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Examining the involvement patterns of international graduate students at Rowan University

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**EXAMINING THE INVOLVEMENT PATTERNS OF INTERNATIONAL
GRADUATE STUDENTS AT ROWAN UNIVERSITY**

by

Amanjot Kaur

A Thesis

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Master of Arts in Higher Education
at
Rowan University
May 3, 2017

Thesis Chair: Burton R. Sisco, Ed.D.

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Dedications

This thesis and master's degree are wholeheartedly dedicated to my entire family. Had they not supported me and provided the patience that they had, I would not be where I am today.

To my husband, who endlessly supports, encourages, and unconditionally loves me. Thank you for your inspiration.

To all the incredible individuals who help improve upon higher education every day.

Life is nothing but an opportunity
for love to blossom.

Osho

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Abstract

Amanjot Kaur

EXAMINING THE INVOLVEMENT PATTERNS OF INTERNATIONAL GRADUATE STUDENTS AT ROWAN UNIVERSITY

2016-2017

Burton R. Sisco, Ed.D.

Master of Arts in Higher Education

The purpose of this study was to examine the involvement patterns of selected international graduate students at Rowan University. This study focused on the involvement patterns of international graduate students associated with their overall college experience, interactions with students and faculty, and the use of campus services designed to promote student satisfaction. This was a total population study since there were 39 international graduate students enrolled at the Rowan University Glassboro, NJ campus during the spring 2017 semester. Quantitative research, through the use of an online survey, was used to collect data. Quantitative data analysis confirmed findings from previous studies having to do with student involvement, academic success, and institutional satisfaction. Furthermore, the findings suggest international graduate students were satisfied with Rowan University's college experience and institutional services.

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Chapter I

Introduction

Each year, the number of international graduate students studying in the United States increases on college campuses. International graduate students constitute 70% of the full-time graduate students in electrical engineering, 63% in computer science, 60% in industrial engineering, and more than 50% in economics, chemical engineering, and mechanical engineering (Anderson, 2013). Research has recognized that student involvement has a positive effect on academic performance, personal and social development, and overall satisfaction. The definition of involvement is diverse and includes investing the time and effort in campus participation, academic studies, extracurricular activities, interaction with faculty, peers, and other institutional personnel, and use of student services (Parikh, 2008). The more involved a student is with academic and extracurricular activities, the greater is the amount of student learning, development, and keeping he/she connected with each other and institutional personnel (Astin, 1975).

There has been an abundance of research focused on the involvement patterns and success rates of non-international students, however research has not examined the involvement patterns of international graduate students. The present research fills the gap by examining the forms of involvement with students, faculty, and the use of campus services. Current research has been achieved primarily on international undergraduate students, most based on the challenges that they confront. There is absence of literature examining the patterns of international graduate student involvement. Pascarella and Terenzini (2005) state that there should be increased attention to the diversity of students

in America because any particular college experience may have a different impact on different types of students.

Statement of the Problem

Higher education institutions promote a range of high quality services and superior academic programs to all student groups, since there is immense competition for faculty, enrollment, and resources. Due to shrinking budgets impacting colleges and universities and the demand to diversify the student body, many international graduate students have been recruited but encounter more obstacles than non-international graduate students, and regard their campus experience to be less encouraging (Pederson, 1991; Zhao, Kuh, & Carini, 2005). According to Parikh (2008), international students “are an understudied population about which administrators often know little” (p. 11). Thus, the presence and importance of international graduate students compels higher education leaders to become better informed about the challenges and conditions that international graduate students experience (Dalton, 1999). Several problems emerge as to how to provide quality assistance. Firstly, it is difficult for international graduate students to succeed without any type of social involvement or academic encouragement. Secondly, institutions may struggle to successfully assist this population (Parikh, 2008). As recently as 1999, Dalton asserted the importance of strengthening the services provided to international students since higher education institutions would benefit, as would the general student body.

Purpose of the Study

The purpose of this study was to examine the involvement patterns of selected international graduate students at Rowan University. More specifically, the study

examined the involvement patterns of international graduate students associated with their overall college experience, interactions with students and faculty, and the use of campus services designed to promote student satisfaction. Data were collected through quantitative research methods and analysis.

Significance of the Study

This study focused on international graduate students were currently enrolled in the 2016-2017 academic year at Rowan University and their involvement patterns with students, faculty, and the use of campus services. The importance of this study is to identify patterns of involvement that lead to academic success and general satisfaction in international graduate students. It is suggested that the findings of this research may help higher education administrators better serve the international graduate student population, along with examining factors that contribute to personal and academic success.

Assumptions and Limitations

This study has been limited to international graduate students at Rowan University's main campus in Glassboro, New Jersey during the spring 2017 semester. A total international graduate student population was used for this study. It was understood that all students were involved in at least one activity on or off the Glassboro campus. Findings were limited to survey responses focused on campus atmosphere, personal goals, and social and academic involvement. It was understood that the survey subjects completed the survey items by answering them honestly and realistically. As a student who truly empathizes with the international student population, researcher bias may be present as well.

Operational Definitions

1. Campus Services: Campus services is a comprehensive phrase used to identify Rowan University's attempt to promote meaningful experiences, which includes campus activities, health and fitness centers, cultural events, athletics, counseling, and academic support.
2. Faculty: Faculty are the teaching staff at Rowan University during the 2016-2017 academic year.
3. International Graduate Student: International graduate students are those who come to the United States from other countries for college. They are identified as international students because they are here on a visa rather than holding a permanent resident card or U.S citizenship. This study focuses on international graduate students who attended Rowan University during the spring 2017 semester.
4. Involvement: Involvement is defined as the experiences students undergo while at Rowan University. It is the amount of physical and psychological energy that is devoted to those experiences (Astin, 1999).
5. Student Satisfaction: Student satisfaction that international graduate students may experience with the endeavor of academic encouragement and social engagement at Rowan University.

Research Questions

This study explored the following research questions:

1. What are the involvement patterns of selected international graduate students at Rowan University?

2. How do selected international graduate students rate their college experience at Rowan University?
3. How do selected international graduate students rate their level of importance for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?
4. How do selected international graduate students rate their level of satisfaction for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?
5. What do selected international graduate students recommend to improve the services provided at Rowan University?

Overview of the Study

Chapter II provides a literature review essential to the study. This chapter examines international students in the United States, the challenges they face, language barriers, transitions and adjustments they experience, and Astin's theory of student involvement. This literature review also refers to relevant studies by Costa-String (2016), Almurideef (2016), and Harris (2013) who conducted studies on international undergraduate students at Rowan University.

Chapter III describes the context and population that was used. The data collection instrument is illustrated in addition to the validity and reliability of the instrument. Finally, how data were collected and analyzed is described.

Chapter IV demonstrates the results of this study derived from the research questions. The results are summarized by means of tables and narrative explanation.

Chapter V recaps the study and vital findings and interprets quantitative results. Conclusions, recommendations for practice and further research are presented.

Chapter II

Review of Literature

Introduction

International students participate in an essential role in sustaining quality science, technology, engineering and mathematics graduate programs at U.S. universities (Redden, 2013). Hagerty (2014), explains the absence of international students would be quite a concern because the presence of these students is a source of revenue for many programs across college campuses in America. In the summer of 2013, there were approximately 1,253,705 active non-immigrants registered on the Student and Exchange Visitor Information System that contributed to the United States economy more than \$21 billion dollars in the 2012 academic year (Hegarty, 2014). Not only do international students contribute to an institution's financial well-being, they also contribute to its personality. Almost every industry within the United States aids from international student attendance, including the purchase of food, clothing, travel, and textbooks (Hegarty, 2014).

For American students, attending a school that has enrolled a considerable number of international students places them in an advantage in the marketplace because the experience helps expand their ethnic understandings and skills in working with people from different settings. Attempts to expand the number of international students on a campus brings the need for specialized programs and services for these students (Zhao et al., 2005). International students often report difficulty in adapting to their new environments, thus facing many new challenges. However, these students still persevere

in obtaining an education in the United States as the supposed benefits still overshadow the challenges faced in its pursuit (Hegarty, 2014).

This literature review examines the importance of involvement of international students in and outside the classroom, with faculty, students, and campus services. This literature review provides information about international students in the United States, the challenges they face, language barriers, transitions and adjustments they experience, social adjustment, and Astin's theory of student involvement. This literature review explores direct studies that relate to improving upon the service to international students. This literature review also examines the crucial role international graduate students play in the United States as a source of talent for researchers and employers.

International Students

International students' journey to another country for higher education always begins at the honey moon stage, with feelings of excitement about starting a new adventure (Mesidor & Sly, 2016). This is the moment where new beginnings are about to occur and the unseen is about to unfold. For some students, it may be the first time they are leaving their home country or traveling on an airplane. For other students, it may be a chance to start over with new environments and people. Depending on the situation, most international students' initial reaction to coming abroad for education is excitement. However, soon they will experience the loss of family and friends. It is even more challenging for international students to make the shift to college because they must also adjust to a different language, culture, lack of social support, solitude, adapt to new roles, and academic difficulties (Harris, 2003). The honey moon stage could equally be

distinguished by disharmony because of cultural differences and misunderstandings, thus leading to the second stage, the hostility stage (Mesidor & Sly, 2016).

According to Mesidor and Sly (2016), the hostility stage is where international students become intolerant of the misunderstandings and misinterpretations they experience with their new culture. In the third stage, the humor stage, the students interact more with others because they have made friends and have started to enjoy their academic activities (Mesidor & Sly, 2016). The home stage, which is the final stage, is described by students feeling established in the new environment or culture because they feel accepted (Mesidor & Sly, 2016). Often, international students fail to consider differences in culture and learning and teaching styles. This results in a form of learning shock that affects their academic performance (Xu, 2015). In addition, there can be misunderstandings with professors over what is expected in classroom settings.

Challenges Faced by International Students

International graduate students seem to place greater emphasis on pressure to produce high quality academic and professional performances (Bang & Montgomery, 2013). Managing these pressures necessitates inner strength and external supports to adjust academically, socially, and culturally (Bang & Montgomery, 2013). According to Arthur (2004), international students have a high burden to thrive academically because academic disappointment could result in shame of themselves, their families, their sponsors, and a loss of financial resources. According to Wang (2009), even with intense pressure resulting from high expectation for performance, international students with tough personalities were negatively correlated to maladjustment issues and experienced fewer adjustment problems. Some characteristics include motivated, organized, proactive

attitudes, positive view of themselves and the world, flexible ideas, and socially flexible minds (Wang, 2009).

Research conducted by Harris (2013) studied international students' attitudes on their experience at Rowan University. The encouragement of academic success to international students was emphasized stating the importance of faculty members and advisors to understand students' needs when faced with challenges. Also of importance was meeting the needs of international students not only academically, but socially and culturally as well (Harris, 2013).

Culture shock. Culture shock is expressed by feelings of frustration, anger, sadness, confusion, anxiety, and depression (Mesidor & Sly, 2016). When international students experience culture shock, they may feel depressed and isolate themselves. DuBois (1956) has stated, "the greater the degree of culture contrast between the home and host country, the greater will be the severity of the adjustment problems" (p. 78). According to Chen and Yang (2014), some common problems faced by international students include lack of support, failure to have open communication, and lack of access to information.

Adjusting to customs and traditions of American society and campus life may clash with the characteristics of personal and cultural identity of international students. They are more likely to describe sensing isolation and loneliness, which can lead to severe unhappiness and diminish their involvement in activities for learning and personal development (Zhao et al., 2005). The challenge is to maintain their own cultural identity along with maintaining a relationship with other groups (Bang & Montgomery, 2013). Cultural aptitude helps international students understand the scope of various cultures by

using cultural empathy with accepting attitudes toward different cultures (Hannigan, 1990). International students realize the need to adjust is crucial because of the impact on their social or economic status, separation from family and social supports, lack of language proficiency, and the feeling of being isolated from their home country (Chen & Yang, 2014).

A consequence of adjusting to a new culture causes some international students to give up identifying with their culture of origin and moving towards identification with the new cultural mores (Zhou, Jindal-Snape, Topping, & Todman, 2008). Cultural mediation is when these students can synthesize both cultures and attain bicultural or multicultural personalities (Zhou et al., 2008). Integration consists of taking part in the student culture, both within and outside the existing context of the learning environment or inside or outside the classroom (Tinto, 1998). According to Lu (2001), some cultures are more prone to autonomy and respect individuals who do not seek assistance when needed. This often leaves international students' feeling stress to avoid student services, leading to lack of involvement.

Learning shock. International students come to the United States to get a better education or they come for the thrill of living in a new environment and culture for a few years, perhaps even more. Seldom do they think about how the professors and peers would behave. This is something that is crucial to the well-being of international students and their academic performance. International students often expect the learning environment to be the same as their environments back home, but when they actually get to experience the classroom, they experience something called learning shock (Xu, 2015).

This learning shock refers to experiences of acute frustration, confusion, and anxiety (Xu, 2015).

According to Xu, international students may have difficulties in adjusting to the different styles the instructor uses and their ability to understand class lectures and test formations. Moreover, there are the different attitudes to the authority of lecturer and text, modes of teacher-student interaction, and criteria for assessment (Xu, 2015). In a study conducted by Zhou and Hyeyoung (2011), participants claimed that their professors were quite professional, supportive, and approachable, which facilitated their academic learning. Having international students on campus gives faculty who are involved in the international student supervision an occasion to increase and improve their perceptions and their thinking by interacting with international cultures (Glass, Buus, & Braskamp, 2013). According to Zhou et al. (2008), there is a culture synergy that can take place, that suggests a mutual reciprocal process where teachers get to learn from students and vice versa about the students' cultural traditions. This way the students feel more welcome because they see someone is there willing to learn about them and even change the way they teach in order to better accommodate their needs. Learning styles, such as auditory, visual, or pragmatic learning can influence these students' learning abilities and comprehension skills (Mesidor & Sly, 2016).

Language barriers. Language can be a barrier, depending on the situation and can hinder learning inside of the classroom. According to Mesidor and Sly (2016), international students face language challenges in the area of listening comprehension and oral proficiency. Listening to someone speak a foreign language and having to listen creates confusion because many times those who are proficient in a language speak at a

faster rate than those who are not proficient can understand. According to Xu (2015), even international students that have studied English for years in their home countries may still struggle with language used by instructors, which may cause them to feel anxiety and stress. Students mention that they need a little more time to reflect on their learning and absorb the information and class materials (Chen & Yang, 2014).

Leong (2015) states that a lack of fluency in the English language causes other adjustment issues and the ability to communicate with peers, leading to miscommunication and misunderstandings. According to Valdez (2015), efforts made by a professor to avoid singling out an international student during class actually excludes the student from an essential classroom activity by not asking questions. For example, the student stated:

The whole semester, even though the professor knows my name, he does not ask me questions because he knows I'm an international student and he knows 'oh this student maybe does not want answer the question because she has an accent or she doesn't know the answer, I don't want to make her embarrassing like that...' (p. 195)

This is an example of misunderstandings, miscommunications, and assumptions made from both points of views. Occasionally, international students regard Americans' friendly social meanings such as "Come on over sometime," "Let's get together soon," and "I will call you" as the beginning of a lasting friendship (Costa-String, 2016). It is difficult for international students to realize that America has an individual-oriented culture, where friendships are not long-lasting (Bulthuis, 1986). As an outcome,

international students involve in social relationships with persons from their particular nationality (Harris, 2003).

This language barrier can be a hurdle in some students' academic success. It is reported that students may not participate in class, instead opting for silence, because of the embarrassment associated with limited English fluency. This can lead to students isolating or self-segregating themselves, which can lead to discrimination by other students (Leong, 2015). According to Parikh (as cited in Costa-String, 2016), many international students stated they felt more comfort and pleasure in large classes, where the professor used a lecture-style monologue, which required little verbal contribution from students.

A study conducted by Almurideef (2016) focused on identifying the challenges faced by international students during their time at Rowan University. Academic success and language skills were reported to be some of the main concerns of international students, along with job opportunities. When asked about campus experiences, three percent of international students reported instructors did not listen to what they had to say and were at times ignored (Almurideef, 2016).

Transitions and Adjustments

Pedagogical adjustment. According to Chen and Yang (2014), it would be helpful if colleges and universities increased the opportunities to experience the host culture and environment inside and outside the classroom. This would help international students feel accepted while helping to expand the worldview of other students in becoming more open-minded to different cultures and styles of teaching. International student involvement in activities that are offered outside of the classroom has been

demonstrated to have a positive effect on international student's sense of belonging and social adjustment (McFaul, 2016).

Classroom interaction is crucial to the theory of student involvement as it leads to greater skill fundamentals and developed aptitudes, which are anticipated to ensue in better academic potential and a qualitatively exclusive educational experience (Karuppan & Barari, 2011). Parikh (2008), discovered international students confirm the predicted irony: good academic performance occurred when there was lower involvement in extracurricular activities and higher involvement in activities that benefit academic performance. Another international student study discovered international students spent most of their time using the computer labs, library, bookstore, and recreation center (Abe, Talbot, & Geelhoed, 1998).

Similarly, Costa-String (2016) reported international students at Rowan University were more involved with more curricular activities than extracurricular activities and spent most of their time studying or working on assignments. According to a participant in Costa-String's study, "more time spent socializing with classmates meant less time on academic work" (p. 85). It was reported there were some international students who would rarely attend a departmental or international club event, play a team sport, and participate in cultural events. Costa-String found international students spent much less time relaxing and socializing since their motivation and focus in college is to be academically successful, which positively effects their course completion and shows in their GPA.

Zhou et al. (2008) state during cross-cultural contact, students perceive themselves in a much broader context – 'little fish in bigger ponds.' This leads to anxiety-

provoking change in identity and self. Group membership can affect individual identity; students may see in-group as favoritism and out-group as derogation (Zhou et al., 2008). Valdez (2015), mentions a student example, “a group of American students, and you are the only foreigner in that group, then you become isolated and you become ignored; you cannot get into their groups or their conversations. I think this is very frustrating” (p. 191). Regrettably, international students marginalized by discrimination will suffer withdrawal and isolation, and will not feel comfortable expressing themselves and communicating with other students. These circumstances are great constraints of involvement (Karrupan & Barari, 2011).

However, when international students have friends of another race or are a part of an interracial friendship, there are significant and positive net effects on racial-ethnic attitudes and values (Rose-Redwood, 2010). Zhou and Hyeyoung (2011) found participants worked hard on peer relationships through interactions with international and American peers outside of class. More specifically, peer collaboration in class significantly enriched participants’ academic learning skills and outcomes.

Social adjustment. According to Zhou et al. (2008), the greater amount of interaction with other students has been associated with fewer academic problems, social difficulties, improved communication, and better adaptation to life overseas for international students. Friendship links are an important factor in how well international students cope with stress. Those who have a strong communal support system are inclined to adapt to college life in their host country more rapidly and successfully. When more international students are in attendance, they are more prone to have networks with related interests whom they converse honestly about their experiences at the institution

(Zhao et al., 2005). Research on international student friendship methods implies they favor friends who are from the same country or region of the world, although interacting with domestic students tends to enrich the general quality of their experience (Zhao et al., 2005). According to Glass and Westmont (as stated in McFaul, 2016), the support of a secure co-national or multi-national network can be a spark for international students to get involved with other students by supplying the courage to consider an unaccustomed culture.

Social aptitude is the ability to manage one's cognition, emotions, and actions by understanding social relationships, creating social skills, and offering supportive and healthy social relationships (Bang & Montgomery, 2013). Costa-String (2016) states, "to better adjust and develop a deeper understanding of the host culture, international students must interact with the native population of the host country they are in" (p. 14). Relationships with host-country nationals are difficult for international students to begin and find support, though they are meaningful to students' assimilation and prosperous acculturation to the institution (McFaul, 2016). Mesidor and Sly (2016) mention the home stage, which is characterized with students learning norms and standards of the new culture, while integrating elements of their home culture into the new one. Similarly, Leong (2015) states students who were better able to assimilate American culture and learn to communicate with Americans will be more successful in avoiding personal problems, meeting life needs, and fulfilling academic demands. In Chen and Yang's (2014) study, they found that 70% of international students believed that the longer they lived in America, the more comfortable they would feel in navigating among different

cultures, which indicates that efforts are being made in learning how to deal with the different cultures in this country.

Furthermore, it is a slightly different challenge for international students who are married, which plays a significant importance in their lives, compared to international students who are single. Married international students are more likely to devote a good portion of their social time in the company of their spouses and may experience reduced opportunities for social interaction with other international or domestic students (Poyrazli & Kavanaugh, 2006).

Astin's Theory of Student Involvement

Student involvement alludes to the aggregate of physical and psychological vitality that a student dedicates to the academic experience (Astin, 1999). Therefore, a highly involved student devotes an abundance of energy to studying, time on campus, student organizations, and interacting with faculty and other students (Astin, 1999). It can be declared that students learn by becoming involved (Astin, 1985). Involvement describes what a student does or how he/she behaves. There must be constant exertion and contribution from the student that produces the desired learning and development outcomes, which relates to why students initially attend colleges and universities (Astin, 1999). Research conducted by Duckworth (2002) reported involvement as a vital aspect in student development; students engaging in campus social events displayed a positive effect in areas such as goal-setting, interpersonal communication, networking with others, and persistence.

Elements that play a part in the student's remaining in college indicated involvement, whereas those that play a part in the student's dropping out indicated a lack

of involvement (Astin, 1999). Residential students have a better prospect than do commuter students of evolving a strong connection and fondness for student life. Working while attending college takes time and energy, though part-time occupations in an on-campus job truly encourages retention (Astin, 1999). There is not just one form of involvement, it takes many forms, such as campus participation, academic studies, extracurricular activities, interaction with faculty, peers, other institutional personnel, and use of student services (Parikh, 2008). As it happens, Tinto (1975) suggests that integration in both the social and academic domains has a favorable influence on student's ambitions and institutional dedication. Not only is it the student's responsibility to make sure he or she is involved, but it is also the institution's obligation to assure student success (Tinto, 1993). An institution's aptitude to keep students is directly linked to its ability to engage, integrate, and involve students in the social and academic campus life (Tinto, 1993). When institutions are designed to stimulate a student's active involvement, this involvement leads to higher academic performance and greater satisfaction. Astin (1999) describes the degree to which students can reach an objective is directly connected to the time and effort students put into attaining the objective.

According to Astin (1999), frequent interaction with faculty, students, and administration leads to higher student satisfaction with institutional experiences. Involvement in activities within and outside of the classroom is intensely linked to contentment with all features of college life. Astin (1985) emphasizes the importance of student involvement with academic and extracurricular activities; the more involved a student is, the stronger the amount of learning and development occurs. Demetriou and Schmitz-Sciborski (2011) declare that satisfaction levels have been found to be one of the

elements that impact the quality and overall value and positively determine student diligence, retention, and graduation rates.

Summary of the Literature Review

International students go through many changes when attending higher education abroad. Initially students are overwhelmed with excitement leading them to not think about the differences in culture or language barriers that may occur. It is only until they experience it they realize changes are needed within in order to adapt to their new surroundings. According to Bang and Montgomery (2013), emotional aptitude is determined by one's emotional experiences, which guide social interaction and behaviors as well as academic and cultural performance. As the enrollment of international graduate students in American colleges and universities increases, there is a necessity to study their involvement patterns in order to fully comprehend the value and advantages of such involvement for both the student and institution (Costa-String, 2016). The review of literature suggests more information is needed about what international graduate students do in college in order to understand if they get involved to polish their experience and, along the way, improve the standard of graduate education for all students (Zhao et al., 2005).

A study that ties involvement patterns with international graduate students not only helps to better understand what activities these students are doing, but also helps determine institutional effectiveness. The study considers the results of research performed by Costa-String (2016), which focused on the involvement patterns of international undergraduate students at Rowan University. Thus, the gap in the knowledge base suggests the need to understand whether international graduate students

are involved with students, faculty, the use of campus services, and to what extent they are reaching personal and academic goals. Using Astin's student involvement theory as a theoretical framework, the research problem of this study focuses on how the involvement patterns of selected international graduate students at Rowan University promote personal and academic growth and development leading to satisfying outcomes.

Chapter III

Methodology

Context of the Study

This research study was conducted at Rowan University on the main campus, which is located in Glassboro, New Jersey. Rowan prospered in recent years since its modest foundation in the early 1920s. With its rapid growth, Rowan now has over 14,000 students, that of which are from 33 states and 19 foreign countries; minority enrollment is 28% (Media and Public Relations, 2015). As a constantly growing institution, Rowan provides a diverse faculty, staff, and students along with offering degrees from the baccalaureate to doctorate levels (Rowan University Mission Statement, 2016). Rowan has developed a School of Biomedical Science & Health Professions, launched a Cooper Medical School of Rowan University in Camden, New Jersey, and obtained the Stratford-based School of Osteopathic Medicine and Graduate School of Biomedical Sciences. Rowan University is presently the second university in the United States to provide both M.D. and D.O. medical programs (Media and Public Relations, 2015).

Not only does Rowan offer several programs of studies and degrees, the institution also offers various ways to get involved on campus. There are a total of 146 clubs and organizations offered, those of which are 115 campus clubs and organizations and 31 Greek Life organizations. Besides clubs and organizations, Rowan offers 8 men's and 10 women's varsity sports (Media and Public Relations, 2015). Rowan has a Division of Student Life, which is divided into 19 departments, some of which include the Academic Success Center, Orientation & Student Leadership Programs, Office of Student Activities, and Chamberlain Student Center that all provide for the students in

their own unique way (Rowan University Student Life, 2016). There is an International Center that is focused on the comfort and productivity of international students' and exchange visitors' experience at Rowan (Rowan University International Center, 2016). There is a specific International Club whose primary purpose is to design activities for its members while acquainting them with the American culture and relating them to people from all over the world (Costa-String, 2016).

Population and Sample Selection

The target population used in this study was composed of international graduate students from Rowan University attending the 2016-2017 scholastic year. The obtainable population was all international graduate students from Rowan University's main campus in Glassboro, New Jersey. The enrollment data of the 2016-2017 international graduate students is comprised of 39 students; thus a total population study was completed. The survey was sent through Qualtrics and was dispatched by means of a link via email to the entire population of international graduate students on Rowan University's main campus in Glassboro, New Jersey.

Instrumentation

Since this study focused on the involvement patterns of international graduate students at Rowan University, a survey was used as the data collection instrument. The survey was developed by Ohio University entitled Student Involvement Study. This survey is implemented yearly by the Office of Institutional Research and given out to all first year students housed in residence halls (Costa-String, 2016). Permission to use and modify this original survey was received on November 10, 2016 (Appendix C). The survey instrument (Appendix B) was developed to determine the involvement patterns of

international graduate students at Rowan University. This instrument consists of three sections, the first one being demographics, which collects background information on the international graduate students. The second section are questions on student involvement, which vary from weekly, monthly, to yearly. This section also asks the students how important they believe each item encompassing involvement is and how satisfied they are with that item. Items focused on the importance and satisfaction are linked to social involvement, academic involvement, campus atmosphere, and personal goals; they were measured by a Likert scale, which varied from very important (1) to not at all important (5) and very satisfied (1) to not at all satisfied (5). Section three consists of questions that each use a different set of Likert scales. Responses varied from definitely right choice (a) to probably wrong choice (e), extremely important (a) to not at all important (d), very satisfactory (a) to very unsatisfactory (e), and definitely yes (a) to definitely not (e). There is also an open-ended question asking whether the student has any recommendations to improve upon the services provided to international graduate students at Rowan University. A Cronbach Alpha coefficient tool in SPSS was calculated for this survey to measure reliability. The Likert scale items examining international student rate of importance with social involvement, academic involvement, campus atmosphere, and personal goals yielded a score of .927. The Likert scale items examining international student satisfaction with Rowan University yielded a score of .905. Alpha coefficients with a value of .70 and above indicate internal consistency and a reliable instrument.

Data Collection

The director of the International Center, Dr. Li Yang, provided assistance in data collection by sending out an email (Appendix B) to the international graduate student population of Rowan University's main campus, asking students to participate in the survey. The email provided an overview of the study along with the purpose of the research. The email stated the survey would take no longer than 10 minutes to complete and included the link to the survey. Approval to proceed with this study was received on March 15, 2017 from the Institutional Review Board of Rowan University (Appendix A).

Data Analysis

The independent variables in this study included country of citizenship, gender, age, ethnic background, current GPA, student status, graduate program, and where the international graduate student resides while attending Rowan University. Information regarding the independent variables were collected in the first section of the survey. The dependent variables included levels and patterns of student involvement and interactions with other students, faculty, use of campus services, and progress in reaching personal goals including the satisfaction with Rowan University. Deviations in student involvement and satisfaction were examined based on each of the independent variables using the Statistical Package for the Social Sciences (SPSS) computer software. Data were analyzed using frequency and descriptive tables. Frequency and descriptive statistics, including frequency distribution, percentages, means, and standard deviations were used to examine the data in regards to the research questions presented in Chapter I.

Chapter IV

Findings

Profile of the Sample

The subjects of this study were Rowan University international graduate students during the spring 2017 semester. The available population was all international graduate students from the Rowan University Glassboro campus in New Jersey. Out of the 39 international graduate students, 23 completed the online survey, yielding a return rate of 60%.

Table 4.1 contains demographic data including student type, country of citizenships, gender, age, ethnic background, current grade point average (GPA), student status, graduate program, and place of residence. The student type was 100% international graduate. The respondents' ages varied from 22 to 35, and 26% were 26 years old. The majority of the respondents surveyed were male. Of the respondents surveyed, 52.2% were from India and 21.7% were from Bangladesh. Out of the 23 surveys, 16 subjects (69.6%) were self-identified as Asian and two subjects (8.7%) were self-identified as White. Ninety-six percent of the international graduate students stated they were full time students. Fifty-two percent of respondents reported living in a residence farther than walking distance to campus. Ten subjects stated that their GPA was at the 3.5 or above range (43.5%). Of the international graduate students surveyed, the most popular graduate program was mechanical engineering (21.7%).

Table 4.1

Demographics of Respondents (N=23)

Variable	Item	<i>f</i>	%
Student Type	International Graduate Student	23	100
Country of Citizenship	Bangladesh	5	21.7
	China	1	4.3
	India	12	52.2
	Kuwait	1	4.3
	Morocco	1	4.3
	Trinidad and Tobago	1	4.3
	Turkey	1	4.3
	Venezuela	1	4.3
Gender	Man	18	78.3
	Woman	5	21.7
Age	22	4	7.4
	23	2	8.7
	24	3	13
	25	2	8.7
	26	6	26.1
	27	2	8.7
	28	1	4.3
	29	1	4.3
	30	1	4.3
	35	1	4.3
Ethnic Background	Asian	16	69.6
	Black/African American	1	4.3
	Hispanic/Latino	1	4.3
	Other	2	8.7
	Prefer not to respond	1	4.3
	White	2	8.7

Table 4.1 (continued)

Variable	Item	<i>f</i>	%
Current GPA	No credits earned	4	17.4
	2.5 to 2.99	3	13
	3.0 to 3.49	6	26.1
	3.5 or above	10	43.5
Full Time Student	Yes	22	95.7
	No	1	4.3
Graduate Program	Business Administration	1	4.3
	Civil Engineering	3	13
	Civil/Environmental Engineering	2	8.7
	College of Engineering	2	8.7
	Computer Science	3	13
	Criminal Justice	1	4.3
	Electrical/Computer Engineering	2	8.7
	Mechanical Engineering	5	21.7
	Pharmaceutical Sciences	4	17.4
Place of Residence	Residence farther than walking distance	12	52.2
	Residence within walking distance	10	43.5
	None of the above	1	4.3

Analysis of the Data

Research question 1. What are the involvement patterns of selected international graduate students at Rowan University?

Table 4.2 contains information describing how many hours a day Rowan international graduate students spent using a computer for academic or personal purposes. The majority of international graduate students, 17.4%, reported spending three to five

hours a day using a computer for academic purposes. Twenty-six percent reported spending only an hour a day for personal purposes.

Table 4.2

Hours Spent Each Day on a Computer (N=23)

Variable	Time	<i>f</i>	%
For Academic/Course Work	0.00	2	8.7
	1.00	1	4.3
	2.00	3	13
	3.00	4	17.4
	5.00	4	17.4
	6.00	1	4.3
	7.00	2	8.7
	8.00	1	4.3
	10.00	1	4.3
	12.00	3	13
	40.00	1	4.3
	For Personal Use	0.00	5
0.50		1	4.3
1.00		6	26.1
2.00		3	13
3.00		3	13
4.00		3	13
6.00		1	4.3
10.00		1	4.3

Table 4.3 contains information describing how many hours per week Rowan international graduate students spent doing certain curricular and extracurricular activities. An overall look at the responses dealing with student involvement levels at Rowan University indicates that the majority of international graduate students were more involved with curricular activities than extracurricular activities. International

graduate students reported spending most of their time studying for classes. Of the international graduate students who took the survey, six (26.1%) reported spending at least 20 hours per week studying. According to the survey responses, involvement with extracurricular activities was low. Sixteen (69.6%) of the students did not participate at the rec center at Rowan University, nor did 91% of international graduate students participate in campus recreation. One hundred percent of the survey respondents did not participate in college productions or performances, fraternities or sororities, residence hall activities, international-related activities, nor any volunteer services.

Table 4.3

Hours Spent Each Week on Curricular and Extracurricular Activities (N=23)

Variable	Time	<i>f</i>	%
Studying for classes	2.00	1	4.3
	6.00	2	8.7
	9.00	1	4.3
	10.00	1	4.3
	12.00	1	4.3
	15.00	2	8.7
	20.00	6	26.1
	25.00	1	4.3
	28.00	1	4.3
	30.00	3	13
	40.00	2	8.7
	48.00	1	4.3
	70.00	1	4.3

Table 4.3 (continued)

Variable	Time	<i>f</i>	%
The Rec Center	0.00	16	69.6
	1.00	2	8.7
	2.00	1	4.3
	3.00	1	4.3
	4.00	2	8.7
	5.00	1	4.3
Campus Recreation	0.00	21	91.3
	2.00	1	4.3
	5.00	1	4.3
College Publications	0.00	21	91.3
	1.00	1	4.3
	3.00	1	4.3
College Productions/ Performances	0.00	23	100
Fraternities/Sororities	0.00	23	100
Professional/ Departmental Clubs	0.00	20	87
	1.00	3	13
Hobbies/Social Clubs	0.00	21	91.3
	3.00	1	4.3
	5.00	1	4.3
Religious Organizations	0.00	21	91.3
	1.00	1	4.3
	2.00	1	4.3
Residence Hall Activities	0.00	23	100
Student Government	0.00	22	95.7
	2.00	1	4.3

Table 4.3 (continued)

Variable	Time	<i>f</i>	%
International-Related Activities	0.00	23	100
Leadership Programs	0.00	22	95.7
	1.00	1	4.3
Volunteer Service	0.00	23	100

Table 4.4 contains information describing how often per month Rowan international graduate students participated in activities. There were eight (34.8%) respondents that reported spending at least four weekends a month on campus. There were seven (30.4%) subjects that reported going out with friends at least twice a month and there were at least five (21.7%) respondents that reported having a conversation with an international student at least twice a month.

Table 4.4

Number of Times Involved in Activities per Month (N=23)

Variable	Time	<i>f</i>	<i>%</i>
Weekends on Campus	0.00	8	34.8
	1.00	1	4.3
	2.00	4	17.4
	3.00	2	8.7
	4.00	8	34.8
Going Out With Friends	0.00	3	13
	1.00	3	13
	2.00	7	30.4
	3.00	2	8.7
	4.00	1	4.3
	5.00	3	13
	6.00	1	4.3
	10.00	1	4.3
	15.00	1	4.3
	20.00	1	4.3
Conversations with International Students	0.00	4	17.4
	2.00	5	21.7
	3.00	2	8.7
	7.00	1	4.3
	10.00	4	17.4
	15.00	2	8.7
	20.00	1	4.3
	25.00	1	4.3
	50.00	3	13

Table 4.5 contains information describing how often Rowan international graduate students were involved in activities during this academic year. Of the respondents, there were 17 (73.9%) students that did not attend a cultural event this

academic year. There were four (17.4%) students that met with their academic advisor at least five times this year and there were at least three (13%) students that conversed with a faculty member six to ten times this year. Of the 23 respondents, 22 (95.7%) have never had a conversation with residence life staff or a student organization advisor.

Conversations about research or scholarships have occurred 30 times for three (13%) students. There are two (8.7%) students that have had dinner or refreshments at a faculty member's home and two (8.7%) students that have went out for refreshments with a faculty member a total of 11 times. Thirteen percent of respondents have met with a career advisor at least five times this academic year and 13% have communicated with faculty via email at least 50 times. There are six (26.1%) students that have been to the library between six to twenty-five times this year.

Table 4.5

Number of Times Involved in Activities This Academic Year (N=23)

Variable	Time	<i>f</i>	%
Attended a Cultural Event	0.00	17	73.9
	1.00	2	8.7
	2.00	3	13
	3.00	1	4.3

Table 4.5 (continued)

Variable	Time	<i>f</i>	%
Conversations with Academic Advisor	0.00	5	21.7
	1.00	2	8.7
	3.00	2	8.7
	4.00	1	4.3
	5.00	4	17.4
	15.00	3	13
	20.00	2	8.7
	30.00	2	8.7
	50.00	2	8.7
Conversations with Faculty Member	0.00	10	43.5
	1.00	1	4.3
	3.00	1	4.3
	5.00	2	8.7
	6.00	3	13
	9.00	1	4.3
	10.00	3	13
	30.00	1	4.3
	365.00	1	4.3
Conversations with Residence Life Staff	0.00	22	95.7
	2.00	1	4.3
Conversations with Student Organization Advisor	0.00	22	95.7
	3.00	1	4.3
Conversations with Other Staff Members	0.00	17	73.9
	2.00	1	4.3
	7.00	1	4.3
	10.00	1	4.3
	15.00	2	8.7
	365.00	1	4.3

Table 4.5 (continued)

Variable	Time	<i>f</i>	%
Conversations about Research/Scholarships	0.00	10	43.5
	2.00	2	8.7
	3.00	2	8.7
	5.00	2	8.7
	10.00	1	4.3
	15.00	3	13
	30.00	3	13
Dinner/Refreshments at Faculty Member's Home	0.00	19	82.6
	1.00	2	8.7
	2.00	1	4.3
Went out for Refreshments with Faculty Member	0.00	21	91.3
	5.00	1	4.3
	6.00	1	4.3
Had a Meal on Campus with Faculty Member	0.00	19	82.6
	1.00	1	4.3
	2.00	1	4.3
	5.00	2	8.7
Communicated with Faculty Member via Email	0.00	10	43.5
	3.00	1	4.3
	5.00	4	17.4
	15.00	2	8.7
	25.00	3	13
	50.00	3	13

Table 4.5 (continued)

Variable	Time	<i>f</i>	%
Talked with a Career Advisor	0.00	11	47.8
	1.00	2	8.7
	2.00	3	13
	3.00	1	4.3
	5.00	3	13
	6.00	1	4.3
	10.00	1	4.3
	20.00	1	4.3
Went to the Library	0.00	5	21.7
	1.00	1	4.3
	2.00	1	4.3
	5.00	1	4.3
	6.00	2	8.7
	10.00	2	8.7
	25.00	2	8.7
	30.00	4	17.4
	40.00	3	13
	50.00	2	8.7

Research question 2. How do selected international graduate students rate their college experience at Rowan University?

Table 4.6 contains information describing international graduate students' satisfaction on choosing Rowan University as their higher education institution. Twenty-two percent of respondents stated Rowan University was definitely the right choice and 35% of respondents stated it was probably the right choice.

Table 4.6

Rowan University Rank of Satisfaction: Attendance (N=23)
(Definitely Right Choice=1, Probably Right Choice=2, Not Sure=3, Probably Wrong Choice=4, Definitely Wrong Choice=5)

Variable	Definitely Right Choice		Probably Right Choice		Not Sure		Probably Wrong Choice		Definitely Wrong Choice	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Attending Rowan University <i>n=19,</i> <i>M=2.11,</i> <i>SD=.875,</i> <i>Missing=4</i>	5	21.7	8	34.8	5	21.7	1	4.3	0	0

Table 4.7 contains information describing the level of importance from international graduate students about graduating from Rowan University. Eleven (47.8%) respondents stated that it was extremely important to graduate from Rowan University and seven (30.4%) respondents stated that it was very important to graduate from Rowan.

Table 4.7

Rowan University Rank of Satisfaction: Graduation (N=23)
(Extremely Important=1, Very Important=2, Somewhat Important=3, Not at all Important=4)

Variable	Extremely Important		Very Important		Somewhat Important		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Graduating from Rowan University <i>n=20,</i> <i>M=1.55,</i> <i>SD=.686,</i> <i>Missing=3</i>	11	47.8	7	30.4	2	8.7	0	0

Table 4.8 contains information about Rowan University’s quality of instruction. Six (26.1%) respondents stated that they were very satisfied with Rowan’s quality of instruction and 10 (43.5%) respondents were somewhat satisfied.

Table 4.8

Rowan University Rank of Satisfaction: Quality of Instruction (N=23)
(Very Satisfactory=1, Somewhat Satisfactory=2, Neutral=3, Somewhat Unsatisfactory=4, Very Unsatisfactory=5)

Variable	Very Satisfactory		Somewhat Satisfactory		Neutral		Somewhat Unsatisfactory		Very Unsatisfactory	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Quality of Instruction at Rowan University <i>n=18, M=1.83, SD=.786, Missing=5</i>	6	26.1	10	43.5	1	4.3	1	4.3	0	0

Table 4.9 contains information regarding whether Rowan’s international graduate students would recommend Rowan University to friends or family. Eight (34.8%) respondents stated they would definitely recommend Rowan and seven (30.4%) respondents stated they would probably recommend Rowan. However, two (8.7%) respondents stated they were not sure if they would recommend Rowan University to friends or family.

Table 4.9

Rowan University Rank of Satisfaction: Recommendation (N=23)
(Definitely Yes=1, Probably Yes=2, Not Sure=3, Probably Not=4, Definitely Not=5)

Variable	Definitely Yes		Probably Yes		Not Sure		Probably Not		Definitely Not	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Recommending Rowan University <i>n=19,</i> <i>M=1.95,</i> <i>SD=1.13,</i> Missing=4	8	34.8	7	30.4	2	8.7	1	4.3	1	4.3

Research question 3. How do selected international graduate students rate their level of importance for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?

Table 4.10 contains information describing international graduate students' level of importance towards social involvement. Items are arranged according to mean scores from most to least positive. According to Table 4.10, 12 (52.2%) respondents rated that it was very important to establish personal relationships with peers at Rowan. Nine (39.1%) respondents stated that it was very important to have a job while enrolled. Respondents also stated that it was important to get involved with student organizations (26.1%), campus activities (26.1%), and cultural events (17.4%).

Table 4.10

Social Involvement Rank of Importance (N=23)

(Very Important=1, Somewhat Important=2, Neutral/Don't Know=3, Somewhat Unimportant=4, Not at all Important=5)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Establishing Personal Relationships <i>n=20,</i> <i>M=1.65,</i> <i>SD=1.04,</i> Missing=3	12	52.2	5	21.7	2	8.7	0	0	1	4.3
Having a Job While Enrolled <i>n=20,</i> <i>M=1.80,</i> <i>SD=.834,</i> Missing=3	9	39.1	6	26.1	5	21.7	0	0	0	0
Interacting with People of Different Races <i>n=20,</i> <i>M=1.90,</i> <i>SD=.852,</i> Missing=3	8	34.8	6	26.1	6	26.1	0	0	0	0

Table 4.10 (continued)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Having Close Friends at Rowan <i>n</i> =20, <i>M</i> =2.10, <i>SD</i> =1.29, Missing=3	8	34.8	7	30.4	2	8.7	1	4.3	2	8.7
Interacting with International Students <i>n</i> =20, <i>M</i> =2.15, <i>SD</i> =.875, Missing=3	5	21.7	8	34.8	6	26.1	1	4.3	0	0
Getting Involved in Student Organizations <i>n</i> =20, <i>M</i> =2.45, <i>SD</i> =1.19, Missing=3	6	26.1	4	17.4	5	21.7	5	21.7	0	0
Getting Involved in campus activities <i>n</i> =20, <i>M</i> =2.60, <i>SD</i> =1.23, Missing=3	6	26.1	2	8.7	6	26.1	6	26.1	0	0

Table 4.10 (continued)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Attending Cultural Events <i>n</i> =20, <i>M</i> =2.65, <i>SD</i> =1.14, Missing=3	4	17.4	4	17.4	8	34.8	3	13	1	4.3
Getting Involved in Religious Activities <i>n</i> =20, <i>M</i> =3.05, <i>SD</i> =1.32, Missing=3	4	17.4	1	4.3	8	34.8	4	17.4	3	13

Table 4.11 contains information describing international graduate students' level of importance towards academic involvement. Items are arranged according to mean scores from most to least positive. According to Table 4.1, 15 (65.2%) respondents stated that the instruction in program courses was very important. Seventeen (73.9%) respondents stated the importance of academic advising at Rowan.

Table 4.11

Academic Involvement Rank of Importance (N=23)
(Very Important=1, Somewhat Important=2, Neutral/Don't Know=3, Somewhat Unimportant=4, Not at all Important=5)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Instruction in Program Courses <i>n=19,</i> <i>M=1.21,</i> <i>SD=.419,</i> Missing=4	15	65.2	4	17.4	0	0	0	0	0	0
Academic Advising <i>n=19,</i> <i>M=1.21,</i> <i>SD=.631,</i> Missing=4	17	73.9	0	0	2	8.7	0	0	0	0
Faculty Availability Outside of Class <i>n=19,</i> <i>M=1.63,</i> <i>SD=.761,</i> Missing=4	10	43.5	6	26.1	3	13	0	0	0	0
Social Contacts with Faculty <i>n=19,</i> <i>M=1.81,</i> <i>SD=.688,</i> Missing=4	6	26.1	10	43.5	3	13	0	0	0	0

Table 4.12 contains information describing international graduate students' level of importance towards campus atmosphere. Items are arranged according to mean scores from most to least positive. According to Table 4.12, 15 (65.2%) respondents stated it was very important to have an adequate academic or intellectual environment and 12 (52.2%) respondents stated it was very important to have an adequate social atmosphere as well. Nine (39.1%) respondents stated it was very important to fit into the campus community.

Table 4.12

Campus Atmosphere Rank of Importance (N=23)
(Very Important=1, Somewhat Important=2, Neutral/Don't Know=3, Somewhat Unimportant=4, Not at all Important=5)

Variable	Very Important		Somewhat Important		Neutral /Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Adequate Academic/ Intellectual Environment <i>n=19,</i> <i>M=1.32,</i> <i>SD=.671,</i> Missing=4	15	65.2	2	8.7	2	8.7	0	0	0	0
Adequate Social Atmosphere <i>n=19,</i> <i>M=1.68,</i> <i>SD=1.16,</i> Missing=4	12	52.2	4	17.4	1	4.3	1	4.3	1	4.3

Table 4.12 (continued)

Variable	Very Important		Somewhat Important		Neutral /Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Fitting into campus community <i>n=19,</i> <i>M=1.79,</i> <i>SD=1.03,</i> Missing=4	9	39.1	7	30.4	2	8.7	0	0	1	4.3

Table 4.13 contains information describing international graduate students' level of importance towards personal goals. Items are arranged according to mean scores from most to least positive. According to Table 4.13, 17 (73.9%) respondents stated making progress toward personal goals was very important, 17 (73.9%) respondents expressed it was very important to manage personal stress, and 16 (69.9%) respondents stated developing personal values and beliefs was very important. Sixteen (69.9%) respondents also stated making progress toward academic goals and personal motivation for academic success was very important.

Table 4.13

Personal Goals Rank of Importance (N=23)
(Very Important=1, Somewhat Important=2, Neutral/Don't Know=3, Somewhat Unimportant=4, Not at all Important=5)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Making progress toward personal goals <i>n=19, M=1.11, SD=.315, Missing=4</i>	17	73.9	2	8.7	0	0	0	0	0	0
Managing personal stress <i>n=19, M=1.11, SD=.315, Missing=4</i>	17	73.9	2	8.7	0	0	0	0	0	0
Developing personal values & beliefs <i>n=19, M=1.16, SD=.375, Missing=4</i>	16	69.6	3	13	0	0	0	0	0	0
Making progress toward academic goals <i>n=19, M=1.16, SD=.375, Missing=4</i>	16	69.6	3	13	0	0	0	0	0	0

Table 4.13 (continued)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Personal motivation for academic success <i>n</i> =19, <i>M</i> =1.16, <i>SD</i> =.375, Missing=4	16	69.6	3	13	0	0	0	0	0	0
Developing self-esteem & confidence <i>n</i> =18, <i>M</i> =1.17, <i>SD</i> =.383, Missing=5	15	65.2	3	13	0	0	0	0	0	0
Developing philosophy of life <i>n</i> =19, <i>M</i> =1.26, <i>SD</i> =.562, Missing=4	15	65.2	3	13	1	4.3	0	0	0	0
Adjusting academically to college <i>n</i> =19, <i>M</i> =1.37, <i>SD</i> =.684, Missing=4	14	60.9	3	13	2	8.7	0	0	0	0
Developing spirituality <i>n</i> =19, <i>M</i> =1.37, <i>SD</i> =.684, Missing=4	14	60.9	3	13	2	8.7	0	0	0	0

Table 4.13 (continued)

Variable	Very Important		Somewhat Important		Neutral/Don't Know		Somewhat Unimportant		Not at all Important	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Adjusting emotionally to college <i>n</i> =19, <i>M</i> =1.63, <i>SD</i> =.831, Missing=4	11	47.8	4	17.4	4	17.4	0	0	0	0
Adjusting socially to college <i>n</i> =19, <i>M</i> =1.79, <i>SD</i> =1.08, Missing=4	10	43.5	5	21.7	3	13	0	0	1	4.3

Research question 4. How do selected international graduate students rate their level of satisfaction for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?

Table 4.14 contains information describing international graduate students' level of satisfaction towards social involvement. Items are arranged according to mean scores from most to least positive. According to Table 4.14, 14 (60.9%) respondents stated they were neutral in attending cultural events and getting involved in religious activities at Rowan. Respondents expressed they were somewhat satisfied with their interactions with international students (34.8%) and not at all satisfied about having a job while enrolled at Rowan (13%).

Table 4.14

*Social Involvement Rank of Satisfaction (N=23)**(Very Satisfied=1, Somewhat Satisfied=2, Neutral/Don't Know=3, Somewhat Dissatisfied=4, Not at All Satisfied=5)*

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Establishing Personal Relationships <i>n</i> =20, <i>M</i> =1.85, <i>SD</i> =.745, Missing=3	7	30.4	9	39.1	4	17.4	0	0	0	0
Having close friends at Rowan <i>n</i> =20, <i>M</i> =1.95, <i>SD</i> =.826, Missing=3	7	30.4	7	30.4	4	17.4	0	0	0	0
Interacting with international students <i>n</i> =20, <i>M</i> =2.15, <i>SD</i> =.875, Missing=3	5	21.7	8	34.8	6	26.1	1	4.3	0	0
Interacting with different races <i>n</i> =20, <i>M</i> =2.30, <i>SD</i> =1.08, Missing=3	5	21.7	7	30.4	6	26.1	1	4.3	1	4.3

Table 4.14 (continued)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Getting involved in student organizations <i>n</i> =20, <i>M</i> =2.50, <i>SD</i> =.761, Missing=3	3	13	4	17.4	13	56.5	0	0	0	0
Getting involved in campus activities <i>n</i> =20, <i>M</i> =2.50, <i>SD</i> =.761, Missing=3	3	13	4	17.4	13	56.5	0	0	0	0
Attending cultural events <i>n</i> =20, <i>M</i> =2.55, <i>SD</i> =.759, Missing=3	3	13	3	13	14	60.9	0	0	0	0
Getting involved in religious activities <i>n</i> =20, <i>M</i> =2.80, <i>SD</i> =.951, Missing=3	3	13	1	4.3	14	40.9	1	4.3	1	4.3

Table 4.14 (continued)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Having a job while enrolled <i>n</i> =20, <i>M</i> =2.80, <i>SD</i> =1.36, Missing=3	4	17.4	5	21.7	5	21.7	3	13	3	13

Table 4.15 contains information describing international graduate students' level of satisfaction towards academic involvement. Items are arranged according to mean scores from most to least positive. According to Table 4.15, eight (34.8%) respondents stated they were very satisfied with instruction in program courses and somewhat satisfied with Rowan's academic advising. Eleven (47.8%) respondents stated they were somewhat satisfied with faculty's availability outside of class and 13% were very satisfied with social contacts with faculty.

Table 4.15

Academic Involvement Rank of Satisfaction (N=23)

(Very Satisfied=1, Somewhat Satisfied=2, Neutral/Don't Know=3, Somewhat Dissatisfied=4, Not at All Satisfied=5)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Instruction in program courses <i>n=19,</i> <i>M=1.79,</i> <i>SD=.855,</i> <i>Missing=4</i>	8	34.8	8	34.8	2	8.7	1	4.3	0	0
Academic Advising <i>n=19,</i> <i>M=1.84,</i> <i>SD=.958,</i> <i>Missing=4</i>	8	34.8	8	34.8	1	4.3	2	8.7	0	0
Faculty availability outside of class <i>n=19,</i> <i>M=2.05,</i> <i>SD=.780,</i> <i>Missing=4</i>	4	17.4	11	47.8	3	13	1	4.3	0	0
Social contacts with faculty <i>n=19,</i> <i>M=2.37,</i> <i>SD=.831,</i> <i>Missing=4</i>	3	13	7	30.4	8	34.8	1	4.3	0	0

Table 4.16 contains information describing international graduate students' level of satisfaction towards campus atmosphere. Items are arranged according to mean scores

from most to least positive. According to Table 4.16, two (8.7%) respondents were somewhat dissatisfied with the academic or intellectual atmosphere and six (26.1%) respondents were neutral on fitting into the campus community. Twenty-two percent of the respondents were very satisfied with the social atmosphere at Rowan University.

Table 4.16

Campus Atmosphere Rank of Satisfaction (N=23)

(Very Satisfied=1, Somewhat Satisfied=2, Neutral/Don't Know=3, Somewhat Dissatisfied=4, Not at All Satisfied=5)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Adequate social atmosphere <i>n=19,</i> <i>M=2.11,</i> <i>SD=.875,</i> <i>Missing=4</i>	5	21.7	8	34.8	5	21.7	1	4.3	0	0
Adequate academic/intellectual atmosphere <i>n=19,</i> <i>M=2.11,</i> <i>SD=.937,</i> <i>Missing=4</i>	5	21.7	9	39.1	3	13	2	8.7	0	0
Fitting into campus community <i>n=19,</i> <i>M=2.11,</i> <i>SD=.737,</i> <i>Missing=4</i>	4	17.4	9	39.1	6	26.1	0	0	0	0

Table 4.17 contains information describing international graduate students' level of satisfaction towards their personal goals. Items are arranged according to mean scores from most to least positive. According to Table 4.17, six (26.1%) respondents stated they were very satisfied with adjusting academically to college and making progress toward career goals. Two (8.7%) respondents stated they were somewhat dissatisfied managing personal stress.

Table 4.17

Personal Goals Rank of Satisfaction (N=23)

(Very Satisfied=1, Somewhat Satisfied=2, Neutral/Don't Know=3, Somewhat Dissatisfied=4, Not at All Satisfied=5)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Adjusting academically to college <i>n=19, M=1.79, SD=.631, Missing=4</i>	6	26.1	11	47.8	2	8.7	0	0	0	0
Making progress toward academic goals <i>n=19, M=1.79, SD=.631, Missing=4</i>	6	26.1	11	47.8	2	8.7	0	0	0	0

Table 4.17 (continued)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Making progress toward personal goals <i>n</i> =18, <i>M</i> =1.89, <i>SD</i> =.583, Missing=5	4	17.4	12	52.2	2	8.7	0	0	0	0
Personal motivation for academic success <i>n</i> =19, <i>M</i> =1.89, <i>SD</i> =.658, Missing=4	5	21.7	11	47.8	3	13	0	0	0	0
Developing personal values & beliefs <i>n</i> =19, <i>M</i> =2.11, <i>SD</i> =.937, Missing=4	4	17.4	11	47.8	3	13	0	0	1	4.3
Developing philosophy of life <i>n</i> =19, <i>M</i> =2.11, <i>SD</i> =1.20, Missing=4	6	26.1	9	39.1	2	8.7	0	0	2	8.7

Table 4.17 (continued)

Variable	Very Satisfied		Somewhat Satisfied		Neutral/Don't Know		Somewhat Dissatisfied		Not at All Satisfied	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Developing self-esteem & confidence <i>n</i> =19, <i>M</i> =2.16, <i>SD</i> =.898, Missing=4	3	13	12	52.2	3	13	0	0	1	4.3
Adjusting socially to college <i>n</i> =19, <i>M</i> =2.21, <i>SD</i> =.713, Missing=4	3	13	9	39.1	7	30.4	0	0	0	0
Developing spirituality <i>n</i> =19, <i>M</i> =2.21, <i>SD</i> =1.27, Missing=4	7	30.4	5	21.7	5	21.7	0	0	2	8.7
Adjusting emotionally to college <i>n</i> =19, <i>M</i> =2.26, <i>SD</i> =.806, Missing=4	3	13	9	39.1	6	26.1	1	4.3	0	0
Managing personal stress <i>n</i> =19, <i>M</i> =2.26, <i>SD</i> =1.10, Missing=4	3	13	12	52.2	2	8.7	2	8.7	0	0

Research question 5. What do selected international graduate students recommend to improve the services provided at Rowan University?

Table 4.18 contains information describing the recommendations international graduate students had to improve the services provided at Rowan University. There was one respondent (4.3%) that recommended better communication by faculty members and another that recommended more collaborations and more contact sharing (4.3%).

Table 4.18

Recommendations to Improve Services Provided at Rowan University (N=23)

Variable	Item	<i>f</i>	%
Recommendations	Better Communication by Faculty Members	1	4.3
	More Collaborations, More Contact Sharing	1	4.3
	None	21	91.3

Chapter V

Summary, Discussion, Conclusions, and Recommendations

Summary of the Study

This study examined the involvement patterns of international graduate students at Rowan University associated with their overall college experience, interactions with students and faculty, and the use of campus services designed to promote student satisfaction. The study further examined what services or activities are most used by international graduate students and their level of importance and satisfaction with social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University.

The survey instrument was used to determine international graduate students' involvement patterns at Rowan, their college experience, level of importance and satisfaction related to their social and academic involvement, campus atmosphere, and personal goals. The survey instrument used in this study is divided into three sections, which include the international graduate students' demographic information, involvement patterns, and overall satisfaction with Rowan University. The available population was all international graduate students from the Rowan University Glassboro main campus during the spring of 2017. Of the 39 international graduate students who received the survey, 23 students responded yielding a 60% response rate. Descriptive statistics were used to analyze the frequencies, percentages, means, and standard deviations using the Statistical Package for the Social Sciences (SPSS) software.

Discussion of the Findings

Research question 1. What are the involvement patterns of selected international graduate students at Rowan University?

Student involvement alludes to the aggregate of physical and psychological vitality that the student dedicates to the academic experience (Astin, 1999). According to Parikh (2008), student involvement takes many forms, which includes time and effort invested in campus participation, academic studies, extracurricular activities, interaction with faculty, peers, other institutional personnel, and use of student services. Quantitative data analysis revealed that international graduate students are involved in both curricular and extracurricular activities at Rowan University. Out of the 23 respondents, 17.4% used a computer for academic and course work between three to five hours a day, 8.7% have had a conversation with an academic advisor, and have been to the library over 50 times this academic year. Four percent have spoken with a faculty member every day this year, have had dinner at a faculty member's home twice this year, have gone out for refreshments with a faculty member six times this year, have had a meal on campus with a faculty member five times this year, and have met with a career advisor about 20 times this year. According to Astin (1999), a highly involved student devotes an abundance of energy to studying, time on campus, student organizations, and interacting with faculty and other students. The findings also confirm a study conducted by Abe, Talbot, and Geelhoed (1998) that discovered international students spent most of their time using the computer labs, library, bookstore, and recreation center.

Astin (1975) emphasized the importance of student involvement with academic and extracurricular activities in higher education institutions because the more involved a

student is in college experiences, the greater is the amount of student learning, student personal development, and satisfaction with the overall college experience. Student involvement in activities that are offered outside of the classroom has been demonstrated to have a positive effect on an international student's sense of belonging and social adjustment (McFaul, 2016). Out of the 23 respondents, 4.3% have spent five hours a week at the rec center, campus recreation, conducting hobbies or social clubs, two hours a week at a religious organization or student government activity, and have attended a cultural event or conversed with a student organization advisor at least three times this academic year. An hour a week is spent on college publications (4.3%), or a professional or departmental club (13%). Thirty-five percent reported spending four weekends a month on campus and 30.4% reported going out with friends at least twice a month. The respondents (13%) revealed they have had a conversation with an international student every day this academic year.

Although Parikh (2008) discovered that international students confirm the predicted irony: good academic performance occurred when there was lower involvement in extracurricular activities and higher involvement in activities that benefit academic performance, that is not the case here. International graduate students at Rowan University are doing well academically while involved in both curricular and extracurricular activities. Forty-three percent of respondents reported having a GPA of 3.5 or higher and 26.1% reported a GPA between 3.0 and 3.49. This finding also do not support Costa-String's (2016) study on international undergraduate students at Rowan University that reported the students were more involved in curricular activities than

extracurricular activities and spent most of their time studying or working on assignments.

Research question 2. How do selected international graduate students rate their college experience at Rowan University?

According to Astin (1999), frequent interaction with faculty, students, and administration leads to higher student satisfaction and institutional experiences.

Regarding the findings dealing with international graduate students' college experience at Rowan University, 21.7% reported they definitely made the right choice in attending Rowan University. Forty-eight percent reported it is extremely important to graduate from Rowan University, 43.5% reported they are somewhat satisfied with the quality of instruction at Rowan University, and 34.8% stated they would definitely recommend Rowan University to family or friends. An institution's aptitude to keep students is directly linked to its ability to engage, integrate, and involve students in the social and academic campus life (Tinto, 1993). Tinto (1993) states when institutions are designed to stimulate a student's active involvement, this involvement leads to higher academic performance and greater satisfaction.

Research question 3. How do selected international graduate students rate their level of importance for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?

Zhou et al. (2008) states the greater amount of interaction with other students has been associated with fewer academic problems, social difficulties, improved communication, and better adaptation to life overseas for international students. According to the survey responses dealing with social involvement, 52.2% reported

establishing personal relationships with peers at Rowan University was very important. Thirty-nine percent reported having a job while enrolled was very important, and interacting with different races (34.8%) was very important. According to McFaul (2016), the support of a co-national or multi-national network can be a spark for international students to get involved with other students by supplying the courage to consider an unaccustomed culture. Getting involved in religious activities or attending cultural events was of least importance, however, as 17.4% reported it was very important.

Data showing responses dealing with academic involvement revealed instruction in program courses (65.2%) to be very important. Academic advising (73.9%) and faculty availability outside of class (43.5%) was also very important. Social contacts with faculty was of least importance, however, as 26.1% reported it was very important. Harris (2013) emphasized the encouragement of academic success to international students stating the importance of faculty members and advisors to understand students' needs when faced with challenges. Meeting the needs of international students is important not only academically, but socially and culturally as well (Harris, 2013).

According to Zhou et al. (2008), there is a culture synergy that can take place, suggesting a mutual reciprocal process where teachers get to learn from students and vice versa about the students' cultural traditions. Survey responses dealing with campus atmosphere revealed adequate academic or intellectual atmosphere (65.2%) was very important along with adequate social atmosphere (52.2%). Fitting into the campus community was of least importance, however, as 39.1% reported it was very important.

Research conducted by Duckworth (2002) has reported involvement as a vital aspect in student development; students partaking in campus social events displayed a positive effect in areas such as goal-setting, interpersonal communication, networking with others, and persistence. Quantitative data concerning personal goals exhibited progress towards personal goals and managing personal stress (73.9%) to be very important. Adjusting academically to college (60.9%) was also very important and of least importance was adjusting socially to college, however, 43.5% shared it was still very important.

Research question 4. How do selected international graduate students rate their level of satisfaction for social involvement, academic involvement, campus atmosphere, and personal goals at Rowan University?

According to Astin (1999), there must be constant exertion and contribution from the student that produces the desired learning and development outcomes. Regarding the survey responses dealing with social involvement, 39.1% reported they were somewhat satisfied with establishing personal relationships with peers at Rowan University. Having close friends at Rowan University (30.4%) was rated as very satisfactory and interacting with international students (34.8%) was rated somewhat satisfactory. Getting involved in student organizations and campus activities both received a neutral rating at 56.5%. Having a job while enrolled was least satisfying, however, as 34.8% were very satisfied.

Having international students on campus gives faculty who are involved in the international student supervision on occasion to increase and improve their perceptions and their thinking by interacting with international cultures (Glass, Buus, & Braskamp, 2013). Data showing responses dealing with academic involvement revealed instruction

in program courses and academic advising, both at 34.8%, were very satisfactory. Faculty available outside of class (47.8%) was somewhat satisfactory and social contact with faculty was least satisfying, however, as 30.4% were somewhat satisfied.

According to Costa-String (2016), in order to develop a deeper understanding of the host culture and better adjust, international students must interact with the native population of the host country they are residing. Survey responses dealing with campus atmosphere revealed adequate social atmosphere as 34.8% were somewhat satisfactory. Adequate academic or intellectual atmosphere (39.1%) was rated somewhat satisfactory as well and fitting into the campus community was least satisfying, however, as 39.1% rated it to be somewhat satisfying.

Quantitative data concerning personal goals exhibited adjusting academically and making progress toward academic goals, both at 47.8%, somewhat satisfying. Fifty-two percent of respondents shared making progress toward personal goals was somewhat satisfying. Forty-eight percent were somewhat satisfied with their personal motivation for academic success, and 52.2% were somewhat satisfied with managing personal stress. According to Zhou et al. (2008), friendship links are an important factor in how well international students cope with stress. Those who have a strong communal support system are inclined to adapt to college life in their host country more rapidly and successfully.

Research question 5. What do selected international graduate students recommend to improve the services provided at Rowan University?

Zhou and Hyeyoung (2011) found peer collaboration in class significantly enriched participants' academic learning skills and outcomes. Four percent recommended

better communication by faculty members, more collaborations, and more contact sharing. Some of the problems faced by international students include lack of support, failure to have open communication, and lack of access to information (Chen & Yang, 2014). According to Chen and Yang (2014), it would be helpful if institutions provided the opportunities to experience culture and environment inside and outside the classroom. This would help international students and other students in becoming more open-minded to different cultures and styles of teaching. In a study conducted by Almurideef (2016), although most international students were satisfied with their overall experience at Rowan University, it was illustrated that the students desired more information about housing, academic programs, job opportunities, culture, and language prior to beginning at Rowan.

Conclusions

This study has found just how impactful involvement is on international graduate students' overall college experience, interactions with students and faculty, and the use of campus services designed to promote student satisfaction. The data presented suggest international graduate students are equally involved with curricular and extracurricular activities such as studying on their computers or at the library, meeting with academic or career advisors, staying in contact with faculty and students, attending clubs, events, and participating in student organizations. The findings suggest international graduate students are satisfied with Rowan University's college experience and institutional services.

The results of this study confirmed the findings in prior studies having to do with involvement, academic success, and institutional satisfaction. Even though the majority

of students reported high rates of satisfaction with Rowan, more efforts in international graduate student involvement should be arranged and executed to fortify these students' experiences, thus growing the population of international graduate students.

Recommendations for Practice

The following presents recommendations for practice in order to examine the involvement patterns of international graduate students associated with college experience, interactions with students and faculty, and the use of campus services inspired by this study and the available knowledge base presented in the Literature Review:

1. More resources should be invested in the International Center, which should include working with other departments and organizations.
2. The International Center should especially work closely with academic and career advisors to increase awareness of programs and career opportunities, and interaction with faculty.
3. Implementing an orientation course, similar to required courses for first-year students. This would introduce campus resources, facilities, recommendations, and what to expect from faculty.
4. Integrating programming and student services for international students, international graduate students, and domestic undergraduate and graduate students should increase interactions between students.

Recommendations for Further Research

1. A mixed-method study including a survey and multiple interviews should be achieved in order to more completely examine the involvement patterns of

international graduate students associated with college experience, interactions with students and faculty, and the use of campus services.

2. An additional quantitative study at a public research institution, comparable to this study, should be achieved and increased to include international graduate students from all campuses in order to have a complete appreciation of the involvement patterns of international graduate students.
3. Research is needed to assess more inclusive activities geared towards STEM graduate programs to see if international graduate students are more likely to attend.

References

- Abe, J., Talbot, D. M., & Geelhoed, R. J. (1998). Effects of peer program on international student adjustment. *Journal of College Student Development, 39*(6), 539-547.
- Almurideef, R. (2016). *The challenges that international students face when integrating into higher education in the United States*. Theses and Dissertations. Paper 2336.
- Anderson, S. (2013). *The importance of international students to America*. Retrieved April 15, 2017, from <http://www.nfap.com/pdf/New%20NFAP%20Policy%20Brief%20The%20Importance%20of%20International%20Students%20to%20America,%20July%202013.pdf>
- Arthur, N. (2004). *Counseling international students*. New York: Kluwer Academic/Plenum.
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. W. (1985). Involvement: the cornerstone of excellence. *Change, 17*, 34-39.
- Astin, A. W. (1999). Student involvement: A development theory for higher education. *Journal of College Student Development, 40*(4), 518-529.
- Bang, H., & Montgomery, D. (2013). Understanding international graduate students' acculturation using Q Methodology. *Journal of College Student Development, 54*(4), 343-360. The Johns Hopkins University Press. Retrieved April 15, 2017, from Project MUSE database.
- Bulthuis, G. (1986). The foreign student today: A profile. In K. R. Pyle (Ed.), *Guiding the development of foreign students* (pp. 19-28). *New Directions for Student Services, 36*. San Francisco, CA: Jossey-Bass.
- Chen, D., & Yang, X. (2014). Striving and thriving in a foreign culture: A mixed method approach on adult international students' experience in U.S.A. *Journal of Education and Training Studies, 2*(3), 16-25.
- Costa-String, K. C. (2016). *Involvement patterns of international students and their overall college experience*. Theses and Dissertations. Paper 2111.
- Dalton J. C. (1999) The significance of international issues and responsibilities in the contemporary work of student affairs, in J.C. Dalton (Ed.), *Beyond borders: How international developments are changing student affairs practice* (pp. 3-11). *New Directions for Student Services, 86*. San Francisco, CA: Jossey-Bass.

- Demetriou, C., & Schmitz-Sciborski, A. (2011). Integration, motivation, strengths and optimism: Retention theories past, present and future. In R. Hayes (Ed.), *Proceedings of the 7th National Symposium on Student Retention* (pp. 300–312). Norman, OK: The University of Oklahoma.
- DuBois, D. (1956). *Foreign students and higher education in the United States*. New York: Carnegie Endowment for International Peace.
- Duckworth, L. W. (2002). *International student leadership involvement and cross-cultural adjustment: Two case studies*. (Order No. 3045979, Georgia State University). ProQuest Dissertations and Theses, 208-208. Retrieved from <http://ezproxy.rowan.edu/login?url=http://search.proquest.com/docview/305526885?accountid=13605> (305526885).
- Glass, C., Buus, S., & Braskamp, L. (2013). *Uneven experiences: What's missing and what matters for today's international students*. Retrieved from <http://international.illinois.edu/faculty/docs/Report-on-International-Students.pdf>
- Hannigan, T. P. (1990). Traits, attitudes, and skills that are related to intercultural effectiveness and their implications for cross-cultural training: A review of the literature. *International Journal of Intercultural Relations*, 14, 89-111.
- Harris, C. (2013). *Attitudes on the experience of international students at Rowan University*. (Unpublished master's thesis). Rowan University, New Jersey.
- Harris, K. A. (2003). *International students in cross-cultural transitions: A narrative inquiry*. (Order No. 3125125). Available from Dissertations & Theses @ Rowan University; ProQuest Dissertations & Theses Global. (305217957). Retrieved from <http://ezproxy.rowan.edu/login?url=http://search.proquest.com/docview/305217957?accountid=13605>
- Hegarty, N. (2014). Where we are now--The presence and importance of international students to universities in the United States. *Journal of International Students*, 4(3), 223-235.
- Karuppan, C. M., & Barari, M. (2011). Perceived discrimination and international students' learning: An empirical investigation. *Journal of Higher Education Policy and Management*, 33(1), 67-83.
- Leong, P. (2015). Coming to America: Assessing the patterns of acculturation, friendship formation, and the academic experiences of international students at a U.S. college. *Journal of International Students*, 5(4), 459-474.
- Lu, M. M. (2001). *International students and the university support services*. Buffalo, NY: University at Buffalo.

- McFaul, S. (2016). International students' social network: Network mapping to gage friendship formation and student engagement on campus. *Journal of International Students*, 6(1), 1-13.
- Media and Public Relations. (2015). Rowan fast facts 2015-2016. Retrieved from <http://www.rowan.edu/fastfacts/>
- Mesidor, J. K., & Sly, K. F. (2016). Factors that contribute to the adjustment of international students. *Journal of International Students*, 6(1), 262-282.
- Parikh, M. (2008). *The relationship between student engagement and academic performance: An exploration of the paradox of international undergraduates*. (Order No. 3307680). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (220005924). Retrieved from <http://ezproxy.rowan.edu/login?url=http://search.proquest.com/docview/220005924?accountid=13605>
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Pederson, P. B. (1991). Counseling international students. *Counseling Psychologist*, 19(1), 10-58.
- Poyrazli, S., & Kavanaugh, P. R. (2006). Marital status, ethnicity, academic achievement, and adjustment Strains: The case of graduate international students. *College Student Journal*, 40(4), 767-780.
- Redden, E. (2013). Foreign Student Dependence. Retrieved April 15, 2017, from <https://www.insidehighered.com/news/2013/07/12/new-report-shows-dependence-us-graduate-programs-foreign-students>
- Rose-Redwood, C. R. (2010). The challenge of fostering cross-cultural interactions: A case study of international graduate students' perceptions of diversity initiatives. *College Student Journal*, 44(2), 389-399.
- Rowan University International Center. (2016). Retrieved from <http://www.rowan.edu/home/international-center>
- Rowan University Mission Statement. (2016). Retrieved from <http://www.rowan.edu/home/about>.
- Rowan University Student Life. (2016). Retrieved from http://www.rowan.edu/studentaffairs/main_office/
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21(2), 167–177
- Valdez, G. (2015). U.S. higher education classroom experiences of undergraduate Chinese international students. *Journal of International Students*, 5(2), 188-200.
- Wang, J. (2009). A study of resiliency characteristics in the adjustment of international graduate students at American universities. *Journal of Studies in International Education*, 13, 22-45.
- Xu, L. (2015). Transitional challenges faced by post-secondary international students and approaches for their successful inclusion in classrooms. *International Journal for Leadership in Learning*, 1(3), 1-28.
- Zhou, F. Y., F. C., & Hyeyoung, B. (2011). Understanding of international graduate students' academic adaptation to a U.S. graduate school. *International Education*, 41(1), 76-94.
- Zhao, C., Kuh, G. D., & Carini, R. M. (2005). A comparison of international student and American student engagement in effective educational practices. *Journal of Higher Education*, 76(2), 209.
- Zhou, Y., Jindal-Snape, D., Topping, K., & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, 33(1), 63-75.

Appendix A

Institutional Review Board Approval

IRB Chair Person: Harriet Hartman

IRB Director: Sreekant Murthy

Effective Date: 3/15/2017

eIRB Notice of Approval

Title: Examining the Involvement Patterns of International Graduate Students at Rowan University

Submission Status: Approved

Approval Date: 3/15/2017

Appendix B

Recruitment Letter and Survey Instrument

Dear **International Graduate Student**,

I would like to invite you to participate in the **International Graduate Student Involvement Survey**. This survey is being conducted as a component of my Master's thesis in Higher Education Administration at Rowan University. The intention of this research is to examine the involvement patterns of international **graduate** students with students, faculty, and campus services that promote student satisfaction.

This study has been approved by Dr. Li Yang, the director of the international center as there are no risks or discomforts associated with this survey and all responses will be kept anonymous.

Below is a link to the International Graduate Student Involvement Survey. Please click the link to begin the survey, which will take no more than 10 minutes of your time. For any questions, please contact Amanjot Kaur at kaura9@students.rowan.edu.

Thank you for completing the survey.

Amanjot Kaur

Graduate Intern, Office of Career Advancement
Program Coordinator, 21st CCLC Community Learning Center Program
Master of Arts, Higher Education Administration
Rowan University, May 2017

RESERVED FOR IRB APPROVAL
STAMP
DO NOT REMOVE

Version #: 1
Version Date: 1/21/17

International Graduate Student Involvement Survey

Online Survey (Alternate Consent)

You are invited to participate in this online research survey entitled International Graduate Student Involvement Survey. You are included in this survey because you are a current Rowan University international graduate student. The number of subjects to be enrolled in the study will be 39 students. The principal Investigator of the study is Dr. Burton Sisco. The Co-Investigator of the study is Amanjot Kaur.

The survey may take approximately 10 minutes to complete. Your participation is voluntary. If you do not wish to participate in this survey, do not respond to this online survey. Completing this survey indicates that you are voluntarily giving consent to participate in the survey.

The purpose of this research study examine involvement patterns of international graduate students with other students, faculty, and the use of campus services designed to promote student satisfaction.

There are no risks or discomforts associated with this survey. There may be no direct benefit to you, however, by participating in this study, you may help us understand the variable that impact academic performances of international graduate students, leading to improve student success.

Your response will be kept confidential. We will store the data in a secure computer file and the file will be destroyed once the data has been published. Any part of the research that is published as part of this study will not include your individual information. If you have any questions about the survey, you can contact Dr. Sisco at sisco@rowan.edu or Amanjot Kaur at kaura9@students.rowan.edu.

Please complete the checkbox below.

To participate in this survey, you must be 18 years or older. Place a check box here

Completing this survey indicates that you are voluntarily giving consent to participate in the survey

I. Demographics

1. Are you an **international graduate** student?
 - a. Yes
 - b. No

2. What is your country of citizenship?

3. What is your gender identity?
 - a. Man
 - b. Woman
 - c. Another gender identity, please specify:

 - d. I prefer not to respond

4. What is your age?

5. What is your racial or ethnic identification?
 - a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Hispanic or Latino
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. Other
 - h. I prefer not to respond

6. Current GPA:
 - a. No credits earned
 - b. 1.99 or below
 - c. 2.0 – 2.49
 - d. 2.5 – 2.99
 - e. 3.0 – 3.49
 - f. 3.5 or above

7. Are you a full-time student?
 - a. Yes
 - b. No

8. What graduate program / school are you a part of?

9. Which of the following best describes where you are living while attending college?
- Dormitory or other campus housing (not fraternity or sorority house)
 - Fraternity or Sorority house
 - Residence (house, apartment, etc.) within walking distance to the institution
 - Residence (house, apartment, etc.) farther than walking distance to the institution.
 - None of the above

II. International Graduate Student Involvement

How much time do you spend per week doing certain activities?

_____ 10. How many hours did you spend each week studying for your classes during this academic year?

How many of the following activities did you participate in per week?

For the following list of activities, place a check mark (✓) on the first line for those in which you participated. For those you check, please indicate the number of hours you participated each week during this academic year in the space to the right.

Check	Hours	
_____	_____	11. The Rec Center
_____	_____	12. Campus Recreation (Rowan Sports Clubs, Fitness classes, Intramurals, Aquatics)
_____	_____	13. College Publications (The Whit, Yearbook)
_____	_____	14. College Productions or Performances (e.g. theater, band)
_____	_____	15. Fraternities, Sororities
_____	_____	16. Professional or Departmental Clubs (e.g., International Student Club)
_____	_____	17. Hobbies or Social Clubs
_____	_____	18. Religious Organizations (e.g. Catholic Campus Ministry, Chabad at Rowan, Chi Alpha Christian Fellowship)
_____	_____	19. Residence Hall Activities (e.g. Hall Council, social activities, workshops)
_____	_____	20. Student Government (e.g. Student Senate, Interfraternity Council)
_____	_____	21. International-Related Activities
_____	_____	22. Leadership Programs (e.g. Leadership Rowan)
_____	_____	23. Volunteer Service (e.g. Habitat for Humanity, Circle K)

How much time do you spend per month doing certain activities?

_____ 24. How many weekends each month do you spend on campus?
 _____ 25. How many times do you go out with friends each month?

_____ 26. How many conversations with international students have you had in an average month?

How much time do you spend per year doing certain activities?

_____ 27. How many cultural events did you attend during this academic year?

28. How many conversations about educational plans, problems, or progress did you have with the following people during this academic year?

_____ Academic Advisor

_____ Faculty Member

_____ Residence Life Staff Member

_____ Student Organization Advisor

_____ Other Staff Member

_____ 29. How many conversations about faculty research and scholarship have you had with faculty during this academic year?

30. During this academic year, how many times did you do the following:

_____ Have dinner or refreshments at a faculty member's home?

_____ Go out for refreshments with a faculty member?

_____ Have a meal on campus with a faculty member?

_____ Communicate with a faculty member via e-mail?

_____ 31. How many times have you talked with a career advisor or attended a program concerning your career during this academic year?

_____ 32. How many times have you been to the library this academic year?

33. On average, how many hours each day do you spend on a computer?

_____ For academic and course work

_____ For personal use

First, please rate how important each item is to you here at Rowan University by circling the best response. Second, rate how satisfied you are with each item here at Rowan University by circling the best response.

	Importance					Satisfaction				
	<i>Very Important</i>	<i>Somewhat Important</i>	<i>Neutral/Don't Know</i>	<i>Somewhat Unimportant</i>	<i>Not at all Important</i>	<i>Very Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Neutral/Don't know</i>	<i>Somewhat Dissatisfied</i>	<i>Not at all Satisfied</i>
Social Involvement										
34. Establishing Personal Relationships with Peers at Rowan University	1	2	3	4	5	1	2	3	4	5
35. Having Close Friends at Rowan University	1	2	3	4	5	1	2	3	4	5
36. Getting Involved in Student Organizations	1	2	3	4	5	1	2	3	4	5
37. Getting Involved in Campus Activities	1	2	3	4	5	1	2	3	4	5
38. Attending Cultural Events on Campus	1	2	3	4	5	1	2	3	4	5
39. Interacting with International Students	1	2	3	4	5	1	2	3	4	5
40. Interacting with People of Different Races	1	2	3	4	5	1	2	3	4	5
41. Getting involved in Religious Activities	1	2	3	4	5	1	2	3	4	5
42. Having a job while enrolled	1	2	3	4	5	1	2	3	4	5
43. Other _____	1	2	3	4	5	1	2	3	4	5
Academic Involvement										
44. Instruction in My Program Courses	1	2	3	4	5	1	2	3	4	5
45. Faculty Availability Outside of Class	1	2	3	4	5	1	2	3	4	5
46. Social Contacts with Faculty	1	2	3	4	5	1	2	3	4	5
47. Academic Advising	1	2	3	4	5	1	2	3	4	5
48. Other _____	1	2	3	4	5	1	2	3	4	5

First, please rate how important each item is to you here at Rowan University by circling the best response. Second, rate how satisfied you are with each item here at Rowan University by circling the best response.

	Importance					Satisfaction				
	<i>Very Important</i>	<i>Somewhat Important</i>	<i>Neutral/Don't Know</i>	<i>Somewhat Unimportant</i>	<i>Not at all Important</i>	<i>Very Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Neutral/Don't know</i>	<i>Somewhat Dissatisfied</i>	<i>Not at all Satisfied</i>
Campus Atmosphere										
49. Adequate Social Atmosphere	1	2	3	4	5	1	2	3	4	5
50. Adequate Academic/Intellectual Atmosphere	1	2	3	4	5	1	2	3	4	5
51. Fitting into the Campus Community	1	2	3	4	5	1	2	3	4	5
52. Other _____	1	2	3	4	5	1	2	3	4	5
Personal Goals										
53. Making Progress Toward Personal Goals	1	2	3	4	5	1	2	3	4	5
54. Making Progress Toward Academic Goals	1	2	3	4	5	1	2	3	4	5
55. Adjusting Academically to College	1	2	3	4	5	1	2	3	4	5
56. Adjusting Socially to College	1	2	3	4	5	1	2	3	4	5
57. Adjusting Emotionally to College	1	2	3	4	5	1	2	3	4	5
58. Managing Personal Stress	1	2	3	4	5	1	2	3	4	5
59. Developing Self-Esteem & Confidence	1	2	3	4	5	1	2	3	4	5
60. Developing Personal Values & Beliefs	1	2	3	4	5	1	2	3	4	5
61. Developing a Philosophy of Life	1	2	3	4	5	1	2	3	4	5
62. Developing Spirituality	1	2	3	4	5	1	2	3	4	5
63. My Personal Motivation for	1	2	3	4	5	1	2	3	4	5
64. Other _____	1	2	3	4	5	1	2	3	4	5

III. Satisfaction with Rowan University

Please respond by placing the letter corresponding to the response that best describes your feelings in the blank provided.

65. How sure are you that you made the right choice in attending Rowan University?
- | | |
|----------------------------|----------------------------|
| a. Definitely Right Choice | d. Definitely Wrong Choice |
| b. Probably Right Choice | e. Probably Wrong Choice |
| c. Not Sure | |
66. How important is it to you that you graduate from Rowan University?
- | | |
|------------------------|-------------------------|
| a. Extremely Important | c. Somewhat Important |
| b. Very Important | d. Not at all Important |
67. How would you rate the quality of instruction at Rowan University?
- | | |
|--------------------------|----------------------------|
| a. Very Satisfactory | d. Somewhat Unsatisfactory |
| b. Somewhat Satisfactory | e. Very Unsatisfactory |
| c. Neutral | |
68. Would you recommend Rowan University to your family/friends?
- | | |
|-------------------|-------------------|
| a. Definitely Yes | d. Probably Not |
| b. Probably Yes | e. Definitely Not |
| c. Not Sure | |
69. Do you have any recommendations to improve the services provided to international graduate students at Rowan University?
-

Thank you for taking the time to complete this survey!

Appendix C

Permission to use Survey Instrument



Kaur, Amanjot <kaura9@students.rowan.edu>

Ohio University survey instrument approval

2 messages

Kaur, Amanjot <kaura9@students.rowan.edu>

Wed, Nov 9, 2016 at 6:09
PM

To: willifor@ohio.edu

Good evening,

My name is Amanjot Kaur and I am a masters student in Higher Education Administration at Rowan University. I am conducting a research study about the involvement patterns of international graduate students with other students, faculty, and on or off campus services at Rowan University. Your Ohio University survey instrument entitled Student Involvement Study will allow me to determine international graduate student involvement patterns. I would like to ask if I can get copyright approval to use your survey instrument and if it can be reproduced as an appendix?

Thank you for your time.

--

Amanjot Kaur

Rowan University MA Higher Education Administration

Williford, Michael <willifor@ohio.edu>

Thu, Nov 10, 2016 at 10:28 AM

To: "Kaur, Amanjot" <kaura9@students.rowan.edu>

Dear Amanjot,

Yes, you have permission to use the instrument, as long as you give proper attribution of its source in any reporting of results.

Best wishes,
Michael Williford, PhD
Associate Professor, Counseling and Higher Education
301m Alden Library
Ohio University
Athens, OH 45701
(740) 593-1056
michael.williford@ohiou.edu