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# University internationalization as a method of human capital development

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University Internationalization as a Method of Human Capital Development

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DISSERTATION

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for the degree of Doctor of Business Administration  
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DEFENSE COMMITTEE:

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### **Abstract**

University internationalization involves a complex set of initiatives that provide students and faculty with opportunities to gain global perspectives and intercultural skills which can enhance human capital. Typically, these activities are evaluated in terms of participation numbers or financial costs. But little attention is paid to understanding the intangible benefits of internationalization activities. This study aims to understand the benefits of international educational experiences and determine whether they can be considered investments from a human capital perspective. This mixed methods study involved qualitative interviews and a quantitative survey of over 400 students and faculty at a university. The results demonstrated that some methods of internationalization, such as study abroad and international or intercultural coursework, had significant and positive relationships with benefits such as engagement and institutional commitment. However, other experiences such as having interactions with individuals from different cultural backgrounds, showed significant but negative relationships with expected benefits such as engagement and professional development. This study provides empirical evidence to help university leaders in determining the best ways to invest limited resources in internationalization activities. Further research is needed to more clearly understand why some methods of internationalization are better than others in developing student and faculty, from a human capital perspective.

*Keywords:* university internationalization, human capital development

## Introduction

University internationalization has become an explicit, articulated, institution-wide strategic priority (Gao, 2015). However, it faces increasing challenges due to limited resources and a changing political landscape. Internationalization of higher education is commonly understood to mean the process of integrating an international/intercultural dimension into the teaching, research and service elements of an institution (Altbach & Knight, 2007). The 2006 International Association of Universities (IAU)<sup>1</sup> survey indicated that 73 percent of the participating higher education institutions assigned high priority to internationalization, 23 percent medium priority and only 2 percent low priority (de Wit, 2009). To operate successfully in the increasingly globalized environment, academic institutions must continue to foster a commitment to internationalization and make significant efforts to integrate the international dimension into key areas of operation (Gao, 2015). Institutional challenges in the internationalization of higher education consist of a lack of financial resources, scarcity of human resources, and educational structure (Zolfaghari, Sabran, & Zolfaghari, 2009). Internationalization strategies are clearly important for universities; however, limited institutional resources and the current political climate pose significant challenges to its successful implementation.

As the higher education industry becomes more competitive and university resources become scarcer, securing resources for internationalization efforts will become increasingly difficult. Leslie, Slaughter, Taylor, and Zhang, (2012) based on resource dependence theory, found that institutions facing budget cuts tend to engage into academic capitalism to search for

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<sup>1</sup> Knight, Jane, 2005, IAU Global Survey on Internationalization of Higher Education, reported in *Internationalization of Higher Education: New Directions, New Challenges*, retrieved from [https://www.iau-aiu.net/IMG/pdf/key\\_results\\_2005\\_1.pdf/](https://www.iau-aiu.net/IMG/pdf/key_results_2005_1.pdf/)



supplementary revenue streams in the market (Bugandwa Mungu Akonkwa, 2009). Moreover, with an increasingly tense political climate within the U.S. and growing nationalistic agenda, critics of internationalization insist that the focus should be on the U.S. first. This leads to even higher competition for resources within university budgets and an even more pronounced need to demonstrate the benefits and payoffs of internationalization efforts. Without more conclusive evidence of the payoffs of internationalization, securing resources for these activities will become increasingly difficult.

The resources that are allocated to university internationalization are spread across a broad array of activities and it is difficult to know which of these activities has the greatest returns. While there is no agreed upon definition, Elkin, Devjee, and Farnsworth (2005) suggest, university internationalization should “aim to create values, beliefs and intellectual insights in which both domestic and international students and faculty participates and benefit equally. They should develop global perspectives, international and cultural and ethical sensitivity along with useful knowledge, skills and attitudes for the globalized market place”. Rationale for university internationalization vary by institution but may include desired benefits such as increasing global awareness of students, improving the quality of teaching and learning, strengthening research and institutional knowledge, enhanced prestige for the institution, and diversified and increased revenue potential (Seeber, Cattaneo, Huisman, & Paleari, 2016). Prestigious, selective U.S. colleges use international programs to provide international and cross-cultural perspectives for their students and to enhance their curricula (Hayward & Siaya, 2001). With such a wide array of internationalization goals and methods and limited resources to support them all, it is difficult to know which investments make the biggest impact.

Most of the focus to-date has been on understanding how university internationalization

efforts impact the whole university or institution, which can be considered the macro level. For example, Elkin, Farnsworth, and Templer, (2008) developed an 11-dimension model to help universities measure their ideal versus current performance in internationalization efforts focused on the macro level and based on opinions of university leadership. And Ayoubi and Massoud, (2007) examined the international achievements versus strategic intent at 117 universities and developed a matrix to compare international mission to international action. Similarly, in a study by Delgado-Marquez, Escudero-Torres, and Hurtado-Torres (2013), university internationalization (as measured by percentages of international students and staff) was established as a predictor of institutional reputation for the top 50 universities in the World Reputation Ranking (2011), (Delgado-Marquez et al, 2013). While these studies help define various aspects of internationalization from the macro view, they do not help us understand how international efforts may benefit the individual faculty and students who are involved in them, the micro view.

Perhaps, the benefits of internationalization need to be assessed differently. Because a university is the sum of its parts, perhaps the best way to understand real benefits is to study the impact at the individual level and how those benefits also affects the institution. Kotler and Fox (1995) stated that the institution is the sum of opinions, ideas, and impressions that prospective students have of the institution and their opinion about the image of the institution is formed from word of mouth, past experience, and marketing activities of the institution (Ivy, 2001) as cited by María Cubillo, Sánchez, and Cerviño, (2006). This study will investigate the micro view, the benefits of internationalization activities to individual faculty and student participants, and how those benefits also impact the institution.

The returns on university internationalization efforts are difficult to measure and are

largely assumed. While traditional internationalization efforts may enhance the competitiveness, prestige, and strategic alliances of a university, it is rarely a profit-making activity (Altbach & Knight, 2007). It is also challenging to quantify the true costs and returns associated with university internationalization activities, because the greatest returns are intangible benefits. Because return on investment is typically understood by evaluating the financial inputs and outputs of a particular activity, attempting to apply a return on investment analysis on university internationalization would not fully capture the intangible returns. Perhaps, a better foundation from which to investigate these returns is to leverage human capital theory to assess how international education activities can serve as a method of human capital development.

My research interest lies in understanding how university internationalization efforts serve as a method of human capital development, in delivering benefits to the individual participants (faculty and students) and how those benefits affect the university that invested in those efforts. Human capital, defined by Theodore Schultz as “the knowledge and skills that people acquire through education and training as being a form of capital, and this capital is a product of deliberate investment that yields returns” (Nafukho et al., 2004, p. 11) as cited by Zula and Chermack, (2007). Human capital theory provides solid grounding for assessing the benefits of internationalization activities to individual participants and how those benefits affect the universities that invest in them.

## **Literature Review**

### **Theoretical Foundation**

Gary Becker (1975) defined the basic notion of human capital as skills acquisition, and that skills acquisition can be achieved through education and training. Human capital

development benefits the organization from a productivity standpoint, and benefits the individual workers with improved performance (Bae & Patterson, 2014). Some of the intangible benefits of human capital development include improvement in well-being at work as a result of additional schooling and training and takes the form of higher status, with more flexibility or more interesting assignments or self-fulfillment, or job satisfaction. The intangible benefit of human capital development can mean improved working conditions rather than improved salary (Lazear & Shaw, 2007). Workers with more education or training, tend to be less often unemployed than those without it (Becker, 1993). From an organizational standpoint, there are two primary reasons to invest in human capital development including an expected increase in productivity and some form of financial return. Evidence of the link between training and productivity has been established (Bartel, 2000). And Hashimoto (1994) and Berg (1994) demonstrated a difference between the U.S., Japanese and German companies within the automotive industry, finding that inferior performance of U.S. companies is attributable to a lack of training activity (as cited by Bae & Patterson, 2014).

Becker (1993), defined three types of training or knowledge, which are directly related to rate of return and human capital. They are: 1) on-the-job training – “learning new skills and perfecting old ones while on the job” (p. 31); they can be general or specific; 2) schooling – “an institution specializing in the production of training, as distinct from a firm that offers training in conjunction with the production of goods” (p. 51); and 3) other knowledge – any other information that a person obtains to increase their command of their economic situation (Zula & Chermack, 2007). The internationalization activities assessed in this study can be considered a combination of all three types of training and knowledge.

**Internationalization as a Method of Human Capital Development.** There are

numerous methods to improve human capital, which range from formal education to on-the-job learning or firm-provided training (Machin & Vignoles, 2005; Zula & Chermack, 2007).

International experience is a form of human capital sought after by employers wishing to better manage international supply chains, engage an international customer base, and negotiate increasingly complex and unfamiliar business relationships across the globe (Poza, 2014).

University internationalization activities can serve as methods of developing human capital, by exposing students and faculty to academic experience that can enrich their engagement, professional development and performance. Campus-based internationalization initiatives that can serve as forms of human capital development include study-abroad experiences, curriculum enrichment via international studies majors or area studies, strengthened foreign-language instruction, and sponsorship of foreign students to study on campus (Hayward & Siaya, 2001). This study will focus on methods of internationalization including study abroad, participating in intercultural interactions both on campus and virtually, and participating in international or intercultural coursework.

To better understand the benefits of internationalization efforts, seven hour-long interviews were conducted with faculty and staff experts involved in different methods of internationalization. The interview method and details are presented at the end of this paper (Appendix A). Each of these individuals described the benefits of their involvement with internationalization activities at the university, and the benefits gained by the university as a whole. The results of these interviews helped reveal both the methods of internationalization and the benefits of those activities to faculty and students, as well as the institution. Based on those interviews, this study will focus on methods of internationalization including: faculty leading and students participating in education abroad programs; faculty and students experiencing

intentional interactions with individuals from a different country or cultural background; and international/intercultural coursework and foreign language study from the perspective of faculty teaching those courses as well as the students participating in them. These methods described in the following section, will serve as the independent variables in this study. The benefits described in the interviews will serve as the dependent variables and will be defined in more detail in the following section.

### **Types of Internationalization**

**Education Abroad.** Education or study abroad can serve as an excellent method of human capital development for student participants as well as for faculty who lead them and teach in them. Colleges and universities tout the benefits that students can obtain from study abroad programs, by encouraging participants to build their foreign language abilities, cultural sensitivities, and familiarity with alternative problem solving strategies (Pozo, 2014).

Laboratory experiments in social psychology purport to show that individuals who have lived abroad are more creative and better at tasks such as negotiating (Maddux and Galinsky 2009) as cited by Pozo (2014).

Study abroad participants including faculty who lead them and students who participate in them are exposed to other languages, cultures, and ways of life which can translate into benefits from a career development standpoint. Bourke (2000) found enhanced career prospects and higher status were implied in studying abroad; with similar findings from Qureshi (1995) and Lin (1997), as cited by Maria Cubillo et al (2006). Future employers are the true customers (Kotler and Fox, 1995) because they will “buy” the product (trained students), and they are the ones who judge the validity of those experiences according to their perception about program

quality, the institution's prestige, and country image (María Cubillo et al., 2006). In a study by King and Young (2016), the authors stated that 97% of respondents found their study abroad experience to be worth the extra cost, and 44% of them reported using their international expertise in their most recent job. Another study by the American Institute for Foreign Study (AIFS) found that 86% of the academic year participants felt that study abroad was a worthwhile investment in their future (AIFS, 1988).

This study will assess long term and short-term study abroad experiences. Long term study abroad experiences include any programs that are greater than eight weeks of study, but do not result in a degree from a foreign institution. Long-term education abroad programs may include exchange programs, faculty-led (or non-faculty led) study abroad programs, or other formats. Short-term study abroad programs are typically faculty-led, less than 8 weeks in length and often include a preparatory course on the home campus prior to travel. Short-term study abroad programs are most often led by a faculty member and are usually focused on a topic associated with the travel destination.

**Intercultural Interactions.** More often, people are being expected to engage in interpersonal interactions with individuals from cultures other than their own in social, academic and business settings. Reasons for this phenomenon include developments in the global marketplace, increases in international tourism, affirmative action policies, changes in school curricula in response to demands for cultural sensitivity, changes in immigration policies, and the movement of international students. (Shuter, 1987). As universities continue to grow their international student populations, intercultural interactions are even more frequent.

Experience in intercultural situations plays a major role in intercultural learning, and is referred to as intercultural interaction (Funke 1995). Funke distinguishes between indirect

interaction, through the media, for example, and direct interaction, when meeting people from another culture and talking with them. Face-to-face situations, conversation and language are the typical characteristics of this direct interaction (Berger and Luckmann, 1966) as cited by Bartel-Radic (2006).

From a human capital development perspective, experience with intercultural interactions, cross-cultural understanding and language skills are seen as predictors of success in business (Seligman, 1999). Within a multinational corporation, employees are often supported in gaining skills to navigate intercultural interactions more effectively. The effect of agentic behavior (characterized by assertiveness, industriousness, and ambition) in these interactions is thriving, which increases an employee's learning, satisfy the need for development, expands vitality and positive emotional states as well as benefits the very organization by means of creativity and innovations. (Rozkwitalska, Basińska, Chmielecki, Przytuła, & Sułkowski, 2016).

This study focuses on two different types of intercultural interactions: on campus and online. With growing international student population on campus, more domestic students and faculty are faced with intercultural interactions every day. In the classrooms, in study or project groups, in residence halls, and all over campus, students and faculty are meeting and engaging with those from cultures and backgrounds different from their own. These interactions can be enlightening and they can also be challenging, however, they present tremendous opportunities to learn and build valuable skills. The online interactions are typically arranged by a faculty member for the specific purposes of giving students an opportunity to engage with students in a foreign classroom. Interactions are supported through technological connections and may include connecting two classrooms for online, virtual seminars and lectures; student-to-student projects or discussions; or other facilitated exchanges. The use of online communication



increases as organizations continue to adapt and utilize new technology. Fujimoto, Bahfen, Fermelis, and Härtel, (2007) stressed the importance of learning to properly manage online engagement, stating that value dissimilarities across cultures could manifest in online environments and produce negative outcomes such as increased costs and reduced productivity. Understanding how faculty and students can benefit from intercultural interactions on-campus or online, is one of the goals of this study.

**International/cultural coursework.** Human capital can also be developed through international education within targeted coursework. Examples of this type of coursework include international studies courses that generally deal with world area or country specific courses, thematic courses dealing with a particular topic such as world poverty or comparative literature, and international aspects of particular disciplines such as economics or political science. This also includes substantive instruction about other societies and cultures, including foreign language education, training of international affairs specialists to carry out internationally focused tasks and the education of foreign students (Lambert, 2012).

Students' most common exposure to other cultures is in foreign language courses. However, students who take foreign language courses enroll for on average one or two while they are in college, few progress on to higher levels. Language faculty stress the value of exposure to language training because it serves as the best way to gain insight into another culture (Lambert, 2012).

Speaking a foreign language is rewarded in the labor market. The earnings of college graduates who speak a foreign language are higher than the earnings of those who do not (Saiz & Zoido, 2005). Estimates of the impact of bilingualism on earnings are relatively small (2%-3%)

and compare unfavorably with recent estimates on the returns to one extra year of general schooling (8%-14%), which may help explain current second- language investment decisions of monolingual English speakers in the United States. The returns may be higher for individuals in management and the business services occupations, and they seem to be higher for individuals who learn a second language (Saiz & Zoido, 2005).

This study will address international and intercultural courses which can include foreign language courses, international and comparative studies courses, cross-cultural and intercultural communication courses, and other courses with a heavy emphasis on global perspectives. We will seek to understand the benefits to both faculty and students of teaching or participating in these types of courses.

**Benefits of Internationalization.** Investing in university internationalization activities such as education abroad, facilitating intercultural interactions, international and intercultural coursework are expected to lead to benefits for the participants (including students and faculty), as well as the institution. The focus of this study is to assess the intangible benefits experienced at the individual level through engagement, professional development, performance and commitment to the organization.

Human capital inputs such as on-the-job training, job specific training, formal education, and other knowledge, has proven to increase productivity, wages, and organizational income (Zula & Chermack, 2007). Human capital theory can be analyzed by both individual and organizational perspectives, which can conflict with each other in some points. From the individual worker's perspective, human capital theory provides the principles of individual accumulation, costs, and the returns of human capital, and the notion of earning profiles. From

the organizational perspective, human capital theory presents the ideas about productivity, the labor market, labor mobility, turnover, costs and benefits, and the risks of investment (Bae & Patterson, 2014). For the purposes of this study, the focus will be how internationalization methods benefit individual participants and how those benefits also impact the organization.

**Engagement.** Engagement can be defined as one's sense of purpose and focused energy that is evident to others through the display of personal initiative, adaptability, effort and persistence directed toward the organization's goals (Macey & Schneider, 2008). People equity is comprised of three factors including alignment, capabilities and engagement. Engagement within this context goes beyond work or job satisfaction, beyond commitment, to a higher level of advocacy. Employees serve as ambassadors for the organization (Schiemann, 2007).

From the interviews with on-campus experts in internationalization, several participants talked about how their involvement in international activities lead to very personal benefits, including feelings of engagement and excitement. For example, one interviewee stated, "Personally, through this work I have come to know individuals, cultures, frameworks of thought and ways of approaching life that I would not have gotten to know as well if I weren't in this position...and that changes you." Similarly, another interviewee said of his experience, "(These activities) are very exciting...so that's what motivated me...I saw myself as an ambassador, you know, to both sides". One interview participant described her feeling about her role almost as a calling, "(My role) is totally what I was meant to do...it's a perfect alignment of my background...I love business, I love language, and I love culture, and (this experience) brings it all together". In addition, an interviewee stated of his experience, "I learn so much all the time...it really is invigorating". Based on sentiments from the interview participants, participation in internationalization activities appears to influence engagement.

**Professional Development.** Human capital development in the form of educational attainment is positively related to managerial advancement (Tharenou et al., 1994), salary progression (Bretz and Judge, 1994; Judge et al., 1995; Powell and Butterfield, 1994, 1997; Stroh et al., 1992) and assessments of promotability (Sheridan et al., 1997) as cited by Wayne, Liden, Kraimer, and Graf, (1999). Exposure to foreign markets enhances the potential for learning, including technological, market and social learning (Yeoh, 2004).

Professional development for this study will be defined as the ability to expand ones' perceived career opportunities and the ability to make oneself more promotable. One interviewee described longer-term effects of international activities as "employability and learning global perspectives" which benefit not only the students but also the university. Another interviewee stated the reasons for his involvement in international activities included, "personal and professional development... (my experience) was quite enlightening and opened doors for me". One interviewee also stated that the ability for faculty to participate in international activities served as a huge recruitment strategy, "DePaul was an attractive place to come". These benefits include recruitment of new faculty, and the retention and development of existing faculty. An interviewee claimed, "...experiencing new things and strategies in the field of international education, particularly in leadership...I see it as a way of positioning myself for my next step". The interview participants provided clear indication that participation in internationalization activities will lead to higher levels of professional development, through a perception of better career opportunities and promotability.

**Performance.** People are motivated to put forth effort if they expect that the effort will lead to good performance, and that the effort will be instrumental in attaining valued outcomes (Katzell and Thompson, 1990) as cited by Wayne et al (1999). Development from a performance management perspective is the accumulation and application of new knowledge and skills over time, including the capacity to view the world through a more-informed and inclusive perspective (Mone and London 2009). Employees put forth more effort in performing their job tasks if they believe that the good performance will result in both intrinsic and extrinsic rewards (Wayne et al., 1999).

Participation in internationalization activities made both faculty and staff feel as though they were more effective in their respective roles as leaders, teachers, students, and team players, and more able to resolve conflict. One interviewee saw his role in international activities as enabling him to "...become more effective, better informed, and experience new things". Another interviewee felt that his involvement in international activities lead to significant improvement in performance, "The more I was exposed to different parts of the world, the better I was in the classroom". Based on interview participants' responses, involvement in internationalization activities may have an effect on in-role performance.

**Institutional Commitment.** International learning can be viewed as a complex resource of an organization that can be used to create competitive advantage and ultimately, superior performance in international markets (Yeoh, 2004). Internationalization efforts can provide learning opportunities to enhance human capital for the individual faculty and students involved in them, as well as the institution as a whole, through institutional commitment.

The benefits of students and faculty participating in internationalization efforts can range from enhancing faculty recruitment, development and retention efforts, to building affinity and

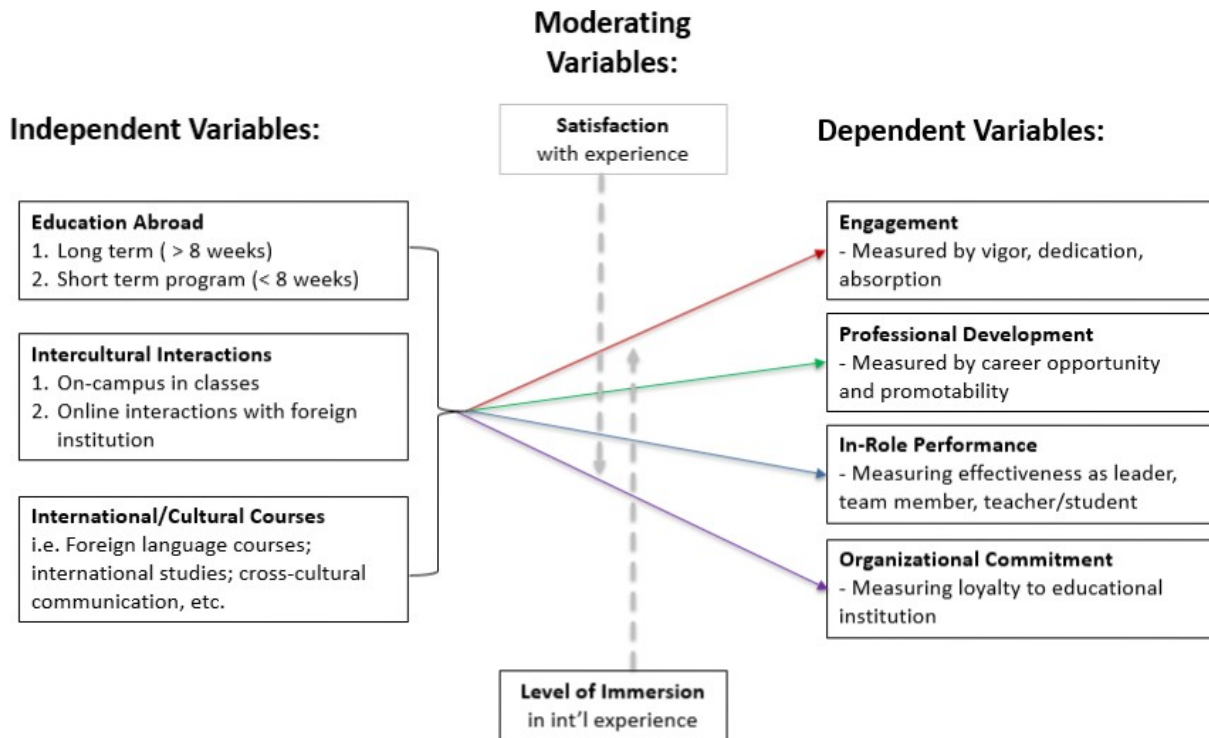
loyalty among student participants. One interviewee stated that because of the opportunities for international involvement available at the university, it would be difficult for people to leave. Another interviewee stated, “I feel like this is a noble profession, the work we do affects communities throughout the world both here in Chicago, on campus, back home when they return as alums, it’s a soft diplomacy in a way”. An interviewee talked about the bonds created by students who study abroad together, “it creates bonds of friendship that last way beyond the program itself, and that’s good for university fundraising, or giving back or various things...the university should find a way to leverage those connections”. Based on interview participant responses, participation in international activities may have an effect on the commitment students and faculty feel toward their institution.

**Moderating Factors.** This study will evaluate the moderating effects of two variables: satisfaction with international experience and level of immersion in the experience. Several of the interview participants became impassioned as they spoke about their involvement with international experiences, referring to them as transformative, life-changing, and meaningful. To understand if this emotional response can influence the benefits received from participating in internationalization activities, we will evaluate it in two ways: by asking about the level of satisfaction with the experience and the level of immersion within the experience.

**Level of Satisfaction.** Prior research on customer loyalty programs has demonstrated that satisfaction has a moderating effect on the relationship between the customer experience with the rewards or benefits received (Keh & Lee, 2006). Similarly, the level of satisfaction with an international education experience can either enhance or diminish the benefits received from this experience. If international educational experiences are thought of as a method of developing human capital, then satisfaction with those experiences might have an effect on the

benefits received. Effectiveness in learning, which can be considered a form of human capital development, is highly related to the satisfaction experienced by the learner or individual (Cassel, 1968). The excitement and contagion of discovery for the further quest of knowledge has important implications for facilitating satisfaction in the learner (Cassel, 1968). Mone and London (2009) found that a predictor of engagement is the extent to which employees are satisfied with their opportunities for career progression and promotion. This study will seek to understand if a participant's level of satisfaction with their international experience will moderate the effect of the benefits they receive.

**Level of Immersion.** Level of immersion or participation refers to the extent of effort that a student or faculty member invests in the experience. A high level of immersion is essential for consumers to close the physical and mental gap between themselves and the context, and therefore plays a key role in making an experience intense, memorable and more rewarding (Pine & Gilmore, 1998). Active participation is essential for both students and faculty learning, to drive the greatest levels of satisfaction with the experience (Cassel, 1968). This study will seek to understand if a participant's level of immersion in participating or leading international experiences will moderate the effect of the benefits they receive.

*Figure 1: Proposed Theoretical Model*

## Hypothesis Development

Returning to the stated research questions, this study aims to test the proposed theoretical model to understand how university internationalization efforts serve as a method of human capital development, in delivering benefits to the individual participants (faculty and students) and back to the university that invested in those efforts. The individual and organizational benefits will serve as the dependent variables, the internationalization efforts will serve as the independent or predictor variables, and level of satisfaction and level of immersion will be utilized as moderating variables. Because there is limited research available on the different methods of internationalization, there is not sufficient evidence to justify the differences between them. An interesting line of future inquiry might be to instigate the differential impact of the methods of internationalization on the benefits. Therefore, the hypotheses for this study will be



as follows:

H1a: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on engagement, and that relationship will be positively moderated by level of satisfaction with the experience.

H1b: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on engagement, and that relationship will be positively moderated by level of immersion with the experience.

H2a: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on professional development, and that relationship will be positively moderated by level of satisfaction with the experience.

H2b: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on professional development, and that relationship will be positively moderated by level of immersion with the experience.

H3a: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on performance, and that relationship will be positively moderated by level of satisfaction with the experience.

H3b: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on performance, and that relationship will be positively moderated by level of immersion with the experience.

H4a: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on organizational commitment, and that relationship will be positively moderated by level of satisfaction with the experience.

H4b: University internationalization efforts (including education abroad, intercultural interactions and international/cultural coursework) will have a positive effect on organizational commitment, and that relationship will be positively moderated by level of immersion with the experience.

**Measures.** The measures used to operationalize the variables included established scales to test the dependent variables and a simple Likert scale to test the moderating variables. The independent variables were tested with a simple ‘yes’ or ‘no’ question, asking participants to indicate which types of experience they had. Within a few of the independent variables, such as ‘Education Abroad’, additional information was gathered to understand the length of that experience including long-term or exchange program (> 8 weeks) or short-term programs (< 8 weeks). Similarly, within the variable ‘Intercultural Interactions’, additional information was gathered to understand whether those interactions were part of a course on campus or an online experience. The ‘Other Experiences’ option asked participants to fill in an open text box asking for more details on what type of other international experiences they had which might include academic experiences outside their current institution, or non-academic experiences. Participants were also able to indicate if they had no experience in international or intercultural activities by selecting ‘No experience’.

The dependent variables were tested with established scales that were modified slightly to

for the purposes of this study. In efforts to manage survey length, the top three factor loading items were used within each scale. Engagement was measured using scale items established by Schaufeli and colleagues (2002), which tests participants' vigor, dedication and absorption. As an example of the modifications I made to the items, for engagement, I added the following language to each item, "Because of my exposure to international experiences through DePaul..." Professional development was measured in terms of perceived career opportunities and promotability. A scale to test career opportunity was established in a working paper by Wayne et al., and promotability was measured through a scale developed by Thacker and co-authors (1995). In-role performance was measured through a scale developed by Williams and colleagues (1991), and organizational commitment was tested through a scale developed by Allen and co-authors (1990).

The moderating variables included satisfaction with experience and immersion within experience, which were tested on a 7-point Likert scale. Participants rated each item accordingly. Additional information was gathered to address control variables including participant age, gender, type (undergraduate student, graduate student, or faculty), frequency of international travel, citizenship, and employment status.

*Table 1: Measurement*

Variable	# Items	Source
Engagement	9 items (3 vigor, 3 dedication, 3 absorption)	Schuaufeli et al. 2002, "The measurement of engagement and burnout."
Professional development	6 items (3 career opportunity, 3 promotability)	Wayne et al., working paper
Performance	3 items	Williams et al. 1991, "Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors"
Institutional commitment	3 items	Allen et al. 1990, "The measurement and antecedents of affective continuance, and normative commitment"
Satisfaction	3 items	Canmann et al. 1979, The Michigan Organizational Assessment Questionnaire
Immersion	1 item	Simple Likert scale rated from (1= not immersive, to 7 = extremely immersive)

## Method

**Data Collection.** In order to test the proposed model and hypotheses, I surveyed students and faculty at a large, private university located in an urban setting. The goal of this survey was to understand the individual and institutional benefits of university internationalization efforts as a method of human capital development. I proposed that participation in various types of university internationalization (independent variables) created benefits (dependent variables) for the individual participants and the university, and those relationships were moderated by the level of satisfaction and level of immersion with the experience. I created two versions of the survey, so the wording was appropriate for distinct audiences: students and faculty. I administered and distributed the survey via email through an online platform, Qualtrics. Respondents had approximately four weeks to complete the survey, and they were sent several email reminders to participate.

**Sample.** The target sample included students and faculty, both those with known international experience and those whose experience was unknown. The participants with known experience were identified through lists of former study abroad participants, faculty directors, those enrolled in or teaching specific types of courses, etc. which were obtained through the relevant administrative units (i.e. Study Abroad, Global Engagement, Registrar, etc.).

The student survey was launched on October 10, 2017. I sent it to a list of 4091 students who subscribe to a weekly e-newsletter focused on the university's resources, events and with a global or regional theme. Additionally, I posted messages on the university's Facebook sub-sites including official class sites for the Classes of 2018, 2019, 2020 and 2021, the Study Abroad site, and the Global Engagement site. I reposted the Facebook messages three times, and friends and colleagues shared and liked the posts to give them broader exposure. Several faculty also agreed to send the survey to their classes to request participation. I closed the survey on November 8, 2017 with 367 responses. Since it is unknown how many students received the survey, it is difficult to determine an accurate response rate.

The faculty survey was launched on October 12, 2017. It was sent to all faculty and staff at through a newsletter. Additionally, I compiled a list of 319 faculty including both those who are known to have participated internationalization activities and those whose experience was unknown. I sent three reminder emails to the faculty list. Several faculty also shared the survey with their department colleagues and encouraged them to participate. The faculty survey closed on November 8, 2017 and I received 186 responses. Since it is unknown how many faculty received the survey, it is difficult to determine an accurate response rate for this survey as well.

**Data Analysis.** A combination of multivariate analysis of variance (MANOVA) and regression analyses were used to understand relationships between variables, differences

between groups and to test the hypotheses. In initial data testing, MANOVA analysis was used to help reveal the statistical differences between independent groups on more than one continuous dependent variable. Then, simple and hierarchical regression analyses were used to identify significant relationships between types of international experiences and the benefits from those experiences. Finally, moderated regression was used to test the hypotheses and understand how satisfaction and immersion, affected the relationships between the international experience and engagement, professional development, performance and institutional commitment.

## Results

**Descriptive Statistics.** I merged the data from both surveys together and cleaned it, resulting in 500 total responses. The data cleaning involved removing all cases that did not have complete responses to the dependent variables, resulting in 438 complete and usable responses. Of the 438 responses, 27% were faculty, the remaining 73% were a combination of students, and staff (graduate students 26%, undergraduate students 37%, staff 6%, and other 4% including Law and intensive English language students). Forty one percent of respondents classified themselves as employed fulltime and 21% employed part time, 29% described themselves as students, and the remaining 9% were either unemployed, unable to work, retired or self-employed. Forty one percent of respondents were between 18 and 24 years old, followed by 24% between 25 and 34, 11% between 35 and 44, 10% in both the 45 to 54 and 55 to 64 years old ranges, followed by only 3% of respondents who were 65 or older. More females (66%) responded than males (34%), and the majority of respondents were U.S. citizens (66%). Of the faculty respondents, 87% were U.S. citizens and the remaining 13% were from a diverse set of countries including

Argentina, Australia, Belgium, Bhutan, China, France, Germany, Iran, Japan, Peru, and the U.K. Of the student respondents, 58% were U.S. citizens and the largest portion of non-U.S. students were from China (9%), India (5.6%), Brazil (2.2%) and 40 other countries.

The respondents ranged in experience with previous travel abroad with 27.4% who reported traveling abroad once every few years, 26.3% once a year, 23.5% travel a few times a year (2 to 3), and 14% who reported traveling abroad only once before or never before. The types of international experience reported by respondents varied as well from 14% reporting no previous international education experience, 37.9% with experience interacting with individuals from different cultural backgrounds from their own in an educational setting, 12.8% who had experience with international or intercultural coursework, and 34.2% who had study abroad experience.

**Data Integrity: Frequencies and Reliability of Variables.** Before starting data analysis, I tested the frequencies of all variables to check for outliers or inconsistency in the data. To measure the independent variable, respondents rated their international or intercultural education experience for each modality or type of experience on a scale from “0” to “5” (0 = no experience; 3 = a moderate amount of experience, to 5 = a great deal of experience). I tested the frequencies of each of the five modalities. First, I analyzed the mean level of experience rating for each modality. Respondents had the most experience with on-campus intercultural interaction experience (mean score = 3.21), international or intercultural courses (mean score = 2.52), and short-term study abroad (mean score = 1.72), followed by long-term study abroad (mean score = 1.55) and online intercultural interactions the lowest (mean score = 1.09). Since 72% of respondents rated their online intercultural interaction experience as a ‘1’ or ‘0’, there was not a sufficient population who had experience with this modality to test on its own.

Therefore, I decided to lump this category together with the on-campus intercultural interaction experience for analysis. I also evaluated the distribution of responses for short-term and long-term study abroad experiences. The mean experience reported for short-term study abroad is 1.72 out of 5; whereas the mean experience reported for long-term study abroad is 1.55. A paired sample t-test was conducted to evaluate if the difference between the means (rounded to .17) was meaningfully different from zero. The result of this test confirmed that a difference of .17 was not different from zero ( $t = 1.51$ ,  $df = 437$ ,  $p > .05$ ). Therefore, I decided to merge these two categories together for analysis. I used the categorical data including study abroad, intercultural interactions, and international courses and no experience as the independent variables in the MANOVA analyses to compare the differences across the main modalities of experience. For the regression analyses, I totaled the scores from each of the five modalities of international or intercultural experience into an aggregate score and used the aggregate experience score as the independent variable.

I tested all four dependent variables including engagement, professional development, performance and institutional commitment, as well as the two moderating variables including satisfaction and immersion. I tested the consistency of the scales used using a reliability analysis for all variables with more than three items, which included engagement, professional development, performance, institutional commitment and immersion. Satisfaction only had two items, so I did not test for reliability.

I modified the scales used for the dependent variables, to reference international or intercultural educational experiences. As an example of the modifications made to the items, for engagement, I added the following language to each item, "Because of my exposure to international or intercultural educational experience..." For engagement, the survey respondents



rated their engagement because of their international or intercultural education experiences. Schaufeli and colleagues (2002) developed a 17-item scale to test engagement through participants' vigor, dedication and absorption. A shortened 9-item version of this scale was tested in a pilot survey of 234 students, by Wayne, Lemmon, Hoobler, Cheung, and Wilson (2017) through a confirmatory factor analysis using the three highest loading items on each engagement dimension (vigor, dedication and absorption). To manage the length of the survey, this same 9-item scale was used in this study ( $\alpha = .87$ ). An example item is "Because of my exposure to international or intercultural educational experiences, I find the work/study I do full of meaning and purpose". For professional development, the respondents rated career opportunities and their promotability because of their international or intercultural experience. I used the 3-item professional development sub-dimension of the career opportunity scale ( $\alpha = .91$ ) developed by Wayne and co-authors (1999). Because career opportunity scale did not capture promotability, I added a 3-item scale developed by Thacker and colleagues (1995) ( $\alpha = .75$ ). To ensure both scales worked together to test professional development, all six items were analyzed together ( $\alpha = .87$ ). An example item from career opportunity is "Because of my exposure to international or intercultural educational experiences, I feel happy when I'm working/studying intensely." An example item from promotability is "Because of my exposure to international or intercultural educational experiences, I believe that I will have a successful career."

For performance, respondents rated the extent their exposure to international or intercultural experiences influenced their current performance as either a student or employee (faculty or staff). Due to survey length, I applied the same logic used for the engagement scale and used the top three factor loading items from a 6-item scale developed by Williams and

colleagues (1991) to test in-role performance ( $\alpha = .92$ ). An example item is “Because of my exposure to international or intercultural educational experiences, I feel that I can more effectively perform tasks that are expected of me.” Finally, for institutional commitment, respondents rated the extent to which they felt affective, continuance and normative commitment to their educational institution because of their international or intercultural educational experiences. Allen and co-authors (1990), created a 16-item scale, from which I used the top three factor loading items ( $\alpha = .92$ ) to manage survey length (Wayne et al, 2017). An example item is “Because of my exposure to international or intercultural educational experiences, I feel a strong sense of belonging to my educational institution.”

The moderating variables were satisfaction and immersion. For satisfaction, participants rated the extent to which they felt satisfied with their international or intercultural educational experiences. Cammann and colleagues (1979) developed a three-item scale (Spector, 1997). However, in a pre-test of the survey, participants expressed difficulty with one of the items, which was “In general, I didn’t like my exposure to international or intercultural educational experiences.” Therefore, I did not test alpha reliability for satisfaction. The two items I used were “All in all, I am satisfied with my level of international or intercultural educational experience”, and “In general, I liked my international or intercultural educational experience.” For the second moderator, immersion, participants rated their involvement in the international or intercultural educational experiences. Work involvement measures the extent to which individuals felt included or alienated in a particular experience. Kanungo (1982) created a 10-item scale to measure job and work involvement, from which three items were selected based on relevance for this study and used in the survey ( $\alpha = .66$ ). The items were “Most of my interests are centered around my level of international or intercultural experience”; “I like to be absorbed

in international or intercultural experiences”; and “My international or intercultural experience is a small part of who I am” which was intentionally reverse coded to ensure participants were reading the questions carefully. To investigate alpha reliability for immersion, I tested the item total statistics. Unfortunately, the alpha was not reliable ( $\alpha < .70$ ) for all three items. However, I decided to use the 3-item scale, even though the reliability was slightly below the ideal threshold.

Table 2: Survey Items

Variable	# Items	Actual Items
Engagement	3 items - Vigor	At work/in school, I feel full of energy.
		At work/in school, I feel strong and vigorous.
		I feel motivated when I get up in the morning to go to work/school.
	3 items - Dedication	I find the work/studies that I do full of meaning and purpose.
		I am enthusiastic about my work/studies.
		My work/studies inspire/s me.
3 items - Absorption	Time flies when I'm working/studying.	
	When I am working/studying, I forget everything else around me.	
	I feel happy when I am working/studying intensely.	
Professional development	3 items - Career opportunity	There are career opportunities that are attractive to me.
		There are professional opportunities available that are of interest to me.
		There are many opportunities that match my career goals.
	3 items - Promotability	I believe that I will have a successful career.
		I believe that I am a viable candidate for a management position.
		I believe that I have higher potential in my work.
Performance	3 items	I feel that I can more effectively fulfill all of my responsibilities
		I feel that I can more effectively and consistently meet performance requirements of my role as a student/faculty.
		I feel that I can more effectively perform tasks that are expected of me
Institutional commitment	3 items	I feel emotionally attached to my educational institution.
		My educational institution has a great deal of personal meaning to me.
		I feel a strong sense of belonging to my educational institution.
Satisfaction	2 items	I am satisfied with my international or intercultural experience.
		In general, I liked my international or intercultural experience.
Immersion	3 items	Most of my interests are centered around my level of international or intercultural experience.
		I like to be absorbed in international or intercultural experiences.
		My international or intercultural experience is a large part of who I am.

**MANOVA.** As a first step in the data analysis, I tested the relationships between the independent and dependent variables, using MANOVA analysis. MANOVA, specifically, is an analysis of variance (ANOVA) that has two or more dependent variables (Warne, 2014). For this analysis, I used categorical data on the type of international or intercultural experience as the independent variable. Respondents answered a question on the survey, “Which type of international or intercultural education experience are you most familiar with?” and chose one of the following categories: no experience; experience interacting with individuals from a different cultural background from my own; international or intercultural coursework; or study abroad. In comparing the groups, the Wilks’ Lambda ( $F=3.647, p < .01$ ), showed that there were statistically significant differences between the groups. In the test of Between-Subjects Effects, all four categories were statistically significant: Engagement ( $F=5.64, p < .01$ ); Professional Development ( $F=3.00, p < .05$ ); Performance ( $F=2.67, p < .05$ ); and Institutional Commitment ( $F=5.076, p < .01$ ).

In the Multiple Comparisons table, there were statistically significant differences between groups (based on type of experience) on the dependent variables engagement, professional development and institutional commitment. For engagement, those who had participated in international or intercultural courses had higher engagement than those with no experience (mean difference =  $-.65, p < .01$ ), and higher than those with international/intercultural interactions with those from different cultural backgrounds (mean difference =  $.39, p < .05$ ). Those with study abroad experience also had statistically significant difference in engagement from those with no experience (mean difference =  $.45, p < .01$ ). For professional development, those with no international or intercultural experience had a statistically significant difference than those who had intercultural interaction experience (mean difference =  $.39, p < .05$ ). There

were no significant differences between groups in performance. Finally, there were statistically significant differences between groups in institutional commitment. Those with experience in international or intercultural courses had higher levels of institutional commitment than those with no experience (mean difference = .68,  $p < .05$ ) and those with intercultural interaction experience (mean difference = .59,  $p < .05$ ). Those with study abroad experience had higher levels of institutional commitment than those with no experience (mean difference = .55,  $p < .05$ ) and those with intercultural interaction experience (.46,  $p < .05$ ).

Table 3: Results of MANOVA

#	Hypotheses	MANOVA Results (mean difference, significance)
1	University internationalization efforts will have a positive effect on engagement.	Intercultural Courses > No Experience (mean difference = .65, $p < .01$ )
		Study Abroad > No Experience (mean difference = .45, $p < .01$ )
		Intercultural Courses > Intercultural Interactions (mean difference = .39, $p < .05$ )
2	University internationalization efforts will have a positive effect on professional development.	No Experience > Intercultural Interactions (mean difference = .39, $p < .05$ )
3	University internationalization efforts will have a positive effect on performance.	Nothing significant
4	University internationalization efforts will have a positive effect on institutional commitment.	Intercultural Courses > No Experience (mean difference = .68, $p < .05$ )
		Intercultural Courses > Intercultural Interactions (mean difference = .59, $p < .05$ )
		Study Abroad > No Experience (mean difference = .55, $p < .05$ )
		Study Abroad > Intercultural Interactions (mean difference = .47, $p < .05$ )

**Moderated Regression Analysis.** The proposed model includes hypotheses to test the effect of the independent variable on the four dependent variables, moderated by two different interaction variables. Therefore, I tested eight hypotheses utilizing moderated regression analysis. I measured the independent variable, international or intercultural experience, using participant ratings of their experience for each modality (short term study abroad, long term

study abroad, intercultural interactions online, intercultural interactions in person, and international/cultural coursework) on a scale from “0” to “5” (0 = no experience; 3 = a moderate amount of experience, to 5 = a great deal of experience). I totaled the scores into an aggregate score for international/cultural experience. Respondents with no international or intercultural experience (aggregate experience score = 0, n=69) were excluded from this analysis because the focus of this analysis was to test the relationship between the experience and the benefits of the experience. First, I tested for main effects using the centered IV (experience) against each DV, then added control variables one at a time. Next, I tested each DV (engagement, professional development, performance and institutional commitment) separately using hierarchical regression. For example, in Block 1, I included the control variables one at a time (age, gender, citizenship, frequency of travel) in Block 2 I included the main IV (experience). Finally, I tested moderated regression for each type of experience separately by selecting cases of participants who indicated they were most experienced in study abroad, intercultural interactions, or international courses. For this analysis I selected cases for type of experience, then in Block 1 I included controls (where significant), in Block 2 I included the main IV (aggregate experience score), the two centered moderators (satisfaction and immersion) and in Block 3, I included the interaction variables one at a time (satisfaction and immersion). The results are in the table presented below.

Table 3: Results of Hypotheses Testing

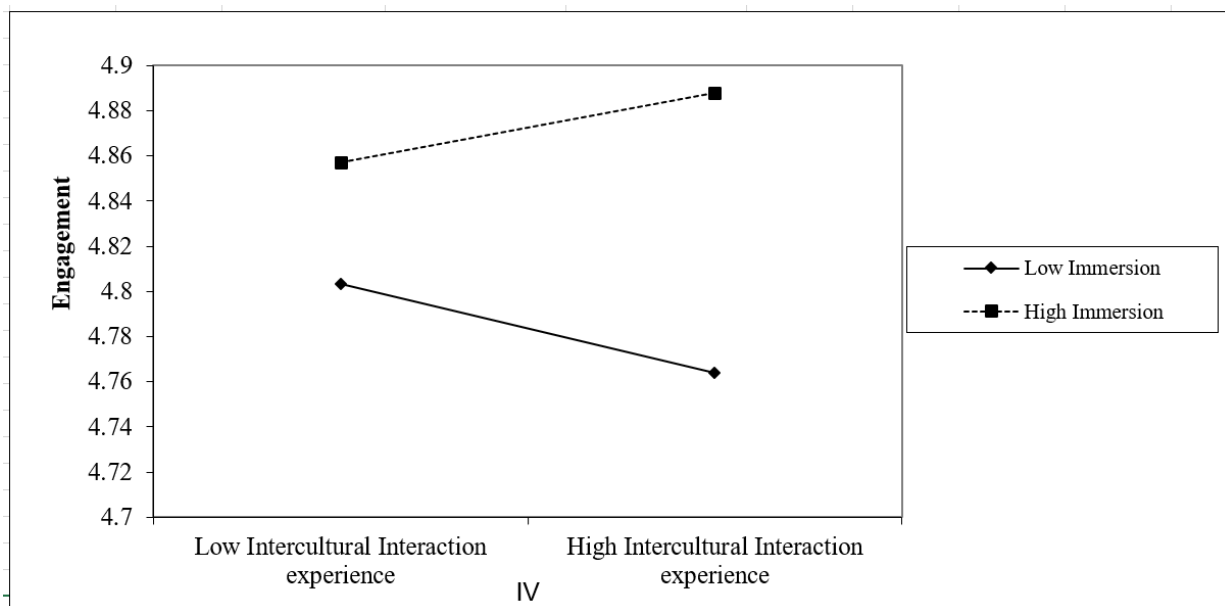
#	Hypotheses	Moderated Regression Results
1a	University internationalization efforts will have a positive effect on engagement, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
1b	University internationalization efforts will have a positive effect on engagement, and that relationship will be positively moderated by level of immersion with the experience.	YES - Intercultural Interaction experience (B = .018, p < .05)
2a	University internationalization efforts will have a positive effect on professional development, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
2b	University internationalization efforts will have a positive effect on professional development, and that relationship will be positively moderated by level of immersion with the experience.	NO - Failed test
3a	University internationalization efforts will have a positive effect on performance, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
3b	University internationalization efforts will have a positive effect on performance, and that relationship will be positively moderated by level of immersion with the experience.	NO - Failed test
4a	University internationalization efforts will have a positive effect on institutional commitment, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
4b	University internationalization efforts will have a positive effect on institutional commitment, and that relationship will be positively moderated by level of immersion with the experience.	YES - Study Abroad experience (B = -.01, p < .05)

To understand the interactions for the two statistically significant moderated regression tests (intercultural interaction on engagement, moderated by immersion; and study abroad experience on institutional commitment, moderated by immersion experience) I plotted both interactions and tested the significance of their slopes. In the two figures below, I plotted the interactions to test the effects of the level of immersion (high condition and low condition) and the interaction between the independent and moderating variables. The high condition regression line describes the relationship between the IV and DV which is computed when assuming all values on the moderator are +1 standard deviation. The same logic applies to the low condition regression line, which reflects the relationship between the IV and DV if all values on the moderator are -1 standard deviation.



**Engagement and Intercultural Interaction Experience.** The first significant moderation finding is that immersion moderates the relationship between intercultural interaction experience and engagement. The interaction of immersion and intercultural experience on engagement was significant ( $B = .01$ ,  $p < .05$ , change in  $F = 4.22$ ; change in  $R^2 = 2.4\%$ ). See Moderation Tables in Appendix B.

Figure 2: Intercultural Interactions and Engagement

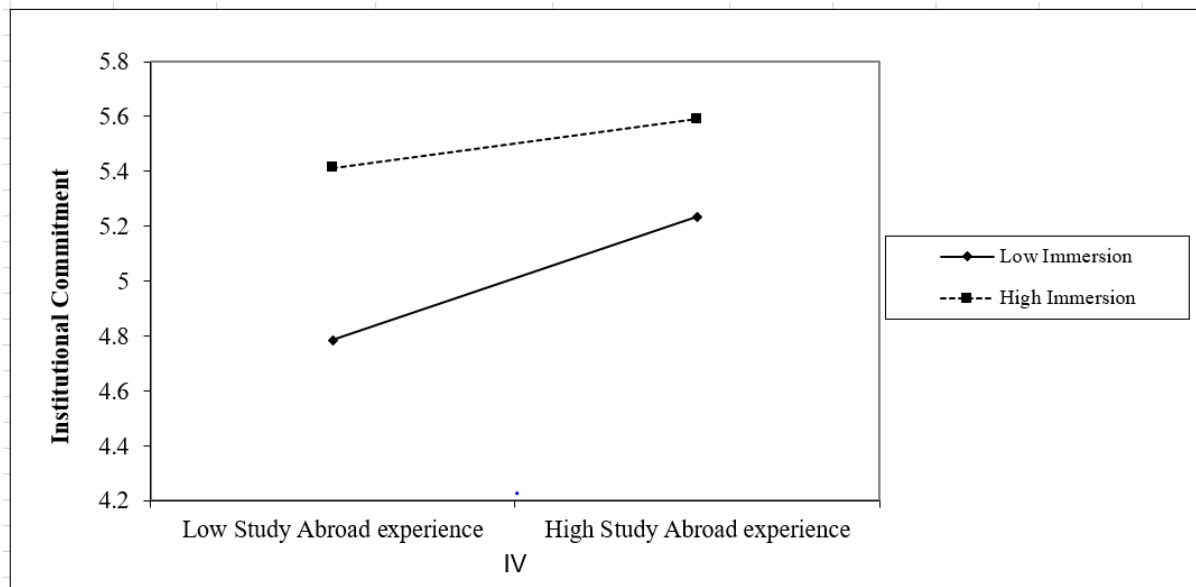


For individuals with high immersion, there is a significant positive relationship between engagement and intercultural interaction experience (gradient =  $.014$ ,  $p < .01$ ). For individuals with low immersion, there is a significant, negative relationship between engagement and intercultural interaction experience (gradient =  $-.018$ ,  $p < .01$ ). This partially supports the hypothesis 1b; for individuals with high levels of immersion there is a positive relationship, for individuals with low levels of immersion there is a negative relationship.

**Institutional Commitment and Study Abroad Experience.** The second significant moderation finding is that immersion moderates the relationship between study abroad

experience and institutional commitment. The interaction of immersion and study abroad experience on institutional commitment was significant ( $B = -.01$ ,  $p < .01$ , change in  $F = 8.72$ ; change in  $R^2 = 5.3\%$ ). See the Moderation Tables in Appendix B.

*Figure 3: Study Abroad and Institutional Commitment*



For individuals with high immersion, there is a significant positive relationship between institutional commitment and study abroad experience (gradient =  $.018$ ,  $p < .01$ ). For individuals with low immersion, there is a significant positive relationship between institutional commitment and study abroad experience (gradient =  $.044$ ,  $p < .01$ ). This supports hypothesis 4b for individuals with both high and low levels of immersion.

### Further Analyses

**MANOVA: Differences between Students and Faculty.** Although I did not specifically hypothesize differences between faculty and student responded, I conducted additional analyses to understand the differences for those two groups. First, I reran the

MANOVA analyses to test for the differences between faculty ( $n = 119$ ) and students ( $n = 319$ ). When testing faculty only, there were no statistically significant differences between the different types of independent variables on the dependent variables. For students, there were no significant differences between groups for the dependent variables engagement or professional development, however there were differences in performance and institutional commitment. For performance, those with study abroad experience rated their performance higher than those with intercultural interaction experience (mean difference = .45,  $p < .05$ ). There was also a statistically significant difference in levels of institutional commitment between those with experience participating in international or intercultural courses (mean difference = .85,  $p < .05$ ) than those with intercultural interaction experience. Similarly, those with study abroad experience had a higher level of institutional commitment than those with intercultural interaction experience (mean difference = .52,  $p < .05$ ).

Table 4: Results of MANOVA (Students Only)

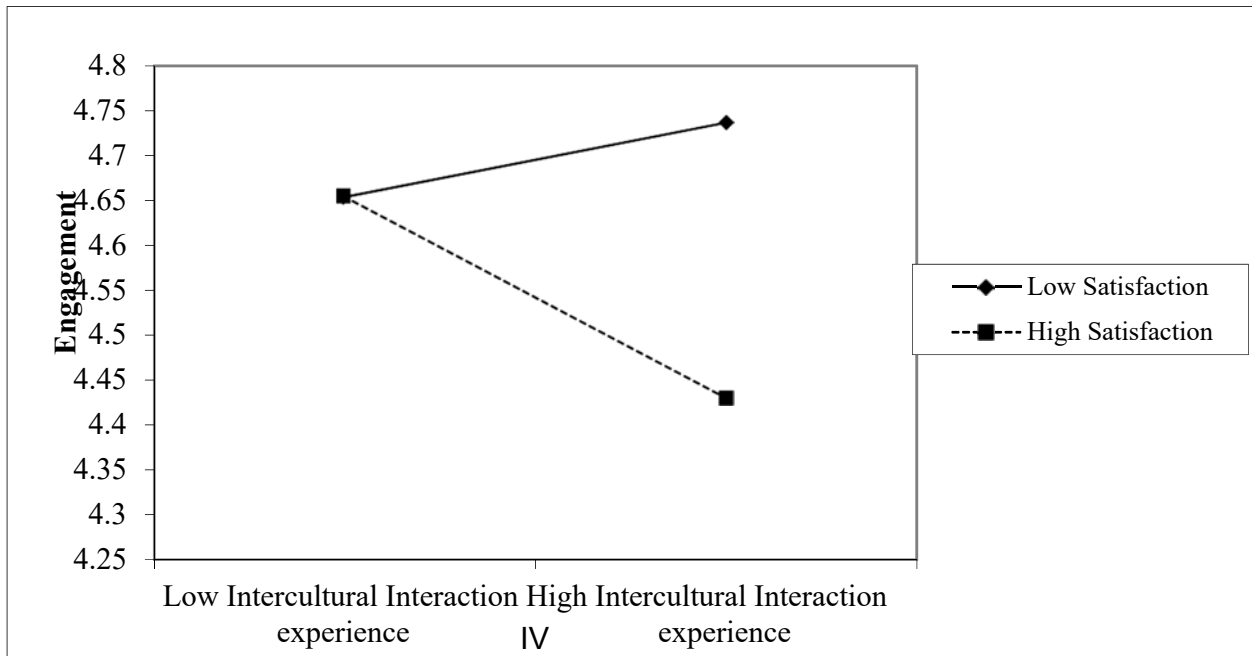
#	Hypotheses	MANOVA Results (mean difference, significance)
1	University internationalization efforts will have a positive effect on engagement.	Nothing significant
2	University internationalization efforts will have a positive effect on professional development.	Nothing significant
3	University internationalization efforts will have a positive effect on performance.	Study Abroad > Intercultural Interactions (mean difference = .45, $p < .05$ )
4	University internationalization efforts will have a positive effect on institutional commitment.	Intercultural Courses > Intercultural Interactions (mean difference = .85, $p < .05$ ) Study Abroad > intercultural interactions (mean difference = .52, $p < .05$ )

**Moderated Regression: Differences between Students and Faculty.** Similarly, I conducted additional moderated regression analysis separately testing effects on students only and faculty only. For faculty only, there was only one significant main effect however; it did not demonstrate significance in the moderation. Intercultural interactions with those from a different background from my own, had a significant relationship with performance ( $F=4.91$ ,  $p < .05$ ).

Table 5: Results of Further Hypotheses Testing (Students Only)

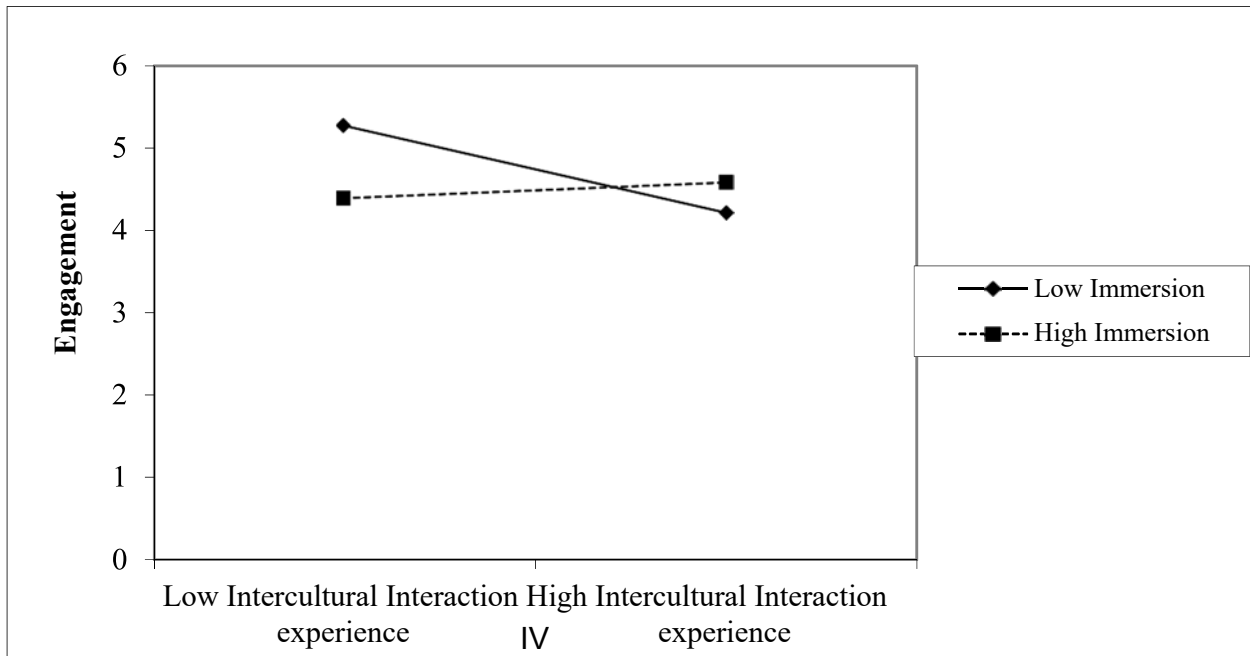
#	Hypotheses	Moderated Regression Results
1a	University internationalization efforts will have a positive effect on engagement, and that relationship will be positively moderated by level of satisfaction with the experience.	YES - Partial. Intercultural Interaction experience (B = -.07, p < .05)
1b	University internationalization efforts will have a positive effect on engagement, and that relationship will be positively moderated by level of immersion with the experience.	YES - Partial. Intercultural Interaction experience (B = .04, p < .05)
2a	University internationalization efforts will have a positive effect on professional development, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
2b	University internationalization efforts will have a positive effect on professional development, and that relationship will be positively moderated by level of immersion with the experience.	NO - Failed test
3a	University internationalization efforts will have a positive effect on performance, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
3b	University internationalization efforts will have a positive effect on performance, and that relationship will be positively moderated by level of immersion with the experience.	NO - Failed test
4a	University internationalization efforts will have a positive effect on institutional commitment, and that relationship will be positively moderated by level of satisfaction with the experience.	NO - Failed test
4b	University internationalization efforts will have a positive effect on institutional commitment, and that relationship will be positively moderated by level of immersion with the experience.	YES - Partial. Study Abroad experience (B = -.01, p < .05)

**Intercultural Experience and Engagement (Students Only).** For students only, there were some significant findings. The first significant moderation finding is that immersion and satisfaction both moderate the relationship between intercultural interaction experience and engagement. The interaction of satisfaction and intercultural experience on institutional commitment was also significant (B = -.07, p < .05, change in F = 3.509, change in R<sup>2</sup> = 5.8%). Additionally, the interaction of immersion and intercultural experience on institutional commitment was significant (B = .04, p < .05, change in F = 3.509, change in R<sup>2</sup> = 5.8%). See the Moderation Tables in Appendix B.

*Figure 4: Intercultural Interaction and Engagement (Students Only)*

For students with low satisfaction, there is not a significant relationship between engagement and intercultural experience (gradient = .039,  $p > .05$ ). However, for students with high satisfaction, there was a significant negative relationship between engagement and intercultural experience (gradient = -.105,  $p < .05$ ). This does not support hypothesis 1b for students with either high or low levels of satisfaction.

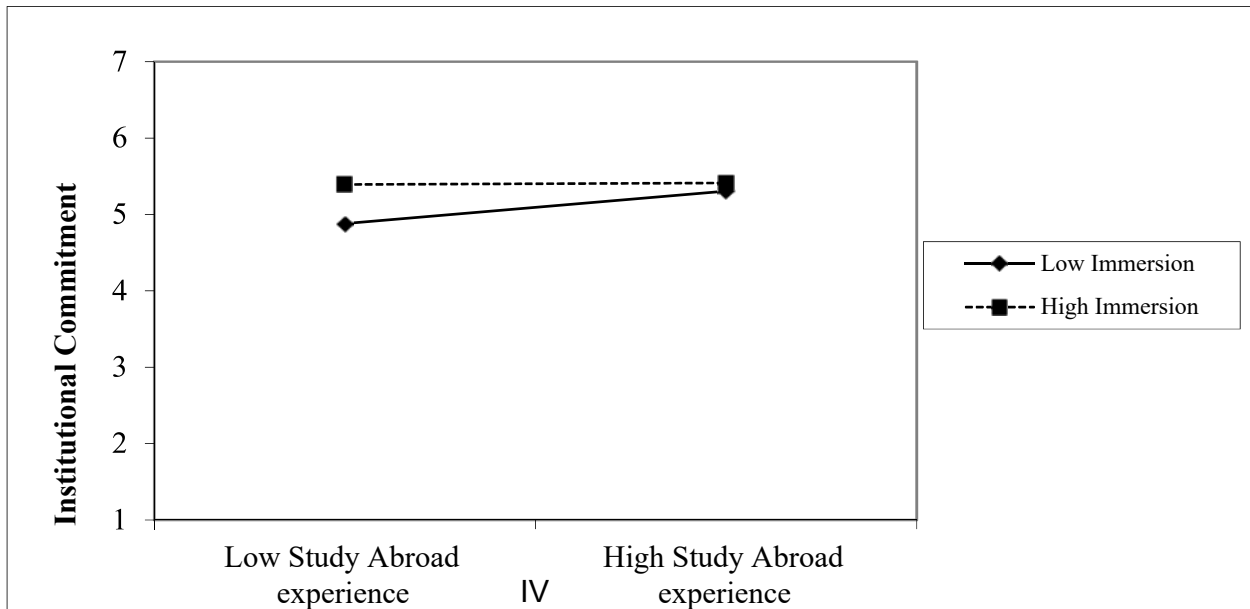
Figure 5: Intercultural Interaction and Engagement (Students Only)



For students with low immersion, there is a significant negative relationship between engagement and intercultural experience (gradient =  $-.081$ ,  $p < .01$ ). However, for students with high immersion, there was not a significant relationship between engagement and intercultural experience (gradient =  $.015$ ,  $p > .05$ ). This does not support hypothesis 1a for students with either high or low levels of immersion.

**Study Abroad Experience and Institutional Commitment (Students Only).** The second significant moderation finding for students only is that immersion moderates the relationship between study abroad experience and institutional commitment. The interaction of immersion and study abroad experience on institutional commitment was significant ( $B = -.01$ ,  $p < .05$ , change in  $F = 3.201$ , change in  $R^2 = 5.2\%$ ). See the Moderation Tables in Appendix B.

Figure 6: Study Abroad and Institutional Commitment (Students Only)



For students with low immersion, there is not a significant relationship between institutional commitment and study abroad experience (gradient = .032,  $p > .05$ ). Similarly, for students with high immersion, there was not a significant relationship between institutional commitment and study abroad experience (gradient = .015,  $p > .05$ ). This does not support hypothesis 4b for students with either high or low levels of immersion.

### Discussion

This dissertation focused on understanding the benefits of university internationalization activities and how those activities can serve as a method of human capital development. Ponzo (2014) stated that international experience is a form of human capital sought after by employers wishing to better manage international supply chains, engage an international customer base, and negotiate within increasingly complex and unfamiliar business relationships across the globe. Generally, I hypothesized that the students and faculty involved in international or intercultural

education experiences would report greater benefits from those experiences. Siaya and Hayward (2003) defined campus-based internationalization initiatives such as study abroad experiences, curriculum enrichment via international studies majors or area studies, strengthened foreign-language instruction, and sponsorship of foreign students to study on campus as forms of human capital development. My hypotheses also proposed that individuals who reported high levels of satisfaction with or high levels of immersion in those experiences would report even greater benefits, which would then ultimately benefit the university that invested in those activities. This study fills a gap in the literature by providing some empirical evidence of the intangible benefits of university internationalization. The next section summarizes the significant and non-significant results of this study's hypotheses.

### **Summary of Significant Results and Theoretical Implications**

When comparing the differences in the various modalities of international or intercultural experience, there were some significant findings that partially supported three of the four main hypotheses (1, 2, and 4). One of the most notable take-aways was that, in general, intercultural interactions as a modality of university internationalization had a negative but significant relationship with dependent variables, such as engagement and institutional commitment. This was a surprising finding because part of the rationale for recruiting international students to the university is to infuse global perspectives into the classroom and provide students with the opportunity to gain valuable skills in intercultural communication. However, it is clear that respondents did not view these experiences as opportunities to strengthen their skills or as benefits. Study abroad and international or intercultural courses, on the other hand, did show more positive effects on the dependent variables. These relationships are discussed next.



**Engagement.** Employees who are engaged serve as ambassadors for their organization (Schiemann, 2007). Fostering employee engagement serves as a benefit to the individual, but also back to the organization that sponsored that experience. In this study, individuals who had experience with two of the modalities, international or intercultural courses and study abroad experience, demonstrated higher levels of engagement than individuals who reported they had no experience. Additionally, individuals with international or intercultural course experience had higher levels of engagement than those with intercultural interaction experience. One possible explanation for these findings is that respondents felt more engaged when participating in or teaching international and intercultural courses or study abroad experiences. These seem to be meaningful experiences that led to higher levels of engagement. On the other hand, the intercultural interaction experiences led to lower levels of engagement. A possible explanation for this finding might be that respondents felt that the structured academic experiences including the international or intercultural courses or study abroad experiences, were more meaningful than the intercultural interactions, which might be harder to interpret, understand, and learn from. When individuals interact with others from a different cultural background from their own, this led to lower levels of engagement, likely because these experiences might be more challenging and uncomfortable.

**Professional Development.** Human capital development in the form of educational attainment is positively related to managerial advancement (Tharenou et al., 1994), salary progression (Bretz and Judge, 1994; Judge et al., 1995; Powell and Butterfield, 1994, 1997; Stroh et al., 1992) and assessment of promotability (Sheridan et al., 1997) (Wayne, Liden, Kraimer & Graf, 1999). Exposure to foreign markets enhances the potential for learning, including technological, market and social learning (Yeoh, 2004). In this study, I expected that

international experience would lead to a higher level of professional development. However, individuals with no international or intercultural experience had higher professional development than those with intercultural interaction experience otherwise, the remaining modalities were not significant. A possible explanation for this finding might be that individuals working with people from different cultural backgrounds from their own feel at a disadvantage or as if they are being held back from developing professionally. Alternatively, participants might not value intercultural interaction experiences as opportunities to build skills that could be helpful in their professional careers. Another possibility is that intercultural interaction experiences helped individuals realize that they have a lot more to learn in this area. Either way, it was clear that intercultural interactions did not provide benefits for the individual or university except in cases where individuals had high levels of immersion. However, in general, this modality did not serve as an effective method of human capital development.

**Institutional Commitment.** Yeoh (2004) described international learning as a complex resource of an organization that can be used to create competitive advantage and ultimately, superior performance in international markets. In this study, I expected that individuals with international experience would have higher levels of institutional commitment. However, this was true for some types of international experience but not all. Individuals with international or intercultural course and study abroad experience both have higher institutional commitment than those with no experience, and those with intercultural interaction experience. Again, it seems like a possible explanation might be that respondents felt more committed to their institutions when participating in (or teaching) international/cultural courses or study abroad. These seem to be meaningful experiences. Individuals with international course and study abroad experience also have higher institutional commitment than those with intercultural interaction experience,

likely because there seems to be appreciation for the structured academic experiences, but less appreciation of the unstructured intercultural interactions. The unstructured interactions might be more challenging, harder to interpret and learn from.

When testing the main hypotheses, a few clear findings became evident. Intercultural interaction experience influenced engagement, and that relationship was moderated by immersion. Similarly, study abroad experience had a relationship with institutional commitment, which was also modified by immersion. In both of these cases, there was partial support for two of the hypotheses (1b and 4b).

Engagement is positively influenced by intercultural interaction experience but moderated by level of immersion when controlling for age. In the low condition (those with low immersion), the more intercultural interaction experience a respondent had, the lower they rated their engagement. In the high condition (those with high immersion), the more intercultural interaction experience a respondent had, the higher they rated their engagement. A possible explanation for this finding might be that there are distinct differences between individuals who rated themselves as having high versus low immersion, and these differences lead to either a positive or negative relationship with engagement. For people who were highly immersed in their intercultural interaction experiences, they rated their engagement higher. To me, this means that because they invested energy into these experiences they got more out of them. For people who were not immersed in these experiences, there was a negative relationship between their intercultural interaction experience and their level of engagement. The individuals who were not immersed in the experience gained very little from it. This negative experience led to lower levels of engagement. In general, it seems that some people were interested in intercultural interaction experience and others were not, and that difference led to a different outcome based

on their preferences. Intercultural interaction experience might work as a method of human capital development for some but might have an opposite effect and be interpreted as a hindrance for others.

Institutional commitment is positively influenced by study abroad experience but moderated by immersion, when controlling for frequency of international travel. Study abroad seems to lead to higher levels of institutional commitment for individuals in both the high immersion and low immersion conditions. In general, it seems as though study abroad is a positive experience that leads to benefits for both the individual and the university. Study abroad experience can be considered a significant method of human capital development.

**Differences between Faculty and Students.** This study tested the effects of university internationalization activities for both students and faculty. Since students are typically the participants in internationalization activities and faculty frequently facilitate or lead these activities, I was interested in understanding if there were differences in the benefits experienced by these two groups. There were no significant findings for faculty only, so this section will focus on significant results for students only. When analyzing the data for students only to understand how their experiences influenced the dependent variables, there were no significant findings with engagement or professional development, but there were significant differences between performance and institutional commitment. The students with study abroad experience reported their performance as being higher than those with intercultural interaction experience, which is consistent with previous findings. Again, it seems as though those with intercultural interaction experience felt as though those experiences were less favorable than study abroad in terms of enhancing their performance. Similarly, students with experience in international or intercultural courses rated that experience as more favorably impacting their institutional

commitment than students with intercultural interaction experience. And students with study abroad experience also rated their institutional commitment as higher than students with intercultural interaction experience. Once again, it seems that the intercultural interaction experience has a less favorable influence on institutional commitment than both international or intercultural courses or study abroad experience. These results all underscore the findings that intercultural interactions are not thought of positive experiences and are generally not considered benefits. This modality does not serve as an effective method of human capital development, with the exception of those with a high level of immersion in the moderated regression analysis.

Again, when analyzing the moderated regression results for students only there were a few significant findings related to intercultural interaction experience and engagement, and study abroad experience and institutional commitment. The relationship between engagement and intercultural interaction experience was moderated by both satisfaction and immersion. This was the only scenario in which the moderator, satisfaction, showed a significant relationship with the independent and dependent variables. The other area in which there were significant findings for students only, was in the relationship between study abroad experience and institutional commitment which was modified by immersion. The more intercultural interaction experience students had, the more negatively they rated their engagement, which was significant for students with low levels of immersion in these experiences. Once again, this demonstrates one of the main findings that intercultural interaction experiences were not viewed favorably when considering engagement. Similarly, satisfaction moderated the relationship between intercultural interactions and engagement. The more intercultural interaction experience students had, the more their engagement declined. Once again, this shows the intercultural interaction experience does not serve as an effective method of human capital development. In most cases, students did

not see these experiences as providing benefits.

In the last significant finding for students only, study abroad experience did have a positive relationship with institutional commitment. And students with high levels of immersion in their study abroad experience reported higher levels of institutional commitment. This modality of university internationalization seems to provide benefits to the individual and institution and serves as an effective method of human capital development.

### **Summary of Non-Significant Results**

While there were some interesting significant results, there were some surprisingly non-significant findings from this study. For example, the dependent variable performance did not yield many findings at all. However, during the interview phase of this study, several individuals talked about how international experience helped them perform much better in their current roles. I thought that performance would have been a more important benefit from international experiences, however, it was not. Additionally, professional development did not yield many interesting results with the one exception of the negative relationship with intercultural interaction experience. Rather than this type of experience helping individuals feel as though they had more career opportunities and were more promotable, it had the opposite effect. Individuals with intercultural interaction experience rated their professional development as lower than those with no experience at all, as if this experience held them back. This was the opposite finding from what I was expecting, based on data gathered through the interview phase of this study.

This research study focused on university internationalization efforts as a method of human capital development. My model proposed that internationalization efforts would benefit the

faculty and students who participate in those activities, and would ultimately benefit the university. My hypotheses proposed that satisfaction with and immersion in these activities would moderate the relationship between the international experience and the dependent variables, including engagement, professional development, performance, and institutional commitment. While there was some evidence that participation in international education experiences provided benefits (engagement and institutional commitment), this did not hold true for all modalities of experience. Some relationships (study abroad experience and institutional commitment; and intercultural interaction experience and engagement) were moderated by immersion and satisfaction, but not to the extent I proposed. Therefore, some types of university internationalization, such as study abroad and intercultural interaction experience might serve as methods of human capital development. However, some experiences had no relationship with the dependent variables, and a few experiences had negatively associated relationships with the dependent variables. In those cases, international or intercultural experience acted as a liability in human capital development.

These results contribute to existing human capital theory by evaluating how international educational opportunities serve as a method of developing human capital. This is important for all types of institutions to consider their options to foster international and intercultural experiences. As the world becomes more interconnected and national and cultural lines become more blurred, exposure to international experiences becomes more important and valued.

**Practical Implications.** The research provides useful information about the benefits of university internationalization from a human capital development perspective, which can help decision makers determine how to invest limited resources. Understanding the benefits of the various modalities of internationalization to individuals as well as the university, are also

important when considering the returns on investment. Similarly, understanding how satisfaction and immersion affect the benefits can help faculty and administration put more emphasis on the structure and delivery of these experiences. By focusing on the quality of these experiences and encouraging deeper involvement from all participants, the benefits can be maximized.

This study provides several practical implications. First, it provides empirical evidence that study abroad creates benefits for both the individual participants as well as for the university that sponsors the experience. In the MANOVA analysis, study abroad positively influenced both engagement and institutional commitment. The moderated regression results showed that study abroad experience, for participants with high and low levels of immersion, had a significant positive influence on institutional commitment. The student only MANOVA analysis confirmed that study abroad resulted in benefits such as higher levels of performance and institutional commitment. The student only moderated regression analysis revealed a significant interaction between study abroad and immersion on institutional commitment. While the simple slope analysis was not significant for the high or low condition, this may indicate that a data collection with more power may be better able to detect the effect of a significant slope.

Overall, study abroad seems to provide the greatest returns for the individual in the form of engagement, as well as for the university, in the form of commitment. University leaders can expect positive returns from investments in study abroad for individual participants as well as for the university, from a commitment standpoint.

The second practical implication is university leaders cannot assume that intercultural interactions will provide human capital benefits. In most cases, this experience had the opposite



effect and resulted in fewer benefits. For example, in the MANOVA analysis, intercultural interaction experience had less of an effect on engagement than intercultural courses. In the moderated regression analyses, there were significant effects of intercultural interaction in both the low and high conditions that result in less engagement and more engagement respectively. While these results seem contradictory, in fact, they are consistent. Intercultural interactions must be carefully managed and facilitated in order to gain benefits from a human capital perspective. The moderated regression analysis showed that for individuals with higher levels of immersion, or one standard deviation above the regression line, there were higher levels of engagement. However, the opposite was true for individuals with lower levels of immersion, or one standard deviation below the regression line. Those individuals had lower levels of engagement.

The student only results of the MANOVA analysis showed that intercultural interaction experiences were the least effective in providing benefits to participants, particularly in performance and institutional commitment. In the case of performance, students felt that study abroad experience contributed more to their performance than intercultural interaction experience. Again, it seems that students felt that intercultural interaction experiences held them back from higher levels of performance. Similarly, the moderated regression analysis for students only showed that intercultural interaction experience, when moderated by both by satisfaction and immersion, influenced institutional commitment. For those with higher satisfaction, engagement went down as intercultural interaction experience went up.

This seems to indicate that simply bringing internationally diverse students and faculty to campus is not enough and does not ensure that benefits will be realized through this modality. University leadership needs to ensure there is a strategy in place to leverage cultural differences

and facilitate meaningful interactions, in order to realize the benefits from a human capital development perspective. For example, the university leaders could provide resources for faculty and administration, offer training for all members of the university community, and encourage more structured learning around intercultural competence. By creating a strategy to develop and facilitate intercultural interaction experiences, this modality has potential to become a much more effective method of human capital development.

The third important implication for university leadership is to focus on expanding the reach of university internationalization to more students, to administration and to involve a broader pool of faculty. The results of this study showed that internationalization activities seem to benefit students, but not faculty. One possible reason for this might be that the sample size was too small (faculty = 119, students = 319). However, a closer look at the demographic data on the faculty respondents showed that 92% of faculty were 35 years old, and more than half of them had been employed at the university for 12 years or more. Because this segment of participants had so much more professional experience and had a longer relationship with the institution, it is likely that the benefits gained from international experience have less additive effect over time. If faculty are already committed to their institution, additional international experiences will not make as big of an impact as they would on more junior faculty, administrators and students who may be younger and less experienced. Similarly, by expanding the reach of internationalization activities, the investment in these activities can benefit a larger number of individuals and have a bigger overall impact to the university from a human capital development standpoint.

### **Limitations**

A limitation to this study involves the process of identifying key dependent variables, or the

benefits of university internationalization efforts. In order to understand the key dependent variables, I conducted seven qualitative interviews. However, those interviews included only faculty and staff, not students. Considering that two thirds of my respondents were students, perhaps, this oversight created an inaccurate assessment of the benefits of university internationalization. Additionally, I did not collect data on race/ethnic background or whether students identified as first-generation college students. Both of these characteristics are unique and specific to the university studied and could have served as additional control variables. One other control variable I could have used was how long ago an individual's previous international travel experience took place. While there was not strong evidence in existing literature that these variables would have influenced the model, this additional data may have helped in understanding the results.

Another limitation involves clarity and utilization of the various modalities of university internationalization. In the pretest, individuals confirmed that the terminology was clear and easily understood. However, it is possible that the individuals who participate in the pretest had existing knowledge that aided in their understanding of the survey. I could have defined the variables used in the study more explicitly to ensure broader understanding. It is possible that some participants did not understand the different modalities within the independent variable, or the dependent variables.

I used two manipulation checks (reverse coded questions) in the survey that did not produce good results. Both items were for moderating variables (immersion and satisfaction). It is possible that the scales used for the moderators did not do a good job of capturing the type of data I intended.

### **Future research directions**

There are a number of future research directions that can be pursued to build on this study. For example, additional control variables such as race or ethnic background, or whether students were first generation college attendees could be explored to see if there are variations in the results. Additionally, it would be interesting to focus more on comparing the types or modalities of international education experience and evaluate how the type of experience influences the benefits of those experiences. I would be interested in understanding why participants did not view certain experiences as benefits. Perhaps, by conducting further qualitative research we could uncover why some experiences were viewed as benefits while others were not. It would also be interesting to compare participants' perceptions before and after a specific intercultural or international experience, to see if that experience could serve as an intervention. Another possible direction would be to evaluate how these experiences influence other university measures such as budgets or investments made, mobility numbers, and satisfaction ratings. It would also be interesting to test this concept at other universities to see how the results might vary depending on the type of institution.

### **Conclusion**

This purpose of this study was to investigate whether university internationalization efforts can serve as a method of human capital development in delivering benefits to the individual participants (faculty and students) and back to the university that invested in those efforts. By understanding and communicating the intangible benefits associated with international educational experiences, university leadership can make more informed decisions about whether or not to invest scarce resources in those initiatives. This study involved qualitative and quantitative analyses of faculty and student perceptions about the benefits associated with international educational experiences.

The study provided partial evidence to support the proposed model and hypotheses. Two of the hypotheses were significant, however one was supported the initial direction predicted and the other was not. Hypothesis 4b was supported, study abroad experience did positively influence institutional commitment and that relationship was moderated by immersion. However, Hypothesis 1b was significant but not supported directionally. Intercultural interaction experience had a significant but negative relationship with engagement, and that relationship was moderated by immersion. The remaining hypotheses involving the dependent variables performance and professional development were not influenced by international educational experience.

While the proposed model and hypotheses were only partially confirmed, there were some important findings from this study. One of the most consistent and notable findings was that intercultural interaction experiences did not result in the expected benefits, and in most cases had the opposite effect. This was a surprising finding that indicates there is room for further research in this area to understand why. A less surprising but consistent finding was that study abroad did positively influence institutional commitment, and that relationship was moderated by immersion. It is interesting that study abroad was not positively associated with engagement, professional development or performance, which demonstrates that there is room to further investigate this result as well. Finally, this study provides empirical evidence to demonstrate that there is much to learn about the impacts of international education experience and particularly, how to make them more beneficial to the students and faculty that participate in them. More research must be done to provide more evidence for how to most effectively utilize university internationalization as an effective method of human capital development

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## **APPENDIX A: Interview Methodology**

An exploratory study was conducted to help identify the key concepts and themes relevant for this line of research. The exploratory study involved seven hour-long interviews with faculty and staff involved in internationalization activities at a university. The purpose of the interviews was to understand the various methods of internationalization at a university, the roles that faculty and administration play in delivering them, and their opinions about the benefits of these activities to the students, themselves, and the university as a whole.

### *Participants*

The interview participants were selected based on their involvement in internationalization activities such as teaching international and intercultural coursework, leading study abroad trips, teaching overseas, recruiting or advising international students, or leading online or on-campus intercultural learning experiences. The interviewees had between five and twenty years of experience at the university and had been involved in internationalization activities for most of their tenure. Interviewees were selected because of their involvement in at least one or two methods of internationalization, which evolved into the independent variables.

### *Method*

Six of the interviews were conducted in person and on-campus, while one interview was conducted by phone. Each interview was audio recorded and included a set of ten questions that were asked in the same order and read from a script for consistency. Interview questions included questions about the participants' experience and involvement in internationalization activities at the university, about the benefits of those activities to students, themselves and

if/how those benefits were transferred to the university. Then participants were asked a few more general questions about their beliefs about the importance of internationalization activities for a university and which methods of they felt were most effective. These questions were formulated with the intention of gathering information to support the research question and provide themes and concepts to explore in the literature review.

As an aside, my own experience in university internationalization efforts involves the strategic direction and oversight of international student recruitment and advising, acculturation programming aimed at developing intercultural interactions, intensive English language instruction for international students, and education abroad programming. My experience in this area has informed my thinking on this topic and piqued my interest in more concretely understanding the value and benefits of internationalization efforts.

The interviews were conducted over a two-week period and the audio files were transcribed electronically and corrected manually with the aid of an online program called 'Trint' ([www.trint.com](http://www.trint.com)). When the transcriptions were complete, they were read, reread and highlighted for key words or phrases that emerged frequently across all of the interviews. There were some clear themes that emerged, which were then researched as part of the literature review. With the additional literature support the dependent and independent variables were formalized, which were used to develop the proposed model and hypotheses.

**APPENDIX B: Interview Participants**

<b>Participant</b>	<b>Date</b>	<b>Description</b>
A	4/17/17	Full-time instructor with intercultural interaction experience; more than 10 years at university
B	4/18/17	Full-time staff with intercultural interaction experience; between 5-10 years at university
C	4/19/17	Tenured faculty with international courses, study abroad, and online intercultural interaction experience (GLE); more than 10 years at university
D	4/19/17	Tenured faculty with international courses, study abroad, and online intercultural interaction experience (GLE); more than 15 years at university
E	4/24/17	Tenured faculty with study abroad, and online intercultural interaction experience (GLE); more than 15 years at university
F	4/24/17	Full-time staff with intercultural interaction experience; more than 15 years at university
G	4/25/17	Tenured faculty with international courses, study abroad, and intercultural interaction experience; more than 15 years at university

**APPENDIX C: Survey Participant Profile**

	<b>All Cases</b>		<b>Faculty</b>		<b>Students</b>	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<b>Employment Status</b>						
Employed full time	182	41.6	111	93.3	71	22.3
Employed part time	91	20.8	7	5.9	84	26.3
Retired	1	0.2	0	0	1	0.3
Self-employed	2	0.5	0	0	2	0.6
Student	127	29.0	0	0	127	39.8
Unable to work	3	0.7	0	0	3	0.9
Unemployed looking for work	25	5.7	0	0	25	7.8
Unemployed not looking for work	7	1.6	1	0.8	6	1.9
Total	438	100.0	119	100.0	319	100.0
<b>AGE</b>	Frequency	Percent	Frequency	Percent	Frequency	Percent
18 to 24 years	180	41.1	2	1.7	178	55.8
25 to 34 years	104	23.7	7	5.9	97	30.4
35 to 44 years	50	11.4	29	24.4	21	6.6
45 to 54 years	47	10.7	38	31.9	9	2.8
55 to 64 years	44	10.0	33	27.7	11	3.4
Age 65 or older	13	3.0	10	8.4	3	0.9
Total	438	100.0	119	100.0	319	100.0
<b>Gender</b>	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	147	33.6	55	46.2	92	28.8
Female	291	66.4	64	53.8	227	71.2
Total	438	100.0	119	100.0	319	100.0
<b>Frequency</b>	Frequency	Percent	Frequency	Percent	Frequency	Percent
Never	27	6.2	1	0.8	27	8.5
Only once before	34	7.8	1	0.1	33	10.3
Once every few years	120	27.4	28	23.4	92	28.8
Once a year	115	26.3	30	25.3	85	26.6
A few times a year (2 to 3 times)	103	23.5	41	34.5	62	19.4
Multiple times a year (more than 4 times)	39	8.9	19	16.0	20	6.3
Total	438	100.0	119	100.0	319	100.0
<b>Experience Type</b>	Frequency	Percent	Frequency	Percent	Frequency	Percent
International Courses	64	14.6	5	4.2	59	18.5
Intercultural Interaction Experience	168	38.4	48	40.3	120	37.6
Study Abroad	56	12.8	32	26.9	24	7.5
No Experience	150	34.2	34	28.6	116	36.4
Total	438	100.0	119	100.0	319	100.0

**APPENDIX D: Correlation Table**

Variable	Mean	SD	1	2	3	4	5	6	7
1. Experience	11.87	5.48	--						
2. Satisfaction	5.82	1.06	.368**	--					
3. Immersion	4.89	1.24	.334**	.559**	--				
4. Engagement	5.05	0.96	0.044	.171**	.171**	--			
5. Professional Development	5.39	1.06	-0.013	0.083	.089*	.547**	--		
6. Performance	5.34	1.23	-.01	.142**	.119*	.594**	.594**	--	
7. Institutional Commitment	5.06	1.44	-0.004	.105*	.094*	.628**	.405**	.512**	--

Note. N = 367

Note2 Alpha reliability for all variables except for moderators, Satisfaction and Immersion.

\*  $p < .05$

\*\*  $p < .01$

**APPENDIX E: Moderation Tables**

Engagement				
	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
<i>Model 1</i>				
Constant	4.89	--	59.78	.00
Age	.14	.19	2.44	.02
Frequency Travel	.07	.08	1.06	.29
<i>F</i>		4.570*		
<i>Adjusted R<sup>2</sup></i>		4.20%		
<i>Model 2</i>				
Constant	4.93	--	57.37	.00
Age	0.13	0.19	2.39	.02
Frequency Travel	0.10	0.11	1.26	.21
Experience	-0.02	-0.09	-0.99	.32
Immersion	0.06	0.07	0.83	.41
<i>F</i>		2.59*		
<i>Adjusted R<sup>2</sup></i>		4%		
<i>Change in adjusted R<sup>2</sup></i>		1%		
<i>Model 3</i>				
Constant	4.86	--	53.72	.00
Age	0.12	0.17	2.17	.03
Frequency Travel	0.11	0.13	1.45	.15
Experience	-0.02	-0.09	-1.00	.32
Immersion	0.04	0.05	0.61	.54
xImmersion	0.01	0.16	2.05	.04
<i>F</i>		2.96*		
<i>Adjusted R<sup>2</sup></i>		5.6%		
<i>Change in adjusted R<sup>2</sup></i>		2.4%		

*N* = 165

\* *p* < .05

\*\* *p* < .01

## Institutional Commitment

	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
<i>Model 1</i>				
Constant	5.2	--	56.16	.00
cFrequencyTravel	.28	.30	3.80	.00
<i>F</i>		14.422**		
<i>Adjusted R<sup>2</sup></i>		8.50%		
<i>Model 2</i>				
Constant	5.18	--	50.49	.00
cFrequencyTravel	0.25	0.27	3.04	.00
cExperience	0.01	0.03	0.67	.50
clmersion	0.07	0.07	0.80	.42
<i>F</i>		5.080**		
<i>Adjusted R<sup>2</sup></i>		8%		
<i>Change in adjusted R<sup>2</sup></i>		1%		
<i>Model 3</i>				
Constant	5.25	--	51.33	.00
cFrequencyTravel	0.24	0.26	2.97	.00
cExperience	0.01	0.06	0.67	.50
clmersion	0.15	0.16	1.77	.08
xlmersion	-0.01	-0.25	-2.95	.00
<i>F</i>		6.196**		
<i>Adjusted R<sup>2</sup></i>		12.5%		
<i>Change in adjusted R<sup>2</sup></i>		5.3%		

*N* = 146

\* *p* < .05

\*\* *p* < .01



## Engagement (STUDENTS ONLY)

	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
<i>Model 1</i>				
Constant	4.687	--	29.87	.00
cFrequencyTravel	.03	.02	0.24	.81
<i>F</i>		.06		
<i>Adjusted R<sup>2</sup></i>		-0.80%		
<i>Model 2</i>				
Constant	4.68	--	28.51	.00
cFrequencyTravel	0.13	0.09	0.90	.37
cExperience	-0.04	-0.12	-1.17	.24
cSatisfaction	-0.02	-0.01	-0.12	.91
clmersion	-0.14	-0.10	-0.87	.39
<i>F</i>		.85		
<i>Adjusted R<sup>2</sup></i>		-1%		
<i>Change in adjusted R<sup>2</sup></i>		3%		
<i>Model 3</i>				
Constant	4.62	--	27.57	.00
cFrequencyTravel	0.15	0.11	1.03	.30
cExperience	-0.03	-0.11	-1.06	.29
cSatisfaction	-0.07	-0.05	-0.47	.64
clmersion	-0.11	-0.08	-0.71	.48
xSatisfaction	-0.07	-0.24	-2.20	.03
xlmersion	0.04	0.26	2.42	.02
<i>F</i>		1.764*		
<i>Adjusted R<sup>2</sup></i>		3.8%		
<i>Change in adjusted R<sup>2</sup></i>		5.8%		

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*N* = 146

\* *p* < .05

\*\* *p* < .01

## Institutional Commitment (STUDENTS ONLY)

	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
<i>Model 1</i>				
Constant	5.213	--	46.02	.00
Citizenship	-.17	-.07	-0.78	.44
<i>F</i>		.61		
<i>Adjusted R<sup>2</sup></i>		-0.30%		
<i>Model 2</i>				
Constant	5.22	--	44.75	.00
Citizenship	-0.22	-0.09	-0.99	.32
Experience	0.00	0.02	0.18	.86
Immersion	0.02	0.02	0.17	.87
Satisfaction	0.28	0.25	2.10	.04
<i>F</i>		2.24		
<i>Adjusted R<sup>2</sup></i>		4%		
<i>Change in adjusted R<sup>2</sup></i>		7%		
<i>Model 3</i>				
Constant	5.25	--	42.22	.00
Citizenship	-0.37	-0.16	-1.64	.10
Experience	0.02	0.08	0.72	.47
Immersion	0.13	0.13	1.15	.26
Satisfaction	0.17	0.15	1.24	.22
Immersion Interaction	-0.01	-0.29	-2.48	.02
Satisfaction Interaction	0.02	0.09	0.79	.43
<i>F</i>		2.62*		
<i>Adjusted R<sup>2</sup></i>		7.9%		
<i>Change in adjusted R<sup>2</sup></i>		5.2%		

*N* = 146

\* *p* < .05

\*\* *p* < .01

**APPENDIX F: Survey Instrument**

## Information Sheet

### Information Sheet

Research Study on International Education

Principal Investigator: Kari Costello, Doctor of Business Administration candidate, DePaul University

Faculty Advisor: Dr. Zafar Iqbal, PhD, Driehaus College of Business

### Purpose:

We are conducting a research study because we are trying to understand **attitudes about international education**. Exposure to international and intercultural learning is ubiquitous through more global perspectives in the classroom, participation in foreign language and intercultural studies, teaching and learning abroad, and involvement in online collaborations with foreign institutions and classrooms, etc. If you agree to be in this study, you will be asked to fill out a survey about your perceptions of international education, including your exposure to and attitudes about activities such as study abroad, foreign language study, international or area studies, or intercultural interactions on campus and online. We will also collect some personal information about you such as your affiliation with the university (faculty or student), your age, your professional and academic experience. The research study will be completed online.

### Participation:

Any individual over the age of 18 years old who currently attends a four year university; or a currently employed faculty member from a four year university is welcome to participate. **This survey will take about 5 to 8 minutes** of your time. **Research data collected from you will be anonymous.** Your participation is voluntary, which means you can choose not to participate. There will be no negative consequences if you decide not to participate or change your mind after you begin the study. You can withdraw your participation at any time prior to submitting your survey. If you change your mind later while answering the survey, you may simply exit the survey. Once you submit your responses, we will be unable to remove your data later from the study because all data is anonymous and we will not know which data belongs to you.

We hope to include about 400 people in the research. **At the end of the survey, you will have the opportunity to enter a drawing to win a Visa gift card worth \$50.** If you are interested in entering the drawing, at the end of the survey you can click the advance button below which will direct you to a separate form to fill in your name and contact information. The form will ask for your name, mailing address and email address, which will be used to notify the winner and to mail the gift card. The contact information will be kept separately from your survey responses in order to keep your survey responses anonymous.

### For More Information:

If you have questions, concerns, or complaints about this study or you want to get additional information or provide input about this research, please contact Kari Costello, #312-362-8661 or [kcstel7@depaul.edu](mailto:kcstel7@depaul.edu).

If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University's Director of Research Compliance, in the Office of Research Services at 312-362-7593 or by email at [sloesspe@depaul.edu](mailto:sloesspe@depaul.edu). You may also contact DePaul's Office of Research Services if:

Your questions, concerns, or complaints are not being answered by the research team. You cannot reach the research team. You want to talk to someone besides the research team.

You may keep [or print] this information for your records. By completing the survey you are indicating your agreement to be in the research.

## Block 2 - Demographics

Which best describes you?

- Undergraduate student
- Graduate student
- Professional student (i.e. Law)
- Faculty
- Staff
-

Other

What is your current standing grade level?

- Freshman
- Sophomore
- Junior
- Senior
- 5th year Senior
- 1st year Graduate Student
- 2nd year Graduate Student
- Other

What is your major or area of study?

What is your employment status?

- Employed full time
- Employed part time
- Self-employed
- Unemployed looking for work
- Unemployed not looking for work
- Student
- Retired
- Unable to work

How many part-time jobs or internships have you had while you've been in college? (enter number)

What is your age?

- 18 to 24 years
- 25 to 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- Age 65 or older

What is your gender?

- Male

Female

What is your country of citizenship?

What type of previous international travel experience have you had? (check all that apply)

Previous study abroad experience

Service or volunteer related travel

Work or professional experience

Personal or family experience

Other

None

How frequently do you typically travel abroad?

Multiple times a year (more than 4 times)

A few times a year (2 to 3 times)

Once a year

Once every few years

Only once before

Never

### Block 3 - Experience vs. No experience

Which type of **international or intercultural education** are you most familiar with?

Study abroad

Experience interacting with individuals from different cultural backgrounds from my own in an educational context

International or intercultural coursework

No experience

### Block 6 - Survey (no experience)

You have indicated that **you have no experience with international or intercultural education**. Based on that response, **please indicate how much you agree or disagree with the following statements**.

**At school I feel full of energy.**

Strongly disagree  
(1)

Disagree (2)

Somewhat  
disagree (3)

Neither agree nor  
disagree (4)

Somewhat agree  
(5)

Agree (6)

Strongly agree (7)

**At school I feel strong and vigorous.**

Disagree (2)

Agree (6)

Strongly agree (7)

Strongly disagree (1)                      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)                      Agree (6)                      Strongly agree (7)

**I feel motivated when I get up in the morning to go to school.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**I find my studies full of meaning and purpose.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**I am enthusiastic about my studies.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**My studies inspire me.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

Time **RARELY** flies when I'm studying.

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

You previously indicated that **you have no experience with international or intercultural education**. Based on that response, **please indicate how much you agree or disagree with the following statements.**

**When I am studying, I forget everything else around me.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**I feel happy when I'm studying intensely.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**There are career opportunities available that are attractive to me.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**There are professional opportunities available that are of interest to me.**





**My educational institution has a great deal of personal meaning to me.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**I feel a strong sense of belonging to my educational institution.**

Strongly disagree (1)      Disagree (2)      Somewhat disagree (3)      Neither agree nor disagree (4)      Somewhat agree (5)      Agree (6)      Strongly agree (7)

**Thank you**

Thank you for your for completing this survey. If you are interested in being entered into a drawing to win a Visa gift card worth \$50, you may click the advance button below which will direct you to a form to enter your name, mailing address and email address. Your contact information is not linked to your survey responses, and will not be shared or used for any purpose other than the drawing.

**Block 4 - International Education Experience**

What is your **level of experience** with the following types of international or intercultural education? **(Please slide the marker to indicate your level of experience, 0 = no experience; 5 = a great deal of experience)**

	No experience 0	A little experience 1	A moderate amount of experience 2	3	A lot of experience 4	A great deal of experience 5
Short-term study abroad (less than 8 weeks)						
Long-term study abroad or exchange program (more than 8 weeks)						
Classroom experience interacting with individuals from different cultural backgrounds from my own						
Online/technology-enabled intercultural distance learning experiences (i.e. GLE)						
Internationally focused coursework, including foreign language, international or area studies, and intercultural courses.						







