from Lebanon to Sweden.

3.1 What is academic integrity?

This study uses the following definition for academic integrity, as stated in the Definitions section (1.3) of Chapter One:

Academic integrity is the moral code of academia. Under this code, scholars must avoid cheating and plagiarism, adhere to academic standards, and be honest in their research and writing.

While this is a useful and succinct definition, students may be more interested in understanding exactly which behaviors are considered honor code violations. Academic dishonesty covers a variety of behaviors, some of which are obvious for students (e.g., copying another student’s answers during an exam) and some of which may not be so obvious (e.g., submitting the same paper for two different classes). The University of North Carolina at Chapel Hill’s Instrument of

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2 A previous version of this chapter was published in MELANotes in 2012. The issue is available at http://www.mela.us/MELANotes/MELANotes85.pdf.
Student Judicial Governance includes the university Honor Code and its enforcement policies. This document calls for students to “refrain from all forms of academic dishonesty including, but not limited to, the following:”

- Plagiarism
- Falsification, fabrication, or misrepresentation of data
- Unauthorized assistance or unauthorized collaboration
- Cheating
- Violating procedures pertaining to the academic process
- Deliberately furnishing false information
- Forging, falsifying, or misusing University documents
- Violating other University policies
- Assisting or aiding another to engage in acts of academic dishonesty (University of North Carolina at Chapel Hill, 2015, p. 5-6).

The complete text from this section of the Instrument, including expanded descriptions of these behaviors, can be found in Appendix A.

McCabe, Butterfield, and Treviño, well-known academic integrity scholars, published Cheating in College in 2012. They cover decades of multiyear and multisite research, but also provide a valuable lens for thinking about academic integrity: They answer the question, why does it matter? They argue that this is an important issue for the following reasons:

- Cheating is widespread and on the rise.
- The college years are a critical period for ethical development.
- College students feel significant pressure to cheat.
- College students are being taught that cheating is acceptable.
Today’s college students represent tomorrow’s leaders (McCabe, Butterfield, and Treviño, 2012, pp. 4-11).

3.2 Why do students engage in academic dishonesty?

Why do students cheat? Why do they plagiarize? These and similar questions have been asked often, by researchers and scholars in numerous fields. Studies have found that students engage in academic dishonesty because they have certain personality traits (Kisamore, Stone, & Jawahar, 2007), because they see others cheating (McCabe & Treviño, 1997), because they have strong relationships with classmates and weaker relationships with professors (Stearns, 2001), because they are unlikely to be forced to face the consequences (Hutton, 2006), and because they think that faculty do not care if they cheat (McCabe, Butterfield, & Treviño, 2006). Clearly there is no simple answer. The academic integrity research tends to be divided into two categories: cheating as related to personal characteristics, and cheating as a result of environment or context. The following subsections provide more information about each of these perspectives.

3.2.1 Personal characteristics. While Kisamore, Stone, and Jawahar (2007) agree that studying situational variables is important, they suggest that investigating the ways that “situational factors interact with personality constructs to influence perceptions of and intentions relating to academic dishonesty” would also be useful to educators (p. 390). They studied the ways in which the personality constructs from the Hogan Personality Inventory (Hogan & Hogan, 2007), which focuses on qualities related to successful performance, affect how students perceive academic integrity culture and behave within this culture. They found that students who have high scores on Prudence, which is related to responsibility and conformity, and Adjustment, which is related to confidence and composure, are “less likely to perceive or engage in academic dishonesty” (Kisamore et al., 2007, p. 391).
Research based on student characteristics has shown that men tend to cheat more than women (Bowers, 1964; Davis, Grover, Becker, McGregor, 1992; McCabe & Treviño, 1997), although some studies have shown no difference between men and women (Lipson & McGavern, 1993; Ward & Beck, 1990). Younger students cheat more than older students (Lipson & McGavern, 1993; Mustaine & Tewksbury, 2005). Academic achievement has also been shown to have a positive relationship with academic integrity; students with higher GPAs are less likely to cheat than those with lower GPAs (Bowers, 1964; Roig & Caso, 2005; Klein, Levenburg, McKendall, & Mothersell, 2007). Research also demonstrates that students involved in the Greek system are more likely to cheat (Storch & Storch, 2002; Williams & Janosik, 2007), as are intercollegiate athletes (Mustaine & Tewksbury, 2005).

### 3.2.2 Contextual factors.

In a seminal work from the mid-1990s, McCabe and Treviño (1997), two leading scholars in the study of academic integrity on college and university campuses, conducted a multi-campus investigation on the “influences of individual and contextual factors on self-reported academic dishonesty” (p. 379). Their most important finding was that contextual or situational factors, particularly factors that were peer-related, have a stronger effect on behavior than individual or personal characteristics of students. McCabe and Treviño suggest that social learning theory might provide the most appropriate context for educators to approach issues of academic integrity. Social learning theory, developed by Bandura (1986), suggests that “much of human behavior is learned through the influence of example” and that people “learn and change their behavior based on their observation of credible others in the environment” and the consequences of their behaviors (McCabe & Treviño, 1997, p. 392). Learning by observation is “one of the most powerful means of transmitting values, attitudes, and patterns of thought and behavior” (Bandura, 1986, p. 47), making it a potentially useful tool for understanding student choices related to academic integrity. Similarly, Imran and Nordin (2013) found that students who “perceive that social
norms permit cheating” engage in academic misconduct more often than other students, although this observation is made under a different theoretical framework (p. 105).

McCabe also worked with faculty at the American University of Beirut to conduct a study of students in Lebanon (McCabe, Feghali, & Abdallah, 2008). They found that “the perceptions of behaviors of one’s peers with regard to academic integrity showed a very strong relationship with a student’s individual decision on whether to engage in academic integrity” (McCabe et al., 2012, p. 63), indicating that social learning theory can explain choices related to academic integrity in non-American student populations as well. A more thorough discussion of this study can be found in the International Perspectives on Academic Integrity section (3.4).

Relationships also play an important role in academic integrity on college and university campuses. Student evaluations of instructor classroom behavior and perceptions of student-instructor relationships affect ethical behavior. For example, students who admit to academic dishonesty tend to “have lower evaluative perceptions of their instructors” (Stearns, 2001, p. 278). In addition, some research has shown a “faculty versus students” mentality that is detrimental to the culture of academic integrity (Kidwell, Wozniak, & Laurel, 2003). Social network theory indicates that because relationships between students have strengthened as a result of multiple modes of social interaction, relationships between students and faculty have weakened, and dishonest behavior is promoted as students observe one another making unethical choices (Hutton, 2006).

3.2.2.1 Honor codes. McCabe and his colleagues are strong advocates for honor codes. Bowers’ work in the 1960s showed that the presence of an honor code reduced cheating, as has their own research (summarized in McCabe et al., 2012). They argue this contextual factor is of particular importance, and that honor codes:

- are effective in promoting integrity and reducing cheating;
- must be more than window dressing to be effective;
• affect faculty attitudes and behavior;
• can have an enduring effect;
• can be effective in both traditional and modified formats (McCabe et al., 2012, pp. 102-111).

3.2.2.2 Lang’s environmental factors. In Cheating Lessons: Learning from Academic Dishonesty, Lang (2013) identifies four features of an environment that may cause cheating:

1. an emphasis on performance;
2. high stakes riding on the outcome;
3. an extrinsic motivation for success;
4. a low expectation of success (p. 35).

Although these environmental features may be present for students at any educational level and/or from any culture, some of the research indicates that international students feel them acutely. Razek (2014) interviewed students from Saudi Arabia studying at a Midwestern university about their views on academic integrity. His research built on a multi-campus study in which survey data was collected from 673 students. Findings showed that students regularly engaged in academic dishonesty, and their words aligned with Lang’s features. Students emphasized the importance of grades over learning, a clear emphasis on performance. One participant referred to the high stakes and extrinsic motivations, saying of the unauthorized assistance she received on papers:

“I know this is wrong but this will not influence me when I go back to my country. I cannot fail here. It will be a scandal if this happens. I have to get that degree no matter what. I do not need what they teach us here as I need the degree itself [sic]” (p. 150).
The participants also expressed fear of losing scholarships or being kicked out of their programs, which represents additional extrinsic motivations. They also had low expectations of success; Razek points out that the students saw failure as “inevitable” without the illicit help they received (p. 151). This was a case study and thus the findings are not generalizable, but it supports Lang’s ideas and demonstrates the need for further research on this topic.

Hayes and Introna (2005) found that the international students in their study, particularly the Greek and Chinese students, cheated on undergraduate exams in their home countries because high grades were seen as essential for finding a good job or successfully applying to a graduate program abroad. In addition: “Those who would not cheat felt it unfair that they had to work even harder to get higher legitimate marks than those students who cheated. In their view, not cheating came at a substantial cost for them” (p. 225). Their behaviors and choices could be attributed to an environment in which there is an emphasis on performance, high stakes riding on the results, and extrinsic motivations.

It is important to note that these environmental factors can apply to all higher education students, not just international students in the United States. Love and Simmons (1998) found that the following factors contributed to cheating among graduate students: grade pressure (corresponding to emphasis on performance) and lack of competence (corresponding to low expectation of success). Minarcik and Bridges (2015) surveyed psychology graduate students about academic dishonesty. They found that inadequate preparation and task difficulty, which lead to low expectation of success, were common instigators of academic integrity violations.

### 3.3 Plagiarism

Much of the literature related to international students focuses on plagiarism, which is to be expected since language proficiency and familiarity with American-style scholarship are prominent issues. International students, particularly those who are non-native English speakers (NNES) may plagiarize, intentionally or unintentionally, for a variety of reasons. Some
of these reasons are shared by university students globally (e.g., poor time management skills), but some are mostly experienced by international students (e.g., varying levels of English proficiency). Hayes and Introna (2005) conducted a study in which they interviewed students in a master’s program in the United Kingdom; their focus groups included students from 13 different countries, including India, Pakistan, Indonesia, Thailand, Greece, Brazil and others. They found that unintentional plagiarism was often linked to a student’s research process. For example, students take notes as they research, sometimes writing down text exactly as it appeared in the original source. When they use these notes to write a paper, students might simply use these exact phrases, not remembering these chunks of text are not their own words. Students in this study also expressed confusion with why they would change the words of an author who has already stated an idea so well, and claimed that there are “only so many ways that issues could be written” (Hayes & Introna, 2005, p. 221). Duff, Rogers, and Harris (2006) found that plagiarism is often unintentional and the result of poor citation skills.

International students may copy text because it saves time, helps them learn the necessary new vocabulary, and keeps them out of trouble and able to pass a course. For these students, “copying reflects less an intentional violation of cultural code than a survival measure in the face of perceived difficulties or deficiencies” (Currie, 1998, p. 2). In an English speaking institution, international students are asked to produce academic writing in a language in which they may be barely fluent. Often their “heavy reliance on copying seemed to stem not from a conceptual misunderstanding, but rather from a lack of familiarity with academic writing,” according to Amsberry (2009, p. 36). Pennycook (1996) notes that these students may lack confidence, because they feel that they have no ownership over the English language.

3.3.1 Patchwriting. Patchwriting is a technique often used by students, international and domestic alike, who have difficulty creating acceptable academic writing and/or comprehending the texts they are using as sources. It involves “writing passages that are not
copied exactly but that have nevertheless been borrowed from another source, with some changes” (Howard, 1995, p. 799). In other words, students select a relevant section of text from a source, and rearrange sentences, remove some phrases, choose replacement synonyms, etc. To use this technique is to commit plagiarism by most institutions’ definitions, but some scholars have called for a different view of this practice. Some view patchwriting as a crucial stage of learning to write in a scholarly manner, and an indication that the writer understands the source. Pecorari (2003) calls this “source-dependent composition,” which is used by students as they “learn to write in a new discourse, and that causes them to depend heavily on the language of their sources” (p. 266). According to Hayes and Introna (2005), patchwriting “implies a serious attempt to make sense of, and engage with, the material,” and should be viewed as part of the learning process (p. 226).

3.3.2 Problems with plagiarism. Some scholars and educators have found the concept of plagiarism to be problematic. First, plagiarism has been oversimplified by professors, universities, academic integrity councils, and many others. It can be quickly defined as the stealing of another’s ideas, but it is just not that simple. Currie (1998), who spent a semester conducting weekly interviews with a second language writer as she toiled to produce acceptable academic writing, notes that the “traditional and oversimplified view of plagiarism [fails] to account for the layers, complexities, and ambiguities embedded in the production of text” (p. 1). Where is the line between inspiration and theft? Is there truly “nothing new under the sun?”

Secondly, plagiarism is just not that easy to identify. For example, the phrase “nothing new under the sun” appeared in the previous paragraph without a citation, because it can be considered a known idiom and thus categorized under common knowledge. But this phrase might not be considered common knowledge by an Egyptian graduate student writing a literature review or a Chinese professor grading research papers. There are many guidelines to be interpreted for identifying plagiarism, and few clear rules. Because plagiarism is not so easily
identifiable, and because it is often considered an issue of honor, it is also difficult to approach objectively (Pennycook, 1994, p. 278). Passing judgment on plagiarizers, a task assigned to professors, administrators and honor councils, is no easy task.

The academy’s attitude towards plagiarism “unjustifiably elevates a Western concept to the status of norm” (Currie, 1998, p. 1). The current conceptions of authorship and text ownership in American higher education are Western and have not always been in vogue; these are modern ideas (Pennycook, 1996). Globally, the West may play the biggest role in advancing academia, but this does not mean that Western ideas of scholarship are the only or best ideas. Bloch (2008) cautions against presenting Western and non-Western ideas about ownership of information as a dichotomy, because it is easy for international students to interpret “your way is different” as “your way is inferior.” East (2006), borrowing an anthropological concept from Hall (1981), proposes that Australian higher education is a high context culture, “in which its members have come to implicitly understand the situation in which they operate” (p. 17). A professor may have an understanding of what constitutes plagiarism, but be unable to explain it to outsiders. In this case, international students are outsiders because they are not yet members of the culture.

Pennycook, a professor who has taught all over the world and published extensively on plagiarism and non-native English speaking students clearly articulates some of the problems with the way that many in academia view plagiarism. First, he points out that often publications that are identified as the result of original academic work actually depends on what he calls the “silent work” of others, including women (more so in the past), graduate students, and research assistants (Pennycook, 1996, p. 213). Who can identify with certainty where each idea in a paper or book originally developed? In fact, Pennycook often notes at the beginning of his writings that the ideas included in his own work are the result of conversations with many colleagues, and cannot be solely attributed to any one person. Second, issues of plagiarism and other forms of
academic dishonesty should be approached thoughtfully by educators. Certainly students, whether domestic or international, must learn to successfully and ethically navigate the American higher education system, should this be where they choose to learn. However, as this chapter has established, the exact definition of plagiarism is often vague and open to interpretation. As Pennycook (1996) states, “plagiarism needs to be understood within the particular cultural and historical context of its development, but it also needs to be understood relative to alternative cultural practices” (p. 218).

3.4 International Perspectives on Academic Integrity

This section covers the academic integrity research that has been conducted outside of the United States, including the United Arab Emirates, Lebanon, Turkey, Iran, China and Hong Kong, Poland, the Ukraine, and Sweden, and concludes with academic integrity research related to international students. Some of the research covered here is cross-cultural in nature, comparing students in the U.S. with students in another country.

3.4.1 United Arab Emirates. There is little published research in English on academic integrity among student populations in the Middle East and North Africa. Of the few articles that do exist, most utilize weak methodology and provide little insight. Elzubeir and Rizk (2003), however, conducted an interesting study of medical students at United Arab Emirates University in Al Ain. They found that students are genuinely confused about plagiarism and are reluctant to report colleagues for academic misconduct. The students viewed unethical practices such as marking an absent classmate present for a lecture “less seriously than other aspects of educational misconduct,” such as falsifying information on a medical chart (p. 593-594). This indicates that students may have a different perspective than faculty or administrators when it comes to defining ethical behavior. The most interesting observation from this article suggests that Islamic values such as “co-operation, support, brotherhood, and benevolence in all aspects of social life” may shed some light on students’ hesitancy to report unethical behavior, and
makes this the only research to discuss Islam at all (p. 594). It should be noted, though, that this approach to academic integrity is not unique to students in the Middle East and North Africa. Students surveyed in North America have also indicated that they do not believe it is the responsibility of the student body to monitor unethical behavior (Hendershott, Drinan, & Cross, 2000).

3.4.2 Lebanon. McCabe, Feghali, and Abdallah (2008) compared the perceptions of academic dishonesty of Lebanese and American students at the American University of Beirut. Their research is particularly useful because it utilizes McCabe’s model to study the connection between contextual factors and student behaviors, and includes a discussion of the potential impact of Lebanese culture on academic integrity. Although they found that Lebanese students engage in academically dishonest behavior more often than American students, they suggest that “judging the cheating behavior of students in non-Western contexts using Western standards may be problematic” (p. 464) because of the collectivist nature of Lebanese society.

The concept of collectivism versus individualism is one of the four dimensions of Hofstede’s (2001) cultural framework, and Arab cultures tend to be highly collectivistic. Individualism versus collectivism is illustrated in the ways that people within a particular society live together and define relationships with others. A collectivistic society is one in which “people from birth onward are integrated into strong, cohesive in-groups” (Hofstede, 2010, p. 515), and often students in this type of culture prefer to answer questions or create knowledge collectively, working together to manage a challenging task. The authors suggest that students who function in this type of culture may be more prone to collaborative behaviors that would be considered dishonest within the frame of Western academia, and suggest the development of a “collectivist honor code,” which would emphasize some of the elements found in a typical honor code such as “particularly high levels of student involvement, [and] a clear statement of community expectations regarding academic integrity” (McCabe, Feghali, and Abdallah, 2008, p. 465).
3.4.3 **Turkey.** Küçüktepe (2014) conducted semi-structured interviews with 26 students from Marmara University regarding cheating behaviors. More than 65% of the participants responded affirmatively to the question, “Do you cheat on every examination?” (p. 105), more than 75% indicated that they had cheated by copying from classmates’ exams, and more than half admitted to preparing cheating materials ahead of time for an exam. Eret and Gokmenoglu (2010) distributed a questionnaire to research assistants in a Faculty of Education in Ankara to explore their perceptions of and knowledge about plagiarism. Respondents demonstrated attitudes towards plagiarism that would be expected of scholars: They understand the concept and “believe in the necessity of including references and the importance of avoiding plagiarism” (p. 3306). However, when tested on their understanding of issues related to plagiarism, it was clear that they had overestimated their knowledge. Those that admitted to engaging in plagiarism gave reasons including the challenges of working in a non-native language, time constraints, difficulty of and lack of understanding about the assignment, and lack of understanding about what constitutes plagiarism.

3.4.5 **Iran.** Ahmadi (2014) surveyed English as a Foreign Language (EFL) students from multiple universities in Iran about their perceptions of plagiarism. Data was collected in Persian and translated into English, likely for the purposes of publication. Approximately 40% of respondents acknowledged that they would copy a part of someone else’s work without attribution, making small changes in order to make it seem like their own work. Students believe that plagiarism is easy, plagiarizers are unlikely to be caught, and that punishment is light for those who are caught. Ahmadi also found that students engage in plagiarism because they find themselves without enough time to finish their work, and also because professors “are not careful enough in reading the students' papers” and “are lenient in dealing with plagiarism” (p. 161). Ahmadi (2012) also conducted a similar study exploring Iranian student cheating. He found that one out of four students admitted to cheating on midterm or final exams (p. 160), because they are unprepared, lacked the time to study, and find the exams to be too difficult.
3.4.6 China and Hong Kong. In a study similar to Ahmadi’s 2014 research, Mu (2010) investigated Chinese EFL students’ ideas about and reasons for engaging in plagiarism. Results showed that students did not have a clear understanding of academic writing conventions, and viewed plagiarism as a solution when an assignment required writing skills beyond their abilities. In addition, students felt that Chinese culture is not concerned with issues of plagiarism, and that their instructors implicitly emphasized the practice by teaching students to memorize and reuse important or well-written passages. In a cross-cultural comparison study, Chapman and Lupton (2004) surveyed business students in the U.S. and Hong Kong, collecting data about their cheating behaviors and attitudes towards cheating. The authors found that American students are more likely to cheat than the Hong Kong students, but point out that “the American students appear to have a more liberal interpretation of what is or is not academic dishonesty and additionally seemed more inclined to admit to the behaviors being assessed” (p. 432).

3.4.7 Poland and the Ukraine. In another cross-cultural comparison study, American and Polish business students were administered a survey about their perceptions and behaviors related to academic dishonesty (Lupton, Chapman, & Weiss, 2000). Fifty-five percent of American students and 84% of the Polish students reported cheating during college. The two groups of students had very different perceptions of their classmates as well: “Polish students felt that about 61% of their colleagues cheat on exams, whereas American students stated that they felt only about 24% of their fellow students cheat” (p. 234). The authors question whether Polish students truly engage in more cheating, or if they have different attitudes towards and definitions of academic dishonesty. For example, the Polish students were more likely than the Americans to think that using exams from prior semesters to study constituted cheating. Another comparative study looked at the “beliefs toward a range of dishonest and questionable academic behaviors of undergraduate students” (Yukhymenko-Lescroart, 2014, p.38). Ukrainian and American students were asked to rank the “wrongness” of 22 behaviors, from sneaking
notes into an exam to submitting a purchased paper. A number of behaviors were perceived as wrong by both Ukrainian and American students, including: “altering university records, pretending to be sick, using familial connections and influences, not contributing to group work, and arranging someone else to take a test for oneself” (p. 38). American students tended to have more extreme beliefs regarding dishonest behaviors, while Ukrainians tended to take a more neutral stance.

3.4.8 Sweden. Trost (2009) collected data via questionnaire from Swedish university students, looking specifically at academic dishonesty and social desirability. The most common behaviors to which respondents admitted were “lying behaviours in order to get preferential treatment,” copying, plagiarism and “working with others although not allowed” (p. 371). Trost was surprised to find low to moderate scores on the social desirability scale for participants, including those who confessed to cheating behaviors. However, these scores also lent credibility to the accuracy of student responses regarding their behaviors, which is particularly valuable in research in which unethical behaviors are self-reported.

3.4.9 International students. In research designed to “examine how university plagiarism policies interact with international graduate students’ academic writing in English as they develop identities as authors and students,” Abasi and Graves (2008) used ethnographic tools to study the academic writing of four international graduate students. The authors conducted in-depth interviews with the students and their professors, audited courses, and collected materials such as syllabi, written feedback from professors, and writings style guides. They found that the professors viewed inappropriate citation by international students as a result of unfamiliarity with graduate level scholarly communication, but expected them to “write from an authorial stance while demonstrating familiarity with the research literature” and critically engage with this literature (p. 226). The professors perceptions were accurate: these students “had limited experience in the type of writing that is privileged in North American
English medium universities” despite familiarity with the academic conventions in their own countries (p. 228). The authors point out that the university’s strategies to promote academic integrity rely heavily on communications that are punitive in tone, and thus students focus narrowly on avoiding plagiarism instead of responding creatively and critically to the ideas they come across in their academic work.

Song-Turner (2008) surveyed international students at an Australian university about their perceptions and understanding of plagiarism. Respondents were asked to define the term, and responses “indicated a significant degree of agreement and confluence regarding how the students viewed the concept of plagiarism” (p. 42). Students were also asked to respond to a series of actions (e.g., Copying material from the original source without quotation marks) and indicate whether or not they constituted plagiarism. Responses to this part of the survey indicated a rather confused understanding of plagiarism, which is not unexpected. In *My Word! Plagiarism and College Culture*, Blum (2009) calls the definition of this concept “murky” (p. 12). Song-Turner notes that respondents understand that cutting and pasting from a source is plagiarism, but “to cite sections from an expert as part of one’s own work was far less clear” (p. 43). Responses to the final section of the survey, which asked about reasons for committing plagiarism, presented the usual issues: unfamiliarity with what plagiarism actually entails, difficulty with English-language writing, and overwhelming number of assignments, and a lack of time.

In a case study of Indian postgraduate students studying in Australia, Handa and Power (2005) found that neither English-language difficulties nor lack of academic integrity were causes of plagiarism. Participants demonstrated understanding of academic integrity and plagiarism in their own cultural contexts (i.e., undergraduate programs in India), but struggled with applying this in the Australian higher education context. For example, one student lost points on an assignment because he included a reference list but not in-text citations. The
authors recommend “the teaching of explicit academic skills to international students which would incorporate academic acculturation including an exploration of the rationale underlying Australian academic practices” (p. 78).
CHAPTER 4: CROSS-CULTURAL ADAPTATION

This chapter briefly outlines some of the major ideas in cross-cultural adaptation, including the psychology of acculturation, the anxiety/uncertainty management theory, psychological and socio-cultural dimensions of cross-cultural adjustment, and the cultural-learning approach. It concludes with a deeper explanation of Kim’s theory and a review of the research that uses it as a foundation.

4.1 Foundations of Cross-Cultural Adaptation

The research on cross-cultural adaptation has grown from the research on acculturation and culture shock. Scholarly interest in acculturation can be traced back to the 1930s. Three anthropologists were charged by the Social Science Research Council to explore the concept, and they developed the following definition:

Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups (Redfield, Linton, & Herskovits, 1936, p. 149).

Sam and Berry (2010) simplify the definition, asserting that acculturation “refers to the process of cultural and psychological change that results following the meeting of two cultures” (p. 472). In addition, they recognize the relationship between acculturation and adaptation. Adaptation, which is a consequence of acculturation, refers to “individual psychological well-being and how individuals manage socioculturally” (Sam & Berry, 2010, p. 472). In 1960, Oberg introduced the concept of culture shock, calling it “an occupational disease of people who have been suddenly
transplanted abroad” and noting that it is “precipitated by the anxiety that results from losing all our familiar signs and symbols of social intercourse” (p. 177). Oberg viewed culture shock as a medical issue, but “contemporary definitions tend to characterize culture shock as a state of emotional and physical discomfort one experiences when coming into contact with a new culture and the opportunity for adaptation, acculturation, and integration into the host culture” (Dorazio & Constantine, 2008, p. 1107). From these foundations, research on intercultural or cross-cultural adaptation has developed, although Kim (2001) calls the scholarship on this phenomenon “far from cohesive” (p. 11). She identifies three major dialectics in the approaches to cross-cultural adaptation: macro-level vs. micro-level perspectives, long-term vs. short-term adaptation, and adaptation as problem vs. adaptation as learning/growth (p. 11-21).

4.2 The Psychology of Acculturation

The literature on cross-cultural adaptation regularly features Berry’s conception of acculturation. His acculturation framework defines three different processes:

The term *culture change* refers to the process that results in population-level changes that are due to dynamic internal phenomena such as innovation, discovery or major ecological disaster. The term *acculturation* refers to the process that results in population-level changes that are due to contact with other cultures. Finally, the term *psychological acculturation* refers to the process by which individuals change, both by being influenced by contact with another culture and by being participants in the general acculturative changes underway in their own culture (Berry, 1990, pp. 234-235).

For example, the invention of the cotton gin prompted a *culture change* in the American South. The arrival of Europeans in the Americas caused both the native peoples and the Europeans to undergo *acculturation*. Berry points out that initially the Europeans learned a great deal from the native people, but eventually this process shifted and the native people began to adopt more
aspects of the European culture. This study focuses on *psychological acculturation*, looking at the individual adaptation experiences of international students studying in the United States.

Berry also identifies four varieties of acculturation: integration, assimilation, separation, and marginalization. Each of these terms is defined in Table 3. In Figure 1, these acculturation types are illustrated in relation to two major acculturation issues: maintenance of heritage culture and identity and relationships sought among other groups.

*Table 3. Berry's four types of acculturation (Sam & Berry, 2010, p. 476)*

<table>
<thead>
<tr>
<th><strong>Acculturation Type</strong></th>
<th><strong>Definition</strong></th>
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<tr>
<td>Assimilation</td>
<td>“strategy used when individuals do not wish to maintain their cultural identity and seek close interaction with other cultures”</td>
</tr>
<tr>
<td>Separation</td>
<td>“defined by individuals who place a high value on holding on to their original culture and avoid interactions with members of the new society”</td>
</tr>
<tr>
<td>Integration</td>
<td>“strategy is used by individuals with an interest in maintaining one's original culture while having daily interactions with other groups”</td>
</tr>
<tr>
<td>Marginalization</td>
<td>“defined by little possibility or lack of interest in cultural maintenance (often for reasons of enforced cultural loss) and little interest in having relations with others (often for reasons of exclusion or discrimination)”</td>
</tr>
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</table>
Acculturative stress also plays an important role in Berry’s work. He notes that this stress may have a negative effect on the health of an individual and may manifest as “lowered mental health status (especially confusion, anxiety, depression), feelings of marginality and alienation, heightened psychosomatic symptom level, and identity confusion” (Berry, 1990, p. 246-247).

There are a variety of factors associated with the relationship between acculturation and stress:

- nature of the larger society
- type of acculturating group
- modes of acculturation
- demographic and social characteristics of individual
- psychological characteristics of individual (Berry, 1990, p. 248).

For example, the following may reduce acculturative stress for an individual: a multicultural host society, perceived higher status of the individual (e.g., by ethnicity or profession), and the open-mindedness and confidence of the individual.
4.3 Culture-Learning

Working off of Argyle’s (1979) social skills model, Bochner and his colleagues developed the culture-learning model of the cross-cultural sojourn in the 1980s. This model argues that the “major task facing a sojourner is not to adjust to a new culture, but to learn its salient characteristics (Furnham & Bochner, 1982, p. 164). This perspective pushes back on the idea that the sojourner is somehow defective upon arrival in an unfamiliar culture and requires adjustment or adaptation. In addition, the culture-learning model avoids the ethnocentric idea that the sojourner must abandon her own culture for the host culture. Instead, she is simply in need of new skills and knowledge, which can be added to her already existing cultural knowledge base. Bochner (1986) identified two core constructs of the model:

First, it regards the coping process as the acquisition of second-culture social skills, or in its broader formulation, as culture learning. Second, it regards the goal of culture learning to produce mediating persons, individuals who not only possess “two skills in one skull,” that is, are bicultural, but can also act as human links between their two cultures (p. 350).

Furnham and Bochner (1986) advocate for social skills training: “a high priority is to identify those social situations that sojourners find particularly difficult, and then teach them the requisite culturally relevant social skills to enable these situations to be more effectively negotiated” (p. 243). They point out that Argyle (1979) identified seven categories of social skills that can be developed:

- perceptive skills
- expressive skills
- conversation skills
- assertiveness
- emotional expression
• anxiety management
• affiliative skills

4.4 Psychological and Sociocultural Dimensions of Cross-Cultural Adjustment

The work of Ward and her colleagues (Searle & Ward, 1990; Ward & Kennedy, 1996) on cross-cultural adjustment is underpinned by scholarly perspectives on culture shock, including Berry’s work on acculturation and adaptation, in addition to stress and coping (Lazarus & Folkman, 1984), and the social skills model (Argyle, 1979) utilized by Furnham and Bochner (1982). Ward and Kennedy (1996) define the psychological dimension “in terms of well-being or mood states (e.g., depression, anxiety, tension, and fatigue)” and assert that it is “predicted by personality, life changes, and social support variables” (p. 291). Socio-cultural adaptation is “measured by the amount of difficulty experienced in the management of everyday social situations in the host culture” and is “related more strongly to cognitive factors and social skills acquisition” (p. 291). Generally, Ward and her colleagues use questionnaires and scales, either preexisting or researcher-developed, to explore hypotheses related to these dimensions.

4.5 Anxiety/Uncertainty Management Theory

Gudykunst’s anxiety/uncertainty management (AUM) theory of strangers’ intercultural adjustment grew out of uncertainty reduction theory (Berger & Calabrese, 1975). Gudykunst’s (2005) theory is based on the following assumptions:

1. “All sojourners are strangers in the cultures they are visiting” (p. 421). Their interactions with the host culture are a source of uncertainty and anxiety.

2. Uncertainty is a cognitive phenomenon, and anxiety is its emotional equivalent. Successful intercultural adjustment requires that levels of both uncertainty and anxiety are between the stranger’s minimum and maximum threshold.
3. Intercultural adjustment involves “feeling comfortable in the host culture, as well as communicating effectively and engaging in socially appropriate behavior with host nationals” (p. 425).

4. Most communication is automatic or unthinking. Mindful communication acknowledges that host nationals may not interpret communication in the way it is intended by the stranger.

AUM theory includes 47 axioms that can be combined to build theorems. The axioms are organized by category, including self-concept, motivation to interact, reactions to hosts, social categorization of hosts, situational processes, connections with hosts, ethical interactions, and conditions in host culture. This schema is illustrated in Figure 2.
Figure 2. Representation of the anxiety/uncertainty management theory of intercultural adjustment. Adapted from Gudykunst (2005, p. 426)
4.6 Kim’s Cross-Cultural Adaptation Theory

This study was informed by Yun Young Kim’s theory of cross-cultural adaptation. Kim’s research in this area began in the 1970s with her dissertation, investigating the acculturation processes of Korean immigrants. The study focused on three aspects of the “immigrants’ communication patterns: language competence, acculturation motivation, and accessibility to host communication channels” (Kim, 1977, p. 66). By 2001, Kim had fully developed an “integrative theory of communication and cross-cultural adaptation,” which will be referred to here as cross-cultural adaptation theory.

Kim (2001) defines cross-cultural adaptation as “the dynamic process by which individuals, upon relocating to new, unfamiliar, or changed cultural environments, establish (or reestablish) and maintain relatively stable, reciprocal, and functional relationships with this environment” (p. 31). The theory asserts that a human being is an open system, and will “struggle to regain an internal equilibrium in the face of adversarial environmental conditions” (Kim, 2009, p. 244). This human desire to reach a stable relationship with the host environment supports the theory’s stress-adaptation-growth process model. The theory also offers a structural model, which includes a set of factors that influence how quickly and easily a person moves towards successful cross cultural adaptation.

As was noted in Chapter One: Study Overview, three boundary conditions frame cross-cultural adaptation theory. These conditions are focused on the people whose adaptation processes are explained in terms of the theory, here identified as “the strangers:”

1. The strangers have had a primary socialization in one culture (or subculture) and have moved into a different and unfamiliar culture (or subculture).

2. The strangers are at least minimally dependent on the host environment for meeting their personal and social needs.
3. The strangers are regularly engaged in firsthand communication experiences with that environment (Kim, 2001, p. 34).

In addition, the theory is founded on the following assumptions:

1. Humans have an innate self-organizing drive and a capacity to adapt to environmental changes.
2. Adaptation of an individual to a given cultural environment occurs in and through communication.
3. Adaptation is a complex and dynamic process that brings about a qualitative transformation of the individual (Kim, 2001, p. 89).

These assumptions establish that Kim (2001) has placed adaptation at the “intersection of a person and the environment,” and she “underscores the necessary condition of communication between the individual and the host environment for the occurrence of adaptation” (p. 31-32).

This idea is particularly relevant here, as communication is an essential component of an international student’s success, both inside and outside of the classroom. The student must communicate effectively with his roommate in order to maintain harmony at home, with his classmates in order to produce a high quality group project, with his professor to receive a good grade on a research paper. Verbal, non-verbal, and written communication are all critical in his successful adaptation to American culture generally and American higher education specifically.

4.6.1 Process model: The stress-adaptation-growth dynamic. Cross-cultural adaptation theory is underpinned by the stress-adaptation-growth dynamic, “a theoretical representation of the process of a person’s evolution toward increased person-environment fit” (Kim, 2009, p. 244). Learning to live and function successfully in a new culture is a source of stress. Kim (2001) explains that this stress is a struggle “essentially between the need for acculturation and the resistance to deculturation, the push of the new culture and the pull of the
old, and between the existing conditions inside the stranger and the demands of the external environment” (p. 55). As a person experiences a stressor, it acts as a force pushing him to overcome the obstacle or difficulty causing the stress. This adaptation causes the person to “engage in forward-thinking moves” and the “active development of new habits” (Kim, 2009, p. 245). The result of frequent and long-term stress-adaptation experiences is growth. Kim (2009) writes that this psychological growth is “subtle and imperceptible,” and “entails an increased complexity in an individual’s meaning system” (p. 245). For example, an international student studying in the U.S. is unsettled by the expectation of regular class participation in a political science class. She is not used to speaking up in class to ask questions or share her thoughts on the readings. This aspect of the learning environment causes her stress. In order to meet her professor’s expectations, she completes the readings for each class and takes careful notes. She makes a list of questions and ideas, and discusses them with her roommate in order to practice speaking. This preparation process, these “new habits,” represent her adaptation. After a year of learning in the American environment, she is fully comfortable making contributions in class. Perhaps she has internalized this style of teaching and learning, and is able to reconcile it with the style to which she was accustomed prior to arriving in the U.S., recognizing the value of both. This growth may not be obvious – to an observer or even to the student – but that does not mean it has not occurred, as a result of the stress and her adaptation.

The relationship between stress, adaptation, and growth is considered to be dynamic, because it is not a linear process. A person undergoing cross-cultural adaptation does not move along a line with one phase leading clearly to the next. The relationship between stress, adaptation, and growth is cyclical and recurrent. Kim (2001) explains that people “respond to each stressful experiences by ‘drawing back,’ which in turn activates adaptive energy to help them reorganize themselves and ‘leap forward’” (p. 57). See Figure 3 for a visualization of the dynamic. Note that the cycle in this representation moves forward and upward over time, as the
person undergoing adaptation experiences less stress and more adaptive ability – and thus more growth.

*Figure 3. Stress - adaptation - growth dynamic, adapted from Kim (2001, p. 57)*

**4.6.2 Structural model.** Kim’s theory also includes a structural model, “in which key dimensions of factors that facilitate or impede the adaptation process are identified and their interrelations articulated” (p. 245). The model contains five major dimensions: host communication competence, host and ethnic social communication, environment, individual predisposition, and intercultural transformation. Each of these factors are made up of sub-factors. For example, host receptivity, host conformity pressure, and ethnic group strength are the factors underneath the umbrella dimension of “environment.” See Table 4 for descriptions of all structural model dimensions, factors, and descriptions, and Figure 4 for a graphic representation of the relationship between them.
Table 4. Cross-cultural adaptation theory structural model dimensions and factors (Kim, 2009)

<table>
<thead>
<tr>
<th><strong>Personal Communication: Host Communication Competence</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive competence</td>
<td>“internal capabilities such as the knowledge of the host culture and language” (p. 245)</td>
</tr>
<tr>
<td>Affective competence</td>
<td>“capacity to deal with various challenges of living in the host country, including the willingness to make necessary changes” (p. 245)</td>
</tr>
<tr>
<td>Operational competence</td>
<td>makes it possible to “enact cognitive and affective capabilities outwardly” by choosing “behaviors that are appropriate and effective” (p. 246)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Host and Ethnic Social Communication</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Host interpersonal communication</td>
<td>provides “vital information and insight into the mind-sets and behaviors of the local people” (p. 246)</td>
</tr>
<tr>
<td>Host mass communication</td>
<td>includes numerous forms of mass communication (e.g., radio, television), provides exposure to the larger host environment (p. 246)</td>
</tr>
<tr>
<td>Ethnic interpersonal communication</td>
<td>provides access to “original cultural experiences, often rendering assistance to those who need material, informational, emotional, and other forms of social support” (p. 246)</td>
</tr>
<tr>
<td>Ethnic mass communication</td>
<td>provides access to various forms of mass communication (e.g., newspapers, websites) from the original culture</td>
</tr>
</tbody>
</table>

(continued on next page)
<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Host receptivity</td>
<td>“the degree to which a given environment is structurally and psychologically accessible and open to strangers” (p. 246)</td>
</tr>
<tr>
<td>Host conformity pressure</td>
<td>“the extent to which the environment challenges strangers to act in accordance with its language and cultural norms” (p. 246)</td>
</tr>
<tr>
<td>Ethnic group strength</td>
<td>the extent to which an ethnic group is present and exerts influence on its members</td>
</tr>
<tr>
<td><strong>Individual Predisposition</strong></td>
<td></td>
</tr>
<tr>
<td>Preparedness</td>
<td>“the mental, emotional, and motivational readiness to deal with the new cultural environment, including the understanding of the host language and culture” (p. 247)</td>
</tr>
<tr>
<td>Ethnic proximity</td>
<td>“a relational concept with which a given stranger’s ethnicity and the predominant ethnicity of the host environment are compared” (p. 247)</td>
</tr>
<tr>
<td>Personality traits</td>
<td>“personality characteristics that enhance one’s chances for successful cross-cultural adaptation,” particularly openness, strength, and positivity</td>
</tr>
<tr>
<td><strong>Intercultural Transformation</strong></td>
<td></td>
</tr>
<tr>
<td>Functional fitness</td>
<td>“a sense of ease, efficacy, and a desired level of effective working relationship with the host environment” (p. 247)</td>
</tr>
</tbody>
</table>

(continued on next page)
| Psychological health | “reflected in an increased sense of personal well-being and satisfaction in one’s life in the host environment” (p. 247) |
| Intercultural identity | “as individuals advance in the cross-cultural adaptation process, identity orientations undergo a gradual and largely unconscious transformation toward less categorical and more complex ones” (p. 247) |
Figure 4. Representation of structural model dimensions and factors. Adapted from Kim (2001, p. 87)
4.6.3 Cross-cultural adaptation research. Kim’s cross-cultural adaptation theory has not been used in library and information science research, but has provided a theoretical foundation for research in communication, tourism, and education. The theory has been used to explore a variety of populations, including Nigerian organization leaders in the U.S. (Adeniyi, 2013), Korean and American mission travelers in Cambodia and Thailand (Lee, 2011), and Japanese and American workers in a plant in the American Midwest (Tankei, 2009). Most of the research in this section, however, will focus on the cross-cultural adaptation of international students.

In a 1995 study, Zimmermann explored the relationship between intercultural communication competence and international student adaptation. Interviews were conducted with 101 international students, with questions designed to measure the affective and behavioral (or operational, to use Kim’s term) dimensions of intercultural communication competence and their effect on cross-cultural adaptation. The findings were clear: “frequency of interaction with American students was strongly related both to students’ satisfaction with their communication and their adjustment to American life” (p. 328). Zimmermann calls for universities to facilitate interactions between international and domestic students through both formal (e.g., counseling services outreach) and informational (e.g., pairing international and American students in a buddy system) means.

Chen (2000) conducted a multiple method study of international students in the American Midwest, using a survey and interviews to explore preparation and adaptation. She used Kim’s theory as a foundation of the study because “the entire process that international students go through, including applying for, studying in, and graduating from U.S. colleges and universities, is an experience in cross-cultural communication” (Chen, 2000, p. 31). The goal was to explore the relationship between student preparation for and adaptation to higher education in the U.S.,
and thus the following dimensions were integrated into the study design: preparedness, host receptivity, host conformity pressure, and host communication competence (including cognitive, affective, and operational competencies). Chen found that the participants’ perceptions of their adaptation to living and studying in the U.S. were significantly related to their preparation (i.e., “knowledge about American higher education and culture”) (p. 36). Results also indicated significant differences in the adaptation experiences of European and non-European international students, regarding host communication competence, receptivity, and conformity pressure. Kim’s theory also guided Olaniran’s (1996) work, a study of the difficulties encountered by international students in social situations. Participants whose native cultures were more similar to the host culture, in this case American culture, experienced fewer social difficulties. Thus, findings from both studies substantiate Kim’s concept of ethnic proximity as factor that aids the adaptation process.

In a study of Chinese students studying in the U.S., Wang and Sun (2009) investigated how loneliness influenced Internet use and cross-cultural adaptation. They found that although loneliness did not predict higher Internet use, it did negatively affect cross-cultural adaptation. In addition, non-lonely Chinese students were more likely to use the Internet for acculturation. As the result of a study of non-natives living in the U.S., Kim and McKay-Semmler (2013) found that Internet-based forms of communication like email were the most common medium for ethnic interpersonal communication with friends and family in the participants’ home countries. Findings also showed that participants were engaged in direct host interpersonal communication much more often than ethnic interpersonal communication. Host interpersonal communication was found to be significantly correlated with functional fitness and psychological health, two facets of intercultural transformation in the structural model of Kim’s cross-cultural adaptation theory.
The transition from high school to college is considered by some scholars to be a time of cross-cultural adaptation for students. In his dissertation research, Martin (2011) used Kim’s stress – adaptation – growth dynamic to explore first year college student retention. He collected written stories from participants about their experiences at school and at home during their first semester. Findings showed that stories related to school were generally negative, while those about home were positive. Martin suggests that stress events were common for students during their first semester. In fact, Kim (2001) asserts that “stress is the severest during the initial phases of cross-cultural adaptation” (p. 55). As a result his recent research on first-generation college students, Orbe (2008) developed a theoretical framework for understanding these students’ multidimensional identities. He used cross-cultural adaptation theory as a foundation in his work, which resulted in the identification of dialectical tensions experienced by these students (e.g., individual – social identity, stability – change).
CHAPTER 5: METHOD

This study utilizes a qualitative, constructivist method. Creswell (2014) calls qualitative research “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem,” the process of which “involves emerging questions and procedures, data typically collected in the participant’s setting, data analysis inductively building from particulars to general themes, and the research making interpretations of the meaning of the data” (p. 4). In the case of this study, international students make up the “group.” The “social problems” to be explored include academic integrity and the ways that students successfully complete graduate level research and writing. Qualitative research is designed to explore an issue in the real world, as opposed to a controlled setting like a laboratory, by analyzing one or more of the following: group or individual experiences, interactions and communications, and documents (Flick, 2007, p. x). This study focuses on the experiences of individuals, although textual artifacts are considered as well (e.g., a course syllabus, a completed written assignments) – not as a unit of analysis, but as a tool used in interviewing. Critical incident technique (CIT) guided the study design.

This study uses semi-structured interviews in conjunction with critical incident technique (CIT) to explore how international graduate students complete their academic work and think about issues of academic integrity. This section outlines all aspects of the research design, including method, CIT, data analysis and interpretation, and issues of trustworthiness.
5.1 Research Questions

RQ1: How do international graduate students studying in the United States conduct their academic research and writing?

- What steps do they take in the process of completing an academic assignment?
- How do they conduct research and use the library and other resources in this process?
- How do they integrate these sources during the writing stage of an academic assignment?

RQ2: How do international graduate students studying in the United States perceive, engage with, and negotiate issues of academic integrity?

- What and how did they learn about academic integrity prior to entering graduate school in the United States?
- How do they think about academic integrity during the research and writing process?

5.2 Study Participants

The participants were all international students enrolled in master’s programs in North Carolina at one of the following universities: the University of North Carolina at Chapel Hill (UNC-CH), Duke University, or North Carolina State University (NCSU). More detail about requirements for participation is provided in the Establishing Plans and Specifications section below. Information about the participants including pseudonyms, gender, country of origin, and areas of study, can be found in the Chapter Six: Findings, Participants’ Experiences and Perspectives section (6.1).

5.3 Critical Incident Technique

Critical incident technique (CIT) is a set of research procedures pioneered by Flanagan (1954) that grew out of industrial and organizational psychology. The Encyclopedia of
Industrial and Organizational Psychology defines the technique as “a research process that invites respondents to identify events (incidents) they deem significant (critical) for a particular purpose” (Kain, 2007, p. 135). Flanagan (1954) wrote that CIT “consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness solving practical problems and developing broad psychological principles” (p. 327). The technique is a good fit for this study because findings are often used to inform practical outcomes (Hughes, 2007), in this case the ways that academic librarians provide information literacy training and academic integrity support to international students. There are five major steps or stages in CIT:

1. Ascertain the general aims of the activity to be studied.
2. Make plans and set specifications.
3. Collect the data.
4. Analyze the data.
5. Interpret the data and report the results (Borgen, Amundson, & Butterfield, 2008).

CIT is often used in service industry (Gremler, 2004; Grove & Fisk, 1997) and health care (Arora, Johnson, Lovinger, Humphrey, & Meltzer, 2005; Bradley, 1992) research. In LIS research, CIT has been used to study information seeking behaviors (Auster & Choo, 1994; Zach, 2005), reference encounters (Radford, 1996), research anxiety (Kracke & Wang, 2002), and the use of scholarly journals by medical faculty (Tenopir, King, & Bush, 2004). Bianchi (2013) used the technique to identify satisfiers and dissatisfiers for international students studying in Australia. She identified four incident categories: international student performance, educational service performance, socialization performance, and living environment performance. In her doctoral thesis research, Hughes (2010) used an expanded critical incident approach, collecting data via interviews and participant observation, to explore international students’ use of online information resources. She discovered that these students used the
library more often than they had in their home countries, but some misconceptions remained. For example, some participants thought that the resources provided by the library were all produced by the library, and others avoided using library resources and services because they expected to be charged for doing so. Hughes (2007) notes that she selected CIT for the following reasons, all of which apply to this study as well:

- it supports a straightforward qualitative approach;
- it offers well proven, clearly defined guidelines for data collection and analysis;
- it focuses on real-life human experiences;
- it enables the development of practical outcomes;
- it is relatively flexible; and
- it has successfully supported other LIS and education studies (p. 52).

CIT guided the design of the proposed study, including data collection – question development in particular – and data analysis. In this study, the incident to be identified and explored was the completion of a graduate-level academic written assignment that required research, with the additional goal of discovering how issues of academic integrity were involved in the process. These assignments could be research papers, or any other type of academic work that met the criteria outlined in the Establishing Plans and Specifications subsection (5.3.2). CIT was used to learn about this particular human activity and the significance to the people who were engaged in it (Hughes, 2007). The five steps of CIT are illustrated in Figure 5, and described in relation to the proposed study in the following subsections.
5.3.1 **Ascertaining the general aims.** The goal of this step is to “define the activity to be studied and establish its aim” (Hughes, 2007, p. 53). In CIT, the activity is defined by the researcher in a brief, clear, statement. The activity explored in this study was the completion of a major graduate level written assignment that required research, for a course taken in the pursuit of obtaining a master’s degree (e.g., a sociology master’s student writes a literature review about social learning theory for SOCI 802: Social Psychological Theory). According to Flanagan (1954), this aim should be defined based on the “ideas of a number of well-qualified authorities” (p. 337), so that it is understood and widely accepted by those in the field. Some universities have developed learning goals and outcomes for graduate students, which are generally approved by the Faculty Senate and thus based on expert opinions. Because a graduate level assignment is designed to help a student earn a master’s degree, these goals and outcomes can be considered the aim of this activity. I identified seven sets of graduate school learning goals.
and outcomes from different universities\(^3\) via online search, and synthesized them into the following aim:

The aim of completing a major graduate level assignment is to demonstrate advanced knowledge of and ability to communicate in the appropriate discipline, contribute meaningful scholarship, and demonstrate an ability for analytical thinking and understanding of ethics within the discipline.

5.3.2 Establishing plans and specifications. The four key considerations in this step are (1) situation, (2) relevance, (3) extent, and (4) observers. Hughes (2007) simplifies situation as the “who, where and what” of the study (p. 4). In the case of this study: international master’s students (who) at three North Carolina universities (where) who completed an assignment for a graduate-level course (what). See Table 7 for a summary of all plans and specifications for this study.

5.3.2.1 Situation: Participants & research sites. North Carolina is ranked 17\(^{th}\) in the U.S. for number of international students studying in the state (IIE, 2015b). The four North Carolina universities in Table 5 had the largest numbers of international students enrolled in the 2014-2015 academic year. Students from three of the four universities were recruited for this study. The University of North Carolina at Charlotte (UNCC) was excluded as a result of

\(^3\) Rutgers University, Southern Illinois University Edwardsville, Lourdes University, California State University Stanislaus, Loyola University Maryland, City University of New York, Carroll University. None of the four universities included in this study have learning goals and outcomes provided by the graduate school, although some specific schools and departments have them. In order to keep the aim as broad as possible, though, I searched for general goals and outcomes developed by graduate schools and centers that were applicable to all graduate programs.
distance. UNC-CH, Duke, and NCSU are all within 30 miles of Chapel Hill, but UNCC is more than 100 miles away. All interviews were conducted in-person, so proximity was a priority.

Table 5. North Carolina universities with the largest number of international students, 2014-2015 (IIE, 2015b).

<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>City</th>
<th>Number of International Students</th>
<th>% of Total International Students in North Carolina(^4) (n=17,319)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North Carolina State University (NCSU)</td>
<td>Raleigh</td>
<td>4,881</td>
<td>28.2%</td>
</tr>
<tr>
<td>2</td>
<td>Duke University &amp; Medical Center (Duke)</td>
<td>Durham</td>
<td>3,348</td>
<td>19.3%</td>
</tr>
<tr>
<td>3</td>
<td>University of North Carolina at Charlotte (UNCC)</td>
<td>Charlotte</td>
<td>2,283</td>
<td>13.2%</td>
</tr>
<tr>
<td>4</td>
<td>University of North Carolina at Chapel Hill (UNC-CH)</td>
<td>Chapel Hill</td>
<td>1,878</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>12,390</td>
<td>71.5%</td>
</tr>
</tbody>
</table>

Study participants were recruited through international student support offices at the three universities: International Student and Scholar Services (UNC-CH), International House (Duke), and Office of International Services (NCSU). During January and February of 2015, I met with the directors of each of these offices in order to explain my research and request

\(^4\) This is the percentage of the total number of international students enrolled in North Carolina (17,319), not the total number at these five universities (12,390).
assistance with recruitment. All the directors were willing and able to help with disseminating recruitment materials (see Appendices B and C) via international student email lists.

5.3.2.2 Situation: Sample. Purposive sampling, which is common in qualitative research, was used in this study. As Palys (2008) writes,

Research participants are not always created equal—one well-placed articulate informant will often advance the research far better than any randomly chosen sample of 50—and researchers need to take this into account in choosing a sample (p. 698).

Criterion sampling, a type of purposive sampling, requires that each study participant meet a certain criterion (Palys, 2008) – and in this case, participants had to meet several. Simply being classified as an international student was not the only requirement. All participants met the following criteria: they were international students who were 1) enrolled full time in a master’s program, 2) non-native speakers of English, and 3) completing a degree program in the United States for the first time. Current data shows that the top five countries of origin for international students studying in the United States are China, India, South Korea, Saudi Arabia, and Canada5 (IIE, 2015a), and the numbers for North Carolina are similar. While it was anticipated that students from these countries would be heavily represented in the sample, participants from any country could be included as long as they met the stated criteria.

Flanagan (1954) acknowledges that there is no simple way to determine the necessary number of critical incidents (and thus number of participants). He recommends concurrent data collection and analysis, to continue until no new critical behaviors are evident in the data. Table

______________________________

5 Although almost 60% of Canadians are native speakers of English, French is the mother tongue for 22% of the population (Government of Canada, 2011).
6 gives details about sample size and data collection methods in selected CIT studies from the LIS literature.

Table 6. Sample size and data collection methods in selected CIT studies in LIS research.

<table>
<thead>
<tr>
<th>CIT Study</th>
<th>Number of Participants</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auster &amp; Choo. (1994).</td>
<td>13</td>
<td>Focused interviews</td>
</tr>
</tbody>
</table>

The recruitment goal for this study was 32 participants total with representation from all three universities and a variety of academic fields. The sample included students from each of the following disciplinary categories: social sciences, engineering, business, math/science, professional, health sciences, and humanities.

5.3.2.3 Relevance. The relevance consideration involves the “types of critical incidents and nature of critical behaviors that are relevant to the study and therefore worthy of being recorded” (Hughes, 2007, p. 54). For this study, the critical incident was an assignment in a master’s level course, and critical behaviors are any and all actions taken throughout the process of completing the assignment. The critical behaviors included everything between first learning of an assignment to receiving the completed and graded assignment with instructor feedback. Flanagan (1954) defines this consideration as deciding “whether or not a specific behavior which is observed is relevant to the general aim of the activity” (p. 338). Relevance is clear in the context of this study, because assignments in master’s level coursework have been specifically
designed to support the aim defined above: developing expertise on a particular topic, demonstrating scholarly communication within a specific discipline, and completing the requirements for earning a specific graduate degree.

5.3.2.4 Extent. The extent of the effect of the incident must be determined by the observer. Flanagan (1954) wrote that “an incident is critical if it makes a ‘significant’ contribution, either positively or negatively, to the general aim of the activity” (p. 338). Hughes (2007) takes a broad approach to this aspect of study design, arguing that all aspects of an experience are “potentially significant and capable of having a positive or negative effect” (p. 54). I took the same approach in this study. The criteria and context were explained clearly to the participants before and during the interviews, thus it was unlikely that an incident of little significance would be shared.

5.3.2.5 Observers. The final consideration for plans and specifications according to Flanagan (1954) is the selection and training of observers (p. 339). In this study, I am the sole researcher and so there is no need to train additional observers. I worked for three years as an academic librarian in Cairo, working mostly with undergraduate and graduate non-native speakers of English. I also led a multi-campus ethnographic study on how students conduct their academic research, so I have familiarity with both international student populations and studying the research process. As a result of these experiences (as well as the training I have received in my doctoral program), I possess the skills and expertise to carry out this study.
Table 7. Summary of plans and specifications.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Completing a major written assignment that required research in master’s-level coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim of activity</td>
<td>To demonstrate advanced knowledge and ability to communicate in the appropriate discipline, contribute meaningful scholarship, and demonstrate an ability for analytical thinking and understanding of ethics within the discipline.</td>
</tr>
<tr>
<td>Situation</td>
<td>Who? Approximately thirty-two international graduate students</td>
</tr>
<tr>
<td></td>
<td>Where? Three universities in North Carolina</td>
</tr>
<tr>
<td></td>
<td>What? Completing a master’s-level written assignment that requires research</td>
</tr>
<tr>
<td>Critical incidents</td>
<td>Recent assignment in a graduate-level course</td>
</tr>
<tr>
<td>Critical behaviors</td>
<td>Any and all actions taken throughout the process of completing the assignment</td>
</tr>
<tr>
<td>Observer</td>
<td>Sole researcher</td>
</tr>
</tbody>
</table>

5.3.3 Data collection. Flanagan (1954) preferred direct observation of critical incidents, but acknowledged that “if suitable precautions are taken, recalled incidents can be relied on to provide adequate data” (p. 340). He recommends interviews, group interviews, questionnaires, and written records as appropriate methods of data collection. While CIT has not changed a great deal in the past 50 years, perspectives on research have. Flanagan was not conducting research and writing from a constructivist viewpoint, as I am. For this reason, the design of the study occasionally departs from his recommendations. The goal of this study was to explore how participants construct meaning and understand the world through their historical and social perspectives, and thus the interview method is the best fit. Kvale and
Brinkmann (2009) write that “an interview is a conversation that has structure and purpose” (p. 3). This study utilized what Rubin and Rubin (2005) deem a responsive interviewing approach, which has three major characteristics:

- the interviewer and interviewee are both human beings, not recording machines, and they form a relationship during the interview that generates ethical obligations for the interviewer
- the goal of the research is to generate depth of understanding, rather than breadth
- the design of the research remains flexible throughout the project (p. 30).

As interviewer, I placed particular importance on active listening and providing a “helping voice” when necessary. Active listening means that “the listener is able to leave his or her own perspective and concentrate on what the narrator has and wants to say” and “recognize shifts, contradictions, and gaps in a story” (Lillrank, 2012, p. 283). The “helping voice” is an especially important tool in interviews with international students, who have varying levels of English proficiency and language confidence. Lillrank (2012) defines this concept as “a voice that makes itself available to help an interviewee articulate her- or himself more clearly” (p. 283). During these interviews, it was occasionally necessary for me to suggest a word or rephrase an idea in order to help participants express themselves clearly.

5.3.3.1 Recruitment. Participants were recruited on a volunteer basis, between June and October 2015, through the international student email lists at UNC-CH, Duke, and NCSU. The text of the recruitment email can be found in Appendix B. The recruitment email included a link to an online questionnaire designed to determine eligibility. Interested students had to meet the following criteria in order to participate in the study:

- 18 years or older
- classified as an international student studying in the United States
enrolled full-time in a graduate program, with the goal of earning a master’s degree
first time enrolled in a degree program outside of home country
speaks English as an additional language

The content of the online screening questionnaire can be found in Appendix C. Between June 24th and October 11th of 2015, 169 potential participants responded to the recruitment email and completed the screening questionnaire. Of these 169, just more than half (96) met all the study criteria. The majority of those who expressed interest and qualified to participate in the study were NCSU students (64). Twenty-four UNC-CH students and only 8 Duke students expressed interest in participating and met the criteria. The recruitment emails for NCSU and UNC-CH students were distributed through official channels, from International Student and Scholar Services (UNC-CH) and the Office of International Services (NCSU) listservs. Moreover, anyone who wanted to send a message on the Duke International House listserv could do so by joining the list. Thus, this is a high-traffic listserv with many messages about finding housing and selling household goods. I suspect that my recruitment message was simply lost in the flood of emails on this listserv, and few recipients noticed it.

I contacted 46 of the interested and qualified students by email to schedule a phone conversation about the study. Since so few Duke students responded to the recruitment email, I contacted all of them. I emailed most of the UNC students, but only about a third of the NCSU students, using purposive sampling to identify students from a range of disciplines and countries. Fourteen of the potential participants either did not meet the criteria for the study or did not respond to my email request for a phone conversation. During these phone conversations I reviewed their responses to the eligibility questionnaire, provided details about the study, and answered any questions. The most important aspect of this conversation was ensuring that the student had completed a recent assignment that required both research and writing; this assignment would the “critical incident” in our interview. The most common reason
that potential participants did not meet study criteria following this phone conversation was the lack of this type of assignment. I scheduled interviews with 32 of the 46 contacted students.

5.3.3.2 Interview protocol and procedure. Interviews were scheduled during the telephone conversation, for times and locations which the participant deemed comfortable and convenient. Each was scheduled for one and a half hours, although most lasted between 35 minutes and one hour. Almost all of the interviews took place in study or meeting rooms in libraries and other campus buildings. Prior to beginning the interview, the participant reviewed and signed the consent form (see Appendix E), and I answered any questions.

The interview protocol was developed using CIT, and thus was organized around the participant describing a specific incident. However, the critical incident is not the main focus of the data collection, but a tool to help me understand the participant’s perspectives on scholarly research and academic integrity.

In early April 2015, I conducted a pilot interview with a Chinese first-year master’s student in the social sciences. As a result of this experience and the participant’s feedback, I made some significant changes to the interview guide. The interview starts with a series of opening questions to help build rapport and understanding of the participant’s background and worldview. After the pilot interview, the participant mentioned that this conversation helped her to feel comfortable.

1. Tell me about yourself.
   a. Tell me about your hometown.
   b. Where did you complete your undergraduate degree and what did you study?
   c. Why did you come to the United States for graduate school?
   d. What are you studying?
e. Tell me about arriving to [UNC-CH, Duke, NCSU]. Did you receive an orientation? What topics were covered? Was there anything in the orientation that was new to you? Anything that surprised you?

The next questions focused on the critical incident, asking the participant to describe in detail the process of completing a recent class assignment.

2. Think about a time that you had to complete a major written assignment that required research for your coursework.
   a. Describe the assignment.
   b. Describe how you completed it. What was your first step?
   c. Which tools and resources did you use?
   d. Did you use the library to complete the assignment? How?
   e. What was the most important resource that you used?
   f. How did you go about the writing part of this process?
   g. What were some of the challenges in completing this assignment? Why?
   h. What did you enjoy about completing this assignment? Why?

The next question introduces the concept of academic integrity. The student in the pilot interview could not define it, and so this question was expanded to provide a definition of the phrase after the participant answered.

3. Think about the term ‘academic integrity.’ Please define this in your own words.
   a. How did you first learn about this concept?
   b. How did the professors/teachers in [country of origin] talk about academic integrity?
   c. How do your professors at [UNC-CH, Duke, NCSU] talk about it?
   d. How did your classmates in [country of origin] talk about academic integrity?
   e. How do your classmates at [UNC-CH, Duke, NCSU] talk about it?
The three included universities all have some sort of document to promote and clarify issues of academic integrity: UNC-CH’s Honor Code, the Duke Community Standard, and NCSU’s Code of Student Conduct. While these documents do provide explanations of different types of academic misconduct, they do not give a clear definition of academic integrity. The following definition, adapted from the Wikipedia (2015) definition, was used as an interview prompt:

Academic integrity is the moral code of academia. Under this code, scholars must avoid cheating and plagiarism, adhere to academic standards, and be honest in their research and writing.

I read this definition to all participants after they had given their own definitions of academic integrity. Once this concept and the critical incident had been fully discussed, I asked specific questions about academic integrity throughout the research process.

4. Did you think about academic integrity as you completed the assignment we discussed?
   a. How and why did you think about it?
   b. Do you view academic integrity differently after starting your master’s program?
   c. Do you think academic integrity is important?

Finally, the interview closed with a question about the participant’s perceptions of his or her academic environment, asking about the best and most challenging aspects of studying in the United States. This question was meant to be fairly easy to answer, and to afford an opportunity to debrief if necessary. In addition, it provided some insight on the participant’s worldview.
5. Think about your experience of studying at [UNC-CH, Duke, NCSU]? 
   
a. What is your favorite part? 
   
b. What is the most challenging part? 
   
The full interview guide can be found in Appendix F. 
   
   After the pilot interview, the student noted that it was difficult to recall each step taken in the process of completing an assignment. For this reason, I gave details of what we would discuss prior to the interview and invited students to bring along any helpful artifacts such as syllabi, research notes, and/or the final product of the assignment. These documents were not used as data sources, but as interview prompts. 

   **5.3.4 Analyzing the data.** Data analysis using CIT involves identifying and classifying critical incidents and identifying critical behaviors related to them (Hughes, 2007). This analysis was conducted primarily through coding, a process that Saldaña (2013) recommends begin as data is collected and formatted (p. 20). Interviews were audio-recorded and transcribed, and these transcriptions were coded. In addition, I wrote memos throughout the analysis process relating to code choices, emerging patterns and themes, potential relationships between codes, questions about the data, and my personal feelings about the study. 

   **5.3.4.1 Coding.** I used the qualitative analysis software package Atlas.ti for data management and analysis, allowing me to maintain interview transcriptions, codes, quotes, and memos in one location. Saldaña’s (2013) strategies for coding interview transcripts guided my process. The first cycle of analysis included attribute and structural coding. Attribute coding is used to “log essential information about the data and demographic characteristics of the participants for future management and reference” (p. 69). The goal of this initial step is to organize and manage data. Structural coding “results in the identification of large segments of texts on broad topics,” and these codes correspond to the research questions (MacQueen,
In this study, the interview questions were arranged by research question, so it was simple to apply structural codes to the participant responses. These codes allow for a “grand tour” analysis of the data (Saldaña, 2013, p. 85). Flanagan (1954) recommends that categories should not be identified ahead of time, but allowed to emerge from the data. While this is possible (and desirable) at some levels of analysis, the theoretical framework of cross-cultural adaptation provided guidance for data analysis, including some codes. For example, Kim’s process model includes three states: stress, adaptation, and growth. Each of these terms was added to the code book prior to beginning any analysis. Additional codes, however, were allowed to emerge from the data.

After the first cycle of coding was complete, I revisited the codebook. Some codes were combined, renamed, or removed all together. The second coding cycle is an important step in analysis for several reasons, according to Saldaña (2013):

...your data may have to be recoded because more accurate words or phrases were discovered for the original codes; some codes will be merged together because they are conceptually similar; infrequent codes will be assessed for their utility in the overall coding scheme; and some codes...may be dropped altogether (p. 207).

The second round of coding involved re-reading all transcripts and applying the updated coding scheme. This was particularly useful because several months passed between the first and last interviews were conducted. Larger themes and connections became clearer once I had read and analyzed all participant responses. The final codebook was divided into four major categories of codes, those relating to:

- Cross-cultural adaptation theory (e.g., stress, adaptation, growth)
- Cultural issues (e.g., language issues, life in the U.S.)
- Academic work (e.g., learning something new, research difficulties)
• Academic integrity (e.g., plagiarism, rules of academic integrity)

### 5.3.5 Interpreting and reporting the data.

In CIT studies, the “results often include a set of critical behaviors that define the activity studied” (Hughes, 2007, p. 61). In this case, these critical behaviors provided information about how international students actually do their academic work. Through conversation about their processes, I explored the participants’ perspectives on academic integrity. Behaviors that emerged from the data included research techniques and writing practices, and are presented in Chapter Six: Findings. Crotty’s (1998) assumptions of constructivism discussed in Chapter One guided my interpretation of findings:

1. Human beings construct meaning as they engage with the world they are interpreting.
2. Humans engage with their world and make sense of it based on their historical and social perspectives – we are all born into a world of meaning bestowed upon us by our culture.
3. The basic generation of meaning is always social, arising in and out of interaction with a human community (Creswell, 2014, p. 9).

The ways that an international student approaches her academic work and perceives issues of academic integrity are shaped by her worldview. Thus, as I looked for relationships and patterns in my data and thought about their meanings, I identified themes related to “engaging with the world,” “cultural perspectives,” and “social interaction.” Throughout interpretation, it was essential for me to present differing perspectives on research processes and academic integrity as socially constructed. In addition, the critical behaviors identified via CIT will be of particular value for librarians (and other faculty and staff) who wish to better understand how international students approach and perceive their academic work, in order to provide targeted support for this population.
5.4 Ethical Considerations

Flick (2007) writes that ethically sound research must be relevant and of high quality. The relevance of this research is addressed in Chapter One: Study Overview, in the Study Significance section (1.2), and the strategies for ensuring quality in the following section, Trustworthiness. Birch, Miller, Mauthner, and Jessop (2002) point out that interview research can be ethically fraught because the investigator is “researching private lives and placing the accounts in the public arena” (p. 1). This study is designed to adhere to ethical guidelines through Institutional Review Board (IRB) submission, the informed consent of all participants, and data confidentiality. Table 8 summarizes ethics strategies for each stage of the study, based on Creswell’s recommendations.

Table 8. Ethics strategies by study stage (Creswell, 2014, pp. 95-101).

<table>
<thead>
<tr>
<th>Prior to Beginning the Study</th>
<th>Beginning the Study</th>
<th>Collecting Data</th>
<th>Analyzing the Data</th>
<th>Reporting Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply to the IRB</td>
<td>Identify a beneficial research problem</td>
<td>Minimize disruption in the participants’ lives</td>
<td>Do not disclose only positive results</td>
<td>Provide an accurate account of data and findings</td>
</tr>
<tr>
<td>Obtain necessary permissions from gatekeepers</td>
<td>Disclose the purpose of the study</td>
<td>Respect potential power imbalances</td>
<td>Respect the privacy of participants</td>
<td>Do not disclose information that would harm participants</td>
</tr>
<tr>
<td></td>
<td>Respect the norms of the participants’ cultures</td>
<td>Avoid exploitation or deception of participants</td>
<td></td>
<td>Communicate in clear, appropriate language</td>
</tr>
<tr>
<td></td>
<td>Avoid collecting harmful information</td>
<td></td>
<td>Keep and share data</td>
<td></td>
</tr>
</tbody>
</table>
While I expected the assignment as a critical incident to be an innocuous topic of conversation, I acknowledged that aspects of this conversation could be sensitive for the participant – especially issues related to feedback, grading, or communications with the professor. Academic integrity, as a question of ethics, was more likely to be a sensitive subject. I thought that perhaps participants would be hesitant to discuss a concept that they know to be important but may not completely understand, or to admit to violating honor policy. However, I was surprised to discover that the participants were happy to speak frankly about these issues. It was clear that the opportunity to discuss academic integrity was the primary reason several students had volunteered for the study.

In order to ensure the comfort of participants and encourage them to share their experiences, it was critical for me, as the investigator, to develop a rapport and relationship of trust. Developing rapport “requires honesty, sincerity, acceptance, understanding, and spontaneity” (Seghal & Nabors, 2006, p. 403). I attempted to accomplish this by sharing with participants some information about my own worldview, by disclosing my international experience and explaining my interest in this research topic. In addition, emphasizing my status as graduate student potentially helped to reduce perceived power imbalance and emphasize the similarities between myself and the participants. See Appendix F for the details of this disclosure. More importantly, I took exceptional care to maintain the confidentiality of the collected data, and report findings in a manner that protects participants.

5.5 Trustworthiness

The concepts of validity, reliability, and generalizability (or external validity) are generally considered to be indicators of research quality. Gibbs (2007) explains that results are:

- Valid if the explanations are really true or accurate and correctly capture what is actually happening.
- Reliable if the results are consistent across repeated investigations in different circumstances with different investigators.

- Generalizable if they are true for a wide (but specified) range of circumstances beyond those studied in the particular research (p. 91).

These concepts as they have been traditionally defined and utilized by quantitative researchers are not entirely suitable for qualitative research, such as CIT studies. Lincoln and Guba (1985) suggest that qualitative researchers focus on “trustworthiness” and use alternative (and parallel) concepts including credibility, transferability, dependability, and confirmability.

**5.5.1 Validity.** Validity can be defined broadly as “being dependent on the degree to which a study actually measures what it purports to measure, or the ‘goodness’ of a study” (Miller, 2008b, p. 909). The concept of credibility corresponds to internal validity, which is the extent to which a study accurately reflects a causal relationship between variables. Jensen (2008) defines credibility as “the methodological procedures and sources used to establish a high level of harmony between the participants’ expressions and the researcher's interpretations of them” (p. 139). Interview research is generally not considered to be generalizable, corresponding to external validity, but can be considered transferable. The key to transferability is providing a transparent guide to the research, including information about method, process and context so that another researcher may determine whether or not the results are appropriate for another environment that he or she wishes to study. As Lincoln and Guba (1985) stipulate, the researcher is responsible for making available a transparent research process, so that others are able to determine whether findings might be transferable to another population.

A variety of strategies can be used to increase the credibility and transferability of a study. Creswell (2014) suggests the following: member checking, the use of thick, rich description, clarification of researcher biases, inclusion of discrepant information, prolonged time in the field, and peer debriefing (pp. 201-202). Borgen, Amundson, and Butterfield (2008) describe
credibility checks that can be used to determine the trustworthiness of a CIT study specifically, including:

- Interviews audio- or video-recorded, ensuring accuracy
- Exhaustiveness (or saturation) to identify when new categories no longer emerge
- Participant cross-checking
- Theoretical agreement, “making explicit the assumptions underlying the project and comparing the category scheme with appropriate literature” (p. 160).

5.5.2 Reliability. Reliability, which is “not prized for its own sake, but as a precondition for validity” (Lincoln & Guba, 1985, p. 292), is described as the dependability, consistency, and/or repeatability of a study (Miller, 2008a, p. 754). It corresponds to two related concepts included under the umbrella of trustworthiness: dependability and confirmability. Dependability means that findings would be repeated if the study was replicated, and confirmability indicates that findings are determined by the participants and not by researcher bias. Because it is not possible to erase the effects of the researcher on the findings, these effects must be made explicit. Denzin and Lincoln (1998) urge researchers to “be explicit about their preconceptions, power relations in the field, the nature of researcher/respondent interaction, how their interpretations and understanding may have changed, and more generally about their underlying epistemology” (Creswell, 2014, p. 92). Both dependability and confirmability can be supported through the use of inquiry audit, in which a knowledgeable outside auditor closely examines the inquiry process (to establish dependability) and the results of the inquiry (to establish confirmability) (Lincoln and Guba, 1985, p. 318). In the case of this dissertation research, my advisor and committee members act as both inquiry and results auditors. In order for this practice to be effective, the researcher must ensure that the research process is transparent by documenting it meticulously through notes and perhaps a reflexive journal. In
addition, guarding against mistakes in transcription and code drift support reliability (Creswell, 2014, p. 203). See Table 9 for specific actions taken to increase the trustworthiness of the study.

*Table 9. Actions taken to increase trustworthiness of the study.*

<table>
<thead>
<tr>
<th>Research Stage</th>
<th>Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Design</td>
<td>• Guided by theoretical framework</td>
</tr>
<tr>
<td></td>
<td>• Informed by literature review</td>
</tr>
<tr>
<td>Data Collection</td>
<td>• Interviews recorded and transcribed</td>
</tr>
<tr>
<td></td>
<td>• Data collected until saturation point</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>• Multiple coding cycles to prevent code drift</td>
</tr>
<tr>
<td>Reporting Findings</td>
<td>• Findings shared with participants</td>
</tr>
<tr>
<td></td>
<td>• Inclusion of discrepant information</td>
</tr>
<tr>
<td>Throughout the Study</td>
<td>• Research method, process, and context made explicit</td>
</tr>
<tr>
<td></td>
<td>• Clarification of researcher bias</td>
</tr>
<tr>
<td></td>
<td>• Feedback from advisor and committee members</td>
</tr>
</tbody>
</table>

5.6 Positionality

I want to make clear my own position, as this will certainly influence the proposed study. Indeed, my own perceptions are constructed by my cultural background. As an American, I do see the world through a Western lens. But as someone with personal and professional international experience, I believe that I have a reasonable understanding of non-Western perspectives. I expected and acknowledged that this study would uncover as many worldviews as there were participants. Throughout this research, I reflected on my own position and strive for objectivity, with the understanding that true objectivity is not attainable.
5.7 Study Limitations

Regarding CIT, Hughes (2007) points out that it “lacks the strong theoretical underpinning of some other qualitative methods such as phenomenography or participatory action research” (p. 62). However, for an exploratory study intended to encourage further research, the technique is appropriate. Gremler calls CIT a “naturally retrospective research method,” because it depends on respondents to provide an accurate report on an event that may have occurred some time ago (p. 67). In fact, the student who participated in the pilot interview stated that it had been difficult to recall the details of completing her assignment. However, my ultimate goal was to explore participant perspectives on graduate level scholarship and academic integrity through a conversation about an assignment. I am less interested in the minute details of each step of the process; CIT is a tool to uncover perceptions of a broader issue.

I made a particular effort to recruit participants from each of the three universities and a variety of disciplines, and was successful to some extent. Yet even with the ideal sample population, findings cannot be considered generalizable to international students studying in the United States, or even international students at these three North Carolina universities. Although not generalizable, this study was designed to be exploratory and potentially transferable – and sufficient detail has been provided for LIS researchers and practitioners interested in applying the findings to practice or conducting similar research.
CHAPTER 6: FINDINGS

Findings are reported in this chapter and are organized by research question. Within each research question section, results are organized by sub-topics related to the question. The chapter begins with a description of study participants, including English-language background, and participant perspectives on living and learning in the United States. The next section discusses the findings related to Research Question One, including the critical incident assignments, and participant research and writing processes. The chapter ends with the findings related to Research Question Two. This section covers participant definitions of academic integrity, how the students learned about the concept, and how they perceive it in the context of their graduate level work.

6.1 Participants’ Experiences and Perspectives

Thirty-one international graduate students participated in this study. All were non-native speakers of English and enrolled in a degree program outside of their home countries for the first time. Participants were all students at one of three North Carolina universities: North Carolina State University, University of North Carolina at Chapel Hill, or Duke University. They were enrolled in graduate level programs in a variety of disciplines, including engineering, health sciences, business, math/sciences, professional, humanities, and social sciences. Table 10 shows the number of participants that fall into each of these categories, as well as examples of

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6 I conducted 32 interviews for this study. The audio recording file of one interview was corrupted, and I was unable to transcribe or analyze this interview, thus it was not included in the sample.
specific programs included in each. The 2015 *Open Doors Report* identifies the following as the most popular fields of study for international students in the United States: business and management (20.2%), engineering (20.2%), math and computer science (11.6%), social sciences (7.8%), physical and life sciences (7.6%). However, these categories do not quite match those used in this study. For example, communications/journalism and education are separate categories in the *Open Doors Report*, but in this study both are categorized as social sciences. The small sample size called for broader categories; in some cases there was only one student from a particular program.

*Table 10.* Number of participants by academic discipline.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences (e.g. communication, education, information science)</td>
<td>10</td>
</tr>
<tr>
<td>Math/Science (e.g., computer science, biostatistics)</td>
<td>5</td>
</tr>
<tr>
<td>Business (e.g., MBA, engineering management)</td>
<td>4</td>
</tr>
<tr>
<td>Engineering (e.g., environmental engineering, industrial engineering)</td>
<td>4</td>
</tr>
<tr>
<td>Professional (e.g., architecture, city planning)</td>
<td>3</td>
</tr>
<tr>
<td>Health Sciences (e.g., public health, nursing)</td>
<td>3</td>
</tr>
<tr>
<td>Humanities (e.g., languages, literature)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

The majority of the 31 participants (58%) hailed from India or China. The remaining students identified eleven different home countries. See *Table 11* for more information about countries of origin. According to the Institute of International Education (2015a), the number of students from China studying in the U.S. increased by 10.8% between the 2013-2014 and 2014-2015 academic years, and students from India increased by a remarkable 29.4%. Of all the
countries of origin represented in this study, the following appear in the top 25 for the United States: South Korea (3rd), Vietnam (9th), Iran (11th), France (17th), Indonesia (18th), and Colombia (24th) (IIE, 2015a).

*Table 11.* Number of participants by country of origin.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>12</td>
</tr>
<tr>
<td>India</td>
<td>6</td>
</tr>
<tr>
<td>Colombia</td>
<td>2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2</td>
</tr>
<tr>
<td>Benin</td>
<td>1</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>1</td>
</tr>
<tr>
<td>Russia</td>
<td>1</td>
</tr>
<tr>
<td>South Korea</td>
<td>1</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>31</td>
</tr>
</tbody>
</table>

In the United States, close to half of all international students are from China and India, and this number is almost exactly half in North Carolina (IIE, 2015b). In this study, closer to 60% of the participants are from these two countries. See Table 12 for more detail. The numbers for the U.S. and North Carolina are for the 2014-2015 academic year.
Table 12. Percentage of total number of international students enrolled in the U.S., North Carolina, and this study (IIE, 2015a; IIE, 2015b)

<table>
<thead>
<tr>
<th>Country</th>
<th>U.S.</th>
<th>North Carolina</th>
<th>In Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>31.2%</td>
<td>28.7%</td>
<td>38.7%</td>
</tr>
<tr>
<td>India</td>
<td>13.6%</td>
<td>21.4%</td>
<td>19.4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44.8%</td>
<td>50.1%</td>
<td>58.1%</td>
</tr>
</tbody>
</table>

In order to protect the identities of the participants, they will be referred to by self-selected pseudonyms. In some cases, additional steps are necessary to ensure anonymity. For example, one student mentioned that when he arrived to his departmental orientation, he was surprised to discover that he was the only Indian student in the room. If this student were identified by university, program of study, and home country, he might be easily identified. Thus, when information about a specific student is discussed, a combination of pseudonym, nationality, and general discipline will be used – not university or program affiliation. Table 13 lists each participant by pseudonym, gender, country of origin, and English language background.
Table 13. Participants by pseudonym, gender, country of origin, and English language background.

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Country of Origin</th>
<th>English Language Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice</td>
<td>Female</td>
<td>China</td>
<td>Studied English since middle/high school</td>
</tr>
<tr>
<td>Barry</td>
<td>Male</td>
<td>Benin</td>
<td>Studied English since middle/high school; completed ESL program in the U.S.</td>
</tr>
<tr>
<td>Botasky</td>
<td>Male</td>
<td>China</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Chloe</td>
<td>Female</td>
<td>France</td>
<td>Studied English since middle/high school; studied abroad in U.S. and U.K.</td>
</tr>
<tr>
<td>Clara</td>
<td>Female</td>
<td>China</td>
<td>Studied English since middle/high school</td>
</tr>
<tr>
<td>Daisy</td>
<td>Female</td>
<td>Indonesia</td>
<td>Unknown</td>
</tr>
<tr>
<td>Daniel</td>
<td>Male</td>
<td>China</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Delta</td>
<td>Male</td>
<td>India</td>
<td>Studied English since primary school; English language instruction in home country</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>Female</td>
<td>China</td>
<td>Studied English since primary school; studied abroad in Sweden</td>
</tr>
<tr>
<td>Estiatoras</td>
<td>Male</td>
<td>Greece</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Felix</td>
<td>Male</td>
<td>China</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Karl</td>
<td>Male</td>
<td>Colombia</td>
<td>Studied English since primary school; worked in U.S. and Canada</td>
</tr>
<tr>
<td>Leo</td>
<td>Male</td>
<td>India</td>
<td>Studied English since primary school; English language instruction in home country</td>
</tr>
<tr>
<td>Marisa</td>
<td>Female</td>
<td>Russia</td>
<td>Studied English since middle/high school; extended travel to the U.S.</td>
</tr>
<tr>
<td>Mary</td>
<td>Female</td>
<td>China</td>
<td>Studied English since primary school</td>
</tr>
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(continued on next page)
<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Country of Origin</th>
<th>English Language Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael</td>
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<td>China</td>
<td>Studied English since middle/high school</td>
</tr>
<tr>
<td>Paprika</td>
<td>Female</td>
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<td>Studied English since primary school</td>
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<tr>
<td>Peter</td>
<td>Male</td>
<td>South Korea</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Pushta</td>
<td>Female</td>
<td>Kazakhstan</td>
<td>Started studying English after undergraduate; completed ESL program in the U.S.</td>
</tr>
<tr>
<td>Rita</td>
<td>Female</td>
<td>China</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Riya</td>
<td>Female</td>
<td>India</td>
<td>Studied English since primary school; English language instruction in home country</td>
</tr>
<tr>
<td>Robert</td>
<td>Male</td>
<td>Democratic Republic of Congo</td>
<td>Started studying English after undergraduate; completed ESL program in home country</td>
</tr>
<tr>
<td>Ryan</td>
<td>Male</td>
<td>Indonesia</td>
<td>Studied English since primary school</td>
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<tr>
<td>Sabrina</td>
<td>Female</td>
<td>China</td>
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</tr>
<tr>
<td>Sally</td>
<td>Female</td>
<td>India</td>
<td>Studied English since primary school</td>
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<tr>
<td>Sam</td>
<td>Male</td>
<td>Iran</td>
<td>Studied English since middle/high school</td>
</tr>
<tr>
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<td>Male</td>
<td>Colombia</td>
<td>Studied English since primary school; worked in the U.S.</td>
</tr>
<tr>
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<td>India</td>
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</tr>
<tr>
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<td>Male</td>
<td>Vietnam</td>
<td>Studied English since primary school</td>
</tr>
<tr>
<td>Victor</td>
<td>Male</td>
<td>India</td>
<td>Studied English since primary school; English language instruction in home country</td>
</tr>
<tr>
<td>Wendy</td>
<td>Female</td>
<td>China</td>
<td>Studied English since primary school; completed ESL program in the U.S.</td>
</tr>
</tbody>
</table>
6.1.1 English language background. As Table 13 shows, most of the participants had studied English in school for years, starting in primary, middle, or high school. Only two participants had begun studying English after completing their undergraduate degrees. Both were from countries in which a second language other than English was common: Pushta spoke Russian in addition to Kazakh, and Robert spoke French as well as several local languages including Swahili. Half of the Indian students had attended schools in which English was the language of instruction. The Chinese students had taken years of English classes, but generally did not have much experience immersed in the language:

"I started to take English class since elementary school, but what we learnt at school were not really practical in daily life. Then when I started to prepare for my TOEFL and GRE tests, I gained more useful skills, like writing, listening and speaking. After I came to US, my English improved a lot compared to before" (Rita).

Wendy echoed her sentiment: “When I came to United States, I feel that the English that I learned in China is sometimes different from the English in USA. Now, I acquired some language skills from native speakers.” After a year or more in the U.S., many participants still struggled with reading, speaking, listening, and writing in English:

“First I guess the English is problem. I remember two years ago when I first got here I had several articles to read and I read so slowly. It’s much slower than a native American. Now I guess I read faster but still sometimes I don’t get a point of the article. Maybe my problem, may be a problem of the article” (Clara).

“So it’s quite surprising when they want you present even though your English is not good. That's the most challenging, you have to present even though you have this bad English, and you have to deliver your thinking and discussions so many times” (Daisy).
“And sometimes even if I really improved my English, but it’s not enough yet. Sometimes you don’t understand, sometimes people talk and you didn’t catch anything. So you ask again, oh, and you are lost sometimes” (Robert).

“I think the most challenging will still be the language, how to do the writing. Because I can hear what I heard, I can speak, but when it comes to the writing, I can’t write it in a really formal way” (Alice).

Six students had prior experience in English-speaking countries, through studying abroad in the U.S. or Australia, or working or interning in Canada or the United States. One Chinese student had attended summer camp in Canada. Three of the participants, Wendy, Barry and Pushta, completed intensive English programs in the U.S. prior to entering their graduate programs. Overall, the international students demonstrated impressive English language skills. This chapter and the next include many participants’ quotes, and while small grammatical and vocabulary mistakes are noticeable throughout, they were almost always able to effectively communicate their views. I chose not to label these mistakes with ‘sic,’ as I did not want to distract from what these students have to say. The reader can assume that all quotes are represented here exactly as they were spoken.

6.1.2 Coming to America. Most of the participants had been in the United States for fewer than 18 months. One of the first questions asked in the interview was why they had chosen to study in the United States, and two-thirds of them spoke about the high quality of education available. Duke was described as a “top school,” “top-notch,” “prestigious,” and having a “high reputation.” UNC-CH and NC State were praised for more explicit reasons, usually for specific programs: “NC State is not only strong in economics, but also in statistics it’s really good.” “And so in terms of biostatistics, UNC ranks really top in United States.” Some participants acknowledged that the quality of education in their home countries did not meet their expectations. Victor said, “I personally believe that the graduate quality of education in India is
probably not as good as other parts of the world.” A student in the health sciences explained that he was simply not impressed with the colleagues in his field who had been educated in his home country. Ty noted, “I feel that educations I have received in Vietnam is not enough to prepare me for a better competitive positions in later careers.” A few participants chose North Carolina universities because of personal connections. These quotes are not attributed because they identify specific universities:

“But the other reason is because my boss spent his master's degree and PhD degree in the School of City and Urban Planning at UNC and he knows that it is one of the best schools in the U.S. in water sanitation in developing countries.”

“And it was while working with [my undergraduate thesis advisor] that he mentioned NC State, and he said the people there do great work. And he gave me a bunch of publications from professors from NC State and said, read this you can learn a lot.”

One participant chose to pursue graduate school in North Carolina because he befriended his English teacher in China. This teacher had graduated from UNC-CH and spoke highly of the state – including cost of living, environment, people, and education. Another had studied abroad at NC State as an undergraduate, and had “really liked it.” Mahdi explained that his father had studied in the U.S. in the 1970s, and had always encouraged him to do the same.

Some students spoke of their desires to see and understand more of the world, and to grow as a person:

“For graduate school first, I think I want to be in a different place, a really different cultural place and learn how they see my subject...Also I want to see how Western people see things differently with us. It's kind of thinking is really different. So I think after seeing this I can know more about myself, know more about the subject that I'm learning” (Alice).

“I always like to go around the world, expand my worldview...” (Ty).
“I want to explore more about the other side, because until undergraduate I haven’t gone to another city for a long time, for study or for living for long time so I choose to go to abroad to experience another culture and, just be more mature and grow up more” (Paprika).

6.1.3 Learning environments at home. Students spoke at length about the differences between the learning environments in their home countries compared to the U.S. Thirteen of the students emphasized the importance of exams. The majority of these students were Indian and Chinese – in fact, all of the Indian students spoke about exams – but European students did as well. Participants also stressed that the American education system requires that students complete many assignments throughout the semester, while this is not common in their home countries:

“I think the education system here and that was in India is different. In India, we have exams at regular intervals and not many assignments to do in every day, but here it’s different where we have assignments to do in every day” (Sally).

“They have, we have final exams no matter what you do throughout the course. So it’s different here. For example, if I can come every day and participate I have a class participation grade. In Greece, at least in my university, if you come or if you don’t come it doesn’t make a difference” (Estiatoras).

“Most of the time we usually go to the classes, and, you know, there are no emphasis on completing assignments. It is about the last exam, just do your preparations, not just rely on whatever the teacher does, or the college, or something like that” (Delta).
Take home exams were generally a new concept, and were mentioned by a few students:

“In China I don’t think there was take home exam. So after I came to the States I first heard of take home exam, I feel like, 'What's that? You can do it at home?' Yeah so all the tests in China all take place in classroom and there’s some teachers looking at you” (Mary).

“Here we have a lot of take home exams, but there in India, the exam system is very strict...It was very restricted there as to how the exam was conducted, but here it was more like having an honor code. The professor is trusting and giving us a take home exam. So there's a lot of difference” (Sally).

Ty was the only participant who indicated that he had experience with take home exams in his home country. He explained that in Vietnam, usually the whole class would collaborate on the test – and this collaboration is expected:

“So, although I don't want to share with my classmate, I had to conform to the situation. They ask, and I say no, do it just yourself, and it be ah, word travel fast. It would be hard for further collaboration in any stuff, and other stuff other than academic.”

Eight participants stated that their graduate programs in the U.S. required a great deal of writing. They had little experience with writing assignments in their home countries:

“Yeah, in France, it's really different from here. We don't have a ... Almost not at all, no assignments like research paper, or paper at all. It's mostly stuff that you have to learn and then we have an exam” (Chloe).

This lack of writing experience will be covered more thoroughly in the Writing Difficulties subsection (6.2.3.2) under the findings for Research Question One.

Differences between home country and American classroom expectations were apparent, as well. Chinese students found it to be less formal in the United States. Paprika pointed out that
she does not have “to feel interruptive” if she needs to step out of the room or sneeze during class. Mary observed that Chinese students “don’t learn to speak in class, and seldom...ask questions,” because this was not encouraged in Chinese classrooms. Similarly, Daisy had to learn to contribute to her classes:

“In my first semesters it’s really like, 'Ugh.' Because in Indonesia, it’s not common to discuss, like verbally. Most of the time you just listen to the instructor, taking notes and that’s it. If you want to ask, you ask. There is not much discussion. While in here require many presentation, discussion.”

A few students spoke specifically about critical thinking, and how learning expectations differ between the U.S. and their home countries:

“It’s really different from American because I think you teach student how to think, how to learn themselves... [In China] it's more about knowledge that teacher will teach you” (Alice).

“...when I started, I started my first semester with four courses, only I could not handle it. It was really heavy, it was the first time I thought, maybe I should have been taught like this back in school. You're forced to think by yourself, you're forced to discover things by yourself and that's how you learn” (Victor).

Eight of the participants mentioned the library and its available resources. Marisa, Daisy, and Ryan all conveyed appreciation for the online resources that they did not have access to prior to beginning their graduate programs in the United States. Although the Chinese students tended to use libraries as undergraduates, they used them in a different way. Mary observed that Chinese libraries do not usually offer group study rooms, and Daniel said, “In China I go to library with my friends but we just do our own homeworks.” The library is for quiet study and not collaboration, because students are not usually assigned group work.
More than two-thirds of the participants expressed that the academic integrity expectations and standards were different in their home countries:

“Honor code was one of the biggest parts the in-house orientation too, because not many schools in India have... They do have so many integral policies in place, but they don't have something honor code, so getting to know honor code was very important for us too” (Sally).

“There might be some cultural difference from my country, or even other countries with here because I think in my country we discussed the homework problem. We assume it's allowed, we always discuss the homework problem but we don't cheat in exams. Here in the orientation we were told that it's not always allowed to discuss the homework, if it's an individual assignment you need to do it on your own” (Clara).

Several noted that plagiarism is simply not a big issue in academia in their home countries:

“Plagiarism is not a problem in Greece, not as big a problem as here” (Estiatoras).

“But it was not that strict in my country, so lots of people just copied, and some things, just find something on the Internet and gave it as an assignment, or something” (Sam).

“I feel like plagiarism is really emphasized here, but in China not really” (Mary).

These and other academic integrity issues are discussed in more detail in the RQ2: How do international graduate students studying in the United States perceive, engage with, and negotiate issues of academic integrity? section (6.2) of this chapter.

6.1.4  Living and learning in the United States. Early in the interviews, participants were asked about their arrival in the U.S. and any orientations they had attended. To close the interviews, participants were asked about their perspective on living and studying
in the United States. Each described both the best and most challenging aspect of their experience.

**6.1.4.1 Orientations.** All 31 participants had attended at least one orientation session upon arriving in the U.S., and some had attended three. In some cases, students attended an international student orientation, a graduate school orientation, and a school or departmental orientation. Graduate school and departmental orientations tended to focus on administrative information like coursework and requirements, and adjusting to graduate school in general. The international student orientations provided an introduction to life in America including sessions on cultural differences, vocabulary, campus resources (e.g., library instruction workshops, writing centers), and logistical issues (e.g., procuring a driver’s license or ID card). More than half of the students indicated that the topic of academic integrity had been covered in one of the orientations – ranging from a general introduction to the honor code to specific information on understanding and avoiding plagiarism.

Student reactions to the orientations were generally positive. Ryan said that although he started to feel “overwhelmed with many orientations,” he appreciated that the university is “eager to...help international students in adaptation and cultural shock.” Marisa pointed out that her university in Russia never held orientations, and it surprised her that the American university “really cared about students.” Several students expressed that they suffered from information overload during orientations, or that they did not understand much of the content:

“[The departmental orientation was] so American-focused that I didn't know what to do. All my American friends were asking questions, and I was like, uh, what are they talking about? I don't have a clue” (Leo).

“...to be honest I didn't understand anything because they were talking about things I never heard about before” (Robert).
“It was too much information, I remember that. And it was very confused, what to pay attention to. Because I thought everything was important, even little, you know, every little detail” (Marisa).

Five participants, from a variety of countries, mentioned that they were surprised by the diversity of the student populations. Alice, a Chinese student, said that she had never been “in touch with so many foreign students.” Chloe, who is French, was surprised to be one of the few Europeans in her orientation session.

6.1.4.2 Best part of the experience. Major themes in the “best part” responses included the people students encountered in the U.S., the opportunity to learn and grow, and different aspects of the educational environment.

Almost one-third of the participants praised the people that they had worked with during their time in the United States. Some spoke specifically about their classmates. Wendy noted that her classmates “are very active in the class” and she “learned a lot” from them. Others described their professors as the best part of their experiences. Participants were particularly impressed with how supportive and accessible they found the faculty to be. Paprika called her professors “nice and kind-hearted;” Barry was pleased to discover that he could “go in to any professor and talk to them about the difficulties that I was having.” Ryan pointed out that in Indonesia, making an appointment with a professor required “a lot of layers to deal with,” but in the U.S. he could just knock on a professor’s door. Some participants spoke more generally about the people they had encountered. Estiatoras felt that his interactions with Americans and other international students had helped him become a “citizen of the world.” Chloe and Sally also appreciated the opportunity to live in a diverse environment and learn from people from many different countries. It is worth noting that two participants, a business student and an engineering student, expressed disappointment with their peers. The former was unimpressed with his classmates’ apathetic attitude towards academic integrity, and the latter with the quality
of their academic work. Both students were surprised by a perceived lack of work ethic amongst their peers.

Seven participants viewed learning new things, growing as a person, and the accompanying sense of accomplishment as the best part of their experiences in the United States. Some students gave specific examples: Marisa was proud of the research skills she had developed, which enabled her to complete assignments with confidence. Others spoke in more general terms. Elizabeth explained that in China, she never had to write so many papers or complete so many assignments during the course of a semester. But she had “overcome all the difficulties” in learning to succeed in the American academic environment. Robert said that if you had told him two years ago that he would be earning excellent grades in an American graduate program, he would have been amazed.

Different aspects of the educational environment came up regularly in participants’ responses to this question. Students named a variety of things they liked about American higher education in general and their universities in particular, including:

- the expectation that students will express themselves in class
- the opportunity to teach
- university resources (e.g., library, writing center, student health services)
- the ability to choose classes, and take classes in many departments
- extracurricular activities (e.g., working on the school newspaper)
- the opportunity to specialize, develop a scholarly focus
- collaborating with classmates on project-based work

The Chinese students were less likely to give academic examples as the best part about living in the United States. Five of the twelve spoke about the chance to live independently, or the opportunities to travel around the country.
6.1.4.3 Most challenging aspect of the experience. When asked to describe the most challenging aspect of living and studying in the U.S., responses fell into two major categories: cultural challenges and academic challenges. In addition, twelve participants named language issues as the hardest part of their experience:

“The challenge would be the language barrier, because I need to express myself in English which is kind of hard. I still remember that before, for the first couple of months, I need to think really hard beforehand I can speak out. Sometimes I need to translate Chinese into English” (Paprika).

“So at first it may be some professor have a certain accent, or maybe they have a custom they speak very fast, so I may have a little trouble to follow them” (Botasky).

Students described a variety of cultural issues they found to be challenging. Estiatoras disliked the wastefulness he witnessed in the United States. Two Chinese students, Rita and Sabrina, mentioned the difficulty of befriending American students. Rita said: “We want to be friends with you, but our language is not too good, we cannot really understand what you’re talking about. And when you talk about football or basketball, we don’t really know about that, we don’t share the same topics.” Sabrina also mentioned this lack of a shared cultural knowledge base, and Ryan described learning which topics of conversation were acceptable to Americans. Robert struggled to share his experience with professors and classmates he perceived to have a narrow view of the world. Two students found learning to live away from their families to be the most difficult. Michael explained that he had to learn to do things that his family used to do for him, like preparing meals.

Academic issues were also challenging for participants. Several students mentioned heavy workloads, challenging assignments, and deadlines. Shanaya explained the difference between her educational experiences in India and the United States:
“Like in India, we never had regular weekly assignments. We used to just study, we used to have a lot of classes throughout the week and then in the end we just had a final exam. So the way things worked for us was, we used to sit like one week before the exam, study like, anything, study day and night, and then attempt the exam. And here, it's very systematic. You are in a way forced to study every week because of the assignments. You're much more organized, you do everything weekly instead of accumulating it in the end.”

Four students specifically named writing as the biggest challenge they had faced, particularly since they had not had to do very much writing in their undergraduate programs. Other classroom difficulties came up as well: giving presentations, contributing to the class discussion, and learning when to ask questions. Clara described her experience in the American classroom:

“Maybe it's only me, maybe it's culture difference, if I have question I usually save it until the end of the class to ask the professor. First it gives me some time to think and I don't disturb the whole class. Here sometimes it's because of the language or I didn't make some notes or it's because of the knowledge itself I can't understand. I found if I save it to the end of class it's very hard to solve it later because the TA is only there for their office hours and professor is always busy after the class time and I had some problem with that.”

Only two students identified financial issues as the most challenging aspect of living and studying in the United States. However, five other students acknowledged the high cost of their education during different points in the interview. One student selected his program because it was the only one that provided loans to international students. Another explained that it is better to study in the U.S. for graduate school than undergraduate, because two years is more affordable than four.

6.1.5 Experiences and perspectives: Summary of findings. Most participants chose American graduate programs because they believe that the U.S. offers a very high level of
education. Some also spoke of their desires to see more of the world, and experience personal growth as a result. All students attended at least one orientation upon arriving in the United States. Some were overwhelmed by the flood of information, but most appreciated these orientations and viewed them as a sign that the universities prioritized student support.

When asked about the best part of living and studying in the U.S., three major themes included the people (e.g., professors and classmates), the opportunity to learn and grow, and various aspects of the educational environment (e.g., class discussions, collaborative assignments). Language difficulties, cultural issues (e.g., lack of a shared cultural knowledge base), and academic hardships (e.g., heavy workloads, writing assignments) were often named as the most challenging aspects of participants’ experiences living in the United States.

6.2 RQ1: How do international graduate students studying in the United States conduct their academic research and writing?

In the phone conversation prior to the interview, I explained to the potential participant that we would be discussing a specific assignment completed for master’s level coursework, and that this assignment should have required research and writing. This assignment was the critical incident. Participants were told that they could bring any materials that might help them remember the details of the assignment. Some brought the course syllabus, finished paper, or presentation slides. None of these materials were collected or analyzed, but simply used as tools to aid in recall.

Despite this conversation, four participants arrived at the interview prepared to talk about an assignment that did not exactly meet these criteria. In these cases, I asked the students to describe the process of completing the assignment they had in mind but also encouraged them to talk about any recent research and writing experiences.
6.2.1 The assignments. Students described a variety of assignments. Specific topics ranged from Japanese film to environmental disasters to French cuisine. In order to protect the anonymity of participants, only the general assignment type is listed in Table 14.

Table 14. Research assignment types by discipline.

<table>
<thead>
<tr>
<th>Participant Discipline</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Business</td>
<td>Accounting class assignment, case studies also discussed</td>
</tr>
<tr>
<td>Business</td>
<td>Blog post for an internship</td>
</tr>
<tr>
<td>Business</td>
<td>White paper for a client</td>
</tr>
<tr>
<td>Business</td>
<td>Original research project</td>
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<tr>
<td>Engineering</td>
<td>Research paper</td>
</tr>
<tr>
<td>Engineering</td>
<td>Problem sets, original research project also discussed</td>
</tr>
<tr>
<td>Engineering</td>
<td>White paper for an internship</td>
</tr>
<tr>
<td>Engineering</td>
<td>Original research project</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Essay</td>
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<tr>
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<td>Thesis</td>
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<tr>
<td>Humanities</td>
<td>Research paper</td>
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<tr>
<td>Math/Sciences</td>
<td>Memo to a CEO</td>
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<tr>
<td>Math/Sciences</td>
<td>Summary of an academic paper</td>
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<tr>
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<tr>
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<td>Original research project</td>
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<th>Participant Discipline</th>
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<tbody>
<tr>
<td>Professional</td>
<td>Original research project</td>
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<td>Professional</td>
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<tr>
<td>Social Sciences</td>
<td>Literature review</td>
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</tbody>
</table>

### 6.2.2 Research processes.
Several Chinese students mentioned starting this process with figuring out an appropriate topic, usually through a discussion with the professor. Sabrina remembered going to her professor for help with selecting a paper topic:

“I talked to my professor and she is very nice person, and we, I remember that we talked for like nearly two hours, just to find out what my thing could be. And she asked me a lot of questions about, like, 'What's your interest in,' and she want my thesis to be like also beneficial to her field and also to my future.”

The other participants tended to jump right into the actions they took in describing their research processes. The most common research process involved first identifying the major topics to be covered:
“So what differently did I do this time, was in the class, when the professor says in the memo I’m expecting this, this, this, I jotted down everything in detail. Until then I wasn’t focusing on, I know what a memo should be like. But that time I noted down every heading, subheading he wanted” (Leo).

They would then create an outline of headings corresponding to these topics:

“So how I do it, what I did initially was like the entire paper, I divided it into subheadings, because that makes you understand what’s going on” (Shanaya).

“First I have an outline, like how I want to structure all the paragraphs, from the beginning to the end” (Rita).

And then begin searching for resources for each:

“...then for each part I will search of course, search online and then try to get the most related content and materials” (Mary).

“Ok, and so I first determined what I will learn, will write in this paper, and I search a lot of resources” (Wendy).

The next step was reading the documents – or at least the abstracts – and determining whether they would be of value or not. This filtering process was clearly a skill to be developed – some students found it to be challenging, and others had developed techniques for the process. Santi explained:

“Because when you do a literature review, you don’t actually have to read the whole paper, just read the abstract, and you scan and skim over papers and try to just visualize the whole picture. So I learned that process of trying to get rid of things that you don’t really know. So say I start with thirty research papers, and then I started like, filtering, so it narrowed down the topics and tried to be very specific depending on what I was going to
study. So I learned that process, and I think that’s what research is all about. You start with this much information and then, like, narrow it down and get to the point.”

Next, most students would cut and paste either links to websites that they would return to later for content, or quotes from resources that they deemed to be useful, and categorize them under these headings:

"...then I just copy and paste some, you know, information from the articles to the document, and try to find, to kind of do a little bit of structure. So I knew that this information I can use in my introduction, this information can be a part of this literature review” (Marisa).

“After that I will first cut and paste certain sentence that's the most, maybe, core sentence around this paper, and first I just put it there, but without changing it. Because I wanted to gather all that I need to put under topic” (Mary).

At this point, the research and writing processes converged, and thus is discussed further in the Writing section (6.2.3) below. Bordonaro (2008) found that the international students in her study on writing and information literacy used a similar process. She describes a writing stage in which they “were constructing an outline...and then trying to fit the most useful or relevant sources into appropriate sections of their outline” (p. 5).

A few participants – especially those with work experience and a disciplinary knowledge base – wrote first, using the knowledge they already possessed. Then they searched for resources to support what they had already written:

“And if you need another resource, you feel like there is something missing about the topic, because the topic is really related to my job. So I know like what is the topic that maybe people want to read, I just have to Google to add more information into the paragraph” (Daisy).
"I find some articles and the exercise was, I have my idea written but I need to find some article which is talking about the same thing. For taking what is in the article, putting in my assignment” (Robert).

6.2.2.1 Resources. Two-thirds of the participants used library resources – particularly online resources – to do their research. Many reported using the main search bar available on all three university’s library websites, but a few had learned to go directly to specific databases: for example, Web of Science, IEEE Xplore Digital Library, ACM Digital Library, S&P Capital IQ. Nine students identified Google Scholar as integral to their research, and 13 named Google. A student who was assigned to write a memo to a CEO stated that he has a strong preference for using Google to find information, and tends not to use the library:

“...one reason why I don't rely on the library is, library gets you a little bit outdated information. When you're writing a memo to a business leader, you need to be very updated. You need to know what happened yesterday, that could impact a decision in business today – not what happened a year ago, it doesn't make any sense."

Felix called the library “not very convenient for me” because when he wants to check out a book it is frequently unavailable. Sometimes he cannot find what he needs on the shelf, and sometimes the only copies are already checked out.

Only seven participants mentioned using books, and these were often textbooks or volumes recommended by their professors. Students from Indonesia, Kazakhstan and China sought out materials written in their native languages, because their research was focused on their home countries and the most useful resources were likely to be published in these languages.
A few students had developed more advanced research skills. Sabrina, Peter and Karl had learned to use citation chasing, in which they searched the bibliographies of useful books and articles to find additional resources:

“I think my professor give me like several paper, articles to read first, and then she said you can go to the, the reference part, and you can see if there is any other articles that related to your thought...And I read them over, and I forgot if I actually find some useful papers from the reference, but I read them through and I tried to find some paper from the reference” (Sabrina).

Karl also explained how he had discovered an article he really liked, and then browsed other issues of that particular journal because, as he said, “I thought that I was very likely to find journal papers related to that same topic.” Several students had realized that they often could not access articles they found on Google Scholar because they were behind a paywall, but that these articles were often available through the library. Victor, Rita, and Santi learned to use Google Scholar in conjunction with the library website for their research:

“So Google at least gives you the titles of the papers, and then you have [university] library resources where most of the papers are free. So you just go on the [university] library and look for that particular paper, get it, just skim through it if you think it’s relevant, use it” (Victor).

After describing their research processes, participants were asked to name the most important resource used in completing their assignments. Some gave a general answer like Google Scholar, while others named specific resources (e.g., a particular book checked out from the library). Students that conducted original research usually identified the data they had collected as the most important. All of the most important resources are listed in Table 15; note that not all participants provided a clear answer to this question.
Table 15. Most important resources for each assignment.

<table>
<thead>
<tr>
<th>Participant Discipline</th>
<th>Assignment</th>
<th>Most Important Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Accounting class assignment, case studies also discussed</td>
<td>No clear answer given</td>
</tr>
<tr>
<td>Business</td>
<td>Blog post for an internship</td>
<td>Websites</td>
</tr>
<tr>
<td>Business</td>
<td>White paper for a client</td>
<td>No clear answer given</td>
</tr>
<tr>
<td>Business</td>
<td>Original research project</td>
<td>No clear answer given</td>
</tr>
<tr>
<td>Engineering</td>
<td>Research paper</td>
<td>Web of Science</td>
</tr>
<tr>
<td>Engineering</td>
<td>Problem sets, original research project also discussed</td>
<td>“Articles, books, my advisor”</td>
</tr>
<tr>
<td>Engineering</td>
<td>White paper for an internship</td>
<td>No clear answer given</td>
</tr>
<tr>
<td>Engineering</td>
<td>Original research project</td>
<td>Library resources</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Essay</td>
<td>PubMed</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Research paper</td>
<td>Resources accessed through work</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Essay</td>
<td>”The library and the writing center”</td>
</tr>
<tr>
<td>Humanities</td>
<td>Thesis</td>
<td>Collected data</td>
</tr>
<tr>
<td>Humanities</td>
<td>Research paper</td>
<td>Websites, a specific book from the library</td>
</tr>
<tr>
<td>Math/Sciences</td>
<td>Memo to a CEO</td>
<td>Websites</td>
</tr>
<tr>
<td>Math/Sciences</td>
<td>Summary of an academic paper</td>
<td>IEEE Xplore Digital Library</td>
</tr>
<tr>
<td>Math/Sciences</td>
<td>Literature review</td>
<td>Articles found online</td>
</tr>
<tr>
<td>Math/Sciences</td>
<td>Research paper</td>
<td>Papers written by the professor, Google</td>
</tr>
<tr>
<td>Math/Sciences</td>
<td>Research paper</td>
<td>Book recommended by the professor</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Participant Discipline</th>
<th>Assignment</th>
<th>Most Important Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Original research project</td>
<td>Collected data, resources from the library</td>
</tr>
<tr>
<td>Professional</td>
<td>Original research project</td>
<td>Collected data</td>
</tr>
<tr>
<td>Professional</td>
<td>Research paper</td>
<td>Collected data (provided by professor)</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research paper</td>
<td>Articles accessed through academia.edu</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research paper</td>
<td>Google Scholar</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research proposal</td>
<td>Articles accessed through the library</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research paper</td>
<td>Resources from the library</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Original research project</td>
<td>Resources from the course reading list and from the library</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Original research project</td>
<td>Collected data</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research paper</td>
<td>Resources accessed through the library and Google</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research proposal</td>
<td>ACM Digital Library</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Research proposal</td>
<td>Resources from the library and Google Scholar</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Literature review</td>
<td>Google Scholar</td>
</tr>
</tbody>
</table>

**6.2.2.2 Research difficulties.** When asked about the most challenging part of completing the assignment, 18 of the 31 participants described an aspect of the research process. They experienced these stressors throughout the research process, from selecting a topic in the very beginning, to understanding the sources that they select to support their own work. Some students worried about the “big picture” when it comes to research, like coming up with a good idea or opinion, making a meaningful contribution, finding a gap in the literature, or learning about an unfamiliar topic:
“Because you really need to do something you think is meaningful, but all during the process I'm always thinking about I'm writing nonsense” (Paprika).

“To me the first hardest thing is finding an idea. You don't have an idea from nothing. Sometimes your idea ... other people already did that” (Clara).

“And what I remember from the first classes, they kept telling us we need to do something new, you know, because I cannot write a paper that someone, you know, wrote about. So I need to find this gap in the literature, and to write something in this gap. But I asked, you know, professors and my peers, that I cannot do this, because it will take me too much time to, you know, research the whole literature and to understand this gap” (Marisa).

“But when it comes like with the prompts that I'm not familiar with, I really need to learn from zero. I remembered I had an assignments about social justice, for me it's like an abstract topic” (Ryan).

Other research difficulties were more concrete. Both Rita and Sam struggled with reconciling differing opinions and contradictory information in the resources they read:

“Well, as I said, reading and understanding those things, and then, when you have multiple resources in front of you, they are not necessarily saying the same thing, the same like, way, so sometimes you would get different information and then you get, you know, confused” (Sam).

Data analysis and interpretation proved challenging for both Karl and Elizabeth:

“Data analysis for me wasn't easy. I really focused on some, with my engineering background...some I have forgotten; it's been about four years since I've used any of that” (Karl).
“But the difficult part is to interpret them. I think we still don’t, didn’t do it well at last, according to the feedback from our TA...Maybe it’s because doing the analysis, you can, you can learn from other people’s study, like usually we’re doing the same process. But interpreting the result is unique thing to us, so, it’s more original” (Elizabeth).

Many students found finding and assessing potential resources to be difficult. Marisa explained that there were doctoral students in some of her classes, and they already knew how to do research. For her, the search was difficult because she had little experience finding sources. Other participants were comfortable using search engines and the library website to find resources, but then felt overwhelmed by the sheer volume of information that had to be assessed for usefulness:

“It’s not easy to find exactly what you want. Sometimes you input the keywords and just a lot of unrelative things pop up. I think I would spend a lot of time looking for articles and a lot of times they are not valuable at all” (Clara).

“There was a lot of irrelevant information so you have to filter it out and take the relevant information” (Shanaya).

Daniel also mentioned the need to sort through many resources, but acknowledged that reading all these papers helped him learn to “how to write, how to compose” in the American academic style. There seemed to be a distinction between finding sources and finding useful sources. Some participants were actually fairly confident in their searching skills: Alice called the search “not challenging;” Riya said she was “confident” and “comfortable” with finding resources. The main issue appears to be not the search, but the filtering out of unhelpful results.

Some participants found that the most challenging aspect of the research process came after they had found and selected appropriate sources. For students like Barry and Sam, reading and comprehending the materials proved difficult. Ryan explained that learning about an
unfamiliar topic was time consuming because he would “really need to learn from zero.” Michael recognized the language aspect of this part of the research process:

“The most challenging part for me is that I have, I have to read 6 to 10 English long papers before I write, and actually, the reading, reading tasks taken me a lot of time.”

6.2.2.3 Library instruction. Almost half of the participants referred to library instruction in one form or another. Most provided little detail, and only seemed to have a vague recollection of the content. Eight recalled that there had been a library tour or session during orientation, but three of them noted that they had missed it – and showed little concern:

"There was a tour about the library that I did not attend. Basically I didn't miss anything, I guess” (Estiatoras).

"I think they did have something like orientation, but I didn't go there. They have something for like – because, back then I thought, I don't do research, it's not a big deal to me, I didn't go” (Rita).

Three participants in three different disciplines – humanities, social sciences, and professional – indicated that a professor had showed the class how to find resources in the library. In each of these cases, the student was completing a different type of assignment, a research proposal, a research paper, and an original research project. Daniel said that his professor demonstrated a variety of discipline-specific databases, and explained that “he guided us in this class to search those research keywords and find those literatures.”

Only three participants recalled a librarian invited by the professor to provide instruction in one of their classes. Marisa said, “it was not a good workshop, so I didn't like it,” although she did appreciate the part of the presentation that provided guidance on using the APA style. Sabrina and Riya felt that they benefited from these instruction sessions. In fact, Sabrina was the only participant who spoke about seeking out a librarian for assistance with her assignment.
Riya mentioned that a librarian came to her research methods class, and showed them “how to access the various different papers which were required for the course.” Only one student, Clara, had sought out and attended an additional instruction session in the library after receiving basic search training from a librarian during her departmental orientation. Several of the international students who participated in Morrissey and Given’s (2006) study attended a library orientation session during the first week of the semester. They felt that “there was too much information presented and they could not understand what the librarian was saying” (p. 227).

6.2.3 Writing. Writing was not a beloved activity for these international students. Nineteen of the participants named writing as one of the biggest challenges in completing their assignment. A math/sciences student called writing “painful” and says that his “spirits completely broke down” when he realized how frustrating it was for him. An engineering student said that writing is “something I hate.” Common themes included lack of experience with writing, learning to write in the American style, writing in an appropriate academic tone, and the lengthiness of the writing process.

6.2.3.1 Writing process. As discussed in the Research Processes section (6.2.2) of this chapter, many of the participants created an outline in a Word document to organize their research and begin their writing process. Generally, notes or quotes from resources, or sometimes links to websites, were pasted into the outline by topic. Often students were vague about how exactly they created an original document, but in some cases more detail was provided:

“I could collect I would say 5 pages of information, and then I took every paragraph. I try to ... I knew what I wanted from that paragraph, so I try to have those words and rephrase the sentences around from each of those and then combine them in the end. That's how I write it” (Sally).
“I try to paraphrase a lot, either change, change the whole sentence structure and try to substitute a lot of words, because I feel like plagiarism is really emphasized here” (Mary).

“I would copy paste some paragraphs from that link into the document. I know it’s plagiarizing, so that’s not the finalized document, it’s just the draft. So I would read it out loud five or six times, to see if it’s part of the flow or not. If this is the flow then I would change it, basically I would paraphrase, put it in my own words and put it together” (Leo).

The concept of “flow” comes up several times when student spoke about their writing. Paprika said that she needs to think before she writes, so that her work will be logical and have a “really smooth flow.” Although he can recognize a well-written paper, Victor admitted that he had a hard time maintaining a flow in his own work. Ryan learned from an academic writing course taken through the Writing Center to get his ideas down on paper first, and to worry about grammar and flow second.

6.2.3.2 Writing difficulties. Students from South Korea, Benin, France, India, and China all spoke of their lack of experience with writing during their prior education:

“But in our syllabus in India, we never concentrated on writing much. It was more about analyzing and understanding. Like in our English literature, we used to like analyze our thoughts. We never concentrated on essay writing or report writing. Our assignments were never that way” (Shanaya).

“When we had an exam, it was just you and your paper, and it was questions you had to answer based on what you were taught. We didn’t really have to write” (Barry).

“I think the writing was very challenging, because it’s my maybe second year in America, because we don’t have a lot of training on writing when I was in university, college, and I think what I learn in China is very different from what I learn in America” (Wendy).
“I think the most challenging thing was getting used to write a lot and read a lot to write
papers. I was not used to write papers at all” (Chloe).

Writing in a non-native language is hard enough, but many students also struggled with
learning the American academic writing style. Pushta explained that she was used to a style of
writing in which the most important point is at the end of the paper, but in the U.S. this point is
placed at the beginning and repeated throughout. Similarly, Mary learned that in the “Western
style,” the first sentence in a paragraph specifies what the paragraph will be about. She writes
this “important sentence” first. Ryan remembered that he wrote his first assignment in a
“popular essay” style, and his professor encouraged him to go to the writing center for help with
learning to write in an academic style. Chloe struggled with learning new citation styles; in her
first semester, most of the points she lost on writing assignments were “just for the style and the
MLA.” A student who wrote an undergraduate thesis at her Chinese university explains that the
process was very different. The majority of the thesis is constructed from “other peoples’
papers;” students pick and choose sentences and paragraphs they like and build their
manuscript out of these resources. She emphasized that Chinese students do not exactly cut and
paste, but “reconstruct” a paragraph that seems useful.

Participants also worried about writing in an appropriate academic voice, often using
words like “professional,” “scientific” or “formal” when expressing this concern. Sally fretted
about “writing in a way that impresses readers,” lamenting that her writing has a very colloquial
tone and is “not really in English you’d want to read.” She put a lot of effort into polishing her
work in order to achieve what she deemed to be an appropriate tone. Santi says that “actually
putting words together and sound professional and academic was the most difficult part,” and
he went to the Writing Center for help with this. While confident in her speaking and listening
abilities in English, Alice worried that she cannot “write it in a really formal way.” She also
solicited writing feedback from native speakers. Finding the right words was an additional challenge for many of the participants:

“But it’s difficult to find like the exact word to express the feeling that I have, you know” (Daisy).

“Because when I did my writing, I always feel that it’s very difficult because we don’t know these word expressions, and we don’t know how to make this sentence, make my ideas more clear, and so I revised it several times” (Wendy).

“I don't have other words to use. I can't come up with other words, other expression” (Peter).

Han (2012) studied the information literacy development of Chinese PhD students in Australia, and found that that they felt “unable to paraphrase the idea or the sentence better than the author of the original text” (p. 14).

The length of time it took to complete a writing assignment was also problematic for many students. Peter pointed out that a 15-page paper is overwhelming when it took him so much time to craft just one sentence. Pushta said that writing a 20-page paper took her almost a week, and this does not include the research part of the process – just the writing. Spending so much time wrangling with vocabulary slowed down the writing process for Barry. He always had a dictionary by his side when researching or writing. Robert recalled that “a lot of time I didn’t sleep” when he had a writing assignment due. However, a few students acknowledged the problem of writing too much:

“Being concise enough because we had space limitations, being clear about the ideas, that's always been I think the hardest part of doing good work” (Karl).

“Usually it's my problem, I write a lot. I write what I want and then I try to optimize. I restructure” (Pushta).
“I first put an idea, then I write everything I can think of around it, and then I try to compress it. That’s how I end up writing my papers” (Victor).

### 6.2.4 Perspectives on the assignments.

While participants tended to describe the most difficult aspects of the assignments as specific tasks (e.g., finding useful resources), they explained what they liked about the assignments in more general terms. One common theme was the pleasure of learning something new. In particular, students enjoyed learning about and integrating new perspectives from the literature into their own work:

“So because it's a new field and when you do research you get to learn so many points, diverse viewpoints. The interesting point, the same point can be put into perspective in different ways by multiple writers. So it could be *Academic Times*, it could be *Business Wire*, it could be *The Economist* – it's the same news, but said in different ways in two different magazines. Yes, I try to make sense out of it and then not writing a biased opinion based on someone else's opinion” (Leo).

“That was a goal, too, to pull together all of those things I have read in different topics, areas, and the professor was happy about it, too” (Barry).

Students also spoke warmly about the sense of accomplishment that they felt after completing the assignment, and many mentioned the positive feedback they had received from professors. Four students, however, enjoyed nothing about the assignments; noting that they “hated it,” or explaining that they would have chosen a thesis track if they wanted to do work requiring research and writing.

### 6.2.5 RQ1: Summary of findings.

When asked about the process of completing their assignments, the research and writing steps tended to be interwoven. Often, participants created an outline for the assignment, searched for resources on each topic, and added useful notes, quotes, or links to the outline document. The majority of students mentioned using
Google and/or Google Scholar, but two-thirds used library resources in their research. Overlap obviously existed between these two groups. Participants struggled with big-picture research issues (e.g., coming up with a good idea, finding a gap in the literature), as well as specific details (e.g., data analysis, finding “good” sources). Half of the students had participated in some sort of library instruction, usually during orientation. A few had received instruction in specific classes, either from the professor or an invited librarian. In order to address research difficulties, students sought out assistance from professors and campus resources such as the library and learning center.

Writing also presented a challenge for many participants. Students from many different countries explained that they had little experience with writing assignments during their undergraduate programs. Learning to write in the American academic style, using an appropriate scholarly tone, and the length of time required to write a paper were all common difficulties. Participants adapted by using online tools and getting feedback from native English speakers. When asked about what they enjoyed about completing these assignments, most cited the opportunity to learn something new or the sense of accomplishment felt upon completion. A handful, however, had nothing positive to say about the experience.

6.3   RQ2: How do international graduate students studying in the United States perceive, engage with, and negotiate issues of academic integrity?

A number of the interview questions related to academic integrity with the goal of exploring how international students learn about this concept, how they think about it, and how it affects them as they complete assignments for their graduate coursework.

6.3.1   Defining academic integrity. To introduce the topic of academic integrity, I asked participants to define the concept. Plagiarism and cheating were mentioned frequently in these definitions: plagiarism by 11 students and cheating by nine. Ten participants included the
idea of giving credit in their definitions. This was expressed in different ways, usually related directly to citing sources:

“If I’m not using my own words, my own sources, I have to make sure that I make references to those people who actually did the work” (Barry).

“When you write thesis, you cannot take others things without citation” (Rita).

“...if you use somebody's research...you need to like, respect them, and praise what they did, in order that, so that somebody later will praise your work” (Sam).

Nine students emphasized that taking or stealing the work of others is an academically dishonest behavior. While this idea is related to giving credit, I coded it separately because it is not exactly the same. Students spoke of taking others’ work as an unacceptable behavior, while giving credit is a requirement in academic integrity. Thus, taking the work of others has a negative connotation, and giving credit has a positive association for the participants. Marisa touched on plagiarism when she explained that you “can’t just take someone’s work and change it just a little bit.” Felix explained, “I cannot steal others’ opinions, it is illegal,” and Daisy expressed a similar idea, noting that “we cannot steal someone else’s thinking.”

Two other related ideas that came up regularly in the participants’ definitions were “doing your own work” and “unauthorized collaboration:”

“...you are here as a student, the responsibility to do your own job as student, if it’s a job that you have to do on your own, do it by your own. Don’t ask for help, don’t let someone else do it for you, and it’s your responsibility to learn” (Robert).

“Just that your work should be your own. It can be anything, your research, your examinations, anything. Whatever you're presenting as your own work with your name on it should be your own” (Victor).
“...do not take help from somebody if you are not supposed to” (Shanaya).

“I need to do my work on my own, if I received help, the help needs to be authorized by the professor” (Clara).

“I think that you can't get, you are not able to get any help. I mean, like from outside, meaning that someone will complete your work” (Marisa).

The concept of authorized collaboration was new for many of the participants. Often, discussing homework with classmates was common practice in their home countries, and not considered problematic. Some students had learned to be very cautious in their collaborations, always checking with professors to see if discussion with classmates was allowed for specific assignments. A Chinese student explained that he does discuss assignments with his roommate, but only after they have each completed their own work. He viewed this as an important and helpful process, because they learn from one another. Leo said that once an assignment had been given, someone in the class would usually ask, “Can we discuss this assignment, or is it absolutely an individual assignment?”

Of the 31 participants, three could not provide a definition of academic integrity at all and one gave a definition that was simply incorrect. This student seemed to be thinking broadly about academia when asked to provide her definition:

“What are the challenges maybe, to dealing with everything, staff, professors. And managing time, like everything about the academic environment.”

She had pointed out earlier in the interview that academia was “sort of something new for me.” As I did with each participant, I shared this definition with her after she had given her own:

Academic integrity is the moral code of academia. Under this code, scholars must avoid cheating and plagiarism, adhere to academic standards, and be honest in their research and writing.
After hearing this definition, this student demonstrated that she was acquainted with academic integrity, saying that she was always careful to paraphrase when necessary. For two of the three students, both Chinese, who had been unable to define academic integrity, this definition prompted them to realize that they were actually familiar with the concept. One responded, “Oh, like ‘no plagiarism,’” and the other, “like the honor code?” Clearly these students had encountered the concept before, and I suspect the problem was with my choice to use the phrase “academic integrity.” While it is the most general phrase used to discuss these issues, participants were clearly used to hearing and using terms like plagiarism, cheating, and honor code instead.

6.3.2 Learning about academic integrity. When asked where they learned about the concept of academic integrity, participant responses fell into three categories. Fourteen students stated that they had first heard of academic integrity upon arriving in the U.S., and eight specifically named the orientations they had attended. Six had first come across this idea in other settings – during a previous study abroad experience, in an intensive English course, or from a professor in a particular course. Daisy had specifically sought out information on academic integrity, because she knew that the “ethics” of American universities were different than what she had experienced at home. She searched for information on Google and on the Writing Center website, “because the school didn’t require me to do like courses or something, training” that would help her understand expectations. However, she was later required to take an online research ethics training module for one of her courses.

Fourteen students from China, Benin, Russia, Colombia, the DRC, Vietnam, and India described learning about academic integrity in their home countries, usually at different points in their academic careers. Seven recalled learning about it between elementary and high school, usually from teachers and in the context of cheating on exams. One student said that her mother impressed upon her the importance of integrity:
“So my mom taught me, actually. She says if you got a test and you got an F, you come back home and I would not blame you. But if you come home and tell me you got an A but you cheated during the exam – that is unforgivable” (Rita).

Six of these students had first learned about academic integrity during their undergraduate programs. They usually spoke about it in terms of a writing assignment, perhaps an essay or undergraduate thesis. In these cases, a professor taught the student about academic integrity, often by explaining the necessity of references and citation.

It is important to note, however, that the expectations regarding citations seemed to be different in some countries than what is expected in the American style of academic writing. Citation styles were described as less rigid, which is perhaps one reason some of these international students struggled with learning and adhering closely to APA or MLA. Marisa explained, for example, that in Russia, “you can just put at the end of the work some literature you read but didn’t cite, but you base your work on this literature. So what students usually do, they just put a bunch of literature that they didn’t read at all, just to make it more sources.” Even when students started their graduate programs familiar with academic integrity, they learned that the rules and expectations are often different in the United States:

“So we were pretty careful about it especially because we are international students, it is way easy for us to not take these things seriously. Because back in our countries, these things are not much stressed on. Even though they exist, they are not much stressed on, they are not as serious as how it is here. So the way in orientation, they really put it in our head, you know, ‘honor code, honor code.’ That was the first time I knew, ‘Ok, this thing is really serious,’ and I also knew before that in America, plagiarism is a big offense” (Shanaya).
“Because information is more, I think here in the U.S., the copyright aspect is very serious, you have to take it seriously, and universities, and everybody that works in terms of academics, you have to be very careful with that” (Santi).

One student with a health sciences background explained that his perspective came from leading research projects in his home country. He said that the employees he supervised considered him “very difficult” because of his personal and professional sense of integrity. He explained that he had very high expectations of his employees, for good reason:

“If you agree to work here you have to follow the rules...you don't have to cheat, to do things that is not good, because the consequence will be in all the project. And since we have a lot of responsibilities here, we are implementing project funded by international organization, USAID, government, so if something wrong appeared and the study is not accepted, who will be responsible of that?”

In order to get a sense of how academic integrity was perceived in the participants’ home countries, I asked if this was something that their professors at home ever discussed with students. Eleven said that it was, and eleven said that it was not. Seven participants indicated that it was not really a topic of discussion, except in the context of exams. Michael explained that in China, “if you are a graduate student or a PhD student, you need to write a paper, of course, the professor will tell you about [academic integrity],” but this was generally not an issue in undergraduate work. I also asked whether the participants talked about academic integrity with their classmates in their home country. The majority said that this was not a normal topic of conversation. The four that had discussed this with classmates all gave specific examples. Shanaya and her friends heard that they should be very careful in writing a statement of purpose when applying to graduate school in the U.S., “because the university might reject you if they find that it’s copied from somewhere else.” Botasky explained that the news sometimes reports
on scholars who are caught committing academic fraud, and these cases are discussed amongst students.

Interestingly, three students asserted that they had not “learned” about academic integrity, because it is internal or implicit. It is either a part of who you are, or not:

"To be honest with you, I didn't learn it...What I can say is that this is not something that someone teach you, but something that you can learn on your own" (Estiatoras).

“Well, because it's kind of a moral thing, I think you have it with yourself, like forever” (Sam).

“It was there all through in my education in India, but it was just not explicitly mentioned. It was something implicit that we had to understand by ourselves” (Sally).

6.3.3 Academic integrity in graduate school. All but one of the participants acknowledged that professors in the U.S. talk to students about academic integrity. This discussion may not be extensive – often it occurs only at the beginning of the semester when the syllabus is explained. In fact, twelve students mentioned the syllabus when asked this question. The one student who said that her professors did not talk about academic integrity explained that “professors will just expect us, that we will all know the rules already.” Even those who said their professors do talk about it expressed similar sentiments:

“Everyone here is a grown up, they know the rules” (Pushta).

“I don't think any professor emphasized cheating because it's so obvious” (Clara).

Several students felt that issues of academic integrity were emphasized particularly for international students. Two Indian students commented on this observation. Leo noted, “This was told to international students explicitly because we don’t know all the university research culture here.” Victor recalled that the director of his program warned the international students
that academic integrity was of the utmost importance: “And maybe he expected that, or he thought that, most of the students are coming from different countries and not from the United States, don’t understand the importance of it and the kind of impact it can have.”

When asked if their classmates in the U.S. normally talk about issues of academic integrity, 12 of the 31 participants indicated no. They gave a variety of reasons for this: because they are worried about getting in trouble, because the rules are so obvious that it is not worth discussing. One participant who mentioned the fear of getting into trouble explained that these topics are not discussed because students are nervous about sharing work with one another. A business student, who was plainly unimpressed with his colleagues, said, “My honest opinion on that is that my classmates do not care.”

Eleven of the students observed that their classmates do talk about this topic. Two common themes were apparent. The first was that academic integrity was discussed amongst the international students because they worry about committing an infraction:

“I feel like for the international students in my program, we maybe are more worried about plagiarism and stuff like this, so I would ask my friend if he can read my paper to see if I missed anything about citation or stuff like this” (Chloe).

“Yes, there was a discussion among my friends, my international friends, and yeah, we had a lot of discussion about how we can get into trouble if we don’t follow this, and we also talked about how much they stressed about it in the orientation, because, in the two weeks, if I recollect my orientation all I can remember is ‘honor code, honor code, honor code.’ So it was that intense” (Shanaya).

The second theme in these responses related to specific incidents that the students had observed or been directly involved in. A social sciences student recalled that someone had been caught copying from another student in one of her classes. A math/sciences student had found
himself in trouble with a professor over improper citation. These types of incidents were topics of conversation among participants and their classmates, both American and international.

Once defining and learning about academic integrity had been covered, I asked the participants if they thought about these issues while they completed their critical incident assignment, described in section 6.2.1. Almost all (27 of 31) of the students said that they had. They most commonly thought about academic integrity in terms of avoiding plagiarism. In fact, three of them had a previous experience in which they had been reproached by a professor for inadvertently plagiarizing. They learned to be very careful with their words, quotes, and citations, and to understand that “it’s really serious.” Eight students also discussed the importance of proper citation. In a few cases, they seemed to consider proper citation as the key defense against academic dishonesty. Sometimes students who said they were thinking about academic integrity during their assignment were actually worrying about it:

"Yes, I was definitely worried about it because she was going to put it up online, and if a lot of people see it and are like, 'Oh, this is mine,' then even legally I might be in trouble. I also know that in America the legal thing is really big deal and you should never get involved in it. So apart from the academic integrity I was also really worried about that. These two things in mind, I was being extremely careful" (Shanaya).

"But you know, maybe there are some rules that I didn't know, and I did something wrong, so that was my concern, that maybe a professor will tell me that, like you are not honest with it, and you did something wrong” (Marisa).

Only four students had not thought about academic integrity while completing their assignments. Two of them gave reasons related to the nature of the assignments, neither of which required literature reviews or the use of other peoples’ work. One of them, an engineering student reasoned, “I don't really have to if I'm doing my own work, right?” A health sciences student said that he naturally does his work with integrity and thus does not have to think about
A humanities student had been given some potentially inaccurate advice: “The professor told us that you commit plagiarism only if you do that on purpose. So if you didn’t do that on purpose and just accidentally match one sentence, that’s not a problem.” This could easily be considered a problem by a different professor.

When asked if they thought about academic integrity differently than they did before starting graduate school in the United States, six students said that they did not. Two-thirds of the participants indicated that they definitely viewed it differently. Barry explained that he now understood that a violation of academic integrity is “something that can follow you all the way into your career that may even prevent you from having the career that you dreamed of.” Even though she had studied abroad in the U.S. as an undergraduate, Chloe felt that her perspective had changed because she is now a teaching assistant and has to ensure her students adhere to the honor code as well. Many gave specific examples of what they had learned or how their perspectives had changed:

“Hm, like before I didn't think it’s a big deal. I just think that if I didn't copy others paper, like whole paper, I'll be good. But now I know that even if it's just an opinion or just a sentence, when you use others you have to do the citation” (Rita).

"Yeah, I consider it really seriously now. If I see someone copy pasting the same question and answer elsewhere, I find it really odd. Before, I find it really common’ (Leo).

Five students said that they did not exactly think about it differently, but perhaps better understood both the value of academic integrity and how others view it.

**6.3.4 Importance of academic integrity.** The idea of giving appropriate credit when using the ideas or research of others was mentioned by almost half of the participants when asked about the importance of academic integrity:
“It’s very hard to write something, and if the person puts so much effort to do something and you need to appreciate that. You need to give them credit, to his work” (Pushta).

“...it is respectful to the one who write and come up with the great ideas, you can borrow them and you can absorb them, you can benefit from them, but you need to respect them” (Daniel).

The term “respect” was used by several students in describing the importance of giving credit. Most students phrased this in terms of borrowing others’ work, but a few came to the realization that they want their own work to be credited as well. Clara said, “If someone writes an article they use my research, or my results or my opinion without saying it, I would be angry. I think everyone should be honest about that.” Sam recalled working on research with professors and classmates as an undergraduate, and not receiving credit for his contributions. He called the experience “painful.”

Another interesting theme that was apparent in these responses was the idea that academic integrity is critical for inspiring innovation. Felix spoke of the importance of patent law and observed that if people do not feel that their ideas are protected, then they will not bother coming up with new ideas. Karl explained that academic integrity is “what pushes people to come up with original ideas.”

Several participants emphasized how important it is that research can be trusted. A couple acknowledged the temptation to tweak data in order to achieve “better” results, but understood how problematic this behavior would be. A health sciences student was concerned about issues that could arise ten years in the future if health decisions were made based on falsified research. Alice stressed the importance of the academy as a “pure place” that must produce information that can be trusted. One student, who had experience working for an academic publisher in China, explained that scholars are under enormous pressure to publish. Companies like this one
charge scholars to publish their work, which rarely undergoes any type of peer review. She worried that this system undermines academia and causes research to be untrustworthy.

6.3.5 Academic integrity violations. During some interviews, participants described specific instances of academic dishonesty that they had witnessed or experienced. In several cases, students shared stories about their own brushes with academic integrity violations in their graduate programs. A social sciences student had been called in by professors for a discussion on inadvertent plagiarism in two different papers. In both cases he had neglected to include quotation marks when needed. An engineering student shared his experience: He always believed that there was a big difference between being the giver and the taker in a cheating situation, that “it’s not wrong in helping others.” When a classmate asked to borrow his assignment, he was willing to hand it over. But when this classmate copied his work and turned it in, they both ended up in trouble. This participant learned that “giving someone your work is not the best way to help.” A math/sciences student neglected to properly reference a section of code, and another student had used the same resource. Because the professor used a tool to detect similarities in student work, he was concerned that one of these students had copied from the other. None of these cases went further than a conversation with the professor, but each student was shaken by the experience and came away with a deeper understanding of academic integrity expectations. In a few cases, students gave examples of academic dishonesty that they had witnessed. A social sciences student learned that her classmate copied an essay from the Internet for an extra credit assignment. A business student heard that second year students will sometimes pass their old work down to first year students.

Some students gave general descriptions of academic dishonesty in their own countries. Students from India and China spoke of classmates cheating on exams, through simple copying or more advanced techniques. One Chinese student described an answer service accessed by a “chip” placed in the ear of the test-taker.
6.3.6 RQ2: Summary of findings. All but four of the participants were able to give a definition of academic integrity, usually including concepts like plagiarism, cheating, and properly crediting sources. When asked about where they learned about academic integrity, fourteen students named their home countries, at some point between elementary school and their undergraduate programs. One-third said that the professors in their home countries talked about issues of academic integrity, usually in the context of exams. This was not a normal topic of conversation among students in their home countries, according to the majority of participants. Fourteen students indicated they had learned about it after arriving in the U.S., often during orientation. Participants noted that professors in the U.S. do tend to talk about academic integrity, and these conversations often take place at the beginning of the semester as part of the introduction to the course syllabus. For those students who stated that their classmates in the U.S. do talk about these issues, these conversations fell into two major categories: specific incidents that they had observed or been involved in, and the particular worries of international students related to academic integrity.

Most participants did think about academic integrity while completing the assignment they described to me, most frequently in terms of citing properly and avoiding plagiarism. Two-thirds of them explained that they think about these issues differently after at spending at least a year in their graduate programs. They believe that academic integrity is important because scholars’ ideas should be protected and research must be trustworthy.

Participants, both those who had committed academic integrity violations and those who had not, found American academic integrity standards to be overwhelming and confusing. However, most came to better understand expectations and developed techniques to help with honor code policy adherence, as part of their adaptation process.
CHAPTER 7: DISCUSSION

This chapter offers further discussion of the study findings, with a particular focus on Kim’s theory of cross-cultural adaptation and issues of academic integrity. The chapter closes with implications for practice in academic libraries, and suggestions for future research.

7.1 Cross-Cultural Adaptation

Kim’s cross-cultural adaptation theory is based on the following boundary conditions, which clearly apply to the international student participants in this study:

1. The strangers have had a primary socialization in one cultural (or subculture) and have moved into a different and unfamiliar culture (or subculture).

2. The strangers are at least minimally dependent on the host environment for meeting their personal and social needs.

3. The strangers are regularly engaged in firsthand communication experiences with that environment (Kim, 2001, p. 34).

Participants lived and attended school in their home countries, and then chose to pursue their graduate education in the U.S., where they were immersed in a “different and unfamiliar culture.” Living and learning in North Carolina required them to engage with the host environment for basic needs like housing and food, as well as higher-level needs like companionship and social support. These students must also regularly communicate with many people in the host environment – professors, classmates, university staff, community members, and others.
Cross-cultural adaptation theory is comprised of the stress-adaptation-growth dynamic process model and the structural model, which includes dimensions (e.g., individual predisposition) and related factors (e.g., preparedness, personal traits, ethnic proximity). This section elaborates on the study findings through the lens of the process and structural models.

7.1.1 **Stress-adaptation-growth dynamic.** The stress-adaptation-growth dynamic from Kim’s cross-cultural adaptation theory was apparent in these findings. It is important to understand, however, that while stress and adaptation are easily identifiable in the participants’ responses, growth is not so obvious. Participants provided many clear examples of stress and adaptation in their interviews. Kim (2009) calls psychological growth “subtle and often imperceptible,” and it can be identified by “an increased complexity in an individual’s meaning system” (p. 245). Of course, this “increased complexity” is often very difficult to detect. Even when the participants have experienced growth, they may be unaware of it or unable to express it. See Table 16 for more information about the stress-adaptation-growth dynamic and examples from the study.
Table 16. Stress-adaptation-growth dynamic with definitions and examples from the study.

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<th>Stress</th>
<th>Adaptation</th>
<th>Growth</th>
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<tr>
<td><strong>Definition</strong></td>
<td>“state of disequilibrium, often manifested in emotional lows of uncertainty, confusion, anxiety, cynicism, hostility, avoidance, or withdrawal” (Kim, 2009, p. 244)</td>
<td>result of “successful, long-term, and cumulative experiences of managing the stress-adaptation dialectic” (Kim, 2009, p. 245)</td>
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<td><strong>Study Example: Paprika</strong></td>
<td>“Most difficult thing [about living in the U.S.] was that I need to take care of all, every day issues by myself.”</td>
<td>“I need to go to the leasing office to pay my rent, and also other little things like you need to file insurance for your rented house, and you need to just call the customer services to fix all your life, little things.”</td>
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<td>“So I think that really shaped my personality into really independent person, rather than just ask somebody to get help. I need to find the answer by myself and to fix it by myself.”</td>
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<th>Stress</th>
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<td><strong>Study Example: Marisa</strong></td>
<td>“[The biggest challenge was] to find the articles, like to do the search... I was even crying because I wasn't able to find something that I needed.”</td>
<td>“But the most fun part I think was, you know, as soon as I got some skills, like how to do research, I really enjoyed it...I was really happy when I found what I needed. I was so glad that I did that.”</td>
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<td><strong>Study Example: Victor</strong></td>
<td>“A student approached me and said, 'I just want to look at your assignment,' ...He took my Excel file, and it turns out that he just changed his name on it and submitted it. And the professor caught it.”</td>
<td>“But now, at least with this incident, I realized that there is a way in which you can help, and that's the way I should adopt. Giving someone your work is not the best way to help.”</td>
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<td>“I just asked, you know, my peers to help me. Because I did not know how to do this. Just show me, like the keywords, or what filters they use, and how they do this.”</td>
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<td>“I had to be straight...So I went to the professor and I told him clearly what happened. So [my classmate] came to me for help, I know I should have helped him by just showing my sheet and not sharing it with him, and that's where I went wrong.”</td>
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<td></td>
<td>“But now, at least with this incident, I realized that there is a way in which you can help, and that's the way I should adopt. Giving someone your work is not the best way to help.”</td>
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The participant quotes in Table 16 illustrate each aspect of the stress-adaptation-growth dynamic. Paprika described the stress of learning to live in the U.S.; several other participants made similar comments. Often, they lived with their families until the moved to the U.S., and did not have to manage paying bills or even cooking meals. However, over the course of a year, Paprika developed new knowledge and habits. She learned to handle all the “little things” in American life, like paying rent and fixing issues with her internet provider. By the time I interviewed her, she recognized a noticeable change in her personality. Kim writes that growth often manifests as “new ways of handling problems” (p. 245), and Paprika had clearly developed the ability to handle her own problems instead of depending on others. Marisa described the stress of trying to do academic research, and how she adapted by learning techniques from her classmates. Once she better understood how to do academic research, her perspective changed and she began to enjoy the process. After a classmate copied his work, Victor learned that his previous view on academic integrity was not appropriate for the American context. All three of these students learned to handle problems, and demonstrated that their perspectives had changed and become more complex.

7.1.1.1 Stress-adaptation-growth in academic and day-to-day life.

Participants shared stories of their adaptation to life in the U.S., most often focused on either day-to-day life or academic life. The stress and adaptation components of Kim’s cross-cultural adaptation theory were often apparent in their experiences. As noted above, in the telling of their stories, the growth component of the process model is not usually articulated, although some participants’ comments imply that they have experienced personal growth as a result of their sojourns. For example, Estiatoras demonstrated an increased complexity in his meaning system when he said that meeting and interacting with people during his time in the U.S. “completely changed my thoughts of how the world functions.”
Paprika’s stress, adaptation and growth related to life in the U.S. was described in the previous section (7.1.1). Robert also found himself to be overwhelmed by things like grocery shopping and paying bills. He lamented that living in America made him feel like a kid, because he sometimes did not know how to do things for himself. His adaptation was contingent upon the knowledge of his roommate, another international student who had been in the country for longer and possessed a better understanding of life in the United States.

Early in her time in North Carolina, Sabrina struggled with frequently being the only Chinese student in her classes, and feeling unfamiliar with the American culture and history. A year into the experience, though, she was confident in her ability to function in this environment: “I had a lot of chance to talk to local people here and I have chance to take activities here, so I feel like I knew this area, and I knew how to find entertainment and activities, and how to find things to do here.” Sabrina adapted by involving herself with domestic students and university extracurricular activities, and experienced personal growth as a result. She had developed into a person who was comfortable with meeting her social needs in the host culture.

The literature often identifies finances as a major stressor for international students (Hull, 1978; Robertson et al., 2000; Sherry et al., 2010), however, this came up rarely in the interviews. Homesickness and loneliness are also common themes (Hechanova-Alampay et al., 2002; Pedersen, 1991; Rajapaska & Dundes, 2002; Robertson et al., 2000). But only two participants made references to these topics when asked about the most difficult aspect of living and studying in the United States. Victor spoke about this hardship:

“If you want to add a little bit more to my challenges, it is missing my family, right? So I'm all by myself out here, and my parents and my sister are back in India and I haven't seen them in a year, so that's been difficult.”
Participants named a variety of cultural challenges they faced, such as the lack of a shared knowledge base and the difficulty of befriending American students. The literature is clear on this point: Interaction with domestic students is a crucial aspect of adaptation (Hechanova-Alampay et al., 2002; Hendrickson et al., 2011; Hull, 1978; Klineberg & Hull, 1979; Selltiz et al., 1963; Shram & Lauver, 1988; Zimmerman, 1995), and this was something that participants in my study spoke about regularly. Some described how they depended on their domestic friends and classmates for support, and others – often Chinese students – observed that it was difficult to develop relationships with American classmates.

Other stressors were academic in nature. The examples given here are related to the classroom and general learning environment. Students also described stressors related specifically to research, writing, and academic integrity and these are discussed in the following sections. During her first year in her graduate program, Shanaya wrote a white paper for a club in which she was involved. She realized immediately that no one would be asking her for regular updates on this project:

“I had to be accountable for myself, so that was a tough part. Because, I don’t know, maybe the culture I come from in India we are used to kind of spoon feeding. Like there was a lot of say, follow-ups that used to happen. And here there are not many follow-ups because people expect you to be accountable for yourself.”

She responded to this realization by dividing the work into ten sections, and completing one every week during a scheduled block of time on Friday afternoons. Her plan for this paper was indicative of a broader adaptation. She explained, “Right now I’m really organized, and I organize my things weekly and have become really efficient. So that was challenging but I have overcome it, over a period of one year.” During her first year in the graduate program, Shanaya developed into an organized and efficient student, demonstrating personal growth.
After the first few days of the semester, Robert determined that he was not properly prepared for class. He expected to passively listen to a professor lecture for the entire class period, but his classmates were asking informed questions and contributing to discussion. Robert sought out advice from his advisor, who explained that he needed to be checking the syllabus, doing assigned readings, and coming to class prepared to contribute. It took him less than a month to adapt to and feel comfortable with this new learning environment.

There is a great deal of literature on international students and the challenges of adapting to a new and different education system (Badke, 2002; Bultheis, 1986; Ladd & Ruby, 1999; Robertson et al., 2000). Common issues include rote memorization (Bultheis, 1986; Ladd & Ruby, 1999; Lipson, 2008) and passive learning (Andrade, 2006b; Robertson et al., 2000). Participants in my study did not have much to say about rote memorization, but class participation was a concern. Andrade (2006b) found that Asian and Polynesian international students struggled with participating in class, and this perception was echoed by students – both Asian and otherwise – in my study. However, participants seemed to be very aware of the differences between the education systems in their home countries and in the United States. They often articulated these differences and acknowledged that they had to make behavioral changes in order to adapt.

Language issues are a particular stressor in the classroom. Daniel sometimes struggled to follow lectures, so he started recording them to review later. He said that he was growing “accustomed to this style of education.” Botasky was nervous about giving a presentation in class, having never done so in English. He planned his content carefully – developing a thorough understanding of the topic and carefully choosing examples – and practiced his talk many times. These students demonstrate how learning to do their academic work and meet expectations that may be unfamiliar supports to the cultural adaptation process and personal growth.
Practically every study of international students addresses language issues in one way or another. For non-native English speaking students, higher levels of language proficiency help with adaptation (Heikinheimo & Shute, 1986; Senyshyn et al., 2000; Yeh & Inose, 2003). My study was not designed to measure adaptation or English-language proficiency, so I cannot speculate on the relationship between the two. However, my findings confirm that language is a common source of stress for international students. Twelve named language as the biggest challenge they had faced during their time in the U.S., but twenty-three of them spoke at length about this issue at least once in their interviews. Schneider and Fujishima (1995) propose that developing an understanding of the “larger university culture and disciplinary subcultures, including accepted patterns of interaction” is as important as language proficiency, but often overlooked in the research (p. 3). The participants in my study certainly referenced university and departmental cultures, but the frequency with which they discussed language indicates that it was the more pressing issue for them.

7.1.1.2 Stress-adaptation-growth in research. As is evident from the Research Difficulties section (6.2.2.2), research was a source of stress for many participants. In some instances, however, students described both the stress and the adaptation, demonstrating how the research process can contribute to cross-cultural adaptation.

As noted previously, Rita did not understand how to reconcile the differing opinions that she discovered during her research. She said that she would write a paragraph based on what she had read, and then come across another resource arguing the opposite. Professors were a crucial source of information for the participants, especially when it came to learning how to handle academic stressors. Rita’s professor advised her to pick her position and stick to it, and so this is what she did. Barry was dismayed at how long it took him to read the resources he found in his research; he estimated 15 to 20 hours a week spent on reading scholarly texts. He explained, “I always have to have a dictionary. And it can be frustrating sometimes, spending so
much time on vocabulary instead of focusing on the gist of the topic.” In seeking out a solution, he signed up for a speed reading class, hoping to cut those 20 hours in half. Many students were savvy enough to seek out resources like this on campus when faced with a stressful situation. Karl was having trouble with the data analysis for an assignment, so he “went into some of the books in the library, found one that worked for me, read about, it, and kind of helped me out onto doing data processing and analysis.” After his demanding experiences with research during his first semester, Robert started taking advantage of a center on campus that offered peer tutoring, academic coaching, and other services. He learned about useful topics like using the library, organizing a paper, and time management, and called his research process “better organized” as a result.

As was mentioned in the Perspectives on the Assignments section (6.2.4) of Chapter Six: Findings, many participants enjoyed learning new things from their research, demonstrating growth as a scholar:

“I liked what I learned when I started reading all these journal articles and see what people are doing, and it was actually a lot of things that I didn’t know” (Santi).

“Yeah, [you have to search] about something that you haven’t considered before...You need to do the research by your own and then you just know these new things, and you process these new things and it give you more perspective on the other things that you may never thought about” (Daisy).

The literature on the research processes of international students is sparse. A systematic review of the LIS literature on international students and academic libraries showed that almost half of the total publications focused on library instruction and/or information literacy (Click, Wiley, & Houlihan, 2016). However, these publications tend to look at the library experiences of international students (e.g., Hughes, 2010; Morrissey & Given, 2006) and not their actual research processes. Some studies explore information seeking, but this is often narrowly defined
as online searching (Hughes, 2005; Mehra & Bilal, 2007). The research shows that international students prefer to conduct their research using search engines like Google (Liao et al., 2007; Morrissey & Given, 2006). Participants in this study certainly used search engines for their academic work – 13 of them named Google specifically – but 20 stated that they use library resources for research. The international students in Riazi’s (1997) study frequently used library sources for their research, but the internet access and search engines were not ubiquitous in the mid-1990s so this is to be expected. Knight, Hight and Polfer (2010) discovered that international students in their study preferred friends and professors as sources of information, and my findings align with theirs. Many participants in this study often depended on classmates for help with research and writing, and some also placed high value on materials recommended by their professors.

7.1.1.3 Stress-adaptation-growth and writing. Writing was clearly a stressor for many participants. They developed a variety of techniques to improve their writing, or simply to ease the burden. These techniques demonstrate how the international students learn to write both in English and in the expected American academic style, which is part of the cross-cultural adaptation process. Some of their techniques are very simple: Leo explained that he uses lots of tables in his writing assignments, “just to kill space.” Another says she constantly looked up synonyms, so that she does not repeat the same words again and again in her paper. Others use online tools, like Grammarly to check grammar, Google Scholar to help with building citations, and websites that detect plagiarism. Because she was not yet comfortable with this style of academic writing, Elizabeth would find a similar paper to use as an example. She paid special attention to the vocabulary and sentence structures used by the author(s) of the example paper. Feedback is of particular importance, from a variety of sources:
“Trying not to sound superficial, or to sound subjective, it’s always a challenge. That part was very difficult. I went to the Writing Center several times to get feedback from other graduate students whose English is their native language” (Santi).

“I sent it to one of my managers, so he sent it to the content writer. He got it more refined, and then it got back to me, so I had to see that the content was still intact and everything was fine” (Sally).

”My professor asked me to give this paper to a native speaker to read before I submit it to her” (Sabrina).

“I realized that I’m being repetitive when I write a paper, so I use a sentence and then, not making much differences, like copy and pasting the same sentence across the paper. I didn't sound good, as much as my fellow students, like Americans do. Their writing is so good and mine is not. I didn't realize that I need help, and I would take that help from the academic writing professor and she would help me” (Leo).

Participants emphasized the importance of feedback on specific details – grammar, flow, vocabulary – and not just on the content of their work. While several spoke appreciatively of the writing center, a few students at one university found this resource to be less than helpful because only general feedback is provided there. These students wanted detailed feedback on grammar and vocabulary; in other words, they wanted English-language support. Riazi’s (1997) participants also spoke about the significance of feedback from their professors, stating that “they looked through the feedback they received very carefully and tried to add it to their [second language] knowledge repertoire” (p. 131).

In some cases, participants spoke about their writing experiences in ways that implied personal growth. Pushta said that the best part about writing her paper was seeing her own
progress: “I see that I’m doing better and feeling better in my writing. So I like this part.” Others expressed pride at developing as a scholar and producing something worthwhile:

“The final product I had...The final piece of paper, when I saw what I wrote, I was so proud of myself. Even it took a week for me, it's something that I wrote by myself” (Sally).

“You know, all of the projects are like, when you are in them, you get frustrated, exhausted or something, and then you are done with them. You look and you feel like, 'I produced something, I did something important,' and that's really enjoyable” (Sam).

The literature on second language writing is extensive. Over the last 25 years, there has been an increase in research on graduate students – previously the focus had been mostly on undergraduates. In A Synthesis of Research on Second Language Writing in English, Leki, Cumming and Silva (2008) observe a major shift in the literature: No longer are graduate students “merely seen to be enculturated by faculty or others into disciplinary communities” but are “seen as shaping those communities as well, particularly at the local level” (p. 40). The perception of learning disciplinary discourses as challenging is clear in the literature, however. Abasi and Graves (2008) write that international students struggle with writing “not only because of their difficulties with English but also because of their unfamiliarity with the ways of thinking, speaking, and writing associated with the specific subject areas” (p. 226). In some cases, though, international students might already possess extensive disciplinary knowledge, but have difficulty expressing this knowledge in English (Hirvela & Belcher, 2001; Schneider & Fujishima, 1995).

In a review of the research on second language writing, Cumming (2001) identified three major themes: “(a) features of the texts that people produce; (b) the composing processes that people use while they write; (c) the sociocultural contexts in which people write” (p. 2). My study did not focus on the actual texts produced by participants, and thus fits best into the latter two themes. He points out that some research exploring the writing process identifies “salient
composing behaviors” (p. 5), for example, the struggle to find the best words and phrases to express an idea. This challenge was mentioned many times by my participants, often in conjunction with a discussion about language difficulties. My study also explored the sociocultural contexts in which the participants were researching and writing. Cumming argues that writing in a second language provides the opportunity for students to “learn ways of cooperating and seeking assistance from diverse people and resources” and “adapt to and reflect on new situations, knowledge and abilities” (p. 7). The international students in my study described seeking support from faculty, classmates, friends, and university resources, and gave many examples of their adaptation behaviors.

Participants in this study had little experience with writing papers prior to beginning their graduate programs in the U.S., and other studies have found the same (Chen & Van Ullen, 2011; Hayes & Introna, 2005). The international graduate students in Angelova and Riazantseva’s (1999) study were “distressed to find out that they were expected to write extensively” (p. 500). Riazi’s (1997) study of Iranian graduate students in a Canadian university found that participants were often perplexed by their writing assignments. They asked professors and classmates, and consulted other papers in order to understand what their own papers should entail. These same coping behaviors were demonstrated by the participants in my study.

Casanave and Hubbard (1992) distinguish between global and local writing skills. Global skills are bigger picture, “such as quality of content and development of ideas” and local skills are surface-level, such as sentence structure and grammar (p. 42). Faculty who responded to their survey were more concerned about the local skills of non-native English speakers writing, although vocabulary (which does not quite fit into either category) emerged as a major problem. In my study, participants struggled the most with writing in the American style and using an appropriate academic tone. These issues, like vocabulary, seem to fall into a category somewhere between global and local skills.
7.1.1.4 Stress-adaptation-growth and academic integrity. Understanding and learning to abide by American academic integrity standards was a confusing and stressful process for many participants. This section illustrates how some students adapted to these often unfamiliar expectations.

A social sciences student described writing her first academic paper in the graduate program. For the literature review, she used the same technique that she had used during her undergraduate program in China, building the text by pulling sentences directly from other sources. She explained that she “didn’t even change the structure of the sentence.” Her professor gave her a low grade and told her that this method of writing was unacceptable. Given the opportunity to correct the situation, the student rewrote the paper as she was instructed. During the interview, she expressed that she learned to be cautious in her writing and cite all sources. Regarding academic integrity, she started “to really care about it” and “know it’s really serious.”

A math/sciences student who worried about inadvertently committing plagiarism had learned to use a variety of tools to avoid doing so. She used Google Scholar to build proper citations, and also the citation tool in Word as she writes. She also pasted sections of her text into Google, to ensure that she had not accidentally used others’ sentences or phrases in her own writing.

Participants often spoke of fear when talking about academic integrity, indicating that it is a source of stress (emphasis mine):

“And I was really also surprised that in each orientation, they really talked about academic integrity, and I was super scared about this, because I didn’t know the rules and when they referred students to some documents about academic integrity on the website, I went there. But it was so huge, and I was really afraid that I don’t know something, I can do wrong. So that was the big challenge for me” (Marisa).

“First I heard about like, sometimes the honor code at [my university], I think I have seen it in every course every semester, so, so I know that’s something I should strictly obey. But
however, since I’m like, since I'm not very familiar with writing report, especially in English, so I'm a little bit nervous because for maybe to misuse something in the book or something in the paper, and did not cite it” (Botasky).

This fear of sanctions was also expressed by participants in Abasi and Graves (2008) study of international graduate students. The authors voice their concern that this anxiety causes preoccupation with citation as a technique for plagiarism avoidance and distracts them from “the more important aspects of academic writing” (p. 228). However, both of the students in my study explained that after a year studying in the U.S., they better understand the expectations and are no longer so afraid of committing a violation. They have adapted to this aspect of American higher education standards. Students also demonstrate growth as they express how they became comfortable with academic integrity in the U.S., and their meaning systems become more complex:

“[When I started the program] it was difficult for me to understand what was okay to do and what was not okay to do. Now I understand, I don't even have to ask anyone, ‘What is academic integrity going to be like in this course? Can I Google stuff or should I do everything by myself? Can I ask my friends?’” (Sally).

“So I think that it's a big issue and it's a big concern in academic world, it's the way that we keep somebody else's original ideas and also how we can really declare or tell everybody this my original idea, and it's about intellectual properties. And I've found that honesty and accountability is really the main character in academic world, so yeah, I learn more about honesty and accountability here” (Ryan).

In a study of international undergraduate students, Shi (2006) found that the participants viewed plagiarism as both a language and cultural problem. For example, it is a language issue because the students struggled with English-language vocabulary, and a cultural problem because the concept of plagiarism was simply different and/or taken less seriously in their home
countries. Participants in my study raised the same points. However, Shi’s participants expressed confusion about what actually constitutes plagiarism, while the students in my study seemed confident in their understandings of the concept. This could be a result of differences in age and experience, however, between undergraduate versus graduate students. However, Mu (2007) wrote that 2/3 of the graduate students she interviewed at a university in New Zealand “had no idea what plagiarism was” (p. 573).

7.1.1.5 Common adaptation themes. Some themes were apparent in the adaptation phase of the stress-adaptation-growth dynamic, including learning to use available tools and resources, and seeking help from different people on campus. Participants learned to use a variety of tools, particularly when facing stressors related to writing and academic integrity. Leo used a website called Grammarly to check his grammar. Mary used Google Scholar to build citations. Several students mentioned using a thesaurus while writing. They were also motivated to seek out resources, both from their universities and elsewhere. Ryan was delighted to discover academic writing and presentation skills courses offered through the writing center. Santi often searched for YouTube tutorials when he needed to know more about strategies for writing a literature review. Hughes (2013) found that the international students in her study on using online information resources also used a variety of tools, such as “the near hits feature of Ask Jeeves to identify synonyms” and Google Translate (p. 131).

The students also sought help from people, including professors, teaching assistants, and classmates, when they needed guidance or assistance. Sabrina’s professor helped her chose an appropriate topic for a research paper, and Rita’s taught her how to integrate a variety of sources into a literature review. Daisy was grateful that her teaching assistant provided writing feedback on both content and English-language grammar and vocabulary. Many participants spoke about receiving assistance from their American classmates, particularly when it came to conducting research, writing in English, and citing sources.
7.1.2 The structural model. Kim’s structural model, which includes “key factors that facilitate or impede the adaptation process” (Kim & McKay-Semmler, 2013, p. 101), was less relevant in this study because it was not designed to measure participant adaptation progress. However, in some cases student responses did give some insight into how these factors affect their adaptation experience.

7.1.2.1 Individual predisposition. Factors related to individual predisposition came up with more regularity in the interviews than any other dimension. Students demonstrated their preparedness, “the mental, emotional, and motivational readiness to deal with the new cultural environment” (Kim, 2009, p. 247):

“I choose to go to abroad to experience another culture and, just be more mature and grow up more” (Paprika).

“Because I think in a new country I will be exposed to people from different cultures, especially in a place like [university where she was studying], there are people in my program coming from 30 countries. So I thought it would be a great experience, learning experience” (Shanaya).

“I think I probably came prepared for something new, right. So whatever just came across, I was accepting it as it came” (Victor).

Kim names openness, strength, and positivity as three especially important personality traits that facilitate adaptation. The participants demonstrated openness in particular:

“I participated in a lot of extracurricular and co-curricular activities, and I was one of those people who was all dressed and meeting new people, taking some initiative, and things like that” (Sally).

“So I think I am an open-minded and easygoing person, and I like making friends” (Felix).
Participants showed the other important personality traits as well. Rita revealed a positive attitude about the higher education environment in the U.S.: “And I also feel like, if you work hard enough, you get paid off. So it's like, if you study hard, and you get good score, and you take it seriously, and you just get a good outcome.” Recall also from the previous chapter that many participants were very positive regarding the people they interact with regularly:

“I really have excellent peers that make the class more interesting and more tough” (Paprika).

“I like people, the people here are, they're working really hard for their dreams” (Michael).

Strength was not explicitly referenced by participants, but they did speak about their independence, which I consider to be a proxy for strength in handling day-to-day life:

“I was expecting a little bit of dependency on anyone, at least on my friends, but that didn't happen. I was a lot more independent, and I did a lot of things just by myself without anyone's consent or things like that” (Sally).

“But when I come here, because I’m here alone, so I feel like I have to be responsible for myself. So everything, every decision, every step, I feel like I take it really seriously” (Rita).

*Ethnic proximity*, “the degree of the stranger's overall ethnic similarity and compatibility relative to the mainstream ethnicity of the natives” (Kim, 2001, p. 83), was not a topic that participants addressed often. When they spoke about the differences between themselves and their American classmates, they spoke exclusively in terms of culture and never in terms of ethnicity. Alice explained that she perceives “a big culture gap” between American and Chinese students. Felix gave his perspective on Eastern and Western culture:

“And I think it's the most difficult things is also about the culture shock sometimes, because I come from China. China, Japan, and Korea, we share the same cultural background, that is, East Asian cultural background. And maybe United States, Britain,
Australia, Canada, you share the same cultural background. I think there is a two cultural system, maybe they are conflict with each other sometimes.”

7.1.2.2 Environment. **Host conformity pressure**, “the extent to which the environment challenges strangers to act in accordance with its language and cultural norms” (Kim 2009, p. 246), was not an issue that participants discussed explicitly in the interviews. It may be that this pressure simply goes without saying for them; they are studying in a new culture and education system and understand that they are expected to conform to academic, language, behavioral, and other expectations. However, I would contend that when participants spoke about their adaptive responses, they also acknowledged different types of host conformity pressure. When a student describes a technique for writing a literature review or avoiding plagiarism, she is implicitly recognizing the academic expectations she must meet – and these expectations are the result of host conformity pressure. When Robert discovered that he needed to read the assigned materials in order to prepare for class, or when Pushta learned to write her research papers in the American scholarly style, they changed their behaviors in order to adhere to academic cultural norms. When Ryan realized that Americans were often uncomfortable discussing personal matters, unlike Indonesians, he changed his behavior to follow expected social norms. The participants adapted in direct or indirect response to host conformity pressure.

Students did make some statements connected to host receptivity and ethnic group strength. Participant comments related to **host receptivity**, “the degree to which a given environment is structurally and psychologically accessible and open to strangers” (Kim, 2001, p. 246), fell into two different categories. Some students felt that American culture is very hospitable for foreigners. Sally took this into account when she chose to study in the United States:

“I have a lot of people that I know back from India, because there are a lot of people that’s coming from India and they stay here, and it is one country that’s welcoming people. It’s
more welcoming…I knew the living conditions, they were good, and Indians were accepted. The international people were welcomed. That was one thing that I took into consideration and that’s why I chose United States.”

Ryan appreciated the support he received at his university, and credited his professors and classmates with helping him to adapt:

“And I’m really grateful that the peoples, the professors, the university, the peoples, my American friends, they are really helpful and resourceful and supportive and welcome foreigners and really tried to do their best to support us, like the international students, to overcome our cultural shocks and how to adapt a new lives here.”

Other participants, often Chinese students, felt differently. While they did not seem to feel unwelcome, they perceived American students to be distant. Rita explained, “I read some articles that said American students, they feel like Chinese students are not really easy to get along with. They feel like distance between them.”

References to ethnic group strength, the extent to which an ethnic group is present and exerts influence on its members, focused exclusively on the lack of contact with co-nationals. Leo “felt a little odd-man-out” when he was the only Indian student at his school orientation, and Felix pointed out that there are very few other Chinese students in his classes. Both Daisy and Peter were surprised generally by the lower than expected numbers of international students at their university, and specifically by how few students were from their home countries of Indonesia and South Korea respectively. Victor explained that often Indian students “come in herds” to study abroad, but that he had come to the U.S. without knowing anyone. The participants seemed to spend time with other international students, but not necessarily co-nationals. Paprika recalled that during orientation, the students were encouraged to “get involved in American culture rather than just self-include, like just make friends with my culture, just Chinese people or just Asian people.”
7.1.2.3 Intercultural transformation. Kim (2009) defines intercultural transformation as “a set of identifiable changes in...habitual patterns of cognitive, affective, and behavioral responses” (p. 247). While the participants generally demonstrated via their adaptive behaviors a progression towards functional fitness, “a sense of ease, efficacy, and a desired level of effective working relationship with the host environment” (Kim, 2009, p. 247), this study was not designed to specifically measure this factor – nor psychological health. A couple of participants, however, touched on the idea of intercultural identity. During their sojourns, these students’ identities had become more complex. Estiatoras explained:

“If you remain in your own country, for example, let's say I'm in Greece right now. People in Greece have learned to believe that they are center of the world. People in America, people in China, people in Africa, also believe that if they haven't gone outside. That's not the way that works, what I learned here was that it is a tradeoff. It's a tradeoff between cultures, tradeoff between civilizations, between different economies. If I would like to be one thing about my time that I spent here at [university where he studied], was to be like a citizen of the world.”

Estiatoras had completed his graduate program and thus had spent two full years in the U.S. by the time we spoke. Felix, who had completed one year in his program, spoke about his uncle, who studied, lived, and worked in the United States:

“[My uncle] said to me that, 'You should know that I am not American citizen and you are not a Chinese citizen, we are a world citizen.' So because under the globalization, the different countries are connected each other, and United States right now is the most powerful and the strongest nation in this world. So I think for a Chinese undergraduate students, I have a lot to learn in this country, to learn a lot.”

It is interesting to note that both these students had hopes of staying in the U.S. after completing their programs. Felix had applied to a special U.S. government program that would
allow him to work in the country after completing his program. I learned that Estiatoras was able to find a job in New York City after graduation.

**7.1.2.4 Host communication competence.** Kim’s theory of cross-cultural adaptation is, at its core, a communication theory. The host communication competence dimension, the ability to “appropriately and effectively received and process information and design and execute mental plans in initiating or responding to messages” (Kim, 2009, p. 245) is made up of three factors: cognitive, affective, and operational. While communication is undoubtedly a fundamental part of this study – students discussed communicating with their professors and classmates verbally both in- and outside of class, as well as through their written assignments – the interview questions were designed to explore processes and perceptions related to research, writing, and academic integrity. However, during these conversations, participants shared some examples of host communication competence.

*Cognitive competence* includes “internal capabilities such as the knowledge of the host culture and language” (Kim, 2009, p. 245). Despite demonstrating admirable English-language skills across the board, the majority of the students spoke about language difficulties during their interviews. The English Language Background section (6.2.1) in Chapter Six: Findings discusses these issues in detail. Students also demonstrated that they had developed a cultural knowledge base during their time in the United States. Some remembered their orientation experiences:

“And then we were shown, I think, some videos telling how American culture is different from other cultures, and how there are some things that we shouldn’t be surprised at, and how we should slowly adapt to it” (Shanaya).

“They do speak a lot about things that are different from many other countries that international students have to be aware of, like expressions, the way you say things, people
refer to you, or things, and here in the United States, with such a varied population from many countries, also tips for living in the U.S.” (Karl).

Students were more concerned about their language abilities than their cultural knowledge, likely because language is more central to communication, especially in the classroom. Sabrina pointed out that she did not know anything about the American high school experience or pop culture, but this mostly affected her non-academic communications.

The fact that almost every single participant demonstrated adaptive behaviors indicates affective competence, the “capacity to deal with various challenges of living in the host country, including the willingness to make necessary changes” (Kim, 2009, p. 245). These adaptations were related to many facets of the participants’ academic lives, including research (e.g., seeking out help from a librarian, learning to filter out irrelevant materials), writing (e.g., going to the writing center, getting feedback from classmates), and academic integrity (e.g., learning to paraphrase, using citation tools).

The operational competence facet of host communication competence, which is the ability to “enact cognitive and affective capabilities outwardly” (Kim, 2009, p. 246) allowing for effective and efficient interactions, was not often explicit in the data. However, because the participants demonstrated cognitive and affective competence, it is likely that they were successfully working towards operational competence. Robert noted that in adapting to life in the U.S., “you have to learn quickly what to do, the right things to do in that situation.”

7.1.2.5 Host and ethnic social communication. Host interpersonal and mass communication, and ethnic interpersonal and mass communication were not specifically addressed by the participants. Neither host nor ethnic mass communication came up at all in the interviews. Host interpersonal communication, which provides “vital information and insight into the mind-sets and behaviors of the local people” (Kim, 2009, p. 246), is obviously a constant presence in the lives of these international students, as they interact with professors,
domestic students, and university staff. In the interviews, there were a few examples of participants learning about these American “mind-sets and behaviors.” Ryan learned that Americans are more private about some matters:

“...there are some topics that we are not supposed to discuss or to ask people, because it’s kind of privacy. So I learn a lot about that, because in Indonesia, I think it’s also common in Asian cultures, we can ask people everything including their personal lives, so there is no really, there is really no clear separation between personal lives and public things but here I learn, ok, I’m not supposed to ask this, or this is a topic that generally accepted to discuss.”

His interactions with Americans at his university provided feedback on whether his behavior was appropriate or not. Another student learned a lot about the university culture through his communication with domestic students:

“...the atmosphere here is very exciting, not just for study but the whole life including sports. And here I can view some spirit, especially when it’s in basketball game or volleyball game. People say ‘Wolf Pack, Wolf Pack!’”

As was addressed in the Environment subsection (7.1.2.2) above, participants had little to say about interactions with co-nationals. Thus, *ethnic interpersonal communication* was not a topic of discussion during the interviews.

**7.1.3 Cross-cultural adaptation, LIS literature, and the big picture.** The cross-cultural adaptation literature tends to focus on specific aspects of the structural model, and often on intercultural communications competence. For example, Zimmerman (1995) studied international student perceptions of international communication competence and adaptation, and found that interactions with American students was the most important factor affecting both. This type of research typically depends on quantitative measurement of factors.
like adaptation, which was not the goal of my study. There is not a great deal of research using Kim’s theory, perhaps because there are so many dimensions within the structural model and many are difficult to measure. Most of what exists – see Chapter Four: Cross-Cultural Adaptation, Cross-cultural Adaptation Research (4.6.3) – did not produce findings related to my own. My study demonstrates that the theory can be used as a lens through which to conduct qualitative research with practical implications.

The LIS research does not tend to explore the academic research processes of international students. Often the focus has been placed on these students’ library experiences (e.g., Allen, 1993; Jackson, 2005). These types of studies are valuable, particularly for helping academic librarians better understand this student population. However, the use of critical incident technique allowed me to explore the specific steps participants take in completing an assignment, including research and writing. My findings provide information about how exactly international students struggle with these processes, perhaps providing useful information to those who are tasked with supporting these students, such as academic librarians and writing center staff. In addition, there are aspects of academic life and expectations in the U.S. that often remain implicit and thus unclear to students from other cultures. For example, a professor might assign a literature review without explaining what exactly this is or how a scholar writes one. My research sheds some light on what has been effectively communicated to new international students, perhaps through orientation sessions, and what has not been.

7.2 Academic Integrity

While students referred to cheating on exams when they spoke about issues of academic integrity in their home countries, they tended to focus on plagiarism when discussing academic integrity in the American context. As the study findings established, they generally had few writing assignments prior to starting their graduate programs in the U.S., so it makes sense that they would be more focused on plagiarism in a setting in which they were expected to do a great
deal more writing. This section explores further student perspectives on plagiarism, with a focus on patchwriting, paraphrasing, and citing sources.

7.2.1 Patchwriting and paraphrasing. Although students were keenly aware of the concept of plagiarism, and sought to avoid it, some of their writing processes would technically be considered plagiarism by most institutional definitions. I would consider their techniques in most cases to be patchwriting. Howard (1992), who coined the term more than 20 years ago, defines patchwriting as “copying from a source text and then deleting some words, altering grammatical structures, or plugging in one-for-one synonym substitutes” (p. 233). In some cases, when participants described their research and writing processes, they seemed to be describing patchwriting:

“I knew what I wanted from that paragraph, so I try to have those words and rephrase the sentences around from each of those and then combine them in the end. That’s how I write it.”

“Sometimes I will try to write my own sentence but that’s a little bit difficult for me because I don’t have that much knowledge about these kind of public health things. So I will try to do a lot of paraphrase. I try to paraphrase a lot, either change, change the whole sentence structure and try to substitute a lot of words, because I feel like plagiarism is really emphasized here.”

“So generally, I will go through the paper, and if I find it useful I will copy the title of this paper...and Google can create the citing for me. And I just copy that in Google Scholar in case I need a reference. And to see which, which paragraph or which part I want to cite. And then try to rephrase it a little bit.”

Usually these students view their actions as paraphrasing. In fact, twelve of them spoke specifically of paraphrasing, and have evidently learned that this is an essential technique for
avoiding plagiarism. The Chinese graduate students in Qian and Krugly-Smolska’s (2008) study also understood the importance of paraphrasing as a writing skill, but they did not feel as confident in their abilities. These students indicated that “their limited vocabulary and their difficulty with sentence structure affected their ability to generate an adequate paraphrase” (p. 78). The Oxford English Dictionary (n.d.) defines paraphrase as “to express the meaning of (a written or spoken passage, or the words of an author or speaker) using different words, especially to achieve greater clarity.” Wikipedia (2016) says that a “paraphrase is a restatement of the meaning of a text or passage using other words.” Based on these definitions, it is not surprising that students view paraphrasing and patchwriting as the same thing, because they are focusing almost exclusively on “using different words” when they write. However, The Bedford Handbook warns writers that “you are guilty of plagiarism if you half-copy the author’s sentences – either by mixing the author’s well-chosen phrases without using quotation marks or by plugging your own synonyms into the author’s sentence structure” (Hacker, 1998, p. 572). Only one participant, Michael, specifically stated that he would read a paper and then put it away before starting to write, because if the original paper is in front of him, he cannot be sure if he is “copying or writing the exact words that I saw.”

Common causes of patchwriting include lack of reading comprehension, unfamiliarity with the discourse in a particular discipline or with an academic writing style, and limited language ability (Howard, 1992). All of these issues were evident in the data. Clara said that doing a lot of reading is “really a pain for me.” Sam spoke about the challenge of understanding academic articles:

“Well, as I said, reading and understanding those things, and then, when you have multiple resources in front of you, they are not necessarily saying the same thing, the same like, way, so sometimes you would get different information and then you get, you know, confused.”
Raymond and Parks (2002) studied Chinese students enrolled in an MBA program at a Canadian university. Their participants were also overwhelmed by the amount of reading that they were expected to complete, and developed a variety of coping mechanisms such as prioritizing a particular subject over another or reading only certain parts of an article.

Felix wrote a paper in which he conducted original research, but had to frame his work using a particular leadership theory. He struggled with this aspect of the assignment, because he was still learning the discourse in the field:

“So after I finish the whole essay, I went, went through my whole paper, I was still concerning that whether this theory were suitable for this context in an organization. Because I, I don't think I can totally understand this theory. I only understand the maybe the, the most part of this theory. So because I didn't discover or I didn't know it or figure it out, this theory. So I think this is the most challenging part.”

Pushta calls writing “long and exhausting,” mostly because she had to learn to write in the American academic style:

“Another problem is restructuring material, like to this American style of writing. In our country, for example, when you write, you write the big introduction. There's no body or something, the most important thing we put at the end. But here it's like everything is at the beginning.”

Students also explained that limited English-language vocabulary and lack of familiarity with expressions makes writing difficult:

“I can talk, I can talk easily, but when it comes to writing and the words, I should use the vocabulary. I’m honest about it. I don't have a whole lot of vocabulary, so that became a challenge” (Sally).
“Because when I did my writing, I always feel that it’s very difficult because we don’t know these word expressions, and we don’t know how to make this sentence, make my ideas more clear, and so I revised it several times. Yeah, and I find it very difficult” (Wendy).

Li and Casanave (2012) published a case study in which they examined the writing experiences of two students at a university in Hong Kong. These students were non-native speakers of English, studying in an English-language environment. Both students understood the basic definition of plagiarism and recognized the practice as unacceptable, yet their writing assignments were full of poor citation and patchwriting. The authors argue that “although the two students borrowed and cited source material inappropriately, they were not plagiarists, but novice writers who were concerned about not violating the university policies” (p. 178). I draw the same conclusion about most of the participants in my study.

Pecorari (2008) identifies two types of textual plagiarism: prototypical plagiarism, which requires the presence of deceptive intentions (e.g., turning in the same paper that a friend wrote and submitted in a previous semester, copy and pasting full paragraphs from a paper found online), and patchwriting, in which the intention to deceive is absent (p. 5). Despite the prevalence of patchwriting, participants were generally doing their best to avoid plagiarism and adhere to expected academic integrity standards. Only one student described his writing process in a way that would be considered prototypical plagiarism. He explained his method for writing a literature review:

“Usually I write a summary of each article, usually I think is almost like, copy and pasting the wordings in the article, because I, I am lack of expressing the idea using other words.”

Although this may be considered a case of prototypical plagiarism, I do not believe this student was intending to deceive. His course of action was a response to the stress of trying to complete an academic writing assignment without the necessary English-language skills. In the eyes of an academic integrity council, though, intention may or may not matter. As Santi pointed out, “if
you...don’t know the rule or know the law, it doesn’t mean that you are not going to be judged, or punished.”

7.2.2 Citing sources. Two-thirds of the participants spoke specifically about the importance of citing sources. Some view citations as the primary solution in avoiding plagiarism. When asked if she worried about academic integrity violations while completing her thesis, Paprika said that she did not because “we have citations after each paper, so that’s kind of not difficult to do, so no worries.” A few students understood the citation requirements, but found them to be illogical. Leo wondered why it is necessary to paraphrase and cite:

“The source is being explicitly stated, why should I take the pain and paraphrase it? I don’t understand that.”

Some participants acknowledge that citation is important, but that it does not usually apply to the academic work that they do. Felix clarified that in the assignment he was describing, the writing was mostly his own story. There was no need for him to cite sources because “it’s my personal experience.” Victor explained that he does not generally have to think about citing sources because of the type of work he does in his program:

“In the kind of work that I do, I really don’t, it’s more like you get a mathematical problem and you solve it, to make it very simple.”

Students also explained that using proper citation is simply expected in their graduate programs. Elizabeth noted that her professors tell students to use a specific citation style, but do not specify details because “they take it for granted” that students know how to properly adhere to the rules. For example, she said that “they won’t necessarily tell you to include a reference list, because that’s just expected.” Clara spoke about the necessity of citation as though it is obvious, calling it “an academic habit of everyone.”
These unfamiliar citation styles presented challenges for several participants. None had encountered citation styles like APA, MLA, or Chicago prior to starting graduate school in the U.S., even those who had some experience with citing sources in their undergraduate programs. Librarians Chen and Van Ullen (2011) designed workshops on the research process and plagiarism specifically for the international students at their university. They also found that the participants struggled with citation requirements because they vary widely between cultures. Shi’s (2006) participants also expressed confusion about proper citation, specifically about when, exactly, citation is necessary (p. 275).

Marisa was told to buy the *Publication Manual of the American Psychological Association* for guidance. She found herself overwhelmed with the sheer volume of information: “I didn’t have any time to read it, so I just needed to know some main points.” Fortunately she was able to find some streamlined resources, like Purdue University’s Online Writing Lab (OWL)\(^7\), that gave her just the information she needed. Chloe struggled with learning the appropriate citation style, as her professors tended to be strict about MLA:

“I have issues sometimes with that. And not just for this class, other papers, too. For example, my first semester here, I had a literature class and I lost most of my points just for the style and the MLA. It was not perfect.”

Some participants had discovered tools to help with the complicated citation requirements:

“Yeah, Mendeley, because that’s the free resources. Because I feel like, there’s require a lot of time actually for just to write the citations. So I feel like the software can help me to do this” (Daisy).

\(^7\) Available at https://owl.english.purdue.edu/owl/
“And also I use Word to write the paper, so for each source I use, I will use, there is like a, insert citation, that box, so I also use that to keep track every reference I use” (Mary).

“So generally, I will go through the paper, and if I find it useful I will copy the title of this paper...and Google can create the citing for me. And I just copy that in Google Scholar in case I need a reference” (Elizabeth).

Overall, participants understand the importance of proper citation, but some find adhering to the extensive guidelines to be challenging. As Wendy observed, even when she has guidance about the rules of the required format, the process is still not always simple. She explained that sometimes she cannot find the information she needs (e.g., an edition number) or details about how to cite a specific type of resource (e.g., an e-book).

7.2.3 Academic integrity, international students, and the big picture. My study does not fit neatly into the literature on academic integrity, which tends to focus on student perceptions of or self-reported engagement in specific dishonest behaviors. I am less interested in discovering the percentage of international students who admit to plagiarizing – particularly since many do not seem to really understand whether they are doing so or not – and more interested in understanding how they negotiate these issues as they complete their academic work. This study was designed to provide practical information and to inform practice, and this is covered in the following section.

7.3 Implications for Academic Librarians

The findings of this study, particularly those related to research and academic integrity, can offer some insight to academic librarians wishing to develop or improve support for international student populations. This section outlines recommendations for library orientations, information literacy instruction, outreach, and academic integrity support.
7.3.1 **Library orientations.** Despite experiencing some information overload, participants seemed to learn a lot about university services and support during their orientation sessions. Twenty years ago, Heikinheimo and Shute (1986) found that students tended to rely primarily on informal information networks to find this sort of information. In 2006, Morrissey and Givens reported that library orientation sessions held at the beginning of the semester were not particularly helpful for international students who are still learning to function in an exclusively English environment. It certainly makes sense that this would not be the ideal time to delve deeply into the details of database searching or obscure library services. Several students were clearly overwhelmed by the amount of information provided during orientations. But participants did remember general topics that were covered and described the experience in positive terms: “it really prepared me for life in America,” “they provided a lot of resources that I would know if I didn't go to that orientation,” “it was pretty intensive and it was good.” Their experiences would indicate that orientation does not necessarily need to provide all the answers, but to make sure that student know where to find the answers they need. Based on the literature and these findings, librarians might make the most of their time at international student orientations by 1) clarifying their roles as research support, 2) sharing contact details and encouraging students to get in touch for assistance, 3) describing a few library resources that are likely to appeal to the audience (e.g., study spaces, inter-library loan, English language support), 4) promoting library instruction workshops.

7.3.2 **Information literacy instruction.** The participants’ stresses and adaptations demonstrate that there is opportunity for librarians to provide instruction support for a variety of topics. While many students indicated that their orientation sessions introduced them to the American higher education environment, they still struggled to adapt. University faculty and staff may make assumptions about these students that are unfounded – they know how to do academic research, they know how to write a research paper, they know how to use a certain citation style. Libraries might consider hosting a series of workshops designed to introduce
international students to these big academic issues and also teach the skills needed to succeed in American higher education. For example, the library, writing center, and disciplinary faculty could collaborate on a “How to Write a Literature Review” session guiding students through the process of finding, assessing, and synthesizing information. When describing her process, Riya emphasized that synthesis is the most important aspect of writing a literature review, making connections between the different papers and research findings. This is the sort of skill that may not be explicitly taught in the classroom.

The Association of College & Research Libraries’ (ACRL) Framework for Information Literacy for Higher Education (2016) is made up of six frames that include knowledge practices and dispositions. For example, under the Information Has Value frame, “give credit to the original ideas of others through proper attribution and citation” is a knowledge practice, and “respect the original ideas of others” is a disposition (ACRL, 2016). The six frames and a brief description of each can be found in Table 17. Many implications for practice covered here are supported by this new information literacy framework. See Table 18 for examples of specific knowledge practices, dispositions, and strategies for designing information literacy instruction for international students. Note that all the knowledge practices and dispositions in the Framework are relevant for college and university students, both domestic and international. Those included in Table 18 are the most applicable to the findings of this study.
Table 17. The ACRL’s *Framework for Information Literacy for Higher Education*, frames and descriptions\(^8\)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Description (ACRL, 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority is Constructed and Contextual</td>
<td>“Information resources reflect their creators’ expertise and credibility, and are evaluated based on the information need and the context in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.”</td>
</tr>
<tr>
<td>Information Creation as a Process</td>
<td>“Information in any format is produced to convey a message and is shared via a selected delivery method. The iterative processes of researching, creating, revising, and disseminating information vary, and the resulting product reflects these differences.”</td>
</tr>
<tr>
<td>Information Has Value</td>
<td>“Information possesses several dimensions of value, including as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world. Legal and socioeconomic interests influence information production and dissemination.”</td>
</tr>
<tr>
<td>Research as Inquiry</td>
<td>“Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.”</td>
</tr>
<tr>
<td>Scholarship as Conversation</td>
<td>“Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.”</td>
</tr>
<tr>
<td>Searching as Strategic Exploration</td>
<td>“Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.”</td>
</tr>
</tbody>
</table>

\(^8\) Available at http://www.ala.org/acrl/standards/ilframework
Table 18. Frames, knowledge practices and dispositions, and suggested strategies for information literacy instruction for international students.

<table>
<thead>
<tr>
<th>Frame</th>
<th>Knowledge Practice or Disposition (ACRL, 2016)</th>
<th>Instruction Strategy</th>
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</thead>
<tbody>
<tr>
<td>Authority Is Constructed and Contextual</td>
<td>“develop and maintain an open mind when encountering varied and sometimes conflicting perspectives”</td>
<td>Teach students that different authors and researchers have different perspectives, and how to develop their own take on a topic</td>
</tr>
<tr>
<td>Information Creation as a Process</td>
<td>“develop awareness of the importance of assessing content with a skeptical stance and with a self-awareness of their own biases and worldview”</td>
<td>Show students how to assess information for quality, and discuss bias in scholarship</td>
</tr>
<tr>
<td>Information Has Value</td>
<td>“understand that different methods of information dissemination with different purposes are available for their use”</td>
<td>Demonstrate a variety of resources (both library and otherwise) and explain how and when to use them</td>
</tr>
<tr>
<td></td>
<td>“give credit to the original ideas of others through proper attribution and citation”</td>
<td>Teach students both how to cite properly, and why this is necessary and important</td>
</tr>
<tr>
<td></td>
<td>“understand that intellectual property is a legal and social construct that varies by culture”</td>
<td>Discuss a variety of cultural perspectives on ownership of information</td>
</tr>
</tbody>
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(continued on next page)
<table>
<thead>
<tr>
<th>Frame</th>
<th>Knowledge Practice or Disposition (ACRL, 2016)</th>
<th>Instruction Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research as Inquiry</td>
<td>“formulate questions for research based on information gaps or on reexamination of existing, possibly conflicting, information”</td>
<td>Guide students through the process of developing research topics and questions</td>
</tr>
<tr>
<td>Scholarship as Conversation</td>
<td>“see themselves as contributors to scholarship rather than only consumers of it”</td>
<td>Demonstrate how students can be active participants in the scholarly conversation of their disciplines</td>
</tr>
<tr>
<td>Searching as Strategic Exploration</td>
<td>“realize that information sources vary greatly in content and format and have varying relevance and value, depending on the needs and nature of the search”</td>
<td>Teach students techniques for filtering out resources that are not useful or appropriate</td>
</tr>
<tr>
<td></td>
<td>“seek guidance from experts, such as librarians, researchers, and professionals”</td>
<td>Clarify the role of librarians as research experts who provide support for students</td>
</tr>
</tbody>
</table>
Library instruction often focuses on finding resources, but findings indicated that participants require support at many points along the research process. They struggled with coming up with a topic and familiarizing themselves with a body of literature. Librarians might consider covering the research process as whole, and providing context for the practical research skills they teach – and the ACRL Framework offers the underlying concepts. In fact, the Research as Inquiry frame calls for learners to “formulate questions for research based on information gaps or on reexamination of existing, possibly conflicting, information” and “seek multiple perspectives during information gathering and assessment.” Students would also benefit from a better understanding of how the library provides resources; for example, why an article is behind a paywall on Google Scholar and how it can be accessed through the library. Participants who had not figured out how to use Google Scholar and the library website in tandem were sometimes stymied by access issues in their research. The Information Has Value frame includes the following related knowledge practice: “recognize issues of access of lack of access to information sources.” While several students named finding resources as the hardest part of the research process, others grappled with identifying the best information from their search results. Shanaya recalled that “there was so much [information] I had to synthesize it into a twelve page paper, so it was really important to filter out the data, to remove the unnecessary parts.” Daniel was comfortable searching in library databases, but found that as he scrolled though pages of results, it was “hard to tell whether [a result] is truly relevant or it just seems to be relevant.” The Framework calls for information literature learners to “synthesize ideas gathered from multiple sources” (under Research as Inquiry) and “realize that information sources vary greatly in content and format and have varying relevance and value, depending on the needs and nature of the search” (under Searching as Strategic Exploration). Negotiating information overload and assessing the value of resources are clearly research tasks with which librarians can assist.
Librarians should also think about considering and incorporating different cultural perspectives when they design information literacy instruction. The language of the Framework encourages this – for example, calling for learners to:

- develop and maintain an open mind when encountering varied and sometimes conflicting perspectives (ACRL, 2016, Authority Is Constructed and Contextual)
- question traditional notions of granting authority and recognize the value of diverse ideas and worldviews (ACRL, 2016, Authority Is Constructed and Contextual)
- understand that intellectual property is a legal and social construct that varies by culture (ACRL, 2016, Information Has Value)
- understand how and why some individuals or groups of individuals may be underrepresented or systematically marginalized within the systems that produce and disseminate information (ACRL, 2016, Information Has Value)
- recognize issues of access or lack of access to information sources (ACRL, 2016, Information Has Value)
- recognize that systems privilege authorities and that not having a fluency in the language and process of a discipline disempowers their ability to participate and engage (ACRL, 2016, Scholarship as Conversation)

Academic librarians must keep in mind that when they provide library instruction, there are as many perspectives in the classroom as there are students. Ideas about information and research are socially constructed, and thus differ from culture to culture.

The LIS literature contends that library instruction efforts are particularly well-received by international students (Battle, 2004; Detlor et al., 2011; Song, 2004). However, participants in this study did not speak with a great deal of enthusiasm regarding the library instruction they received. In most cases, they did not respond negatively, but simply gave the impression that these sessions were not especially memorable. Perhaps designing library instruction based on
evidence – such as research like this in which international students are given the opportunity to express their research needs and perspectives in their own words – would result in more effective and appreciated instruction.

7.3.3 Outreach. Study participants often spoke of the support and assistance they receive from their classmates. This finding aligns with the research showing that international students value and benefit from contact with domestic students (Hechanova-Alampay et al., 2002; Hendrickson et al., 2011; Hull, 1978; Klineberg & Hull, 1979; Selltiz et al., 1963; Zimmerman, 1995). Marisa’s classmates helped her with using the library website to do research and properly citing sources. Lisa and Sabrina both depend on American friends to give feedback on their writing assignments. Many students spoke about how much they learned from peers in their classes. Wendy said she “learned a lot from her classmates;” Sally that they “inspire me every day.” Other research has demonstrated this as well. The Japanese participants in Ishimura’s (2013) study viewed their Canadian classmates as academic role models. These students sometimes altered their information seeking behaviors, particularly those related to finding and citing sources, after observing the behaviors of their domestic peers.

It is plain that most of these participants valued their interactions with domestic students and these interactions encourage cross-cultural adaptation. Librarians might keep this in mind when planning outreach initiatives for international students. Particularly at universities that have limited English-language support, libraries might offer English discussion groups led by American student volunteers. A series of panel or small group discussions about life and higher education in the U.S. could also be an excellent opportunity for American and international students to interact, developing intercultural competency skills for both groups.

7.3.4 Academic integrity support. Although teaching skills like paraphrasing and summarizing may seem to fall under the purview of writing and composition faculty, I would argue that librarians have a responsibility to promote academic integrity on campus. The
ACRL’s Framework (2016) Research as Inquiry frame calls for learners to “follow ethical and legal guidelines in gathering and using information.” It is not enough for librarians to teach students how to find information, it is also necessary to teach them to use this information – and use it in a responsible way.

Participants undoubtedly understood the importance of paraphrasing and citing sources, but still required support in developing these skills. They are confident in their abilities to paraphrase, but are often engaged in patchwriting instead. They are citing their sources, but sometimes struggle with the complex guidelines. On top of all this, they are fearful of committing a violation in an academic integrity system that they only partially understand. Again, designing instruction that provides both larger context and specific skills would be of particular value for international students. Librarians can help them to understand the American academic integrity framework, as well as why specific behaviors are problematic in this system. Students appreciate citation style-specific assistance (e.g., a workshop on MLA), but can also benefit from understanding why proper citation is important and not just a tedious chore. This recommendation is supported by two frames in the ACRL’s Framework. The Information Has Value frame calls for learners to “give credit to original ideas of others through proper attribution and citation,” and the Scholarship as Conversation frame encourages an understanding of how citation contributes to the greater scholarly conversation (ACRL, 2016).

7.4 Implications for Faculty and Writing Center Staff

The findings of this study show that international students value their relationships with professors and are willing to go to them for guidance. Faculty can provide support by being patient and open-minded, and remembering that these students are adjusting to a new educational environment and represent different worldviews. It is also important to avoid the assumption that students are familiar with both general academic concepts and discipline specific vocabulary. For example, it is obvious to the professor that an original research paper
should include an introduction, literature review, and methods, findings and discussion sections – but this may not be at all clear to a first year graduate student from Saudi Arabia. Findings also demonstrate that students want to make necessary changes and learn new skills to succeed in their graduate programs. They also respect their professors and value their advice. Faculty can direct international students to campus resources like the writing center and library instruction workshops. Some college and university libraries have librarians who focus specifically on supporting international students. Faculty can collaborate with these librarians to learn how to better support this population, especially when it comes to the development of research and information literacy skills.

Many participants in this study used the resources available through the writing center, with varying degrees of satisfaction. In order to better serve international students, writing center staff should also understand that these students come from a variety of cultural and educational backgrounds, and avoid making assumptions about their knowledge as related to American higher education and writing expectations. Building relationships with these students and providing holistic writing feedback – covering grammar, vocabulary, style, and content – will likely lead to improved support and student satisfaction. Participants used a variety of tools in their writing processes, so it would be helpful for writing center staff to introduce resources such as the Purdue OWL and writing tutorials on YouTube. Resources can be recommended in face-to-face sessions, and also collected on the writing center website.

7.5 Future Research

During the design phase of this study, there was some concern about the abilities of participants to express themselves effectively in spoken English. With only a couple of exceptions, these participants demonstrated excellent language skills and provided rich data through the interviews. I recommend that future research on international students be designed in a way that allows participants to express themselves using their own words, in their own
voices. In 2002, Braine wrote about the lack of “authentic voices of [non-native English speaker] graduate students” in the academic literacy research (p. 65). He was writing as a non-native speaker and prior international student, but for researchers who do not fit in either of these categories (like me), the voices of participants are particularly important. In addition, studies designed to take a longer view of the adaptation process would be valuable. A longitudinal study following a cohort of international students over the course of their educational sojourn would provide a more complete picture of the participants’ adaptation processes and growth.

Academic integrity research often focuses on exploring which specific behaviors students perceive as dishonest (e.g., Elzubeir & Rizk 2003; Song-Turner, 2008) and/or determining exactly how often students engage in these behaviors (e.g., Küçüktepe 2014; McCabe et al., 2008; Trost, 2009). While this research provides useful information how students perceive these issues, I believe that tying the academic integrity discussion to a specific assignment is of particular value. The findings of this study can help faculty understand how the work they assign helps students develop necessary academic skills but may also cause them to develop some less-than-ideal habits. In addition, the findings could help librarians better teach students about the ethical use of information. Further research into how students actually research and negotiate academic integrity – not just what they think about these issues in the abstract – could provide actionable findings with clearer implications for faculty and staff in higher education.

This study has shown that there is a clear connection between the information and research needs of international students and the ACRL Framework for Information Literacy for Higher Education. While previous research (e.g., Detlor et al., 2011) on international students has used the old ACRL Information Literacy Competency Standards for Higher Education, which were approved in 2000, future research could explore the information literacy skills and training of international students using the new Framework.
International students in the U.S. must adapt to the America higher education system in order to succeed academically and earn the credentials they have chosen to pursue. However, the expectation of intercultural competence should not be expected solely of them, but also of domestic students and faculty. Bennett (2013), defines intercultural competence as “a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts” which allow people to “interact more meaningfully with those from other cultures” (p. 1203). The higher education setting should encourage the development of intercultural competence for everyone on campus, not just those who are sojourning in a new culture. Lee (2005) argues that:

In the context of multiculturalism, critical thinking means going beyond embracing diversity for diversity’s sake. Critical thinking is predicated on the recognition that diversity in and of itself is of little value unless we can enhance communications among diverse individuals and groups (p. 202).

The mere presence of international students in the classroom and on campus is not enough, if their classmates and professors are not benefiting from their perspectives and experiences. A 2007 study found that international LIS doctoral students were frustrated by the narrow perspectives of their American classmates and professors. The authors argued for purposeful “two-way learning” in which majority and minority perspectives are shared. The participants in my study clearly appreciated the support they received from their classmates related to research, writing, and academic integrity. Future research might explore the connection between the adaptation of international students and their interactions with domestic students, with a particular focus on the intercultural competency development of both groups of students. As most of the research focuses on the necessity of adaptation for international students, a study looking at the cross-cultural adaptation of all students (and perhaps faculty, too) would be a valuable addition to the literature.
CHAPTER 8: CONCLUSION

This qualitative study investigated how international students enrolled in graduate programs at three North Carolina universities conducted their academic research and writing, and negotiated issues of academic integrity in the process. I used critical incident technique and semi-structured interviews to explore the processes participants employed to complete graduate level assignments. Findings were analyzed and interpreted through the lens of Kim’s cross-cultural adaptation theory, particularly the stress-adaptation-growth dynamic.

Participants demonstrated impressive levels of English-language competency, but still spoke frequently about the challenges of reading, writing, speaking, and learning in an English-language environment. They struggled with research and writing for a variety of reasons (e.g., finding useful resources, writing in the American scholarly style), but developed techniques to combat these problems. Participants understood the importance of academic integrity and worked hard to adhere to the rules – although their efforts were not always effective. Most indicated that issues like plagiarism are emphasized in the U.S., but this was not the case in their home countries. The study findings have implications for faculty and staff who provide support and services for international students, and particularly for academic librarians in the areas of library/information literacy instruction, outreach, and academic integrity support.

My study contributes to the research on library support for international students by looking specifically at their research processes – much of the LIS research focuses on this populations library experiences, and sometimes on their everyday information seeking. My findings, however, illustrate the relationship between how these students conduct their research and the knowledge practices and dispositions of a learner developing information literacy
capabilities described in the ACRL *Framework for Information Literacy for Higher Education*. In addition, much of the research on academic integrity focuses on rates of self-reported cheating behaviors or the reasons that international students commit academic integrity violations. My study contributes to this literature by demonstrating that international students are often aware of the importance of adhering to academic integrity policies and of the differences between expectations in their home countries and the United States. In addition, I have argued for the role of academic librarians in promoting academic integrity as a part of information literacy instruction.

It is unlikely that the number of international students studying in the U.S. will begin to decline any time soon. This study was designed to provide guidance for those who wish to provide better support for international students in the library, classroom, and all over campus. The internationalization of higher education continues, and the importance of intercultural competence for everyone – students, faculty and staff – grows. As international students are better supported at U.S. colleges and universities, the better they are able to adapt and interact successfully with their classmates, faculty, and others they encounter. In a world in which the ability to function exclusively in one’s own culture is increasingly insufficient, these interactions benefit everyone involved.
APPENDIX A: University of North Carolina at Chapel Hill’s *Instrument of Student Judicial Governance*, Section II.B

**Academic Dishonesty.** It shall be the responsibility of every student enrolled at the University of North Carolina to support the principles of academic integrity and to refrain from all forms of academic dishonesty including, but not limited to, the following:

1. **Plagiarism** in the form of deliberate or reckless representation of another’s words, thoughts, or ideas as one’s own without attribution in connection with submission of academic work, whether graded or otherwise.

2. **Falsification, fabrication, or misrepresentation** of data, other information, or citations in connection with an academic assignment, whether graded or otherwise.

3. **Unauthorized assistance or unauthorized collaboration** in connection with academic work, whether graded or otherwise.

4. **Cheating** on examinations or other academic assignments, whether graded or otherwise, including but not limited to the following:
   a. Using unauthorized materials and methods (notes, books, electronic information, telephonic or other forms of electronic communication, or other sources or methods), or
   b. Representing another’s work as one’s own.

5. **Violating procedures pertaining to the academic process**, including but not limited to the following:
   a. Violating or subverting requirements governing administration of examinations or other academic assignments;
   b. Compromising the security of examinations or academic assignments;
c. Submitting an assignment that is the same as or substantially similar to one’s own previously submitted work(s) without explicit authorization of the instructor; or

d. Engaging in other actions that compromise the integrity of the grading or evaluation process.

6. **Deliberately furnishing false information** to members of the University community in connection with their efforts to prevent, investigate, or enforce University requirements regarding academic dishonesty.

7. **Forging, falsifying, or misusing University documents**, records, identification cards, computers, or other resources so as to violate requirements regarding academic dishonesty.

8. **Violating other University policies** that are designed to assure that academic work conforms to requirements relating to academic integrity.

9. **Assisting or aiding another** to engage in acts of academic dishonesty prohibited by Section II.B (UNC-CH, 2015, p. 5-6)
APPENDIX B: Participant Recruitment Email

Dear student,

My name is Amanda Click and I am a doctoral candidate in the School of Information and Library Science at the University of North Carolina at Chapel Hill. I am writing to invite you to participate in my research study about international students’ perceptions of graduate level coursework and issues of academic integrity. You're eligible to be in this study because you are an international master’s student at [UNC Chapel Hill/Duke/NC State].

If you decide to participate in this study, I will interview you in-person for approximately 1.5 hours. I would like to audio record the interview. The general purpose of the study is to examine how international graduate students conduct their scholarly work and handle issues of academic integrity in the process. I estimate that there will be 24 to 32 participants interviewed. If you chose to participate, you will receive a $15 Amazon.com gift card.

If you are interested in participating in the study please enter your contact information in this form. You will answer some questions that determine your eligibility and provide contact information. If you have any questions about the study, please contact me at aclick@live.unc.edu or 404-989-0604. Thank you very much.

Sincerely,

Amanda Click
APPENDIX C: Online Screening Questionnaire

Thank you for your interest in this study about international students’ perceptions of graduate level research, writing and issues of academic integrity. The following questions will determine whether you are eligible to participate.

1. Are you 18 or older?
   - Yes
   - No

2. Are you an international student studying in the United States?
   - Yes
   - No

3. Are you enrolled full time in a graduate program, with the goal of earning a master’s degree?
   - Yes
   - No

4. Have you completed at least one semester in your graduate program?
   - Yes
   - No

5. Is this your first time enrolled in a degree program outside of your home country?
   - Yes
   - No

6. Is English your native language?
   - Yes
   - No

7. (If no to 6) Please briefly describe your English language education.
Thank you! Please enter the following information. I will contact you within 3 days to discuss the study further.

Name ____________________
Email ____________________
Phone Number _____________
University ________________
Program of Study ___________
Country of Origin ___________
APPENDIX D: Screening Interview

Thank you for your interest in this study about international students’ perceptions of graduate level research, writing and academic integrity. My name is Amanda Click, and I am a doctoral candidate in the School of Information and Library Science at UNC Chapel Hill. Today I’m calling to see if you are still interested in participating, make sure that you meet the criteria, and tell you more about the study. Are you still interested in participating in the study?

[If no.]

I understand, and thank you for your time.

[If yes.]

First, I’d like to review your answers from the online form that you completed. This is to make sure that you meet the participant criteria.

[Review each question and confirm responses.]

[If the student does not meet the criteria.]

Thank you for your time, but I’m afraid that you don’t qualify for my study. Good luck with your coursework!

[If the student does meet the criteria.]

Now I’m going to tell you more about the interview process. I want to learn about how you complete assignments for your courses, including the research and writing that you do. During the interview, I will ask you to describe the whole process, from finding out about an assignment to receiving your grade and feedback from your professor. I want to talk to you about an assignment that required you to do research, and then use the resources you found to write a paper. This must be an assignment that you completed alone, not a group project. Have you finished an assignment like this during the last year?
[If no.]

Thank you for your time, but I'm afraid that you don't qualify for my study. Good luck with your coursework!

[If yes.]

We will be discussing your assignment in detail. Please bring to the interview any documents that might help you talk about this – including your syllabus, research notes, early drafts, final paper, instructor’s feedback, or anything else that would be helpful.

[Schedule interview time and location.]

Do you have any questions about this study?
APPENDIX E: Consent Form

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty. Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researcher named above any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to learn about the perceptions of international graduate students regarding academic research and academic integrity. The study is the dissertation research of the principal investigator named above, and the findings may be published in a journal and/or presented at a conference. You are being asked to be in the study because you are an international master's student at the University of North Carolina at Chapel Hill, Duke University, OR North Carolina State University.

How many people will take part in this study?

If you decide to be in this study, you will be one of approximately 32 people in this research study. All participants volunteered to participate by responding to an email invitation.

How long will your part in this study last?

Your participation in this study will last up to 1.5 hours.
What will happen if you take part in the study?

The principle investigator will meet with you to conduct an in-person interview. The interview will be audio-recorded, with your permission.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. There may be no direct benefits to you from this research, but it is possible that the findings will inform the development of better support and services for international students studying in North Carolina and/or other states.

What are the possible risks or discomforts involved from being in this study?

There are unlikely to be risks or discomforts associated with this research.

How will your privacy be protected?

Every effort will be taken to protect your identity as a participant in this study. You will not be identified in any report or publication of this study or its results. Your name will not appear on any transcripts; instead, you will be given an alias. The list which matches names and aliases will be kept in a password protected electronic file. After the interview has been transcribed, the tape will be destroyed, and the list of names and numbers will also be destroyed.

Will you receive anything for being in this study?

You will receive a $15 Amazon gift card for taking part in this study.

Will it cost you anything to be in this study?

There will be no costs for being in the study.
What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researcher listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at +1 919-966-3113 or by email to IRB_subjects@unc.edu.

Participant’s Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

________________________________________________________________________

Signature of Research Participant                                      Date

________________________________________________________________________

Printed Name of Research Participant

________________________________________________________________________

Signature of Research Team Member Obtaining Consent                     Date

________________________________________________________________________

Printed Name of Research Team Member Obtaining Consent
APPENDIX F: Interview Guide

Introductory text:

My name is Amanda Click, and I’m a doctoral candidate in the School of Information and Library Science at UNC Chapel Hill. Before I entered the PhD program, I was an academic librarian at the American University in Cairo. I loved living and working in Egypt, and during my time there I became very interested in the ways that my Egyptian students approached their academic work. I even did some research to better understand how they did their scholarly research, and understood issues of academic integrity. I also thought a lot about how different cultural perspectives change the way that people approach education, research, and academic integrity – and that’s why my dissertation work is on these topics. Do you have any questions before we get started with the interview – about me, the process, or anything else?

1. Tell me about yourself.
   a. Tell me about your hometown.
   b. Where did you complete your undergraduate degree and what did you study?
   c. Why did you come to the United States for graduate school?
   d. What are you studying?
   e. Tell me about arriving to [UNC-CH, Duke, NCSU]. Did you receive an orientation? What did you learn?

2. Think about a time that you had to complete a major assignment for your coursework.
   a. Describe the assignment.
   b. Describe how you completed it. What was your first step?
   c. Which tools and resources did you use?
   d. Did you use the library to complete the assignment? How?
   e. What was the most important resource that you used?
   f. How did you go about the writing part of this process?
g. What were some of the challenges in completing this assignment? Why?

h. What did you enjoy about completing this assignment? Why?

3. Think about the term ‘academic integrity.’ Please define this in your own words. (If the participant is unable to provide a definition, the following will be provided for them on paper: “Academic integrity is the moral code of academia. Under this code, scholars must avoid cheating and plagiarism, adhere to academic standards, and be honest in their research and writing.”

   a. How did you first learn about this concept?
   b. How did the professors/teachers in [country of origin] talk about academic integrity?
   c. How do your professors at [UNC-CH, Duke, NCSU] talk about it?
   d. How did your classmates in [country of origin] talk about academic integrity?
   e. How do your classmates at [UNC-CH, Duke, NCSU] talk about it?

4. Did you think about academic integrity as you completed the assignment we discussed?

   a. How and why did you think about it?
   b. Do you view academic integrity differently after starting your master’s program?
   c. Do you think academic integrity is important?

5. Think about your experience of studying at [UNC-CH, Duke, NCSU].

   a. What is your favorite part?
   b. What is the most challenging part?


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Hughes, H. (2009). *International students using online resources to learn* (Doctoral thesis). Queensland University of Technology, Brisbane, Australia.


Küçüktepe, S. E. (2014). College students' cheating behaviors. Social Behavior and Personality, 42(S1), 101-111.


