



2016-05-01

The Impact of Demographic and Educational Factors on International Students' Propensity to Trust: Implications for School Officials in Higher Education

Samuel D. Brown
Brigham Young University

Follow this and additional works at: <https://scholarsarchive.byu.edu/etd>

 Part of the [Educational Leadership Commons](#)

BYU ScholarsArchive Citation

Brown, Samuel D., "The Impact of Demographic and Educational Factors on International Students' Propensity to Trust: Implications for School Officials in Higher Education" (2016). *All Theses and Dissertations*. 6381.
<https://scholarsarchive.byu.edu/etd/6381>

This Dissertation is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu.

The Impact of Demographic and Educational Factors on International Students'
Propensity to Trust: Implications for School Officials in Higher Education

Samuel D. Brown

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Education

Pamela R. Hallam, Chair
Steven J. Hite
Julie M. Hite
Sterling C. Hilton
Clifford T. Mayes

Department of Educational Leadership and Foundations

Brigham Young University

May 2016

Copyright © 2016 Samuel D. Brown

All Rights Reserved

ABSTRACT

The Impact of Demographic and Educational Factors on International Students' Propensity to Trust: Implications for School Officials in Higher Education

Samuel D. Brown
Department of Educational Leadership and Foundations, BYU
Doctor of Education

School officials responsible for the growing international student populations struggle to find ways to help them navigate inconsistencies that may exist between federal regulations and institutional policies, and would benefit from increased understanding of ways to gain trust from diverse student populations. To determine whether student demographics might be related to propensity to trust, this study used the validated Propensity to Trust Scale (PTTS) by Frazier, Johnson, and Fainshmidt (2013), as well as a demographic questionnaire developed to measure students' background and educational attributes. Responses to an online survey from 576 international students from 71 countries were collected from a large private institution of higher education in the Western United States.

Basic inferential statistics, including Analysis of Variance (ANOVA) and post hoc analysis, identified differences among demographic groups within this student population. Findings indicated that students who were not native speakers of the dominant language had a lower propensity to trust than native English speakers, and female students had a lower propensity to trust than did male students. Findings also indicated that during the senior year of school *propensity to trust* was significantly lower than in earlier undergraduate years and in graduate school.

Implications from this study include an emphasis on the value of considering individuals within their own unique cultural and educational contexts, and avoiding a one-size-fits-all approach to fostering trust with students. Additionally, school officials should not assume that *propensity to trust* is consistent among those with institutional similarities and must not stereotype students based on their backgrounds.

Keywords: higher education, foreign students, propensity to trust, trust

ACKNOWLEDGEMENTS

I am extremely grateful for the support and kindness shown by so many during my work on this dissertation, without which I could not have been successful. This is a reflection of their love, patience, guidance, and benevolence, and I treasure my friendship with them. I would especially like to thank the following for their significant contributions and support:

- My wife Marena, whose constant support has been felt throughout this process. Her willingness to shoulder an increased burden at home while I worked on this was a great sacrifice, and her advice and encouragement has motivated me to continue. She is a consummate enthusiast who helps me see the world in an optimistic light, and I love and appreciate her dearly.
- Our children, Adelyn, Kasen, Nyah, and Soren, who have noticed their dad's absence during these long years, and who keep me grounded amid the constant demands of life.
- My chair, Pam Hallam, who has been a wonderful mentor and coach throughout this process. She has been a spectacular chair and friend, and has given me so much of her time and always looked for ways to make me a better person and scholar.
- My committee members have also been a tremendous support throughout this process. I was fortunate to be taken under wing while Steve Hite guided me through the prospectus process, Julie Hite gave great feedback and direction, Sterling Hilton advised me for the statistical analyses, and Cliff Mayes edited my final work. I would also like to thank Vera Terekhova, whose direction through scrubbing and analyzing my data was instrumental in this accomplishment.
- Finally, I wish to thank my colleagues at BYU, including the Dean of Students' office and the International Student Services office, for their support and encouragement.

TABLE OF CONTENTS

TITLE PAGE	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
DESCRIPTION OF DISSERTATION CONTENT AND STRUCTURE	viii
Introduction and Background	1
Trust	2
Defining and classifying trust	2
Examining trust research in an international context.	3
Propensity to Trust	5
Labeling and defining propensity to trust	5
Recognizing trait-based characteristics and other antecedents of propensity to trust.	6
Hypotheses	8
Methods	9
Sampling and Demographics	9
Data Collection	11
Analysis	12
Findings	12
Discussion	15
Native Language	16

Religious Affiliation	16
Exposure to the United States Educational System.....	17
Other Demographic and Educational Factors.....	17
Practical Implications	19
Limitations.....	20
Conclusions.....	21
References.....	22
APPENDIX A: REVIEW OF LITERATURE	27
APPENDIX B: METHODS.....	50
APPENDIX C: INSTRUMENT	59
REFERENCES	61

LIST OF TABLES

Tables	Page
1. Statistical Data from Sample	10
2. Propensity to Trust Scale (Frazier et al., 2013)	12
3. Propensity to Trust Scores by Group	13
4. ANOVA Results for Hypotheses	14

LIST OF FIGURES

Figures	Page
1. Conceptual Model of Study	7

DESCRIPTION OF DISSERTATION CONTENT AND STRUCTURE

This document is presented in the format of the hybrid dissertation as approved by Brigham University's McKay School of Education. The hybrid dissertation is one of several formats supported in Brigham Young University's David O. McKay School of Education. Unlike a traditional "five chapter" format, the hybrid dissertation focuses on producing a journal-ready manuscript. Consequently, the final dissertation product has fewer chapters than the traditional format and focuses on the presentation of the scholarly manuscript as the centerpiece. Following the journal manuscript are appendices, which include an extended review of literature and a methodological section sufficient for the requirements of an institutional review board.

The targeted journal for this article is *Education and Society*, which is sponsored and licensed by James Nicholas Publishers. This journal is an international, fully refereed journal that focuses on educational issues from social, cultural, and economic contexts, and is geared toward both scholars and educational administrators in the field of education. Submissions undergo rigorous review, and manuscripts must be between 4,000 and 8,000 words. This manuscript is approximately 5,363 words, excluding the reference section.

Introduction and Background

Since the introduction of the Immigration and Nationality Act in 1952, the number of international students coming to the United States to study at institutions of higher education has increased consistently. According to the latest *Open Doors* report (Farrugio & Bhandari, 2015), new international student enrollment increased in 2015 by 10% over the previous year, accounting for 974,926 foreign students in the United States. The vast majority of these students entered the country on an F-1 or J-1 student visa.

Following the attacks in New York on September 11, 2001 by terrorists who entered the United States using student visas, the Department of Homeland Security was created and given stewardship over F-1 and J-1 visa populations (F-1 visa holders are self-sponsored financially, whereas J-1 visa holders are sponsored by their home government or the school itself). This led to significant revisions of policy and scrutiny of these visa holders, including the creation of the Student and Exchange Visitor Program (SEVP), which oversees the regulatory compliance of all approved academic institutions. This also led to a much stricter interpretation of the Code of Federal Regulations (CFR), which changed how school officials at these academic institutions interpret and process requests by students.

Pursuant to 8 C.F.R. § 214.2(f) and 8 C.F.R. § 214.3(a)(2), all SEVP-approved schools must appoint Designated School Officials (DSO) and Alternate Responsible Officers (ARO), who are tasked with helping direct F-1 and J-1 visa holders, respectively, in navigating federal regulations as well as individual university policies that may be inconsistent with each other. If international students do not trust, and therefore do not seek to follow the advice of DSOs and AROs, they could lose their privilege of attending school, working, or receiving future benefits, possibly having their visa status terminated and being forced to return home. Research has

shown that *propensity to trust* impacts the degree to which one individual trusts others (Gill, Boies, Finegan & McNally, 2005; Lee & Turbin, 2001; Mayer, Davis, & Schoorman, 1995). Colquitt, Scott, and LePine, (2007) stated that “trust propensity is likely to be the most relevant trust antecedent in contexts involving unfamiliar actors” (p. 911).

F-1 and J-1 students who have a low propensity to trust unfamiliar school officials to guide them through the regulatory and university processes will likely experience heightened stress at school as well as possible loss of future visa benefits, which could also lead to loss of familial and social status in their home countries. If school officials could identify demographic patterns related to international students’ propensity to trust, they would be better equipped to gain these students’ trust and help them navigate these challenging complexities. With these considerations, this study explored the following questions:

1. In what ways does propensity to trust vary among F-1 and J-1 student populations from English-speaking and non-English-speaking backgrounds?
2. In what ways does propensity to trust vary among F-1 and J-1 student populations from different religious backgrounds?
3. What other demographic factors are associated with F-1 and J-1 students’ propensity to trust others?

Trust

Defining and classifying trust. It is impossible to consider propensity to trust without considering the evolution of the broader field of trust research, including the facets and antecedents explored in the vast research within this field. A central challenge with much of the trust research is defining this ambiguous construct, in part because of the multidisciplinary nature as well as the breadth of trust studies (Bigley & Pearce, 1998; Rousseau, Sitkin, Burt, & Camerer, 1998). One

prominent contribution in defining trust was Roger Mayer, James Davis, and David Schoorman's 1995 definition—one of the most cited during the past two decades. These researchers identified trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). While other researchers have developed variations of this definition, the concept of vulnerability introduced by Mayer et al. has permeated most of the trust definitions since that time (Hoy & Tschannen-Moran, 1999; Mishra, 1996; Rousseau et al., 1998; Serva, Fuller, & Mayer, 2005). In 1998 Rousseau et al. continued using vulnerability as a definitive aspect of trust, but added the idea of positive expectations as part of the constitutive definition (Colquitt et al., 2007). The construct of trust has also been dissected and classified in a variety of ways with a wide range of facets. In their work Mayer et al. (1995) established the model of organizational trust with three factors of perceived trustworthiness (ability, benevolence, and integrity), separating trust from trustworthiness, and *trustor's propensity* from those three factors. These authors also included a comprehensive list of the antecedent facets of trust found in the research up until that time. Other researchers have studied additional dimensions and facets of trust (Bijlsma & van de Bunt, 2003; Bryk & Schneider, 2002; Dirks & Ferrin, 2002; Hoy & Tschannen-Moran, 1999; McAllister, 1995; Rousseau et al., 1998; Zucker, 1986). In 2007 Colquitt et al. argued for propensity to trust to be placed as an antecedent to trustworthiness, stating that to do so “would have significant indirect effects on trust to go along with its significant direct effect” (p. 919).

Examining trust research in an international context. While much research is dedicated to internationalization (Urban & Palmer, 2014) and acculturation for students studying outside their own country (Fritz et al., 2008; Kashima & Loh, 2006), as well as psychometric analysis of

outside cultural impacts on the individual (Wang, Wei, Zhao, Chuang, & Li, 2014), research on international students' trust within the United States system of higher education is limited. Until recently, very little focus has been given to research on trust with international populations, and, like most of the trust research trends, much of the research started in the business arena (Nambudiri, 2012). A highly cited work in the business field by Leonard Huff and Lane Kelley (2003) exploring trust among various Asian populations showed that "levels of individual and organizational trust vary across cultures" (p. 88). More recently, research on trust has also been done in educational settings internationally (Addi-Raccah, 2012; Czerniawski, 2011; Hallam, Boren, Hite, & Mugumi, 2013; Van Maele & Van Houtte, 2010; Wermke, 2012). Authors such as Kochanek (2005) have also studied the relationship of nationality to trust. However, even though research on trust in international settings has increased, less focus has been given to trust among foreign student populations in United States higher education, with very little regarding propensity to trust.

In 2007 Schoorman, Mayer, and Davis revisited their original model of trust (1995) and detailed the developments within the context of trust research since 1995. While confirming their previous definition and model as a viable and trusted resource, they also recognized "the role that international and cross-cultural dimensions play" in their model (p. 352). These authors further stated:

We believe that one of the ways in which culture affects trust is through the propensity variable. We have proposed that the antecedents of propensity include personality, experiences, and culture. There is evidence in the culture literature that initial trust of strangers varies across cultures. One of the dimensions of culture that is most relevant to this issue is the task versus relationship orientation of a culture. Task-oriented cultures

seem to have a higher initial trust of strangers and therefore a higher propensity, while relationship-oriented cultures need time to develop a relationship prior to working on the tasks. (p. 351)

While trust is an interdisciplinary topic that has more recently branched into the field of education, limited research exists on the international perspective and even less at the university level within the United States. This study adds to the research regarding international students by considering what factors and attributes impact the propensity to trust of those studying in the United States at the university level.

Propensity to Trust

Labeling and defining propensity to trust. While the general construct of propensity to trust has been included in trust research since Rotter's use of the term *generalized expectancy* (1967), it has become more central to the field during the last two decades. Definitions for propensity to trust have varied, though less debated and scrutinized than the broader construct of trust. While researchers vary slightly on the semantics used in titles and definitions, no constitutive distinction exists in the literature. Many terms and descriptive phrases have been used in the research to describe and explain propensity to trust. Hardin (1993) discussed what he called "precondition of cooperation" (p. 514), defining one's "capacity to trust" (p. 513) in terms of an "attitude of distrust or wariness" (p. 516). In reference to Hardin's work, Bigley and Pearce (1998) used the phrase "predilection to trust" (p. 412), which they defined under the broader category of *dispositional trust*—a term used in much of the research (Burke, Sims, Lazzara, & Salas, 2007; Gill et al., 2005; Kramer, 1999; McKnight, Cummings & Chervany, 1998; McKnight, Choudhury, & Kacmar, 2002; Tschannen-Moran & Hoy, 2000). Descriptive phrases for the construct of propensity to trust include but are not limited to "risk propensity" (Sitkin & Pablo, 1992),

“motivation to trust” (Williams, 2001), “faith in humanity” (McKnight et al., 2002), “trusting stance” (McKnight et al., 2002), and “intention to trust” (Gill et al., 2005). In general, most of the definitions used to describe these terms align with the definition used in this study, introduced by Mayer et al. in 1995: “a general willingness to trust others” (p. 715).

Recognizing trait-based characteristics and other antecedents of propensity to trust.

Over the years, propensity to trust has been included in the conceptualization of trust development as an antecedent to trust and researched in terms of the relationship between the two constructs. This study is distinguished by its focus on characteristics antecedent to propensity to trust in an international population in the US higher education. This research conceptualizes propensity to trust as a mediating variable between specific educational and demographic attributes and trust itself (see Figure 1).

Others have also conceptualized antecedents to propensity to trust. As mentioned above, Schoorman, Mayer, and Davis (2007) reviewed and expanded their previous work on trust (1995), finding that “the antecedents of propensity include personality, experiences, and culture” (p. 351), but they did not elaborate on these constructs. Other work has been less direct in citing specific antecedents, but has included statements implying that propensity to trust was impacted by various attributes and factors. Adams and Forsyth (2009) listed propensity to trust as an antecedent to trust but stated that “trust functions as a mediating condition between socioeconomic status and performance” (p. 143). Tschannen-Moran and Hoy (2000) discussed

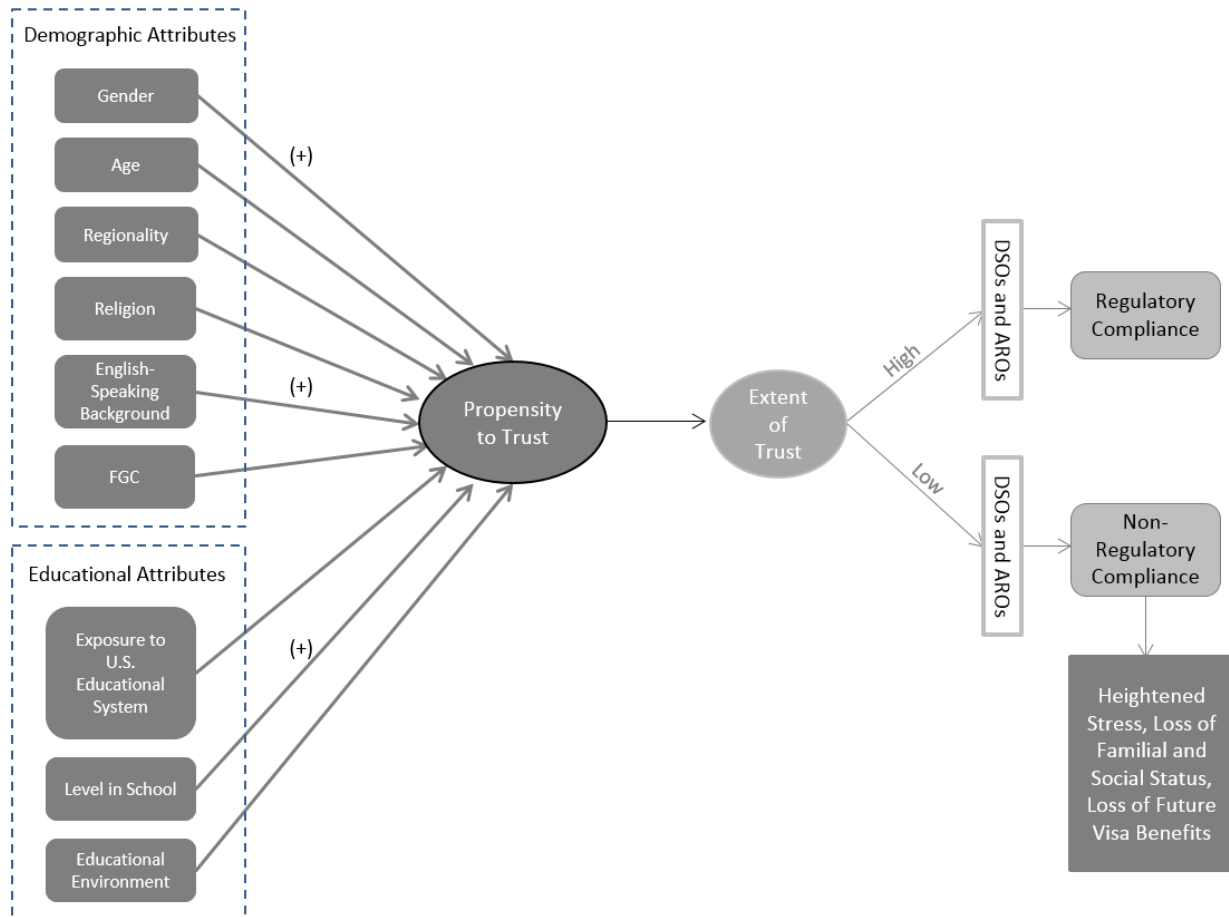


Figure 1. Conceptual Model of Study. Designated School Officials (DSO) and Alternate Responsible Officers (ARO) are designated employees at the institution approved by the government to act as liaisons between the student and government for regulatory purposes.

arguments that researchers have given about the development of propensity to trust (“disposition to trust” as the authors titled it), and included upbringing by parents and situational factors. In this work, they evaluated what they termed the “bases and degrees of trust” (p. 558), which included disposition to trust, moods and emotions, values and attitudes, diversity, and various types of trust. In discussing character-based trust, they stated that “this kind of trust is based on norms of obligation and cooperation rooted in social similarity, wherein similarity may depend

on characteristics such as family background, social status, and ethnicity” (p. 560). While not explicitly stating that these background attributes are antecedents to propensity to trust, they stated that these attributes impact trust itself and can be understood to be antecedents.

Other similarities studied in trust research include physical, geographical, racial, ethnic, cultural, and religious characteristics (Kochanek, 2005; Zucker, 1986). As Kochanek (2005) stated:

People often decide to place their trust with those who share physical and social similarities with them (Zucker, 1986). Immigrants coming to American in the late 1800s and early 1900s chose to live and work among people from the same country of origin, creating ethnic enclaves in major cities that survive even today. Swedes, for example, interacting mostly with other Swedes, felt reassured that by placing their trust with someone from the same culture they were less likely to be cheated. Their belief was that the shared culture would also mean that they had a shared value system and perhaps even be a little more likely to want to support each other. . . . Physical or social characteristics such as race, religion, or even the type of car a person drives are used to represent characteristics that are more difficult to predict or measure, such as competence, honesty, or kindness. (p. 9)

Hypotheses

This study explored relationships of respondents’ demographic and educational background attributes to their aggregated scores on the PTTS (Frazier, Johnson, & Fainshmidt, 2013). Based on the representative demographics for this population across the country and the institution in which this research took place, the following hypotheses were tested:

Hypothesis 1: Propensity to trust will be higher for international students from English-speaking backgrounds than it will be for international students from non-English-speaking backgrounds.

Hypothesis 2: Propensity to trust will be higher for students who are members of the institution's sponsoring religion than for students of other religious backgrounds and affiliations.

Hypothesis 3: Propensity to trust for international students will be positively related with level of exposure to the United States education system.

Hypothesis 4: Propensity to trust for international students will be related to other verified demographic and educational attributes.

Methods

This research used the validated Propensity to Trust Scale (PTTS) developed by Frazier, Johnson, and Fainshmidt (2013) to determine the propensity to trust of international students on F-1 and J-1 visas at a large, private university in the Western United States. Survey responses from 576 individuals representing 71 countries formed the basis for the analysis, recommendations, and conclusions. One-way analysis of variance (ANOVA) was used to explore for potential differences between groups, followed by Tukey's post-hoc tests.

Sampling and Demographics

The target population for this study was all international students on F-1 and J-1 visas at a large, private university in the Western United States. The population was determined using the Student and Exchange Visitor Information System (SEVIS), a government database used by educational institution for tracking student visa holders. Of the 1,616 students who were found to have English proficiency, 691 responses were received. Following Howell's (2007)

recommendation for “listwise deletion,” we also deleted responses with any missing information. In total, 115 respondents were deleted, leaving an N of 576, representing a 35.6% response rate, which well exceeded thresholds taken from other research using similar populations (Urban & Palmer, 2014).

The 576 who remained as participants consisted of 288 males and 288 females from 71 countries. Their average age was 23.9 years ($SD = 5.281$). A full breakdown of demographic and educational variables is provided in Table 1.

Table 1

Statistical Data from Sample

Demographic factors	<i>N</i>	%
Male	288	50.0
Female	288	50.0
Members of church affiliated with university	511	88.7
Not members of church affiliated with university	65	11.3
English as a second language	439	76.2
English as a native language	137	23.8
First-generation college students	107	18.6
Non-first-generation college students	469	81.4
Educational factors	<i>N</i>	%
Previous education in U.S.	210	36.5
Freshmen	105	18.2
Sophomores	88	15.3
Juniors	82	14.2
Seniors	115	19.9
Graduate students	96	16.7
Other (OPT)	20	3.5
English Language Center	70	12.2

Note. OPT=Optional Practical Training: graduated visa holders who are utilizing a 12-month work authorization in the United States, whose stewardship still falls under the university.

Data Collection

In this study, various demographic and educational attributes were considered as antecedents of propensity to trust. Standard demographic variables that were chosen as independent variables included gender, age, regionality, religion, first-generation college status, and level in school; population-specific variables germane to this study included English-speaking background, exposure to the United States educational system, and prior educational environment.

Propensity to trust was then measured using the Propensity to Trust Scale (PTTS), which was developed by Frazier and colleagues by synthesizing the many non-validated scales already in use in the field (Frazier et al., 2013) and adding three of their own. The 40 questions previously used by other researchers include measures consistent with Mayer et al.'s (1995) definition of propensity to trust and what they called "the dispositional component of trust" (p. 77). The final validated survey represents propensity to trust with a 5-point Likert scale (see Table 2 for questions and reliability). The final PTTS score aggregates the four items with a range from 4 to 20, with 4 representing the lowest propensity to trust and 20 representing the highest.

Respondents completed an online survey to indicate their various demographic and educational attributes, such as gender, country of origin, English speaking background, and level in school (see Appendix C for the full survey). Where possible, established standards for demographic questions were followed, which included using the same structure and verbiage as the United States Census Bureau. These data were used in analyzing of the relationships between the antecedent demographic and educational variables and the aggregated PTTS score.

Table 2

Propensity to Trust Scale (Frazier, et al., 2013)

Question	Chronbach's Alpha
1. "I usually trust people until they give me a reason not to trust them."	.85
2. "Trusting another person is not difficult for me."	.84
3. "My typical approach is to trust new acquaintances until they prove I should not trust them."	.70
4. "My tendency to trust others is high."	.89

Analysis

The independent variables used in this study were operationalized, recoded, and transformed into nominal and categorical data types to facilitate the statistical analysis. Age groups were aggregated to facilitate analysis, and groupings were based on traditional ages and corresponding levels in school.

The respondents' propensity to trust was determined by aggregating the scores on each of the four PTTS questions. Following this analysis, the PTTS score was compared to each of the variables using one-way ANOVAs to determine if distinct groupings could be found.

Tukey's post-hoc tests were run to determine which differences between which groups in pairs were significant, as determined using Pearson's correlation coefficient. Post-hoc analysis yielded statistically-significant pairings for four of the variables tested: native language, gender, age, and level at school. Two-way ANOVAs were then run to determine if the interaction of multiple attributes had an effect on the PTTS of the respondents.

Findings

The analysis used the PTTS to determine the propensity to trust of each respondent. The average score for all surveyed respondents was 14.23 ($SD = 3.515$) out of 20. Table 3 provides a breakdown of PTTS scores by different factors. The PTTS score was then used to test

differences between groupings for the attributes in the hypothesis. Exploration of each of the hypotheses showed significant differences in PTTS scores for English as a second language, gender, and level at school (see Table 4).

Table 3

Propensity to Trust Scores by Group

Group	PTTS Score	<i>SD</i>
Male	14.7	3.19
Female	13.8	3.76
Members of church affiliated with university	14.2	3.49
Not members of church affiliated with university	14.5	3.66
English as a second language	14.0	3.57
English as a native language	15.0	3.21
First-generation college student	14.8	3.59
Non-first-generation college student	14.1	3.50
Previous exposure to U.S.	14.3	3.57
No previous exposure to U.S.	14.1	3.42
Undergraduate student	14.2	3.52
Graduate student	14.8	3.17
Other (OPT)	14.0	4.74
English Language Center	13.7	3.48

Hypothesis 1 predicted that propensity to trust would be higher for students whose native language was English (the dominant language at the university) than for students who were non-native English speakers. Findings indicated a significant difference between these two groups. Thus, Hypothesis 1 is supported. Respondents whose native language was not English showed lower propensity to trust than those whose native language was English. This study did not take into account variations between different native languages or different levels of English-speaking ability beyond the standard levels of proficiency required for study in the United States into account variations between different native languages or different levels of English-speaking system of higher education.

Table 4

ANOVA Results for Hypotheses

Hypothesis	<i>df</i>	<i>F</i>	<i>p</i>
1. ESL and PTTS	1	8.351	.004*
2. Religion and PTTS	1	.448	.503
3. Exposure to U.S. and PTTS	1	.345	.557
4. Other attributes and PTTS:			
a. Gender	1	10.413	.001*
b. Regionality	7	1.909	.066
c. FGC	1	2.935	.087
d. Level in School	6	2.179	.043*

^a indicates significance

Hypothesis 2 predicted that propensity to trust would be higher for students who were members of the religious denomination sponsoring the institution. Findings indicated no statistically significant difference between those from the dominant religion and those from other religious backgrounds and/or affiliations. Thus, Hypothesis 2 is not supported.

Hypothesis 3 predicted that propensity to trust would be positively related with the level of exposure to the United States education system. Findings indicated no statistically significant difference between those who had previously studied in the United States and those who had not. Thus, Hypothesis 3 is not supported.

Hypothesis 4 predicted that propensity to trust would be related to other verified demographic and educational attributes. Findings indicated statistically significant differences in PTTS scores for gender and level in school.

Findings indicated significant differences in propensity to trust based on gender. Propensity to trust for male and female respondents was negatively correlated, indicating that females in this study demonstrated a lower propensity to trust than males. Females in this study had an average PTTS of 13.8 ($SD=3.76$), whereas males had an average of 14.7 ($SD=3.19$).

Additional analysis compared PTTS and students' level in school. It might be expected that the longer a student studies at an institution in the United States, the higher their propensity to trust would be; however, this study found that the PTTS scores were significantly lower for seniors. ANOVAs showed that freshmen, sophomores, and juniors were statistically indistinguishable in their propensity to trust, with PTTS scores of 14.65, 14.35, and 14.51, respectively. However, seniors' PTTS scores averaged only 13.41, a statistically significant decrease. Graduate students showed levels similar to freshmen, sophomores, and juniors, with a PTTS score of 14.84. A post-hoc analysis (Tukey test) of the levels in school similarly showed a significant difference between seniors and graduate students as well as between seniors and all other baccalaureate groups. Thus, Hypothesis 4 is supported.

Two-way ANOVAs were also run to determine how propensity to trust is affected by presence of multiple independent variables. Results showed no statistically significant findings that merited exploration. While significance was found among certain pairings, these were obvious groupings. For example, significance was found between level in school and age, which is an obvious association given that students progress through school and age concurrently.

Discussion

Dynamic increase in the number of international students in the United States and in global outreach necessitates more research considering intercultural settings—involving both international students and the US institutions they attend. Trust research has already begun to explore these intercultural settings (Addi-Raccah, 2012; Czerniawski, 2011; Delhey & Newton, 2003; Hallam et al., 2013; Van Maele & Van Houtte, 2010), but more is needed to understand differences in the various facets and antecedents of trust in an international context. This study addressed this gap in the literature by exploring the propensity to trust among various

international groups attending a large university in the United States. Three significant factors—native language, gender, and level in school—were found to impact the propensity to trust of these populations.

Native Language

Analysis of the variable of native language (Hypothesis 1) was particularly relevant for international students in this American institution, since ability for interpersonal communication is a component of trust development (Mayer et al., 1995). The difference in the propensity to trust of those whose native language is not the dominant language spoken is consistent with other trait-based research on trust (Kochanek, 2005; Schoorman et al., 1995; Zucker, 1986). This finding would suggest that language proficiency is similar to characteristic-based trust, in which individuals typically seek similarities as a basis of trust. Thus lower propensity to trust by international students living in an environment where their native language is not dominant would be anticipated.

Religious Affiliation

Religious affiliation was a variable that proved to be non-statistically significant (Hypothesis 2). This outcome was unexpected, as the respondents attended a university sponsored by a religious denomination, and previous research has shown religious affiliation to have an impact on trust (Kochanek, 2005; Rotter, 1967; Rousseau et al., 1998). While religious affiliation was not significantly related to propensity to trust despite the nature of the university, this finding provides a valuable insight for the institution and might merit future research. The concept of institution-based trust (Hoy & Tschannen-Moran, 1999; Rousseau et al., 1998; Zucker, 1986) may be relevant, as respondents who were not affiliated with the sponsoring religion understood the institution's distinctive code of conduct and chose to attend because they

shared these standards. Identifying with these shared values may have contributed to greater propensity to trust at this particular institution, effectively mediating religious differences.

Exposure to the United States Educational System

Another variable that proved to be non-statistically significant was the level of exposure to education in the United States (Hypothesis 3). This outcome was inconsistent with previous research, which has shown that earlier experience impacts propensity to trust (Adams & Forsyth, 2009; Schoorman et al., 2007; Tschannen-Moran & Hoy, 2000). As all respondents were enrolled in an institution of higher education in the United States at the time of the study, they would have had some exposure to education in a US setting. Future research is needed to determine if students who had never experienced US education would show lower propensity to trust than those currently enrolled in it.

Other Demographic and Educational Factors

This study found that females show a lower propensity to trust than males (Hypothesis 4). This may indicate that females are more worried about being harmed (physically or emotionally) or taken advantage of than males, which is understandable given vulnerability of females to imposition or abuse (Buchan, Croson, & Solnick, 2008; Maccoby & Jacklin, 1974). Considering cultural contexts, this lower propensity to trust may be affected by differences in treatment of females across the world, including being subject to inequality (Croson & Buchan, 1999). Worldwide (including the US) females are subject to challenges such as income inequality and lack of female representation in higher-level positions in institutions of higher education, which could contribute to their lower propensity to trust (Chodorow, 1995; Wang & Yamagishi, 2005). It seems natural that those who have witnessed or experienced inequalities in these environments would be more reluctant to trust university personnel who may contribute to the problems.

Future research would benefit from looking at why there are differences in females' versus males' propensity to trust, particularly in a foreign context.

Findings also indicated that level in school was negatively correlated to international students' propensity to trust (Hypothesis 4), with seniors showing significantly less propensity to trust than students in other baccalaureate years and graduate students. This suggests a more dynamic nature to propensity to trust relative to the stage of one's life. The elevated stress caused by the uncertainty of one's future after graduation as well as increased requirements for the graduation process may contribute to lower propensity to trust for these students.

Compounding this for international students is the increase in regulatory processes as they prepare for their optional practical training (authorized employment opportunity for one year). It seems logical that during this time of heightened stress, other areas such as trust could be negatively impacted as shown in this study. In contrast, graduate students who have already passed through this phase of their education tend to have more supportive small group environments in their academic departments, as well as greater levels of personal interactions with their professors, which would understandably lead to higher levels of trust.

Another reason for seniors' diminished levels of propensity to trust may be accumulated negative experiences which conflict with their initial presumptions for the institution. As Fiske and Taylor (1991) asserted, these experiences could cause "cognitive mechanisms" which "could lead individuals to discount information not congruent with their pre-existing beliefs" (Gill et al, 2005, p. 298). If students consistently experience situations which contradict their high expectations for the institution, their willingness to trust those affiliated with that institution might logically decrease.

Practical Implications

This study has several practical implications for university officials. First, this research underscores the value of looking at individual students and others within their own unique cultural and educational contexts. Propensity to trust others is influenced by one's own set of experiences and cultural perspectives, which influence the way one perceives risks and benefits. Taking into consideration these differences can help Designated School Officials (DSO) and school administrators better understand why one student might seek out help or follow suggestions from unfamiliar actors while another with similar challenges might not.

Second, while there is no one-size-fits-all approach to fostering trust with others, group similarities are important when looking at diverse populations such as international students. Consideration of these similarities can help DSOs and school administrators in the United States understand how to approach and work with different groups of students. Knowing that international students whose native language is not English have lower propensity to trust, DSOs and school administrators would benefit from working initially to build trust by finding ways to show their benevolence, reliability, competence, honesty, and openness (Hoy & Tschannen-Moran, 1999). Likewise, knowing that females tend to have lower propensity to trust could lead DSOs and school officials be more cautious as they work to build trust with females based on these same five facets (Buchan, Croson, & Solnick, 2008; Wang & Yamagishi, 2005). The field would benefit from research examining this with foreign nationals in countries outside of the United States.

Third, similarity in propensity to trust should not be assumed merely because others share certain institutional contexts. This study found that students with certain institutional similarities did not show similar trends in propensity to trust. Specifically, participants who

actively participated in the dominant religious culture of the university did not show higher propensity to trust than those who did not. This inconsistency with research that has been done previously on institution-based trust (Zucker, 1986) could indicate certain situational limitations within this study (such as low religious diversity among the respondents). Similarly, students who shared home-country proximity were not found to have distinguishable patterns in their propensity to trust. Beneficial future research could also explore these antecedents to propensity to trust in international student populations at universities with other cultural characteristics.

Finally, it is important to note that while trends can be helpful in assessing and working with students and groups, individuals should not be stereotyped based on their backgrounds. DSOs and school administrators would benefit from using multiple approaches and methods to gain the trust of international students for whom they have stewardship. Specifically, the authors suggest looking at trust-building exercises that build upon previously researched facets of trust (Hoy & Tschannen-Moran, 1999).

Limitations

One significant limitation with this study was that it was conducted at one large private university owned and administered by an international church. Thus many though not all of the international students were members of this sponsoring church. Future trust research might implement a comparable study with a more diverse sampling of students, particularly involving more religious differences. Language was also a limiting factor, as the surveys were in English, not the native language of many of the student respondents. While the survey was not administered to students who had not attained certain English proficiency levels, nuances in the questions may have not been fully understood by non-native English speakers.

Conclusions

Finding ways to help support international students is an increasing concern for DSOs and school officials. This increasing population contributes great enrichment and diversity to institutions of higher education, and focused efforts must be made to support their holistic development and help them succeed in school. If DSOs and school officials can better understand how to gain the trust of these individuals, they have a better chance of helping guide them through these complex and challenging processes. This study shows trends with international students' propensity to trust and helps clarify ways in which some diverse student attributes may affect these students' likelihood of trusting DSOs and school officials who are seeking to help them succeed. These university personnel and representatives would do well to consider these findings as they seek to gain the trust of these international students.

References

- Adams, C., & Forsyth, P. (2009). The nature and function of trust in schools. *Journal of School Leadership, 19*(2), 126-152.
- Addi-Racah, A. (2012). Teachers' trust in role partners, intention to continue in teaching, and schools' social composition in Israel. *Urban Education, 47*(4), 835-864.
- Bigley, G., & Pearce, J. (1998). Straining for shared meaning in organization science: Problems of trust and distrust. *Academy of Management Review, 23*(3), 405-421.
- Bijlsma, K., & van de Bunt, G. (2003). Antecedents of trust in managers: A "bottom up" approach. *Personnel Review, 32*(5), 638-664.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Buchan, N., Croson, R., & Solnick, S. (2008). Trust and gender: An examination of behavior and beliefs in the investment game. *Journal of Economic Behavior & Organization, 68*, 466-476.
- Burke, C., Sims, D., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly, 18*(6), 606-632.
- Chodorow, N. (1995). Gender as a personal and cultural construction. *Signs, 20*, 516-544.
- Colquitt, J., Scott, B., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*(4), 909-927.
- Croson, R., & Buchan, N. (1999). Gender and culture: International experimental evidence from trust games. *The American Economic Review, 89*(2), 386-391.
- Czerniawski, G. (2011). Emerging teachers—emerging identities: Trust and accountability in the

- construction of newly qualified teachers in Norway, Germany, and England. *European Journal of Teacher Education*, 34, 431-447.
- Delhey, J., & Newton, K. (2003). Who trusts? The origins of social trust in seven societies. *European Societies*, 5(2), 93-137.
- Dirks, K., & Ferrin, D. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611-628.
- Farrugio, C., & Bhandari, R. (2015). Open doors: Report on international educational exchange. *Institute of International Educational Exchange*. Retrieved from <http://www.iie.org/research-and-publications/open-doors/data>
- Fiske, S., & Taylor, S. (1991). *Social cognition (2nd ed.)*. New York, NY: McGraw-Hill.
- Frazier, M., Johnson, P., & Fainshmidt, F. (2013). Development and validation of a propensity to trust scale. *Journal of Trust Research*, 3(2), 76-97.
- Fritz, M., Chin, D., & DeMarinis, V. (2008). Stressors, anxiety, acculturation and adjustment among international and North American students. *International Journal of Intercultural Relations*, 32(2), 244-259.
- Gill, H., Boies, K., Finegan, J., & McNally, J. (2005). Antecedents of trust: Establishing a boundary condition for the relation between propensity to trust and intention to trust. *Journal of Business and Psychology*, 19(3), 287-302.
- Hallam, P., Boren, D., Hite, J., Hite, S., & Mugimu, C. B. (2013). Headteacher visibility and teacher trust of the headteacher: Perspectives of Ugandan secondary school teachers. *International Journal of Educational Development*, 33(5), 510-570.
- Hardin, R. (1993). The street-level epistemology of trust. *Politics and Society*, 21(4), 505-529.
- Howell, D. (2007). The treatment of missing data. In W. Outhwaite & S.P. Turner (1st ed.).

- The sage handbook of social science methodology*, (pp. 208-224). Thousand Oaks, CA: Sage.
- Hoy, W., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9(3), 184-208.
- Huff, L., & Kelley, L. (2003). Levels of organizational trust in individualist versus collectivist societies: A seven-nation study. *Organization Science*, 14(1), 81-90.
- Kashima, E., & Loh, E. (2006). International students' acculturation: Effects of international, conational, and local ties and need for closure. *International Journal of Intercultural Relations*, 30(4), 471-485.
- Kochanek, J. (2005). *Building trust for better schools: Research-based practices*. Ann Arbor, MI: Corwin Press.
- Kramer, R. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual review of psychology*, 50(1), 569-598.
- Lee, M., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of electronic commerce*, 6(1), 75-91.
- Maccoby, E., & Jacklin, C. (1974). *The psychology of sex differences*. Redwood City, CA: Stanford University Press.
- Mayer, R., Davis, J., & Schoorman, F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- McAllister, D. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59.
- McKnight, D., Cummings, L., & Chervany, N. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23(3), 473-490.

- McKnight, D., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information systems research, 13*(3), 334-359.
- Mishra, A. (1996). Organizational response to crisis: The centrality of trust. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 261-287). Thousand Oaks, CA: SAGE Publications.
- Nambudiri, R. (2012). Propensity to trust and organizational commitment: A study in the Indian pharmaceutical sector. *The International Journal of Human Resource Management, 23*(5), 977-986.
- Rotter, J. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality, 35*(4), 651-665.
- Rousseau, D., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *The Academy of Management Review, 23*(3), 393 - 404.
- Schoorman, F., Mayer, R., & Davis, J. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review, 32*(2), 344-354.
- Serva, M., Fuller, M., & Mayer, R. (2005). The reciprocal nature of trust: A longitudinal study of interacting teams. *Journal of Organizational Behavior, 26*(6), 625-648.
- Sitkin, S., & Pablo, A. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review, 17*(1), 9-38.
- Tschannen-Moran, M., & Hoy, W. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research, 70*(4), 547 - 593.
- Urban, E., & Palmer, L. (2014). International students as a resource for

- internationalization of higher education. *Journal of Studies in International Education*, 18(4), 305.
- Van Maele, D., & Van Houtte, M. (2010). The quality of school life: Teacher-student trust relationships and the organizational school context. *Social Indicators Research*, 100(1), 85-100.
- Wang, K., Wei, M., Zhao, R., Chuang, C., & Li, F. (2014). The cross-cultural loss scale: Development and psychometric evaluation. *Psychological Assessment*, 27(1), 42.
- Wang, F., & Yamagashi, T. (2005). Group-based trust and gender differences in China. *Asian Journal of Social Psychology*, 8, 199-210.
- Wermke, W. (2012). A question of trustworthiness? Teachers' perceptions of knowledge sources in the continuing professional development marketplace in Germany and Sweden. *Teaching and Teacher Education*, 28(4), 618-627.
- Williams, M. (2001). In whom we trust: Group membership as an affective context for trust development. *Academy of Management Review*, 26(3), 377-396.
- Zucker, L. (1986). The production of trust: Institutional sources of economic structure, 1840 – 1920. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organization Behavior* (pp. 53-111). Greenwich, CT: JAI Press.

APPENDIX A: REVIEW OF LITERATURE

The Impact of Various Demographic and Educational Factors on International Student's Propensity to Trust School Officials

This dissertation considers the impact of various demographic and educational attributes as they relate to the propensity to trust of international students at a major university. The following chapter is a review of the literature used in studying, researching, and writing this dissertation. It begins with a brief history of the federal guidelines governing international students and scholars in the United States and the role that university officials play in guiding international students through these regulations. Next, it contains a review of relevant trust research and the development of propensity to trust as a related construct. Finally, it discusses an overview of previous studies within the field of trust research involving international student populations.

Understanding International Student Regulatory History

In 1952 Congress passed the Immigration and Nationality Act (INA), also known as the McCarran-Walter bill, which codified and restructured the disparate and varied immigration laws at the time and became one of fifty sections in the United States Code of laws (USC). According to the United States Immigration and Citizenship Services (USCIS) website, under this act regulations concerning the appropriate acquisition and use of visas were established, including provisions for approved studies for foreign nationals enrolling in higher education in the United States. There are three visas designated specifically for degree-seeking students (F-1, M-1, and J-1). While there are differences between these visa categories, the fundamental definitions and assumptions written in Immigration and Naturalization Services (INS) for each are consistent. This study primarily focuses on those in F-1 and J-1 status at a large, private university, with

97% of the target population and 98% of the respondents being F-1 visa-holders. With this in mind, I have used the F-1 definitions and regulations to describe federal parameters for these populations.

Over the years, there has been a steady increase in the numbers of international students obtaining student visas to study in the United States. On a national scale, the economy of international students is extremely large, and most institutions of higher education look at international students as significant financial contributors because they pay out-of-state tuition. As such, international students are heavily recruited and are an extremely high input into the U.S. economy. According to the latest *Open Doors* report (Farrugio & Bhandari, 2015), new international student enrollment increased in 2015 by 10% over the previous year, accounting for 974,926 foreign students in the U.S. in the 2014/2015 school year. This includes a 7.6% increase in undergraduate students, and a 9.8% increase in graduate students over the past academic school year. When compared to the 1999/2000 school year, there has been an 89% increase in foreign students studying in the U.S. The U.S. Code of Federal Regulations (CFR) defines an F-1 student with the following parameters: a nonimmigrant who is pursuing a full course of study to achieve a specific educational or professional objective, at an academic institution in the United States that has been designated by the U.S. government to offer courses of study to such students (INA § 101(a)(15)(F); INA § 214(m); 8 C.F.R. § 214.2(f); 8 C.F.R. § 214.3; 8 C.F.R. § 214.4). Following the attacks in New York on September 11, 2001 by terrorists who entered using F-1 student visas, the Department of Homeland Security (DHS) was created and given stewardship over these visa populations within the United States. This led to significant revisions and scrutiny of these visa-holders, including the creation of the Student and Exchange Visitor Program (SEVP), who oversee the regulatory compliance of all approved academic

institutions. This also led to a much stricter interpretation of the Code of Federal Regulations, which changed how administrators at these academic institutions interpret and process requests by students. Figure 1 below illustrates the organizational structure for stewardship and reporting for student visa-holders within the United States, as outlined in this section.

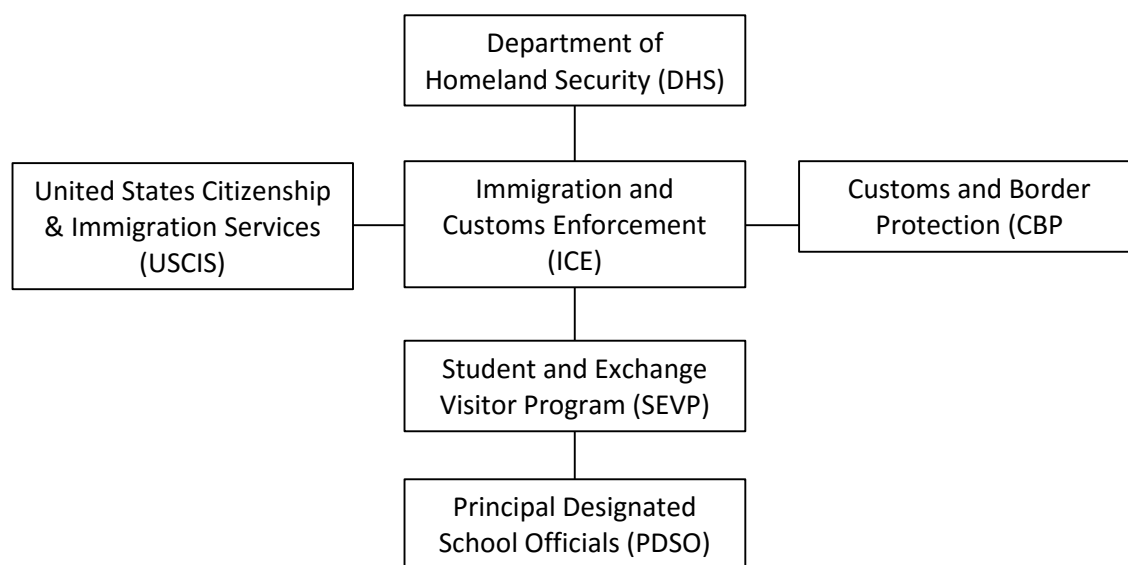


Figure 1. Foreign Student Reporting Structure in the United States

Pursuant to the 8 C.F.R. § 214.2(f) and 8 C.F.R. § 214.3(a)(2), all SEVP-approved schools, through the president, owner, or head, appoint one Principal Designated School Official (PDSO), who may appoint up to nine additional regularly employed members of the school to act as Designated School Officials (DSO), who will have various official functions in the F-1 process (8 C.F.R. § 214.2(f)(11)(ii)). DSOs are tasked with helping direct F-1 visa-holders at their institution as they navigate both the federal regulations as outlined in the CFRs, and individual university policies, which are often at odds with the federal guidelines. Ultimately, it is the responsibility of the principal visa holder to maintain his/her status and follow the

regulations; however, given the extremely complex and ambiguous nature of these guidelines, this is not always a realistic expectation for full-time students in a foreign country. If international students do not trust, and therefore do not seek or follow the advice of DSOs, they could lose their ability to attend school, work, or receive future visa benefits. Additionally, non-compliance to the CFRs and University policies results in the termination of students' visa status and university status, and would likely force them to return home.

Stated more directly, F-1 and J-1 students who have a low propensity to trust DSOs to guide them through the regulatory and university processes will likely experience heightened stress at school, loss of familial and social status in their home countries, and loss of future visa benefits. The ability to help international students grow to trust DSOs has significant potential to strengthen both international students and academic institutions. If DSOs better understand individual international students' propensity to trust university administrators, they have a better ability to help these visa-holders with their regulatory compliance and institutional concerns. On a larger scale, if leaders can identify trends and patterns in a larger international student demographic, they can better economize and maximize those efforts.

Trust

This study considered the impact of various demographic and educational variables on *propensity to trust*. It is impossible to look at propensity to trust without considering the evolution of the larger field of trust research and the facets and antecedents explored in the vast research within this field. This section covers how trust has been defined and categorized in research since the mid-twentieth century and a review of the facets and antecedents to trust within that research. As recommended in Colquitt et al. (2007), this study considers propensity to trust as an antecedent to trust.

Defining Trust

A central challenge with much of the trust research is defining this ambiguous construct, in part because of the multidisciplinary nature and breadth of trust studies (Bigley & Pearce, 1998; Rousseau, Sitkin, Burt, & Camerer, 1998). What we now construe as trust research within the social sciences largely began with Morris Rosenberg's "faith in people" in 1957 and Morton Deutsch (1958). These authors defined trust in terms of "the individual's degree of confidence in the trustworthiness, honesty, goodness, generosity, and brotherliness of the mass of men" (p. 26), and "motivational consequences" (p. 266), respectively. Trust research became even more known with J.B. Rotter's work in 1967, where he built upon Rosenberg's classification of trust as an interpersonal factor and developed an "interpersonal trust" scale that was widely used for several decades. In his work Rotter defined interpersonal trust as "an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon" (p. 651).

This notion of expectancy has permeated many definitions of trust, including Lynne Zucker's (1986) definition as "a set of expectations shared by all those involved in an exchange" (p. 54). Zucker outlined what she considered the two main components of trust: background expectations and constitutive expectations. She defined background expectations as "the common understandings that are taken for granted as part of a world known in common," and characterized this definition with the properties of the "attitude of daily life" and the "reciprocity of perspectives" (p. 57). She defined constitutive expectations as "the rules defining the context or situation" and characterized this definition with the properties of "independence from self-interest" and "intersubjective meaning" (p. 58).

Sitkin and Roth (1993) summarized that “nearly all research has at least implicitly accepted a definition of trust as a belief, attitude, or expectation concerning the likelihood that the actions or outcomes of another individual, group or organization will be acceptable” (p. 368). Using this premise, they defined trust as “belief in a person’s competence to perform a specific task under specific circumstances” (p. 373). The authors also looked at the opposite of trust – distrust, and defined it as “the belief that a person’s values or motives will lead them to approach all situations in an unacceptable way” (p. 373).

One prominent contribution in defining trust was made by Roger Mayer, James Davis, and David Schoorman (1995), who gave one of the most-cited definitions of trust in the past two decades. Mayer et al. defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). While other researchers have developed variations of this definition, Mayer et al.’s introduction of the concept of vulnerability has permeated much of the trust definitions since then (Hoy & Tschannen-Moran, 1999; Mishra, 1996; Rousseau et al., 1998; Serva, Fuller, & Mayer, 2005). In 1998, Rousseau et al. continued using vulnerability as a definitive aspect of trust, but also synthesized the idea of positive expectations as part of the constitutive definition (Colquitt, Scott, & LePine, 2007).

Facets and Antecedents of Trust

The construct of trust has also been dissected and classified in a variety of ways and with a wide range of facets. In their widely accepted work Mayer et al. (1995) established the Model of Organizational Trust with three Factors of Perceived Trustworthiness (ability, benevolence, and integrity), and separated trust from trustworthiness (Colquitt et al., 2007) and “trustor’s

propensity” from those three factors. The authors also included a comprehensive list of the antecedent factors of trust found in the research up until that time (p. 718).

Another highly cited author who placed trust into different categories was Lynne Zucker (1986). Zucker detailed what she termed “three central modes of trust production, each with associated measures: (1) process-based, where trust is tied to past or expected exchange such as in reputation or gift-exchange; (2) characteristic-based, where trust is tied to person, depending on characteristics such as family background or ethnicity; and (3) institutional-based, where trust is tied to formal societal structures, depending on individual or firm-specific attributes” (p. 53). Zucker also states that “trust can be explained only in terms of unmeasured antecedents: if rules are internalized—or moral codes or norms of reciprocity apply—then trust exists” (p. 60).

McAllister (1995) examined interpersonal trust and divided them into two basic forms (cognition-based trust and affect-based trust). He defined cognition-based trust as “grounded in individual beliefs about peer reliability and dependability” (p. 25). He defined affect-based trust as “grounded in reciprocated interpersonal care and concern” (p. 25). The author then identified factors that influenced the development of these two forms of trust and the behaviors demonstrated with each form, and developed a measurement tool.

In 1998, Denise Rousseau, Sim Sitkins, Ronald Burt, and Colin Camerer undertook the task of creating a multidisciplinary view of trust, and showed how complex the categorization of trust is. They also warned of too narrow of categorization, and stated that “conceptualizing trust in only one form in a given relationship risks missing the rich diversity of trust” (p. 401). The authors categorized different types of trust research, including: deterrence-based trust, relational trust, calculus-based trust, and institution-based trust. The latter of these is especially relevant in this dissertation, as the institution in which the respondents were surveyed is a faith-based

university owned and operated by a church, and 88% of those surveyed belonged to that faith. The authors state that “shared understanding between individuals or between firms can arise out of interactions and from shared or common knowledge” (p. 401). With this dissertation sample a sub-category of religious-based trust could also be included under the broader categorization of institution-based trust, owing to the fact that within a religious community there is shared knowledge and community understanding.

In 1999, Wayne Hoy and Megan Tschannen-Moran added to Mayer’s factors with the Five Faces of Trust (benevolence, reliability, competence, honesty, and openness). These same authors further categorized types of trust in 2000 when they created what they called “bases and degrees of trust,” which included trust and diversity, institution-based trust, and knowledge-based trust.

Bryk and Schneider (2002) added another dimension to trust in what they termed “relational trust.” The authors review what they term “the form that trust takes” (p. 16), including organic trust, contractual trust, and relational trust. They define organic trust as “predicated on the more or less unquestioning beliefs of individuals in the moral authority or a particular social institution” (p. 16). The authors define contractual trust as trust where “the basis for social exchange is primarily material and instrumental” (p. 17). Relational trust was a new form that the authors theorized, which drew from James Coleman’s (1988) Social Capital Theory. Building on Coleman’s concept, Bryk and Schneider posited that relational trust consists of interpersonal “social exchanges” within a community (in this case a school), and defined relational trust as “interpersonal social exchanges among members who comprise [a] community” (p. 14). Bryk and Schneider categorized relational trust as “an intermediate case between the material and instrumental exchanges at work in contractual trust and the

unquestioning beliefs operative in organic trust” (p. 21). They further state that “relational trust, so conceived, is appropriately viewed as an organizational property in that its constitutive elements are socially defined in the reciprocal exchanges among participants in a school community” (p. 22). Bryk and Schneider further categorize relational trust as being built on four criterion: respect, competence, personal regard for others, and integrity.

Bijlsma and van de Bunt (2003) also studied antecedents to trust, and identified support, guidance, monitoring, and openness as antecedent trust variables. The authors state that “monitoring performance, guidance to improving individual performance, support in case of troubles with others, openness to ideas of subordinates and co-operation-related problem solving were found to be relevant trust-related behaviours” (pp. 656-657). This article also called in to question the results published by Dirks and Ferrin (2002), in that “actors react to a few single behavioural cues instead of many complex ones” (p. 659). In their work, Dirks and Ferrin also looked at antecedents to trust with relationship to leadership, and provided a detailed meta-analysis of actions, attributes, and intentions, and their relation to different definitions of trust.

Like many mentioned above, Colquitt et al. (2007) also considered the antecedents of trust, and showed that propensity to trust was significantly related to Mayer’s (1995) three precursors to trustworthiness. The authors considered three categories of trust scales: those using positive expectations components of trust, those assessing vulnerabilities, and those they termed “direct measures,” where respondents were asked to rate their levels of trust (p. 912). In their findings they confirmed that “trust propensity remained a significant predictor of trust” (p. 915). They also argued for propensity to trust to be placed as an antecedent to trustworthiness, stating that to do so “would have significant indirect effects on trust to go along with its significant direct effect” (p. 919).

Gender-Based Trust

One physiological aspect that has been heavily studied with regard to trust research is gender. While gender is an anthropologically-based construct and can be subjective, I have chosen to use this term as opposed to sex because of its prevalent use in the literature. Macoby and Jacklin (1974) researched “the way in which biological ‘predisposition’ interact with the impact of social experience to shape the psychological makeup of the person” (p. 2). Chodorow (1995) stated that “there are psychological processes in addition to, and in a different register from, culture, language, and power relations that construct gender for the individual” (p. 517). She also wrote that this is highly individualized in women and should not be generalized for all women (Chodorow, 1995). Other studies have also shown that women have lower propensity to trust when compared to men. Wang & Yamagishi (2005) looked at group-based trust and gender difference in China, and found that “male participants were significantly more trusting of unknown partners than were female participants (p. 199). Croson and Buchan (1999) conducted research in three Asian countries and the United States. They had participants play an investment game to measure their trust and found that “across all countries, male and female senders sent similar amounts, while female responders returned a higher proportion of their wealth” (p. 466). In another study done in the field of economics, Buchan, Croson, and Solnick (2008) found that “men trust more than women, and women are more trustworthy than men” (p. 466).

Propensity to Trust

Propensity to trust plays a central role in this dissertation. While this section will explore the constitutive definition and categorization of this construct as shown in previous research, it is also germane to mention the operational definition used in assessing the propensity to trust of

international students in this dissertation. To measure this value in the respondents, this study used the Propensity to Trust Scale (PTTS) that was developed and validated by Frazier, Johnson, and Fainshmidt (2013). The details of this measurement tool are outlined in the methodology section in Appendix B.

Propensity to trust has been included in the conceptualization of trust development in many ways. More recently, it has been used as an antecedent to trust, and researched to show the relationship between the two. What distinguishes this dissertation is that research was done to show what characteristics act as related antecedents to propensity to trust itself within an international population in the U.S. system of higher education. Sequentially, this research places propensity to trust as a construct within this unique population, and conceptualizes propensity to trust as a mediating variable between specific educational and demographic attributes and trust itself (see Figure 2).

Naming and Defining Propensity to Trust

While the general construct of propensity to trust has been included in trust research since Rotter's use of the term "generalized expectancy" (1967), it has become more central to the field in the last two decades. Defining propensity to trust has been varied, but much less debated and scrutinized compared to the broader construct of trust. While researchers vary slightly on the semantics used for their titles and definitions, there is no normative distinction in the literature. In this section I outline some of the different titles and definitions given to this construct. For this dissertation I have chosen to use the term "propensity to trust," as defined in the widely cited work by Mayer et al. (1995), which they define as "a general willingness to trust others" (p. 715).

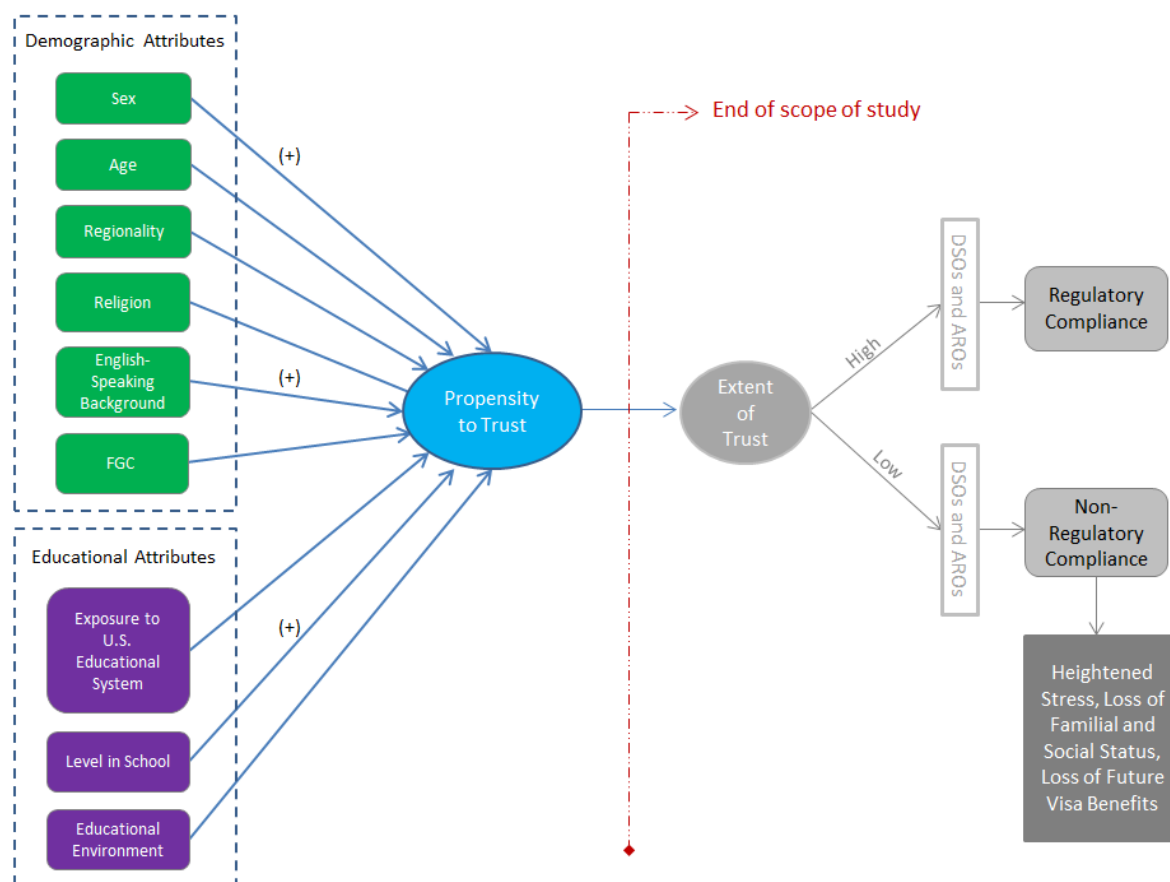


Figure 2. Conceptual Model of Study. Designated School Officials (DSO) and Alternate Responsible Officers (ARO) are designated employees at the institution approved by the government to act as liaisons between the student and government for regulatory purposes.

In 1986, Lynne Zucker published research on trust production in the United States throughout the second half of the 19th century and the first part of the 20th century. In her work, Zucker considered the immigration trends at that time and their impact on trust production in the country. She outlined the shift from what she termed “process-based” trust, to “characteristic-based” trust, and finally “institution-based” trust. Zucker uses the term “preexisting background

expectations” (p. 70) in discussing propensity to trust, or what Bigley and Pearce (1998) later summarized as “preconscious expectation” (p. 415).

Hardin (1993), in his discussion of trust as “encapsulated interest,” discusses the “thick-relationship theory” of trust, or what he defines as knowledge of who can be trusted. The author outlines the need for more discussion on other aspects of trust—in particular, trustworthiness—and elaborates on what he calls “a precondition of cooperation” (p. 514). In this work, Hardin also discusses an individual’s “capacity to trust” (p. 513), and uses the phrase “attitude of distrust or wariness” (p. 516) in discussing propensity to trust. Hardin theorizes that an individual’s propensity to trust comes from learned experiences as a child (what Bigley and Pearce called “predilection to trust,” p. 412), and states that “the psychological development of a propensity to trust involves extensive investment, *especially by others, such as parents*” (p. 515).

Another title used when referring to propensity to trust is “dispositional trust” (Kramer, 1999). Kramer briefly discusses previous research in the field, and states that “ample evidence exists from both laboratory experiments and field-based research that individuals differ considerably in their general predisposition to trust other people. Research suggests further that the predisposition to trust or distrust others tends to be correlated with other dispositional orientations, including people’s beliefs about human nature” (p. 575). This notion of “disposition to trust” is also used by many other authors (Gill, 2005; McKnight, Cummings, & Chervany, 1998; Tschannen-Moran & Hoy, 2000).

Like Kramer, Burke, Sims, Lazzara, and Salas (2007) also use the term “predisposition,” but they use this as a broader term that encompasses all of the trustors characteristics, including: propensity to trust, attribution style, perceived risk, leader prototype, and prior history (p. 613, Figure 1). The authors define propensity to trust as “the general willingness to place faith in

others' reciprocity and good intentions" (p. 619), and "a general tendency to make positive attributions about others' intentions" (p. 609). Like Hardin, Burke et al. posit that an individual's propensity to trust is developed from previous learned experiences. They state that "individual differences in cognitive processing of information influence what information and the weight each piece of information is given in the decision to trust... This reciprocal relationship might have more to do with the recall of different events (high trusters recall positive events and low trustors recall negative events)" (p. 619).

McKnight et al. (2002) took Mayer's facets and expanded on what they called "faith in humanity" and "trusting stance" (p. 340), from which two of the validated questions from Frazier's PTTS derived. Trusting stance was encompassed within the framework of disposition to trust, and was defined as "regardless of what one believes about peoples' attributes, one assumes better outcomes result from dealing with people as though they are well meaning and reliable" (p. 340). Within a business context, McKnight et al. uses the consumer's "personal strategy to trust vendors until they prove him/her wrong" (p. 340), and state that "trust-building strategies may be different for individuals with low versus high disposition to trust" (p. 340). All of McKnight et al.'s questions for "trusting stance" were developed and analyzed (using Confirmatory Factor Analysis) by Frazier et.al (2013) for their PTTS model. McKnight and his colleagues also theorized that disposition to trust influences "institution-based trust" and "trusting intentions" (which was used in their research because their participants were stating that they would or wouldn't purchase an item; they were not actual consumers of a product being sold for the research).

Other terms and definitions of the construct of propensity to trust include "motivation to trust" (Williams, 2001), "intention to trust" (Gill et al., 2005), and "risk propensity" (Sitkin &

Pablo, 1992). “Motivation to trust” was defined by Williams as “the desire to view another person as trustworthy enough to be relied on” (p. 387). In discussing this aspect as it relates to trust development the author states that “the motivation to trust influences whether or not a certain level of perceived trustworthiness is high enough for one individual to trust another in a given situation” (p. 388). Gill et al. used the term “intention to trust” as a related construct to propensity, but distinguished the two in the operational definitions (using separate scales to measure each). The authors found that “intention to trust” and “propensity to trust” are strongly related, depending on the situation, and state that “intention to trust is also determined by the personal disposition of the trustor” (p. 289). Sitkin and Pablo (1992) also used the term “risk propensity” to identify this construct, and defined it as “the tendency of a decision maker either to take or avoid risks” (p. 12).

Propensity to Trust as an Antecedent to Trust

In their work, Mayer et al (1995) placed a trustor’s propensity to trust as an outside variable, or a “within-party factor that will affect the likelihood the party will trust” (p. 715). The authors also state that “propensity should contribute to the explanation of variance in trust if used as a part of a more complete set of variables” (p. 716). Propensity to trust, while not a part of the three factors of perceived trustworthiness, was still considered an integral antecedent in Mayer et al.’s model. The authors stated that “to understand the extent to which a person is willing to trust another person, both the trustor’s propensity to trust and the trustor’s perceptions of the trustee’s ability, benevolence, and integrity must be discerned” (p. 724).

This sequential conceptualization was further elaborated upon by others. As mentioned above, in 2005, Gill and his colleagues considered what they called “intention to trust” as a separate construct in which they separated propensity to trust as a dispositional variable

compared to cognitive and behavioral ones, and stated that “propensity to trust may be more accurately conceptualized as an antecedent rather than as a dimension of trust” (Gill, 2005, p. 288).

Lee and Turban (2001) considered propensity to trust as an antecedent to trust as well; specifically with regard to internet shopping. They suggested that propensity to trust “reflects personality traits, culture, and experience” (p. 75), and introduced a model that used “Individual Trust Propensity” as a moderating variable to trust, as well as an antecedent of trustworthiness and contextual factors (p. 80). In their research they used four questions which they developed themselves to measure trust propensity. Two of these questions (“My tendency to trust a person/thing is high” and “Trusting someone or something is not difficult”) were taken by Frazier et al. (2013) and adapted slightly (removed “person” and “or something,” respectively) for use in their validated PTT scale. Additionally, Lee and Turban found that “the construct of individual trust propensity is believed to positively moderate the effect of these antecedents on consumer trust” (p. 87).

Another heavily cited work within the field of trust research is Colquitt, Scott, and LePine (2007). As mentioned above, in this work the authors looked at the relationships of trust, trustworthiness, and trust propensity with risk taking and job performance. In noting that Mayer et al. (1995) considered “trust propensity...as a stable individual difference that affects the likelihood that a person will trust” (p. 910), these authors set out to test the impact propensity to trust played on trust within the context of trustworthiness (p. 911). Colquitt et al. state that “trust propensity is likely to be the most relevant trust antecedent in contexts involving unfamiliar actors” (p. 911). In conducting a meta-analytic test for this and other factors, the authors confirmed that “propensity was significantly related to all three trustworthiness facets” (p. 918).

They also concluded that “if propensity were to be viewed as an antecedent of trustworthiness perceptions (by changing the curved arrows in the figures into direct paths to ability, benevolence, and integrity), it would have significant indirect effects on trust to go along with its significant direct effect” (p. 918). This can be seen in the conceptual model created by the authors (see Figure 3).

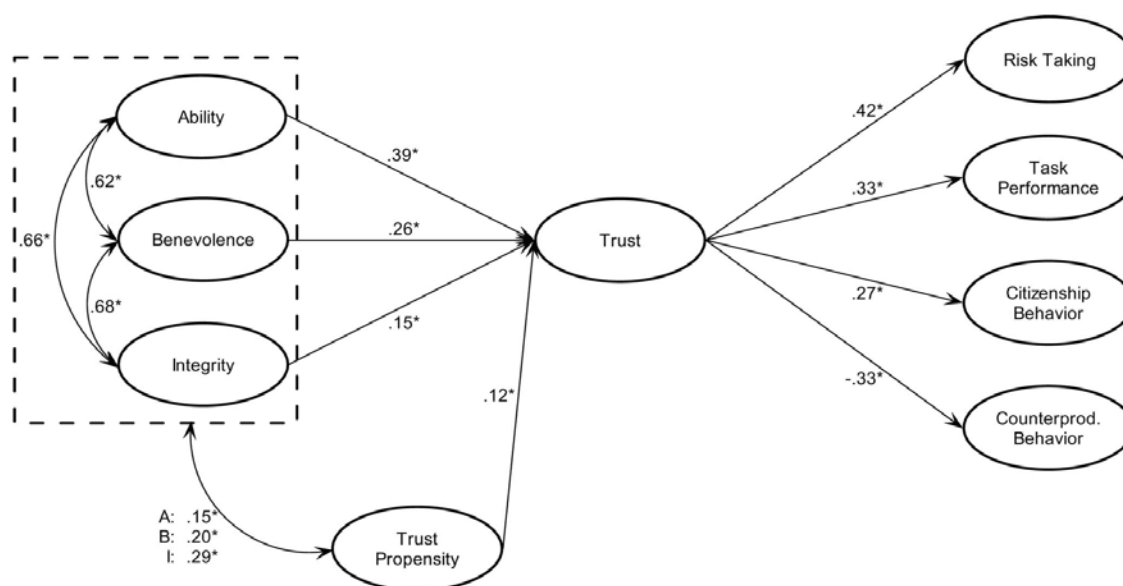


Figure 3. Model of Trust, Trustworthiness, and Trust Propensity (Colquitt, Scott, & LePine, 2007)

Bernerth and Walker (2008) also looked at the relationship propensity to trust had as a precursor to workplace relationships, specifically between supervisors and their subordinates. Using social exchange theory (Blau, 1964), the authors considered antecedents to social exchanges in the workplace and listed propensity to trust as an antecedent. They found that “the highest quality relationships (in terms of social exchange) are positively affected by individuals

who are prone to trust one another... Ultimately, understanding how trust propensity positively influences social systems and exchanges within an organization may prove fruitful in improving the system's functionality" (p. 224).

Trait-Based Characteristics and Other Antecedents of Propensity to Trust

There have been many authors who have considered trait-based characteristics as antecedents to trust. Most notably, Mayer et al. (1995) looked at the ability, benevolence, and integrity (what they called "factors of perceived trustworthiness") as the three main categorical antecedents to trust, and listed "trustor's propensity" as "a stable within-party factor that will affect the likelihood the party will trust" (p. 715). In this model (see Figure 4 below), ability, benevolence, and integrity are not considered antecedents to propensity to trust; however, they are listed sequentially prior to it, with positive correlations connecting each. In discussing previous research regarding propensity to trust, the authors state that "propensity should contribute to the explanation of variance in trust if used as a part of a more complete set of variables" (p. 716).

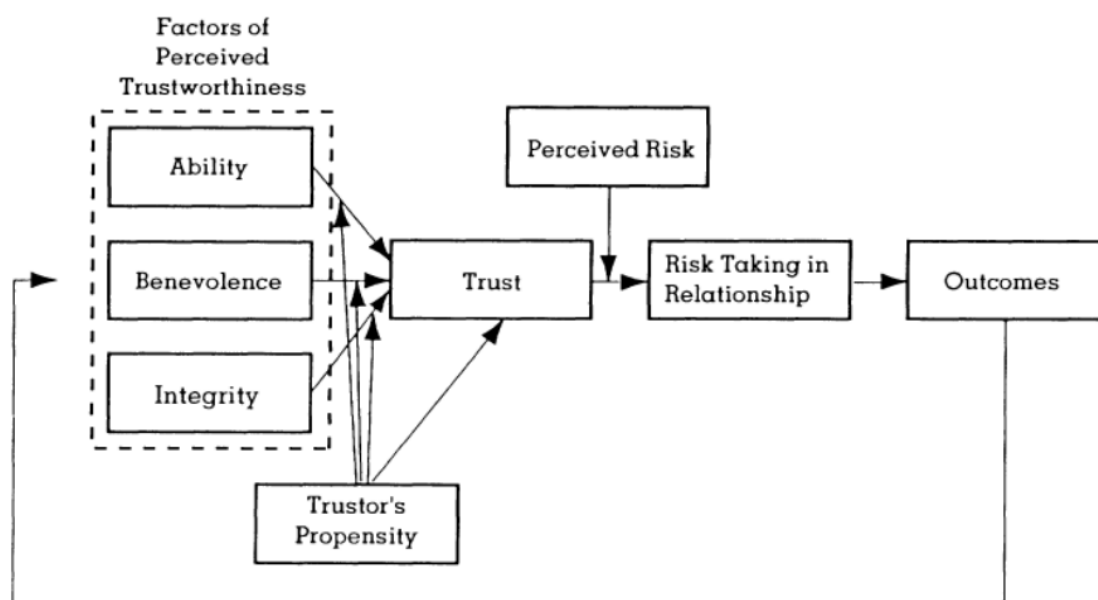


Figure 4. Proposed Model of Trust (Mayer, Davis, & Schoorman, 1995)

In 2007, Schoorman, Mayer, and Davis reviewed and elaborated on their previous work on trust (1995) and confirmed their definition and model as a viable contribution to the field since 1995. They also stated their proposition that “the antecedents of propensity include personality, experiences, and culture” (p. 351), but did not elaborate on it. Some of these antecedents are similar to those in this dissertation, such as educational exposure and environment, which encompass some of the experiences by an individual, and regionality and language, which are somewhat related to culture.

In 2000, Tschannen-Moran and Hoy discussed arguments that researchers have given about the development of disposition to trust, including upbringing by parents and situational factors. In this work they evaluated what they termed the “bases and degrees of trust” (p. 558), which included, among other things: disposition to trust, moods and emotions, values and attitudes, diversity, and various types of trust. In discussing character-based trust the authors state that “this kind of trust is based on norms of obligation and cooperation rooted in social similarity, wherein similarity may depend on characteristics such as family background, social status, and ethnicity” (p. 560). While not explicitly stating that these background attributes are antecedents to propensity to trust (or “disposition to trust” as the authors titled it), it is stated that they impact trust itself and can be understood to be antecedents. This is similar to this dissertation where other background attributes were placed as antecedents to evaluate a relationship with propensity to trust. Some of these attributes are similar to Tschannen-Moran and Hoy’s character-based trust antecedents, such as regionality, which is highly related to ethnicity (Tschannen-Moran & Hoy, 1997), and first-generation college status, which is an aspect of one’s family background and social status.

Adams and Forsyth (2009) also listed propensity to trust as an antecedent to trust, but stated that “trust functions as a mediating condition between socioeconomic status and performance” (p. 143). While not explicitly stating that socioeconomic status is an antecedent to propensity to trust, both are considered by the authors as preceding trust itself. They state that “idiosyncratic characteristics – such as propensity to trust, unique personal experiences, expectations, emotions, and personal attributes – influence the formation of trust perceptions” (p. 131). Again, this dissertation is unique in showing other specific attributes that precede propensity to trust among a very specific population, but there is overlap in some of the attributes listed from Adams and Forsyth, such as gender, age, religion, and English-speaking background, which could all be considered as personal attributes.

Individuals typically look for similarities as a basis of trust, which can include physical, geographical, racial, ethnic, cultural, and religious uniqueness. Kochanek (2005), stated:

People often decide to place their trust with those who share physical and social similarities with them (Zucker, 1986). Immigrants coming to American in the late 1800s and early 1900s chose to live and work among people from the same country of origin, creating ethnic enclaves in major cities that survive even today. Swedes, for example, interacting mostly with other Swedes, felt reassured that by placing their trust with someone from the same culture they were less likely to be cheated. Their belief was that the shared culture would also mean that they had a shared value system and perhaps even be a little more likely to want to support each other...Physical or social characteristics such as race, religion, or even the type of car a person drives are used to represent characteristics that are more difficult to predict or measure, such as competence, honesty, or kindness. (p. 9)

At the institution where this was studied, this is also relevant in that international students represent small subsets of the population, yet are often part of the same religious culture.

Kochanek continued to state that “although people may be predisposed to trust one another on the basis of social similarity, trust will not grow if it is not validated by subsequent actions.

Unless social similarity is accompanied by respect, competence, integrity, and personal regard, the initial bond created by social and physical characteristics will fade away” (Kochanek, 2005, p. 9). Adams, Forsyth, and Mitchell (2009) also addressed this when they wrote that “the alignment between the moral purpose of the group and one’s own moral values produces organic trust [see Bryk & Schneider, 2002], which is commonly found in religious organizations, small communities, and sub-cultures that indoctrinate group members to their core beliefs” (Adams, Forsyth, & Mitchell, 2009, p. 9).

Trust and Propensity to Trust Research in International Contexts

While there is much research dedicated to internationalization (Urban & Palmer, 2014) and acculturation for students studying outside their own country (Fritz, Chin, & DeMarinis, 2008; Kashima & Loh, 2006), as well as the psychometric analysis of outside cultural impacts on the individual (Want, Wei, Zhao, Chuang, & Li, 2014), research on international students’ trust and propensity to trust within the U.S. system of higher education doesn’t seem to be prolific. Until more recently very little focus has been given to researching trust and propensity to trust with international populations, and, like most of the trust research trends, much of the research started within the business arena (Nambudiri, 2012). One highly cited work within the business field was done by Leonard Huff and Lane Kelley in 2003. In their work the authors explored trust among these Asian populations and showed that “levels of individual and organizational trust vary across cultures” (p. 88). More recently, research on trust has also been done in an

educational setting internationally (Czerniawski, 2011; Van Maele & Van Houtte, 2010; Wermke, 2012), with authors such as Kochanek (2005) including nationality as a part of diversity with relationship to trust. However, even though research on trust in an international setting has increased, even less focus has been given to foreign student populations in the U.S. education system. In their research, Delhey and Newton (2003) suggested that “future research on generalized social trust might do better to pay less attention to individual variations in trust within countries, and more to cross-national comparisons” (p. 114). With this in mind, this dissertation considered regionality (operationalized as students from countries based on United Nations Educational, Scientific, and Cultural Organization (UNESCO) groupings for research) and its relationship to propensity to trust.

In 2007, Schoorman, Mayer, and Davis revisited their original Model of Trust (1995), and made clarifications and additions within the context of research since 1995. While confirming their previous definition and model as a viable and trusted resource, they also recognized “the role that international and cross-cultural dimensions play in the model of trust” (p. 352). The authors further state:

We believe that one of the ways in which culture affects trust is through the propensity variable. We have proposed that the antecedents of propensity include personality, experiences, and culture. There is evidence in the culture literature that initial trust of strangers varies across cultures. One of the dimensions of culture that is most relevant to this issue is the task versus relationship orientation of a culture. Task-oriented cultures seem to have a higher initial trust of strangers and therefore a higher propensity, while relationship-oriented cultures need time to develop a relationship prior to working on the tasks. (p. 351)

In 2012, Addi-Racah researched Israeli teachers' trust. She found that "teachers attribute different social roles to trust depending on the school's social composition" (p. 835), and that the socioeconomic status of those schools impacted trust, which was a factor in the teachers' decisions to continue teaching. The author also compares the Israeli educational culture to a variety of other countries with regard to performance expectations, citing "the pivotal role of trust in sustaining their work" (p. 837).

In their work regarding headteacher visibility and trustworthiness, Hallam et al. (2013), researched relational and competence trustworthiness among Ugandan schoolteachers. They found a relationship between low-risk visibility from headteachers and relational trustworthiness, and suggested that Ugandan leaders find ways to schedule time with their teachers that would not be intimidating for them as a way to improve perceptions of relational trustworthiness. They also found that "similarity in teacher and headteacher age, gender, and tribe each corresponded positively to higher perceptions of headteacher *relational trustworthiness*" (p. 514). They also proposed a relationship between trustworthiness and social similarity, as well as experience (p. 517), but do not list these things as antecedents as they were outside of the scope of this research.

While trust is an interdisciplinary topic that has more recently branched into the field of education, there is still limited research done on the international perspective, and even less at the university level within the United States. This dissertation adds to the research of this specific population, and considers what factors and attributes impact the propensity to trust of those studying in the U.S.

APPENDIX B: METHODS

Problem Statement

International students are faced with having to comply with both the Code of Federal Regulations (CFR) governing their F-1 and J-1 visa status and the myriad policies from their respective universities. At times, these two can be in conflict, and require careful negotiation and navigation from Designated School Officials (DSO) and Alternate Responsible Officers (ARO), who are employed by educational institutions to help guide international students through these complexities. If international students do not trust, and therefore do not seek to follow the advice of DSOs and AROs, they could lose their ability to attend school, work, or receive future benefits, and could even have their visa status' terminated and be forced to return home. F-1 and J-1 students who have a low *propensity to trust* DSOs and AROs to guide them through the regulatory and university processes will likely experience heightened stress at school, loss of familial and social status in their home countries, and loss of future visa benefits. If DSOs and AROs can identify trends and correlations with international students' *propensity to trust*, they will be able to better help these students gain their trust and navigate these challenging complexities.

This dissertation sought to answer the following research questions:

1. In what ways does propensity to trust vary among F-1 and J-1 student populations from English-speaking and non-English-speaking backgrounds at BYU?
2. In what ways does propensity to trust vary among F-1 and J-1 student populations from LDS and non-LDS backgrounds at BYU?
3. What other factors are associated with F-1 and J-1 students' propensity to trust others, including:

- a. Demographic: sex, age, English-speaking background, first-generation college status (FGC)
- b. Educational: extend of previous exposure to the U.S. educational system, level in school, educational environment

From these questions the following hypotheses were tested:

1. Propensity to trust will be higher for international students from English-speaking backgrounds than it will be for international students from non-English-speaking backgrounds.
2. Propensity to trust will be higher for LDS international students than it will be for non-LDS international students.
3. Propensity to trust for international students will be positively related with level of exposure to the United States education system.
4. Propensity to trust for international students will be related to other verified demographic and educational attributes.

Instrumentation

This study used a validated Propensity to Trust Scale (PTTS) by Frazier et al. (2013) to determine the propensity to trust of international students on F-1 and J-1 visas at Brigham Young University. In their research, Frazier and his colleagues provided a highly validated and reliable instrument for measuring propensity to trust. They did this by considering 40 questions previously used by other researchers along with three of their own. They based their inclusion on those measures that were consistent with Mayers' et al. (1995) definition of propensity to trust and what they called "the dispositional component of trust" (p. 77) within previous research. They then eliminated duplicates and context-specific references, made them uniform in structure

by placing a five-item Likert scale, anchored by (1) ‘*strongly disagree*’ to (5) ‘*strongly agree*,’ and running Confirmatory Factor Analysis loadings for each question. The result was a final recommendation for a propensity to trust scale using four questions, with a Chronbach’s Alpha of .85, .84, .70, and .89, respectively (see Table 1 below).

Table 1

Propensity to Trust Scale (Frazier, et al., 2013)

Question	Chronbach’s Alpha
1. “I usually trust people until they give me a reason not to trust them.”	.85
2. “Trusting another person is not difficult for me.”	.84
3. “My typical approach is to trust new acquaintances until they prove I should not trust them.”	.70
4. “My tendency to trust others is high.”	.89

A demographic questionnaire was developed to measure levels for the background and educational attributes of the respondents. These included each of the attributes listed in research questions above and in Table 1 below. These are relatively easy to collect and were classified using nominal, ordinal, and ratio classifications. Where possible, care was given to follow established standards for demographics, including using the same structure and verbiage as the U.S. Census Bureau. I did not include socioeconomic status, gender, or race/ethnicity because of the complexity of measuring these across national, regional, and cultural contexts.

Table 2

Classification of Demographic Variables

Classification:	Variable:
Nominal	Sex, region, religion, English-speaking background, educational environment
Ordinal	Age, FGC, level in school
Ratio	Exposure to U.S. education system

Sampling and Data Collection Process

The target population for this study was all F-1 and J-1 visa holders in post-secondary institutions in the United States; however, the accessible population, which encompassed both the sampling frame and sample used, was all F-1 and J-1 visa holders at Brigham Young University (including admitted, incoming students). As the Principal Designated School Official (PDSO) and Director of the International Student Services office, I have access to all of the emails from these populations through the government and university databases, and was able to send emails to every student. Invited participants were identified using the International Student Services database (using a software system called *Sunapsis*), which is tied into the government's Student Exchange and Visitor Information System (SEVIS) through real-time interface, and which contains all F-1 and J-1 students and their contact information by federal law. As such, there were no ineligible participants included in the sample frame.

I chose to do a census instead of a sample, and sent emails to all of the F-1 and J-1 students at BYU. There were 1,901 students who were sent the survey, and 691 completed it. This represents a 36.3% response rate. I chose to remove those from the English Language Center to avoid comprehension error due to language; the remaining students had to have shown English proficiency based on the Test of English as a Foreign Language (TOEFL) scores in order to be admitted to BYU. These scores are an industry standard for universities. Those certified in the English language who completed the survey represented 590 students out of 1,616 potential respondents. This represents a 36.5% response rate.

The PTTS and demographic questions were uploaded and administered using an online *Qualtrics* survey. The names of subjects drawn from the records of the aforementioned databases were replaced by alpha-numeric codes to create a panel for the unique URLs. Emails

were sent through *Qualtrics*, which maintained a list of the emails of those who completed the survey; these lists did not contain the information from the survey, only the emails of those who finished. This was used for anonymity, and to allow the principal investigator to randomly select winners for the incentives promised in the invitation emails.

All responses to the demographic questionnaire were entered by the principal investigator into an Excel spreadsheet and uploaded to SPSS. The data was visually scanned to look for outliers (using frequency distributions). Several administrative columns were deleted (such as verification of informed consent), and several text fields were recoded to show a numerical value (see Table 2) and all Yes/No questions were changed to show consistency, where No=0 and Yes=1.

Table 3

Value Codes for Variables

Variable:	Code:
Language	English (1), Spanish (3), Chinese (4), Korean (5), Japanese (6), Portuguese (7), Other (2)
Sex	Male (1), Female (2)
Religion	LDS (1), Buddhist (2), Catholic (3), Hindu (4), Islam (5), No religious preference (6), Other (7)
Father's Schooling	No college (0), Some college/graduate (1)
Mother's Schooling	No college (0), Some college/graduate (1)
Level at BYU	Freshman (1), Sophomore (2), Junior (3), Senior (4), Graduate Student (5), Other (6), English Language Center (7)

Several of these values were then recoded to simplify them further:

Table 4

Simplified Variable Codes

Variable:	Code:
Language	English (1), Non-English (2)
Parents' Schooling	First-Generation College Student (1), Non- First-Generation College Student (2)
Religion	LDS (1), Non-LDS (2)

In addition to the above codes, each country of origin was recoded to fit into the United Nations Educational, Scientific, and Cultural Organization (UNESCO) regions for international research (see Table 4). These regions were set up to distinguish an “International Standard Classification of Education” (ISCED) for reporting and research purposes.¹

Table 5

UNESCO ISCED Regions

Region:	Code:
Arab States	1
Central and Eastern Europe	2
Central Asia	3
East Asia and the Pacific	4
Latin American and the Caribbean	5
North American and Western Europe	6
South and West Asia	7
Sub-Saharan Africa	8

The country of citizenship was then recoded and placed into eight groups, as outlined by UNESCO regions for international research (see Table 4). UNESCO created these groupings to

¹ <http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx> (January 12, 2016)

distinguish an “International Standard Classification of Education” (ISCED) for reporting and research purposes.²

The variables used in this study were operationalized, recoded, and transformed into nominal data types in order to facilitate the statistical analysis. The decision was made to aggregate age groups to make it easier for analysis, and groupings were chosen based on traditional ages and corresponding levels in school.

Variables for This Study

In this study, various demographic and educational attributes were considered as antecedents of propensity to trust. These variables included: sex, age, region, religion, English-speaking background, FGC status, exposure to the U.S. educational system, level in school, and educational environment. In deciding which demographic variables to consider, commonly-used themes such as sex, regionality (operationalized as country of origin), and educational attainment levels of parents (FGC status) were included. More specific to this study, the population that was surveyed was considered, and variables such as religion were chosen that fit within the context of a private, religiously-owned institution of higher education.

Variables such as age were germane due to the differences in overall ages between international students and domestic students, with international students being slightly older on average. The decision was made to aggregate age groups to make it easier for analysis. Groupings were chosen based on traditional ages and corresponding levels in school, and included the following groupings: <20, 21-24, 25-29, >29.

Language background was also significant within the context of international students in an English-speaking, American institution, since ability for interpersonal communication is a

² <http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx>

facet of trust development (Mayer et al., 1995), and could impact propensity to trust. This study did not take into account variations between different native languages or different levels of English-speaking ability, outside of the minimum levels of proficiency required for study in the United States system of higher education.

The educational environment (operationalized by asking participants to identify the schooling type(s) they had attended, such as private, government, boarding, all-male/female, etc.) was used to determine if there was correlation in the propensity to trust based on exposure to different groups and atmospheres prior to attending a large, privately-owned, co-ed university in the U.S. Similarly, asking participants their previous exposure to the U.S. educational system (operationalized as number of years they had attended schooling in the U.S. prior to attending an institution of higher education) was used to determine correlation to propensity to trust as well. This same thinking was used for level of schooling.

Analysis

The purpose of this study was to determine if various demographic and educational attributes were correlated to foreign students' propensity to trust. As such, respondents' propensity to trust was first determined by aggregating the scores on each of the four PTTS questions, with the lowest possible score being 4 and the highest possible score being 20. Descriptive statistics were run for each of the variables, including frequencies and means, and Pearson's Correlations were run for the demographics to see significance, coefficients, and correlation with overall PTTS score.

Correlation tables were then created to look for positive and negative correlation between the variables, and the PTTS score was compared to each of the variables using one-way ANOVAs to determine if the differences between the groupings were greater than the differences

within, signifying that distinct groupings could be found. If significant difference was found, Tukey's post-hoc tests were run to determine which differences between which groups in pairs were significant, as determined using Chronbach's Alpha. Two-way ANOVAs were later used to determine if any combinations of the independent variables were correlated to the PTTS of the respondents.

Once significance was determined, each finding was considered within the context of the hypotheses outlined above. Thought was given to consider reasons for each finding, and context was considered to determine limitations or biases. For example, English proficiency was considered as something that could have impeded respondents' understanding of the questions. Thought was also given to findings where the null hypothesis was not rejected and hypothesis were not confirmed. An example of this is propensity to trust and religion, where those who belonged to the dominant religion were not found to have different PTTS scores than those who were from other faiths. This also lead to areas where future research could be beneficial.

APPENDIX C: INSTRUMENT

Implied Consent

My name is Sam Brown, I am a graduate student at Brigham Young University and I am conducting this research under the supervision of Professor Pam Hallam, from the BYU Educational Leadership and Foundations Department. You are being invited to participate in this research study titled: “The Impact of Demographic and Educational Attributes on International Students’ *Propensity to Trust*” because you are an international student at BYU.

Your participation in this study will require the completion of the following survey. This should take approximately 5-10 minutes of your time. Participation in this study will make you eligible to win one of four \$25 gift cards to the BYU Bookstore; winners will be randomly selected from those who participate. Your answers will be anonymous, including during the selection of winners for the prizes, and you will not be contacted again in the future. This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about *propensity to trust*.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. Refusal or withdrawal from the research will not affect your standing at BYU.

We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem you may contact me, Sam Brown, at 1351 WSC; (801)422-6073; sam_brown@byu.edu.

If you have any questions about your rights as a research participant you may contact the IRB Administrator at A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu; (801) 422-1461. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

The completion of this survey implies your consent to participate. Thank you!

Please answer the following questions. Please be honest in your feedback - all responses will be anonymous.

(Strongly Disagree – Disagree – Neither Agree Nor Disagree – Agree – Strongly Agree)

1. I usually trust people until they give me a reason not to trust them.
2. Trusting another person is not difficult for me.
3. My typical approach is to trust new acquaintances until they prove I should not trust them.
4. My tendency to trust others is high.

5. What is your Sex? (Male – Female)
6. What is your date of birth? (Month/Day/Year)
7. What is your home country? (Drop-down list of all countries)
8. To what religion do you belong? (Latter-day Saint, Buddhist, Catholic, Hindu, Islam, No Religious Preference, Other – Please Specify)
9. What language did you speak in your home growing up? (English, Spanish, Chinese, Korean, Japanese, Portuguese, Other – Please Specify)
10. What is the highest level of school your FATHER completed? (No High School/Grade School, Some High School/Grade School, High School/Grade School Graduate, Some College, College Graduate (Bachelors or equivalent), Additional Degrees (Masters, Doctorate, or Professional))
11. What is the highest level of school your MOTHER completed? (No High School/Grade School, Some High School/Grade School, High School/Grade School Graduate, Some College, College Graduate (Bachelors or equivalent), Additional Degrees (Masters, Doctorate, or Professional))
12. Did either of your parents attend school in the United States? (Yes/No)
 - a. If yes – What level of school was attended in the US by your parent(s)? (High School/Grade School (Grades 1-12), College or Higher)
13. How many years of formal education did YOU complete in the U.S. PRIOR to attending a university?
14. Have you attended another U.S. college, university, or language center other than BYU? (Yes/No)
15. What level are you at BYU? (Freshman (<30 credits), Sophomore (31-60 credits), Junior (61-90 credits), Senior (>90 completed credits), Graduate Student (Masters, PhD, etc.), Other (OPT, etc.), English Language Center)
16. What type of school did you attend for the majority of your childhood (prior to attending university – mark all that apply)? (Private (NOT funded or run by government), Public (funded or run by government), School at Home, All Male, All Female, Both Males and Females Attended My School, Day School, Boarding School, Other)

REFERENCES

- Adams, C., & Forsyth, P. (2009). The nature and function of trust in schools. *Journal of School Leadership, 19*(2), 126-152.
- Addi-Racah, A. (2012). Teachers' trust in role partners, intention to continue in teaching, and schools' social composition in Israel. *Urban Education, 47*(4), 835-864.
- Bernerth, J., & Walker, H. (2008). Propensity to trust and the impact on social exchange: An empirical investigation. *Journal of Leadership & Organizational Studies, 15*(3), 217-226.
- Bigley, G., & Pearce, J. (1998). Straining for shared meaning in organization science: Problems of trust and distrust. *Academy of Management Review, 23*(3), 405-421.
- Bijlsma, K., & van de Bunt, G. (2003). Antecedents of trust in managers: A "bottom up" approach. *Personnel Review, 32*(5), 638-664.
- Blau, P. (1964). *Exchange and power in social life*. New York, NY: Transaction Publishers.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Buchan, N., Croson, R., & Solnick, S. (2008). Trust and gender: An examination of behavior and beliefs in the investment game. *Journal of Economic Behavior & Organization, 68*(3), 466-476.
- Burke, C., Sims, D. E., Lazzara, E., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly, 18*(6), 606-632.
- Chodorow, N. (1995). Gender as a personal and cultural construction. *Signs, 20*(3), 516-544.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 95*-120.

- Colquitt, J., Scott, B., & LePine, J. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*(4), 909-927.
- Croson, R., & Buchan, N. (1999). Gender and culture: International experimental evidence from trust games. *The American Economic Review, 89*(2), 386-391.
- Czerniawski, G. (2011). Emerging teachers—emerging identities: Trust and accountability in the construction of newly qualified teachers in Norway, Germany, and England. *European Journal of Teacher Education, 34*(4), 431-447.
- Delhey, J., & Newton, K. (2003). Who trusts? The origins of social trust in seven societies. *European Societies, 5*(2), 93-137.
- Deutsch, M. (1958). Trust and suspicion. *Journal of conflict resolution, 265-279*.
- Dirks, K., & Ferrin, D. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology, 87*(4), 611-628.
- Farrugio, C., & Bhandari, R. (2015). Open doors: Report on international educational exchange. *Institute of International Educational Exchange*. Retrieved from <http://www.iie.org/research-and-publications/open-doors/data>
- Fiske, S., & Taylor, S. (1991). *Social cognition (2nd ed.)*. New York, NY: McGraw-Hill.
- Frazier, M., Johnson, P., & Fainshmidt, F. (2013). Development and validation of a propensity to trust scale. *Journal of Trust Research, 3*(2), 76-97.
- Fritz, M., Chin, D., & DeMarinis, V. (2008). Stressors, anxiety, acculturation and adjustment among international and North American students. *International Journal of Intercultural Relations, 32*(2), 244-259.

- Gill, H., Boies, K., Finegan, J., & McNally, J. (2005). Antecedents of trust: Establishing a boundary condition for the relation between propensity to trust and intention to trust. *Journal of Business and Psychology, 19*(3), 287-302.
- Hallam, P., Boren, D., Hite, J., Hite, S., & Mugimu, C. (2013). Headteacher visibility and teacher trust of the headteacher: Perspectives of Ugandan secondary school teachers. *International Journal of Educational Development, 33*(5), 510-570.
- Hardin, R. (1993). The street-level epistemology of trust. *Politics and Society, 21*(4), 505-529.
- Howell, D. (2007). The treatment of missing data. In W. Outhwaite & S.P. Turner (1st ed.). *The sage handbook of social science methodology*, (pp. 208-224). Thousand Oaks, CA: Sage.
- Hoy, W., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership, 9*(3), 184-208.
- Huff, L., & Kelley, L. (2003). Levels of organizational trust in individualist versus collectivist societies: A seven-nation study. *Organization Science, 14*(1), 81-90.
- Kashima, E., & Loh, E. (2006). International students' acculturation: Effects of international, conational, and local ties and need for closure. *International Journal of Intercultural Relations, 30*(4), 471-485.
- Kochanek, J. (2005). *Building trust for better schools: Research-based practices*. Ann Arbor, MI: Corwin Press.
- Kramer, R. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual review of psychology, 50*(1), 569-598.
- Lee, M., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of electronic commerce, 6*(1), 75-91.

- Maccoby, E., & Jacklin, C. (1974). *The psychology of sex differences*. Redwood City, CA: Stanford University Press.
- Mayer, R., Davis, J. H., & Schoorman, F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- McAllister, D. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59.
- McKnight, D., Cummings, L., & Chervany, N. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23(3), 473-490.
- McKnight, D., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information systems research*, 13(3), 334-359.
- Mishra, A. (1996). Organizational response to crisis: The centrality of trust. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 261-287). Thousand Oaks, CA: SAGE Publications.
- Nambudiri, R. (2012). Propensity to trust and organizational commitment: A study in the Indian pharmaceutical sector. *The International Journal of Human Resource Management*, 23(5), 977-986.
- Rosenberg, M., Suchman, E., & Goldsen, R. (1957). *Occupations and values* (pp. 25-35). Glencoe, IL: Free Press.
- Rotter, J. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35(4), 651-665.
- Rousseau, D., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *The Academy of Management Review*, 23(3), 393 - 404.

- Schoorman, F., Mayer, R., & Davis, J. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 32(2), 344-354.
- Serva, M., Fuller, M., & Mayer, R. (2005). The reciprocal nature of trust: A longitudinal study of interacting teams. *Journal of Organizational Behavior*, 26(6), 625-648.
- Sitkin, S., & Pablo, A. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review*, 17(1), 9-38.
- Sitkin, S., & Roth, N. (1993). Explaining the limited effectiveness of legalistic “remedies” for trust/distrust. *Organization Science*, 4(3), 367-392.
- Tschannen-Moran, M., & Hoy, W. (1997). Trust in Schools: A conceptual and empirical analysis. *Journal of Educational Administration*, 36(4), 334-352.
- Tschannen-Moran, M., & Hoy, W. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, 70(4), 547 - 593.
- Urban, E., & Palmer, L. (2014). International students as a resource for internationalization of higher education. *Journal of Studies in International Education*, 18(4), 305.
- Van Maele, D., & Van Houtte, M. (2010). The quality of school life: Teacher-student trust relationships and the organizational school context. *Social Indicators Research*, 100(1), 85-100.
- Wang, K., Wei, M., Zhao, R., Chuang, C., & Li, F. (2014). The cross-cultural loss scale: Development and psychometric evaluation. *Psychological Assessment*, 27(1), 42.
- Wang, F., & Yamagashi, T. (2005). Group-based trust and gender differences in China. *Asian Journal of Social Psychology*, 8(2), 199-210.

Wermke, W. (2012). A question of trustworthiness? Teachers' perceptions of knowledge sources in the continuing professional development marketplace in Germany and Sweden.

Teaching and Teacher Education, 28(4), 618-627.

Williams, M. (2001). In whom we trust: Group membership as an affective context for trust development. *Academy of Management Review*, 26(3), 377-396.

Zucker, L. (1986). The production of trust: Institutional sources of economic structure, 1840 – 1920. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organization Behavior* (pp. 53-111). Greenwich, CT: JAI Press.