

# Stress, adaptation, growth: International students seeking and using scholarly information

## ABSTRACT

International students often face unique challenges in adapting to higher education in the United States, and may benefit from specialized academic support. This visual presentation outlines the findings of a qualitative study exploring international graduate students' adaptation processes as evidenced by their information seeking and use activities. The study was informed by Kim's cross-cultural adaptation theory. Semi-structured interviews developed using critical incident technique were conducted with 30 international graduate students enrolled at three North Carolina universities. Participants described a variety of challenges related to information seeking, including developing a research topic and assessing resources. They generally understood the significance of American academic integrity standards if not the specifics, acknowledging the importance of paraphrasing and proper citation. This visual presentation explores the study findings in the context of Kim's cross cultural adaptation theory, demonstrating that the adaptation process is apparent in information seeking and use. Findings have practical implications for librarians, and other faculty and staff who provide support and training to international students in the United States.

## Keywords

international students, cross-cultural adaptation, research process, academic integrity, information seeking

## INTRODUCTION

During the 2015-2016 academic year, the number of international students enrolled in the U.S. surpassed one million for the first time (Institute of International Education, 2016). Many of these students are faced with adapting to a new system of higher education. They may struggle with conducting the high-level research needed to complete their graduate work, as well as adhering to potentially unfamiliar academic integrity standards. International students make significant contributions to American higher education, providing global perspectives in the classroom (Trice, 2003) that help prepare students for

intercultural work environments (Pandit, 2013). It is important that colleges and universities provide appropriate assistance for these students, and librarians can play a major role by offering specialized support and services. The study provides information to assist with these efforts by exploring the following research questions:

- **RQ1:** How do international graduate students studying in the United States conduct their academic research and writing?
- **RQ2:** How do international graduate students studying in the United States perceive, engage with, and negotiate issues of academic integrity?

This visual presentation will share study findings related specifically to the cross cultural adaptation process and its connection to information seeking and use.

## International Students and the Academic Library

The library and information science literature about international students tends to be descriptive instead of research-based (Click, Wiley, & Houlihan, 2017). The research that does exist indicates that international students use and value the academic library space (Chen & Van Ullen, 2011; Duan, 2016; Liao, Finn & Lu, 2007; Wang, 2008, Yi, 2007). They tend to begin their research on Google (Chen & Brown, 2012; Han, 2012; Morrissey & Given, 2006, Sin, 2015), and need support with the research process as a whole (Chen & Van Ullen, 2011; Han, 2012; Mehra & Bilal, 2006). However, no study has used cross-cultural adaptation theory to explore the research processes of international students, and the ways that the adaptation process is present in information seeking and use. Nor has critical incident technique been previously used to study this population in the context of specific, graduate-level assignments and the information and research processes used to complete them.

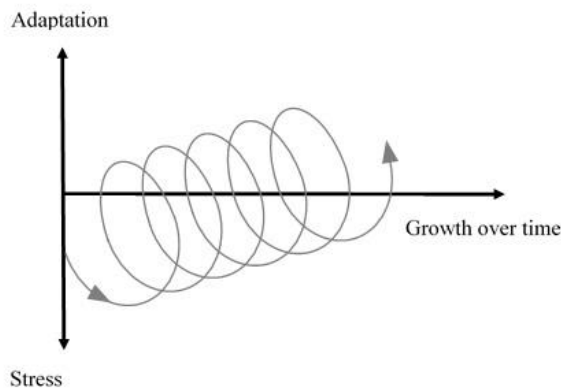
## Cross-cultural Adaptation Theory

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

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**Figure 1. The stress - adaptation - growth dynamic, adapted from Kim (2001, p. 57)**

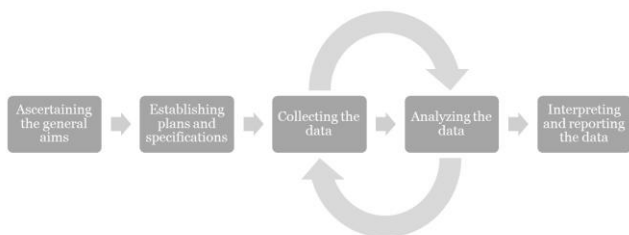
model (Figure 1). The theory also includes a structural model, which includes a set of factors that influence how quickly and easily a person moves towards successful cross-cultural adaptation (e.g., intercultural identity, personality traits, host receptivity). This presentation, however, will focus on the stress-adaptation-growth model.

## METHOD

This qualitative, constructivist study was designed using critical incident technique (CIT). CIT, pioneered by Flanagan (1954), is “a research process that invites respondents to identify events (incidents) they deem significant (critical) for a particular purpose” (Kain, 2007, p. 135). There are five steps in CIT research (Figure 2). Thirty semi-structured interviews were conducted with international graduate students at three North Carolina Universities. Participants hailed from a variety of countries, and all were studying in the U.S. for the first time and spoke English as an additional language. During the interviews, participants described completing a class assignment that required research, and discussed their perceptions of academic integrity in the American context.

## FINDINGS

The cross-cultural adaptation theory's stress-adaptation-growth dynamic was evident in participants' descriptions of their experiences with seeking and using information.



**Figure 2. The five steps of critical incident technique.**

Participants described challenges they faced (stressors) and the ways that they managed these challenges (adaptations). Growth was harder to identify; Kim (2009) calls it “subtle and often imperceptible” (p. 245).

Marisa described the stress of trying to do academic research, and how she adapted by learning techniques from her American classmates. Once she better understood how to find the information she needed, 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 acceptable in U.S. higher education. Both of these students learned to handle problems, and demonstrated cross-cultural adaptation as their perspectives changed and became more complex. Other examples from the study findings include:

- After struggling with unfamiliar research expectations, Robert took advantage a center on campus that offered peer tutoring, academic coaching
- Finding data analysis to be difficult, Karl sought out books in the library on this topic
- Clara worried about inadvertently committing an academic integrity infraction, so she learned to use a variety of methods (e.g., the Google Scholar citation tool) to avoid doing so
- When she first arrived in the U.S., Sally did not understand her professors' academic integrity expectations so she asked for clarification on every assignment until she understood

## CONCLUSION

This study illustrates that the cross-cultural adaptation process permeates all aspects of international students' lives, including the seeking and use of scholarly information as they complete coursework. Thus, research support for this population may be even more important that it seems on the surface. Academic librarians are already committed to helping students develop research and information literacy skills. Now it seems that learning these skills may contribute not only to academic success, but also to overall the cross-cultural adaptation process.

## FORMAT

This visual presentation will be a printed poster, supplemented by audio files. Audience members will have the opportunity to listen to a recording of participants describing their experiences in their own words. Because this is qualitative research, the presentation design will focus heavily on the voices of the participants. Their own words and experiences will be the primary content on the poster, along with a brief outline of the study and its implications.

## REFERENCES

- Chen, Y. H., & Van Ullen, M. K. (2011). Helping international students succeed academically through research process and plagiarism workshops. *College & Research Libraries*, 72(3), 209-235. doi: 10.5860/crl-117rl
- Chen, Y., & Brown, C. (2012). Ensuring Chinese engineering graduate students' academic success: A study at the University of Oklahoma. *Science & Technology Libraries*, 31(3), 320-341. doi: 10.1080/0194262x.2012.705144
- Click, A. B., Wiley, C. W., & Houlihan, M. (2017). The internationalization of the academic library: A systematic review of 25 years of literature on international students. *College & Research Libraries*, 78(3), 328-358. doi: 10.5860/crl.v78i3.16591
- Duan, X. (2016). How they search, how they feel, and how to serve them? Information needs and seeking behaviors of chinese students using academic libraries. *International Information & Library Review*, 48(3), 157-168. doi: 10.1080/10572317.2016.1204179
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327-358. doi: 10.1037/h0061470
- Han, J. (2012). Information literacy challenges for Chinese PhD students in Australia: A biographical study. *Journal of Information Literacy*, 6(1), 3-17. doi: 10.11645/6.1.1603
- Institute of International Education. (2016). *Open Doors report on international education exchange*. Retrieved from <https://www.iie.org/Research-and-Insights/Open-Doors/Open-Doors-2016-Media-Information>
- Kain, D. L. (2007). Critical incident technique. In S. G. Rogelburg (Ed.), *Encyclopedia of industrial and organizational psychology* (pp. 135-137). Thousand Oaks, CA: SAGE Publications. doi: 10.4135/9781412952651.n55
- Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, CA: SAGE Publications.
- Kim, Y. Y. (2009). Cross-cultural adaptation theory. In S. W. Littlejohn & K. A. Foss (Eds.), *Encyclopedia of communication theory* (pp. 244-248). Thousand Oaks, CA: SAGE Publications.
- Liao, Y., Finn, M., & Lu, J. (2007). Information-seeking behavior of international graduate students vs. American graduate students: A user study at Virginia Tech 2005. *College & Research Libraries*, 68(1), 5-25. doi: 10.5860/crl.68.1.5
- Mehra, B., & Bilal, D. (2007). International students' perceptions of their information seeking strategies. In *Proceedings of the 2007 Canadian Association for Information Science* (pp. 1-14). Retrieved from <http://www.cais-acsi.ca/ojs/index.php/cais/issue/archive>
- Morrissey, R., & Given, L. (2006). International students and the academic library: A case study. *Canadian Journal of Information and Library Science*, 30(3/4), 221-239.
- Pandit, K. (2013). International students and diversity: Challenges and opportunities for campus internationalization. In H. C. Alberts & H. D. Hazen (Eds.), *International students and scholars in the United States: Coming from abroad* (pp. 131-141). New York, NY: Palgrave Macmillan.
- Sin, S. C. J. (2015). Demographic differences in international students' information source uses and everyday information seeking challenges. *The Journal of Academic Librarianship*, 41(4), 466-474. doi: 10.1016/j.acalib.2015.04.003
- Trice, A. G. (2003). Faculty perceptions of graduate international students: The benefits and challenges. *Journal of Studies in International Education*, 7(4), 379-403. doi: 10.1177/1028315303257120
- Wang, J. (2008). Toward understanding international students: A study conducted at Middle Tennessee State University. *Southeastern Librarian*, 56(3), 4-10.
- Yi, Z. (2007). International student perceptions of information needs and use. *Journal of Academic Librarianship*, 33(6), 666-673. doi: 10.1016/j.acalib.2007.09.003